Park Street Former MGP Site

Livingston County

Village of Geneseo, New York

Final Engineering Report

NYSDEC Site Number: V00731

Prepared for:

NYSEG

18 Link Drive

Binghamton, New

York 13904

Prepared by:

Arcadis of New York

295 Woodcliff Drive

Fairport, New York

June 2018

CERTIFICATION

I, Jason D. Brien, P.E., am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the *Installation of Monitoring Well MW-8* (Arcadis 2017) work plan was implemented and that all construction activities were completed in substantial conformance with the Department-approved *Installation of Monitoring Well MW-8* work plan.

I certify that to the best of my knowledge and based on my inquiry of the persons involved with the observation of the remediation activities the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the *Installation of Monitoring Well MW-8* work plan and in all applicable statutes and regulations have been achieved in accordance with the time frames, if any, established for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are, or will be, contained in a Declaration of Covenants and Restrictions (deed restriction) created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of Engineering Controls employed at the Site, including the proper maintenance of remaining monitoring wells, and that such plan has been approved by the Department.

I certify that all documents generated by Arcadis in support of this report have been submitted in accordance with the DER's electronic submission protocols.

I certify that all data generated by Arcadis in support of this report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that to the best of my knowledge and based on my inquiry of the persons involved in preparing this document, all information and statements in this certification form are true. I understand that a knowingly false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Jason Brien, P.E., of Arcadis of New York, Inc., am certifying as Owner’s Designated Site Representative for the site.

084067	06/29/18	
NYS Professional Engineer #	Date	Signature

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ACRONYMS

BTEX	benzene, toluene, ethylbenzene, and xylenes
CAMP	Community Air Monitoring Plan
CD	compact disk
DUSR	Data Usability Summary Report
ECs/ICs	Engineering and Institutional Controls
FSP	Field Sampling Plan
IDW	investigation derived waste
IRM	Interim Remedial Measures
HASP	Health and Safety Plan
KBH	KBH Environmental, LLC
mcg/m3	micrograms per cubic meter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PAH	polycyclic aromatic hydrocarbon
PID	photoionization detector
PPE	personal protective equipment
ppm	parts per million
RAO	Remedial Action Objectives
RG&E	Rochester Gas and Electric Corporation
SCWP	Site Characterization Work Plan
SMP	Site Management Plan
SUNY	State University of New York
VCA	Voluntary Cleanup Agreement
VOC	volatile organic compound
QAPP	Quality Assurance Project Plan

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

Rochester Gas and Electric Corporation (RG&E) entered into an Amended and Restated Voluntary Cleanup Agreement (VCA) on December 23, 2014 (DEC Index No. B8-0535-98-07) with the New York State Department of Environmental Conservation (NYSDEC) to include this site. The Agreement obligated RG&E to implement a remedial program for hazardous substances that are components of wastes associated MGP-related operations at the approximately ¾-acre site located in the Village of Geneseo, Livingston County, New York. The site was remediated to restricted residential and industrial use.

The Park Street former MGP site is located at 4 and 6 Park Street in the Village of Geneseo, County of Livingston, New York. The Livingston County tax maps identifies the western portion of the site as Section 080.16, Block 1, Lot 33, and the eastern portion of the site as Section 080.16, Block 1, Lot 34. The site is situated on an approximately ¾ acre area bounded by commercial buildings and School Street to the north, Park Street to the south, commercial buildings along the west side of Main Street to the east, and a State University of New York (SUNY) academic complex (the Brodie Fine Arts building) to the west (**Figure 1**). The boundaries of the site are fully described in **Appendix A:** Survey Map, Metes and Bounds (on compact disk).

An electronic copy of this FER with all supporting documentation is included as **Appendix B**.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

The following Remedial Action Objectives (RAOs) were identified in the Decision Document for this site.

2.1.1 Groundwater RAOs

RAOs for Public Health Protection:

- Prevent ingestion of groundwater containing contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

RAOs for Environmental Protection:

- Restore groundwater aquifer to pre-disposal/pre- release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of groundwater or surface water contamination.

2.1.2 Soil RAOs

RAOs for Public Health Protection:

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil.

RAOs for Environmental Protection:

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

2.1.3 Soil Vapor RAOs

RAOs for Public Health Protection:

- Mitigate impacts to public health resulting from existing, or the potential for, soils vapor intrusion into buildings at the site.

2.2 DESCRIPTION OF SELECTED REMEDY

The site remedy was installed in accordance with the remedy selected by the NYSDEC in the Decision Document dated August 2017.

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Maintenance of the cover systems that currently exist in areas not occupied by buildings to prevent human exposure to any remaining contaminated soil/fill to allow for restricted residential use of the site;
2. Installation and operation of a coal tar recovery well to remove potentially mobile coal tar from the subsurface. Coal tar will be manually collected periodically from the well; however, if the well is determined by the NYSDEC to accumulate large quantities of coal tar over extended time periods, it may be retrofitted with an automatic collection system and additional wells may be added.
3. Execution and recording of a Declaration of Covenants and Restrictions (Deed Restriction) that will:
    a. Restrict land use and prevent future exposure to any contamination remaining at the site.
    b. Limit occupancy of the site that will result in the disturbance or excavation that threatens the integrity of the engineering controls.
    c. Prohibit the site from ever being used for purposes other than non-residential uses, such as a parking lot and Commercial uses as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial uses as described in 6 NYCRR 375-1.8(g)(2)(iv), without the express written waiver of such prohibition by the NYSDEC.
    d. Restrict the use of groundwater underlying the site.
    e. Require the owner of the site to provide a periodic certification that will certify that the institutional and engineering controls put in place are unchanged from the previous certification and have not been impaired.
    f. Maintain any institutional and engineering controls required for the remedy, unless the owner first obtains permission to discontinue such controls from the NYSDEC, in compliance with the approved SMP.

    The Deed Restriction will be deemed a covenant that will run with the land and shall be binding upon all future owners of the site, and shall provide that the owner and its successors and assigns consent to enforcement by the NYSDEC.
4. Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Deed Restriction, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting;
5. Periodic certification of the institutional and engineering controls listed above.

3.0 INTERIM REMEDIAL MEASURES AND REMEDIAL CONTRACTS

As stated in the Decision Document, no Interim Remedial Measures (IRMs) were performed at the site during the remedial investigation.

A source removal action was completed by State University of New York (SUNY) at the site under the oversight of the NYSDEC between September 2002 and January 2003, after SUNY acquired the properties and began activities associated with a Park Street entrance improvement program. A stone/brick underground containment structure, approximately 800 tons of MGP-impacted soil, and 3,200 gallons of impacted water that accumulated in the excavation were excavated and properly disposed off-site. The final excavation depth was approximately 20-feet bgs, terminating at the top of fractured bedrock. An area near the center of the excavation was excavated an additional 5-feet into fractured bedrock to approximately 25 feet bgs. The excavation was backfilled with material that met structural requirements, the landscaped areas and sidewalks were constructed, and the remaining area of the site was paved.

The information provided in a *Report of Activities at LL-Lot* letter correspondence from SUNY to the NYSDEC dated June 26, 2003 was relied upon to describe the source removal activities. A copy of the report is included as **Appendix C**.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved *Installation of Monitoring Well MW-8* letter work plan that was prepared for the RG&E Park Street Former MGP Site (Arcadis 2017). No deviations from the letter work plan occurred during installation of MW-8.

4.1 GOVERNING DOCUMENTS

The *Installation of Monitoring Well MW-8* letter work plan presented the objectives, remedial approach, scope of work, and design parameters for implementing the NYSDEC-selected site remedy. As stated in the letter work plan, the scope of work associated with installation of MW-8 was performed consistent with the requirements of the plans and governing documents presented in the NYSDEC-approved *Site Characterization Work Plan* (Arcadis 2015) (SCWP), and included:

- Health and Safety Plan (HASP)
- Quality Assurance Project Plan (QAPP)
- Field Sampling Plan (FSP)
- Community Air Monitoring Plan (CAMP)

Brief descriptions of each of these governing documents are presented below.

4.1.1 Site Specific Health & Safety Plan

Work performed under the remedial action was in compliance with Site and worker safety requirements mandated by Federal OSHA. The HASP was complied with for all remedial and invasive work performed at the Site. A site- and task-specific HASP was included as Appendix A of the NYSDEC-approved SCWP. Key topics detailed in the HASP included monitoring, documentation, vapor emission action levels, hazard controls (e.g., personal protective equipment [PPE]), project personnel and responsibilities, material data safety sheets, utility identification requirements, and site traffic awareness and responses.

4.1.2 Quality Assurance Project Plan

A QAPP was included as Appendix D of the SCWP. The QAPP describes the specific policies, objectives, organization, functional activities and quality assurance/quality control activities designed to achieve the project data quality objectives. Further, the QAPP presented analytical requirements by media; analyses for waste characterization; and shipping, data review and reporting requirements.

4.1.3 Field Sampling Plan

A FSP was included as Appendix C of the SCWP. The FSP provided methods and guidelines for the field activities and sample collection requirements that were used during

implementation of the remedial action. Pertinent sections and requirements that were followed during the remedial action included soil boring/monitoring well installation, soil sampling, sample labeling/packaging/shipping, well development and equipment decontamination.

4.1.4 Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) was included as Appendix E of the SCWP. The objective of the CAMP was to provide direct measurement of volatile organic compounds (VOCs) and total airborne particulates potentially released during well installation, handling, and or transportation of soil at the site, and to eliminate nuisance odors to the community.

Continuous real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of the work exclusion zone was conducted during installation of MW-8, along with periodic upwind monitoring.

A RAE MiniRAE 3000 photoionization detector (PID) capable of calculating 15-minute running average concentrations was used for community and worker air monitoring. The PID was calibrated at the beginning of each work day. Total organic vapors at the downwind perimeter of the exclusion zone did not exceed the action level of 5 parts per million (ppm) above background for the 15-minute average.

Particulate concentrations were also monitored continuously at the downwind perimeter of the exclusion zone. A TSI Dust Trak II particulate monitor equipped with an audible alarm, capable of measuring particulate matter less than 10 micrometers in size (PM-10), and capable of integrating over a period of 15 minutes for comparison to the airborne particulate action level was used. The downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period was not exceeded during installation of MW-08. Additionally, airborne dust was not observed leaving the work area. Dust suppression techniques were not required.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

Contractors and consultants used during completion of the remedial activities are summarized in **Table 4.1**.

Table 4.1 Contractors and Consultants

Role / Responsibility	Name
Design Engineer	Arcadis of New York, Inc.
Remedial Project Manager	Arcadis of New York, Inc.
Construction Quality Control Representative	Arcadis of New York, Inc.
Well Installation Contractor	Nothnagle Drilling, Inc.
Analytical Laboratory	Test America Laboratories, Inc.
IDW Waste Characterization and Transportation	KBH Environmental, LLC
Site Survey	Fisher Associates
Waste Transportation	Environmental Service Group, Inc.

4.2.2 Site Preparation

Site preparation activities generally consisted of the following:

- Utility Location. Preliminary location of utilities was conducted during preparation of the base mapping during the initial site characterization activities. Prior to initiating field activities associated with the remedial action, NYS One Call (811) was again contacted to identify and mark public utilities in the work area. In addition, SUNY Geneseo identified the locations of private underground utility lines the university had installed around the proposed location of MW-8. A geophysical survey consisting of ground-penetrating radar and radio detection was then conducted at the site on October 8, 2017 by Underground Services (SoftDig) prior to initiating any intrusive work.
- Mobilizing manpower, equipment, and materials to the site. Mobilization activities were also conducted on October 8, 2017.
- A pre-construction meeting was held with the drilling contractor on the first morning of site activities on October 8, 2017. A notice of the meeting and invitation was extended to the NYSDEC and SUNY personnel. The pre-construction meeting and daily tailgate meetings were documented in a field log book.

All work was completed on SUNY property; therefore. permits relating to the remediation project were not required.

4.2.3 General Site Controls

For security purposes and to minimize impacts to the SUNY community, MW-8 installation field activities were conducted over a Holiday break when classes were not in session. When not in use, equipment was stored in a secure Conex-type storage container located in a corner of the adjacent parking lot. Orange traffic cones and flagging were used to secure the work area to keep potential pedestrians/students at a safe distance.

Drill stem equipment was decontaminated within a temporarily constructed decontamination pad by pressure steam cleaning as described in the Field Sampling Plan. Drill cuttings, fluids, and other IDW generated as a result of equipment decontamination from the installation soil boring MW-8 were containerized in DOT-approved 55-gallon steel drums, labeled appropriately, and also temporarily staged onsite in the secure Conex-type container. The decontamination pad was only required for one day, and was removed at the end of the day.

Daily field notes documenting on-site activities and soil screening results were maintained in a field log book. No problems were encountered with site controls during the remedial action.

4.2.4 Nuisance controls

No dust or odor nuisance controls were required.

4.2.5 CAMP results

Community air monitoring was conducted during intrusive work in accordance with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (CAMP). VOCs and particulates were monitored from one upwind and one downwind location. No action thresholds were exceeded. A compact disk (CD) containing the air monitoring data relating to the CAMP is provided in electronic format in **Appendix D**.

4.2.6 Reporting

Installation of MW-8, including well development, required three days to complete. Field notes were documenting on-site activities recorded daily in a field log book; however, daily reports were not required. Pertinent notes, details, and observations from the installation of MW-8 were included in the SMP, including a well construction log.

4.3 CONTAMINATED MATERIALS REMOVAL

Investigation derived waste (IDW) generated during installation of MW-8 were containerized in DOT-approved 55-gallon drums, labeled appropriately, and temporarily staged in a secure Conex-type container. Two waste streams requiring off-site treatment and/or disposal were generated during the remedial action activities: liquids and soil/solids.

The location of the source area removal excavation performed in 2002 to 2003 and the location of MW-8 are also shown on **Figure 1**. Documentation of the source removal waste removal and disposal is provided in **Appendix C**.

4.3.1 Disposal Details

At the completion of well MW-8 installation, the drum inventory included six drums of liquid (core water and development water) and one drum of soil cuttings. RG&E arranged to have KBH Environmental, LLC (KBH) collect waste characterization samples; drums

were removed from the site by KBH on November 16, 2017 and transported for off-site disposal. Based on the results of the waste characterization sampling conducted by KBH, soil and liquids were transported as non-RCRA, non-DOT regulated waste and transported by Environmental Service Group, Inc. to American Recyclers Company located in Tonawanda, New York.

Table 4-2 shows the total quantities of each category of material removed from the site and the disposal locations. Copies of the shipping non-hazardous waste manifest is included in **Appendix E**; waste characterization laboratory analytical reports are included in **Appendix F**.

Table 4.2 Waste Disposal Quantities and Facilities

Material	# Drums	Estimated Quantity	Disposal Facility
Liquids	6	330 gallons	American Recyclers Company
Solids/Soil	1	250 pounds	American Recyclers Company

4.4 REMEDIAL DOCUMENTATION SAMPLING

During installation of MW-8, overburden soil recovered from each 4-foot interval was visually characterized and headspace-screened with a PID. Two overburden soil samples (plus QA/QC samples) were selected per the sample selection criteria included in the SCWP and sent for laboratory analysis of VOCs and semivolatile organic compounds (SVOCs). The soil sampling results were included with the site characterization data in the SMP; the summary table is included as **Table 1**. The soil sampling results are also summarized on **Figure 2** and **Figure 3**, with exceedances of SCOs highlighted.

A Data Usability Summary Report (DUSR) was prepared for all soil data generated during the remedial action. The DUSR is included in **Appendix G**, and associated laboratory reports are provided electronically in **Appendix H.**

4.5 IMPORTED BACKFILL

No imported fill was required by the remedial action.

4.6 CONTAMINATION REMAINING AT THE SITE

As indicated above, source material and soil containing visual MGP-impacts on the former MGP property were removed by SUNY with NYSDEC oversight from 2002 to 2003. A summary of the MGP-related impacts remaining at the site following the completion of the remedial action activities is provided in the following subsections.

4.6.1 Soil

During the site characterization conducted from 2015 to 2016, 22 soil samples were collected from 11 soil borings for laboratory analysis. Two additional soil samples were collected for laboratory analyses during the subsequent installation of MW-8 in October 2017. **Table 1** summarizes the results of all soil samples remaining at the site after completion of Remedial Action that exceed the Unrestricted Use SCOs and Restricted Commercial Use SCOs. Summaries of the VOC and SVOC results of soil samples collected during the site characterization and subsequent MW-8 installation that exceed the Unrestricted Use SCOs and the Restricted Commercial Use SCOs at the site are also included as **Figure 2** and **Figure 3**.

Soil containing one or more residual MGP contaminants above their respective Unrestricted Use SCO was first encountered at approximately 4 feet bgs at various locations across the site. Weathered bedrock is encountered between 8 to 18.5 ft. bgs; therefore, the layer of soil containing those residual MGP contaminants could potentially vary from 4 ft. to 14.5 ft. in thickness. There may be some residual MGP contaminants also present in the weathered bedrock which ranges another 0.3 ft. to 6 ft. bgs and the upper 10 feet of bedrock that was observed to be highly fractured.

4.6.2 Groundwater

Based on the groundwater sampling completed during the site characterization, depth to groundwater across most of the site is 10 ft. to 15 ft. bgs. None of the polycyclic aromatic hydrocarbon (PAH) analytes associated with MGP operations were detected at concentrations above their respective groundwater guidance values; benzene, toluene, ethylbenzene, and xylene (BTEX) analytes, where existing, were only detected at concentrations slightly above groundwater standards.

The volatile and semivolatile analytes detected in groundwater during the site characterization are summarized in Table 5 of the SMP. The table includes a comparison of reported data to *New York State Division of Water Technical and Operational Guidance Series 1.1.1* (TOGS 1.1.1) groundwater quality standards and/or guidance criteria. Summaries of the volatile and semivolatile results of groundwater samples collected during the site characterization that exceed the TOGS 1.1.1 groundwater standards or guidance values are included as Figure 7 and Figure 8 in the SMP.

4.6.3 Soil Vapor

Soil vapor samples were collected in September 2015 during the site characterization and submitted for analysis by USEPA Compendium Method TO-15. Results from the TO-15 analyses are summarized in Table 9 of the SMP. In general, BTEX compounds were detected in much lower concentrations than were non-MGP related chlorinated VOCs. Acetone and chloroform were the VOCs detected in the highest frequencies and in the highest relative concentrations. None of the “MGP-indicator” analytes included with the

TO-15 analyses (indene, isooctane, or thiopenes) were detected in any of the soil gas samples. Gasoline indicators were present in 6 of the 7 soil vapor samples collected from across the site. Based on the types of analytes detected, no evidence of MGP impacts exist in the soil vapor.

Since contaminated soil and groundwater remain beneath the site after completion of the remedial action, Engineering and Institutional Controls (ECs/ICs) are required to protect human health and the environment. These ECs/ICs are described in the following sections. Long-term management of these EC/ICs and residual contamination will be performed under a SMP approved by the NYSDEC.

4.7 SOIL COVER SYSTEM

A site cover currently exists and will be maintained to allow for restricted residential and/or and industrial uses of the site. The cover system consists of asphalt pavement, concrete-covered sidewalks, and a paved access road, with a small landscaped area located at the southern end of the site. Site covers are shown on **Figure 1**. Any site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks, or soil where the upper 2-feet of exposed surface soil meets the applicable soil cleanup objectives for restricted residential use. An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in Appendix D of the SMP.

4.8 OTHER ENGINEERING CONTROLS

Since remaining MGP-related impacts exist beneath the site, the following EC was required by the Decision Document:

- A coal tar recovery well (MW-8) was installed to collect and remove potentially mobile coal tar from the subsurface that may remain beyond the excavation limits. The location of the coal tar recovery well is also shown on **Figure 1**. Well construction details are included in the SMP; a well construction log is included in Appendix B of the SMP.

Procedures for monitoring, operating and maintaining the coal tar recovery well are provided in the Monitoring and Sampling Plan and Operation and Maintenance Plan in Section 4 and Section 5, respectively of the SMP. The Monitoring Plan also addresses inspection procedures that must occur after any severe weather condition has taken place that may affect on-site ECs.

4.9 INSTITUTIONAL CONTROLS

The site remedy requires that an institutional control in the form of a deed restriction be placed on the controlled property to (1) require the remedial party to submit to the Department periodic certification of ICs and ECs in accordance with 6 NYCRR Part 375-

1.8(h)(3); (2) restrict the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the NYSDOH or County DOH; (3) prohibit the use and development of the controlled property from ever being used for purposes other than non-residential uses, such as a parking lot and Commercial uses as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and industrial uses as described in Part 375-1.8(g)(2)(iv) without the express written waiver of such prohibition by the Department, subject to local zoning laws; and (4) require compliance with the Department-approved SMP.

The deed restriction for the site is currently being reviewed by the Department, and will be filed with the Livingston County Clerk upon Department acceptance. Upon acceptance, a copy of the deed restriction will be included in **Appendix I**.

4.10 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN

No deviations from the *Installation of Monitoring Well MW-8* letter work plan occurred during installation of MW-8.

Tables

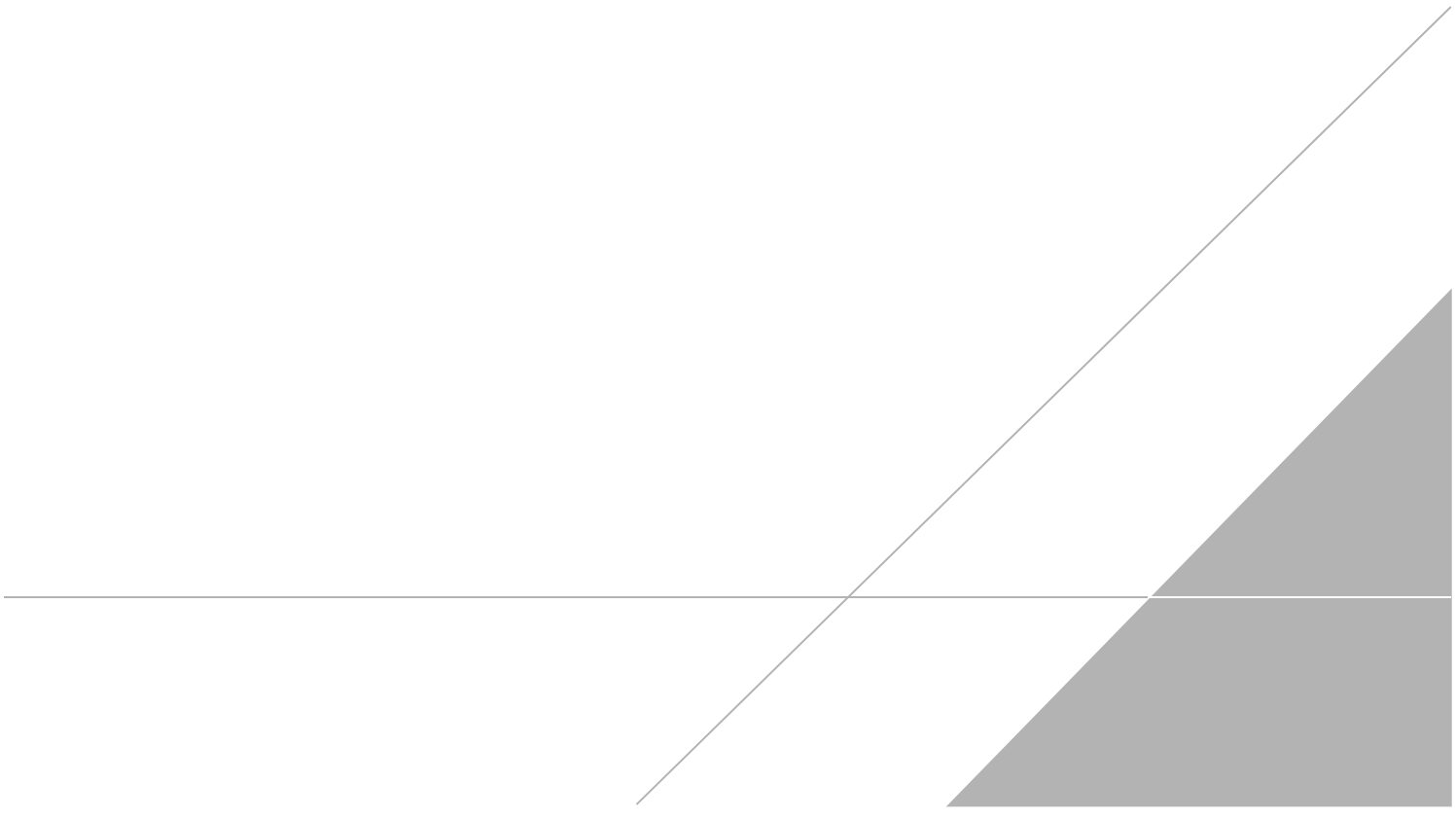


Table 1
Soil Analytical Results (Detected Analytes Only)

Final Engineering Report (table taken from Site Management Plan)
Park Street Former MGP Site

Location ID: / Sample Depth(Feet BGS): / Date Collected:	Unrestricted Use SCOs	Restricted Use SCOs Commercial	Units	MW-1 5 - 7 08/11/15	MW-1 9 - 11 08/11/15	MW-2 5 - 7 08/12/15	MW-2 9 - 13 08/12/15	MW-3 7 - 9 08/13/15	MW-3 9 - 10.2 08/13/15	MW-4 5 - 7 08/10/15	MW-4 13 - 14.5 08/10/15	MW-5 10 - 12 08/11/15	MW-5 12 - 14 08/11/15	MW-6 9 - 11 08/12/15	MW-6 13 - 14.2 08/12/15	MW-7 4 - 6 08/12/15	MW-7 6 - 8.3 08/12/15	MW-8 4 - 6 10/08/17	MW-8 13 - 14 10/08/17	SB-1 7 - 9 08/13/15	SB-1 9 - 11 08/13/15	SB-2 7 - 9 08/13/15	SB-2 9 - 11 08/13/15	SB-3 7 - 9 08/13/15	SB-3 9 - 11 08/13/15	SB-5 9 - 11 08/14/15	SB-5 11 - 13.5 08/14/15
Volatile Organic Compounds																											
1,2-Dichloroethane	20	30,000	ug/kg	4.0 U	4.9 U	3.8 U	**0.32 J**	410 U	**1.6 J**	5.9 UJ	4.1 UJ	3.8 U	3.7 U	4.2 U	4.1 U	4.0 U	3.8 U	0.25 UJ	0.22 U	3.4 U	3.9 U	350 U	3.7 U	3.6 U	3.7 U	3.8 U	3.6 U
Acetone	50	500,000	ug/kg	**35**	**8.4 J**	22 UB	18 U	2,000 U	15 U	29 UJ	**40 J**	**14 J**	**28**	21 U	**6.4 J**	20 UB	19 UB	**13 J**	**21 J**	17 U	20 UB	1,700 U	18 UB	18 U	19 UB	19 U	18 UB
Benzene	60	44,000	ug/kg	**2,300 D**	**0.72 J**	3.8 U	3.7 U	**100 J**	**2.0 J**	5.9 UJ	4.1 UJ	**48**	**6,000 D**	**0.39 J**	4.1 U	4.0 U	3.8 U	**1.5 J**	0.22 U	3.4 U	3.9 U	350 U	**2.4 J**	3.6 U	3.7 U	**1.2 J**	**1.8 J**
Cyclohexane	- -	- -	ug/kg	**2.5 J**	4.9 U	3.8 U	3.7 U	**1,500 J**	**23**	5.9 UJ	4.1 UJ	**2.4 J**	**3.3 J**	4.2 U	**2.5 J**	4.0 U	3.8 U	0.71 U	0.62 U	3.4 U	**2.7 J**	**5,000 J**	**2,300 D**	3.6 U	**2.4 J**	3.8 U	3.6 U
Ethylbenzene	1,000	390,000	ug/kg	**92**	4.9 U	3.8 U	3.7 U	**2,500 J**	**1.5 J**	5.9 UJ	4.1 UJ	**47**	**5,900 D**	**0.33 J**	4.1 U	4.0 U	**0.91 J**	0.35 UJ	0.30 U	3.4 U	3.9 U	**370**	**37**	3.6 U	3.7 U	3.8 U	**0.57 J**
Isopropylbenzene	- -	- -	ug/kg	**19**	4.9 U	3.8 U	3.7 U	**320 J**	3.1 U	5.9 UJ	4.1 UJ	**4.0**	**14**	4.2 U	4.1 U	4.0 U	3.8 U	0.76 U	0.66 U	3.4 U	3.9 U	**370**	**22**	3.6 U	3.7 U	3.8 U	3.6 U
Methyl tert-butyl ether	930	500,000	ug/kg	4.0 U	4.9 U	3.8 U	3.7 U	410 U	**7.9**	5.9 UJ	4.1 UJ	3.8 U	3.7 U	4.2 U	**0.70 J**	4.0 U	3.8 U	0.49 U	0.43 U	3.4 U	3.9 U	350 U	3.7 U	3.6 U	3.7 U	3.8 U	3.6 U
Methylcyclohexane	- -	- -	ug/kg	**3.1 J**	4.9 U	**0.91 J**	3.7 U	**4,900 J**	**25**	5.9 UJ	4.1 UJ	**3.1 J**	**4.6**	4.2 U	**2.6 J**	4.0 U	**2.4 J**	0.77 U	0.67 U	3.4 U	**2.7 J**	**17,000**	**7,600 D**	**2.3 J**	**2.5 J**	3.8 U	3.6 U
Styrene	- -	- -	ug/kg	**63**	4.9 U	3.8 U	3.7 U	410 U	3.1 U	5.9 UJ	4.1 UJ	3.8 U	**14**	4.2 U	4.1 U	4.0 U	3.8 U	**0.28 J**	0.22 U	3.4 U	3.9 U	350 U	3.7 U	3.6 U	3.7 U	**0.70 J**	3.6 U
Tetrachloroethene	1,300	150,000	ug/kg	4.0 U	4.9 U	3.8 U	3.7 U	410 U	3.1 U	5.9 UJ	4.1 UJ	3.8 U	3.7 U	4.2 U	4.1 U	4.0 U	3.8 U	0.68 U	**0.70 J**	3.4 U	3.9 U	350 U	3.7 U	3.6 U	3.7 U	3.8 U	3.6 U
Toluene	700	500,000	ug/kg	**6,100 D**	**1.4 J**	**0.52 J**	3.7 U	410 U	**0.25 J**	5.9 UJ	4.1 UJ	**5.9**	**59**	4.2 U	**0.43 J**	4.0 U	3.8 U	**1.8 J**	0.33 U	3.4 U	3.9 U	350 U	**10**	3.6 U	3.7 U	**2.6 J**	3.6 U
Xylenes (total)	260	500,000	ug/kg	**950**	**1.6 J**	**1.2 J**	7.4 U	**14,000 J**	**5.6 J**	12 UJ	8.1 UJ	**170**	**480**	8.4 U	8.2 U	**1.0 J**	**6.4 J**	**0.85 J**	0.74 U	6.8 U	7.9 U	**1,100**	**67**	7.1 U	7.5 U	**3.5 J**	7.2 U
Total BTEX	- -	- -	µg/kg	**9,442**	**3.7 J**	**1.7 J**	BDL	**16,600 J**	**9.4 J**	BDL	BDL	**271**	**12,439**	**0.72 J**	**0.43 J**	**1.0 J**	**7.3 J**	**4.2 J**	BDL	BDL	BDL	**1,470**	**116 J**	BDL	BDL	**7.3 J**	**2.4 J**
Total Volatile Organic Compounds (VOCs)	- -	- -	µg/kg	**9,565 J**	**12.1 J**	**2.63 J**	**0.32 J**	**23,320 J**	**66.5 J**	BDL	**40 J**	**294 J**	**12,503 J**	**0.72 J**	**12.6 J**	**1.0 J**	**9.71 J**	**17.4 J**	**23.1 J**	BDL	**5.4 J**	**23,840 J**	**10,038 J**	**2.3 J**	**4.9 J**	**8.0 J**	**2.37 J**
Semivolatile Organic Compounds																											
2,4-Dimethylphenol	- -	- -	µg/kg	**5,300**	200 U	920 U	1,800 U	3,600 U	3,600 U	2,100 U	200 U	1,900 U	1,800 U	180 U	890 U	980 U	9,300 U	4,800 UJ	250 U	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	21,000 UJ	4,000 U
2-Methylnaphthalene	- -	- -	µg/kg	**60,000**	200 U	920 U	1,800 U	**1,200 J**	3,600 U	2,100 U	200 U	**5,300**	**1,700 J**	180 U	890 U	980 U	9,300 U	4,000 UJ	**220 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	21,000 UJ	4,000 U
2-Methylphenol	330	500,000	µg/kg	**3,600 J**	200 U	920 U	1,800 U	3,600 U	3,600 U	2,100 U	200 U	1,900 U	1,800 U	180 U	890 U	980 U	9,300 U	2,400 UJ	120 U	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	21,000 UJ	4,000 U
4-Methylphenol	330	500,000	µg/kg	**5,900 J**	390 U	1,800 U	3,600 U	7,000 U	7,000 U	4,000 U	380 U	3,700 U	3,500 U	350 U	1,700 U	1,900 U	18,000 U	2,400 UJ	120 U	4,000 U	7,700 U	3,600 U	6,800 U	1,400 U	17,000 U	41,000 UJ	7,800 U
Acenaphthene	20,000	500,000	µg/kg	**9,700**	200 U	920 U	1,800 U	3,600 U	3,600 U	**770 J**	200 U	**2,600**	**840 J**	180 U	890 U	980 U	9,300 U	**3,800 J**	**290 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	21,000 UJ	4,000 U
Acenaphthylene	100,000	500,000	µg/kg	**11,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**910 J**	200 U	**12,000**	**3,500**	180 U	890 U	980 U	9,300 U	**17,000 J**	**1,000**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**8,600 J**	4,000 U
Anthracene	100,000	500,000	µg/kg	**33,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**3,600**	200 U	**20,000**	**6,400**	180 U	890 U	980 U	9,300 U	**40,000 J**	**1,800**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**18,000 J**	4,000 U
Benzo(a)anthracene	1,000	5,600	µg/kg	**30,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**14,000**	**70.0 J**	**20,000**	**11,000**	180 U	890 U	980 U	9,300 U	**87,000 J**	**2,100**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**36,000 J**	**800 J**
Benzo(a)pyrene	1,000	1,000	µg/kg	**20,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**16,000**	**120 J**	**15,000**	**7,400**	180 U	890 U	980 U	9,300 U	**69,000 J**	**1,500**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**30,000 J**	**740 J**
Benzo(b)fluoranthene	1,000	5,600	µg/kg	**22,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**18,000**	**160 J**	**17,000**	**8,400**	180 U	890 U	980 U	9,300 U	**83,000 J**	**1,600**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**32,000 J**	4,000 U
Benzo(g,h,i)perylene	100,000	500,000	µg/kg	**9,100**	200 U	920 U	1,800 U	3,600 U	3,600 U	**11,000**	**70.0 J**	**7,200**	**3,400**	180 U	890 U	980 U	9,300 U	**38,000 J**	**720 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**16,000 J**	4,000 U
Benzo(k)fluoranthene	800	56,000	µg/kg	**9,200**	200 U	920 U	1,800 U	3,600 U	3,600 U	**8,700**	200 U	**7,800**	**4,900**	180 U	890 U	980 U	9,300 U	**34,000 J**	**700 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**25,000 J**	4,000 U
Biphenyl	- -	- -	µg/kg	**9,400**	200 U	920 U	1,800 U	3,600 U	3,600 U	2,100 U	200 U	**3,200**	**970 J**	180 U	890 U	980 U	9,300 U	3,000 UJ	150 U	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	21,000 UJ	4,000 U
bis(2-Ethylhexyl)phthalate	- -	- -	µg/kg	3,800 U	200 U	920 U	1,800 U	3,600 U	3,600 U	2,100 U	**130 J**	1,900 U	1,800 U	180 U	890 U	980 U	9,300 U	6,800 UJ	350 U	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	21,000 UJ	4,000 U
Carbazole	- -	- -	µg/kg	**9,500**	200 U	920 U	1,800 U	3,600 U	3,600 U	**1,200 J**	200 U	**4,300**	**1,100 J**	180 U	890 U	980 U	9,300 U	2,400 UJ	**250 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**2,500 J**	4,000 U
Chrysene	1,000	56,000	µg/kg	**23,000**	**84.0 J**	920 U	1,800 U	3,600 U	3,600 U	**12,000**	**87.0 J**	**15,000**	**7,800**	180 U	890 U	980 U	9,300 U	**70,000 J**	**1,500**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**45,000 J**	**1,200 J**
Dibenzo(a,h)anthracene	330	560	µg/kg	3,800 U	200 U	920 U	1,800 U	3,600 U	3,600 U	2,100 U	**94.0 J**	**3,000**	**2,000**	180 U	890 U	980 U	9,300 U	3,500 UJ	180 U	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**5,000 J**	4,000 U
Dibenzofuran	7,000	350,000	µg/kg	**28,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**650 J**	200 U	**13,000**	**3,600**	180 U	890 U	980 U	9,300 U	**9,100 J**	**950 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**4,400 J**	4,000 U
Fluoranthene	100,000	500,000	µg/kg	**58,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**18,000**	**93.0 J**	**39,000**	**20,000**	180 U	890 U	980 U	9,300 U	**170,000 J**	**4,200 J**	**340 J**	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**82,000 J**	**1,800 J**
Fluorene	30,000	500,000	µg/kg	**35,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**1,100 J**	200 U	**18,000**	**5,300**	180 U	890 U	980 U	9,300 U	**18,000 J**	**1,600**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**8,800 J**	4,000 U
Indeno(1,2,3-cd)pyrene	500	5,600	µg/kg	**9,200**	200 U	920 U	1,800 U	3,600 U	3,600 U	**11,000**	**100 J**	**7,400**	**4,000**	180 U	890 U	980 U	9,300 U	**36,000 J**	**790 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**15,000 J**	4,000 U
Naphthalene	12,000	500,000	µg/kg	**160,000 D**	200 U	920 U	1,800 U	**940 J**	3,600 U	**600 J**	200 U	**27,000**	**9,600**	180 U	890 U	980 U	9,300 U	2,600 UJ	130 U	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	21,000 UJ	4,000 U
Phenanthrene	100,000	500,000	µg/kg	**140,000 D**	200 U	920 U	1,800 U	3,600 U	3,600 U	**9,400**	**47.0 J**	**44,000**	**16,000**	180 U	890 U	980 U	9,300 U	**110,000 J**	**5,000 J**	2,100 U	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**59,000 J**	**1,700 J**
Pyrene	100,000	500,000	µg/kg	**51,000**	200 U	920 U	1,800 U	3,600 U	3,600 U	**16,000**	**83.0 J**	**30,000**	**15,000**	180 U	890 U	980 U	9,300 U	**130,000 J**	**3,300 J**	**280 J**	4,000 U	1,800 U	3,500 U	740 U	8,900 U	**71,000 J**	**1,300 J**
Total Polycyclic Aromatic Hydrocarbons (PAHs)	- -	- -	µg/kg	**620,200**	**84.0 J**	BDL	BDL	**940 J**	BDL	**141,080 J**	**924 J**	**285,000**	**125,540**	BDL	BDL	BDL	BDL	**818,800 J**	**24,000 J**	**620 J**	BDL	BDL	BDL	BDL	BDL	**451,400 J**	**7,540 J**
Total Semivolatile Organic Compounds (SVOCs)	- -	- -	µg/kg	**741,900 J**	**84.0 J**	BDL	BDL	**2,140 J**	BDL	**142,930 J**	**1,054 J**	**310,800**	**132,910 J**	BDL	BDL	BDL	BDL	**914,900 J**	**27,300 J**	**620 J**	BDL	BDL	BDL	BDL	BDL	**458,300 J**	**7,540 J**

Table 1
Soil Analytical Results (Detected Analytes Only)

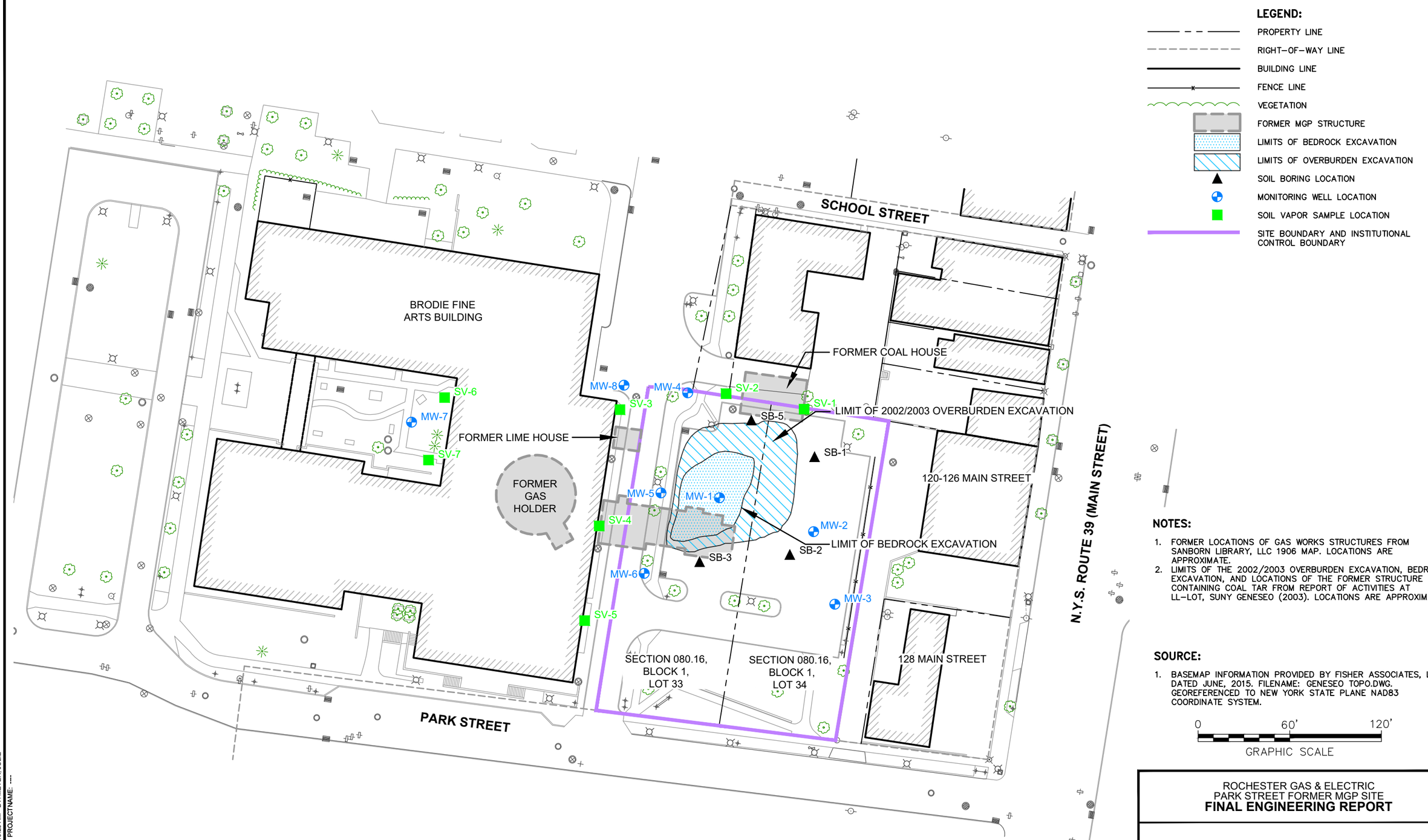
Final Engineering Report (table taken from Site Management Plan)
Park Street Former MGP Site

Location ID: / Sample Depth(Feet BGS): / Date Collected:	Unrestricted Use SCOs	Restricted Use SCOs Commercial	Units	MW-1 5 - 7 08/11/15	MW-1 9 - 11 08/11/15	MW-2 5 - 7 08/12/15	MW-2 9 - 13 08/12/15	MW-3 7 - 9 08/13/15	MW-3 9 - 10.2 08/13/15	MW-4 5 - 7 08/10/15	MW-4 13 - 14.5 08/10/15	MW-5 10 - 12 08/11/15	MW-5 12 - 14 08/11/15	MW-6 9 - 11 08/12/15	MW-6 13 - 14.2 08/12/15	MW-7 4 - 6 08/12/15	MW-7 6 - 8.3 08/12/15	MW-8 4 - 6 10/08/17	MW-8 13 - 14 10/08/17	SB-1 7 - 9 08/13/15	SB-1 9 - 11 08/13/15	SB-2 7 - 9 08/13/15	SB-2 9 - 11 08/13/15	SB-3 7 - 9 08/13/15	SB-3 9 - 11 08/13/15	SB-5 9 - 11 08/14/15	SB-5 11 - 13.5 08/14/15
Petroleum Hydrocarbons																											
Diesel, Fuel Oil #2, C10-C23	- -	- -	mg/kg	NA	NA	NA	NA	**150**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil #4	- -	- -	mg/kg	NA	NA	NA	NA	18.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fuel Oil #6	- -	- -	mg/kg	NA	NA	NA	NA	18.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gasoline	- -	- -	mg/kg	NA	NA	NA	NA	**210**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kerosene	- -	- -	mg/kg	NA	NA	NA	NA	**140**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Motor Oils	- -	- -	mg/kg	NA	NA	NA	NA	**160**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Unknown Hydrocarbon1	- -	- -	mg/kg	NA	NA	NA	NA	18.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics																											
Aluminum	- -	- -	mg/kg	**16,600 J**	**17,100 J**	**11,200 J**	**16,700 J**	**10,400 J**	**12,700 J**	**9,860 J**	**17,800 J**	**16,400 J**	**15,300 J**	**15,100 J**	**17,900 J**	**20,300 J**	**15,700 J**	**15,400**	**15,100**	**12,600**	**15,500**	**11,200**	**12,800**	**14,400**	**14,100**	**17,300**	**18,600**
Antimony	- -	- -	mg/kg	17.8 UJ	17.5 UJ	16.6 UJ	16.3 UJ	15.8 UJ	15.1 UJ	18.7 UJ	16.7 UJ	**0.990 J**	16.8 UJ	15.6 UJ	15.9 UJ	16.6 UJ	16.8 UJ	0.470 UJ	0.470 UJ	19.0 U	17.5 U	**0.650 J**	16.0 U	16.2 U	15.7 U	18.6 U	18.0 U
Arsenic	13	16	mg/kg	**2.20 J**	**2.90**	**3.60**	**4.00**	**3.60**	**3.60**	**23.9**	**6.60**	**3.90**	**4.80**	**2.80**	**3.50**	**2.40**	**5.60**	**18.5**	**2.30 J**	**7.30**	**3.40**	**3.70**	**4.00**	**4.10**	**3.80**	**5.00**	**3.60**
Barium	350	400	mg/kg	**66.3 J**	**86.4 J**	**55.3 J**	**67.7 J**	**44.3 J**	**47.2 J**	**95.3 J**	**63.9 J**	**168 J**	**69.5 J**	**98.9 J**	**58.8 J**	**75.1 J**	**57.8 J**	**184**	**45.9**	**92.7**	**54.9**	**48.3**	**99.5**	**71.1**	**63.6**	**123**	**76.6**
Beryllium	7.2	590	mg/kg	**0.820**	**0.830**	**0.550**	**0.820**	**0.490**	**0.640**	**0.900**	**0.950**	**0.820**	**0.750**	**0.760**	**0.920**	**0.880**	**0.740**	**0.960**	**0.890**	**0.580**	**0.790**	**0.590**	**0.690**	**0.750**	**0.750**	**0.860**	**0.960**
Cadmium	2.5	9.3	mg/kg	**0.0370 J**	**0.0410 J**	**0.0940 J**	**0.0340 J**	**0.140 J**	**0.0720 J**	**0.290**	**0.130 J**	**0.0530 J**	**0.260**	**0.0560 J**	0.210 U	**0.0740 J**	**0.160 J**	**1.10**	0.0350 U	**0.150 J**	**0.0640 J**	**0.0610 J**	0.210 U	0.220 U	**0.0360 J**	**0.610**	**0.0570 J**
Calcium	- -	- -	mg/kg	**56,600 J**	**45,300 J**	**72,200 J**	**53,400 J**	**54,500 J**	**59,200 J**	**49,500 J**	**12,900 J**	**40,000 J**	**35,000 J**	**45,300 J**	**22,600 J**	**37,500 J**	**46,500 J**	**26,100**	**16,800**	**24,000**	**37,900**	**60,400**	**71,300**	**56,300**	**47,600**	**8,180**	**11,400**
Chromium	- -	- -	mg/kg	**24.7 J**	**26.1 J**	**16.8 J**	**24.3 J**	**15.1 J**	**19.2 J**	**15.7 J**	**26.6 J**	**24.8 J**	**22.9 J**	**22.9 J**	**27.2 J**	**26.4 J**	**24.3 J**	**31.3 J**	**21.8 J**	**16.8**	**25.3**	**17.5**	**20.2**	**22.4**	**22.3**	**23.9**	**28.8**
Cobalt	- -	- -	mg/kg	**13.5**	**13.7**	**10.4**	**15.4**	**10.8**	**12.5**	**6.50**	**15.4**	**14.9**	**14.5**	**13.4**	**14.7**	**8.70**	**10.7**	**13.1 J**	**8.90 J**	**8.60**	**15.1**	**10.8**	**12.2**	**14.2**	**15.5**	**12.2**	**17.1**
Copper	50	270	mg/kg	**27.8**	**28.0**	**27.7 J**	**30.5 J**	**32.1 J**	**28.0 J**	**49.0**	**42.2**	**26.6**	**31.0**	**27.0**	**28.3**	**17.3 J**	**34.1 J**	**60.5 J**	**26.2 J**	**27.4**	**27.1**	**26.5**	**29.1**	**29.2**	**28.0**	**18.4**	**27.0**
Cyanide	27	27	mg/kg	1.10 U	**0.860 J**	1.10 U	**1.10**	1.00 U	1.10 U	**5.80**	1.10 U	**2.90**	**3.80**	1.00 U	1.00 U	1.10 U	1.10 U	NA	NA	1.20 U	1.20 U	1.10 U	1.00 U	1.10 U	1.00 U	**469**	1.20 U
Iron	- -	- -	mg/kg	**20,200 J**	**23,800 J**	**16,500 J**	**21,400 J**	**15,500 J**	**18,300 J**	**11,000 J**	**27,100 J**	**23,800 J**	**24,300 J**	**21,300 J**	**24,100 J**	**19,300 J**	**21,100 J**	**25,000 J**	**17,900 J**	**17,100**	**24,500**	**17,100**	**19,700**	**21,400**	**21,700**	**23,300**	**27,300**
Lead	63	1,000	mg/kg	**10.1**	**10.1**	**12.2**	**12.2**	**12.2**	**13.8**	**138**	**22.3**	**10.9**	**14.3**	**9.70**	**11.8**	**9.10**	**13.2**	**679 J**	**8.80 J**	**130**	**13.4**	**12.2**	**13.4**	**12.1**	**11.4**	**63.6**	**13.5**
Magnesium	- -	- -	mg/kg	**7,830 J**	**8,340 J**	**17,200 J**	**7,380 J**	**12,700 J**	**9,390 J**	**3,640 J**	**6,780 J**	**7,800 J**	**7,460 J**	**7,400 J**	**9,170 J**	**7,770 J**	**6,450 J**	**5,870 J**	**5,420 J**	**6,110**	**8,300**	**11,100**	**7,240**	**7,540**	**7,570**	**5,550**	**7,880**
Manganese	1,600	10,000	mg/kg	**345 J**	**333 J**	**321 J**	**410 J**	**368 J**	**345 J**	**197 J**	**285 J**	**302 J**	**284 J**	**295 J**	**269 J**	**254 J**	**249 J**	**308 J**	**173 J**	**332**	**355**	**349**	**388**	**361**	**360**	**389**	**307**
Mercury	0.18	2.8	mg/kg	**0.0230**	**0.0140 J**	**0.0190**	**0.0180 J**	**0.00890 J**	**0.0170 J**	**0.200**	**0.0320**	**0.0300**	**0.0200**	**0.0170 J**	**0.0150 J**	**0.0570**	**0.0260**	**0.350**	**0.0130 J**	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	30	310	mg/kg	**43.3**	**44.5**	**34.0**	**42.2**	**32.4**	**38.9**	**20.8**	**54.2**	**42.1**	**41.0**	**40.4**	**42.9**	**36.7**	**46.8**	**39.1 J**	**33.3 J**	**24.8**	**45.4**	**34.2**	**39.1**	**42.9**	**41.6**	**35.7**	**48.0**
Potassium	- -	- -	mg/kg	**3,650 J**	**3,470 J**	**2,750 J**	**3,850 J**	**2,700 J**	**3,070 J**	**1,450 J**	**3,840 J**	**3,550 J**	**3,030 J**	**3,110 J**	**3,980 J**	**4,200 J**	**3,520 J**	**4,310 J**	**4,350 J**	**2,720**	**3,000**	**2,510**	**2,990**	**3,020**	**3,010**	**2,960**	**3,120**
Selenium	3.9	1,500	mg/kg	4.70 U	4.70 U	4.40 U	**0.500 J**	4.20 U	4.00 U	**0.560 J**	4.50 U	**1.00 J**	4.50 U	4.10 U	**0.460 J**	**0.780 J**	**2.10 J**	**4.00 J**	**0.470 J**	**0.580 J**	4.70 U	**1.00 J**	**0.440 J**	4.30 U	**0.650 J**	**0.730 J**	4.80 U
Silver	2	1,500	mg/kg	0.710 U	0.700 U	0.660 U	0.650 U	0.630 U	0.600 U	0.750 U	0.670 U	0.710 U	0.670 U	0.620 U	0.630 U	0.660 U	0.670 U	**0.260 J**	0.240 U	0.760 U	0.700 U	0.630 U	0.640 U	0.650 U	0.630 U	0.740 U	0.720 U
Sodium	- -	- -	mg/kg	**226**	**212**	**524**	**235**	**173**	**234**	**736**	**173**	**523**	**472**	**427**	**240**	**186**	**189**	**565**	**411**	**916**	**627**	**407**	**264**	**642**	**327**	**752**	**321**
Vanadium	- -	- -	mg/kg	**21.6 J**	**20.9 J**	**17.7 J**	**21.8 J**	**17.6 J**	**19.1 J**	**21.9 J**	**24.7 J**	**20.8 J**	**18.7 J**	**19.2 J**	**22.7 J**	**26.7 J**	**25.7 J**	**29.1 J**	**22.5 J**	**21.8**	**19.7**	**16.9**	**17.1**	**18.6**	**17.7**	**27.6**	**23.9**
Zinc	109	10,000	mg/kg	**56.1 J**	**71.7 J**	**57.7 J**	**56.2 J**	**66.2 J**	**50.8 J**	**135 J**	**90.5 J**	**69.9 J**	**203 J**	**75.4 J**	**52.2 J**	**64.7 J**	**82.1 J**	**482 J**	**35.9 J**	**99.9**	**76.0**	**52.4**	**50.8**	**50.8**	**63.5**	**887**	**79.0**

Notes:

1. Samples were submitted to Test America, Amherst, New York for analysis using USEPA SW-846 Methods 8260B (VOCs), 8270D (SVOCs), 6010C (Inorganics), 9012B (Total Cyanide), 310.13 (Hydrocarbon Identification).
2. Samples from monitoring wells MW-3 and MW-4 were submitted to Test America, Amherst, New York for additional analysis of carbon dioxide, methane, sulfide, nitrate, nitrite, and dissolved iron and manganese.
3. Results are presented in units of micrograms per liter (µg/L) and milligrams per liter (mg/L), as identified.
4. J - Indicates that the analyte was detected at a concentration less than the practical quantitation limit (PQL).
5. U - Indicates the constituent was not detected at the PQL. The value preceding the U indicates the PQL.
6. UB - Indicates the constituent was not detected at a concentration less than the PQL due to associated blank contamination.
7. D - Compound quantitated using a secondary dilution.
8. NA - not analyzed
9. BDL - Below method detection limits.
10. BGS - Below ground surface.
11. Sample results detected above the Method Detection Limit (MDL) are presented in bold font.
12. Gray Shading indicates the result exceeds NYSDEC Part 375 Soil Cleanup Objectives (SCO) for Unrestricted use (Unrestricted use SCO).
13. Yellow Shading indicates the result exceeds NYSDEC Part 375 Soil Cleanup Objectives (SCO) for Commercial use (Commercial use SCO).
14. - - Indicates a standard or guidance value does not exist for the respective analyte.

Figures



LEGEND:

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- BUILDING LINE
- FENCE LINE
- VEGETATION
- FORMER MGP STRUCTURE
- LIMITS OF BEDROCK EXCAVATION
- LIMITS OF OVERBURDEN EXCAVATION
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- SOIL VAPOR SAMPLE LOCATION
- SITE BOUNDARY AND INSTITUTIONAL CONTROL BOUNDARY

NOTES:

1. FORMER LOCATIONS OF GAS WORKS STRUCTURES FROM SANBORN LIBRARY, LLC 1906 MAP. LOCATIONS ARE APPROXIMATE.
2. LIMITS OF THE 2002/2003 OVERBURDEN EXCAVATION, BEDROCK EXCAVATION, AND LOCATIONS OF THE FORMER STRUCTURE CONTAINING COAL TAR FROM REPORT OF ACTIVITIES AT LL-LOT, SUNY GENESEO (2003). LOCATIONS ARE APPROXIMATE.

SOURCE:

1. BASEMAP INFORMATION PROVIDED BY FISHER ASSOCIATES, LLC. DATED JUNE, 2015. FILENAME: GENESEO TOPO.DWG. GEOREFERENCED TO NEW YORK STATE PLANE NAD83 COORDINATE SYSTEM.

0 60' 120'

GRAPHIC SCALE

ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
FINAL ENGINEERING REPORT

SITE MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

CITY:CRANBURY-NJ DIV/GROUP:ENV/CAD DB:JMEYER LD:JMEYER PIC:K.WHITE PM:B.AHRENS TM:B.AHRENS LYR:(OPTION=*;OFF=*REF*
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---- PLOTTED: 6/15/2018 10:29 AM BY: MEYER, JULIE
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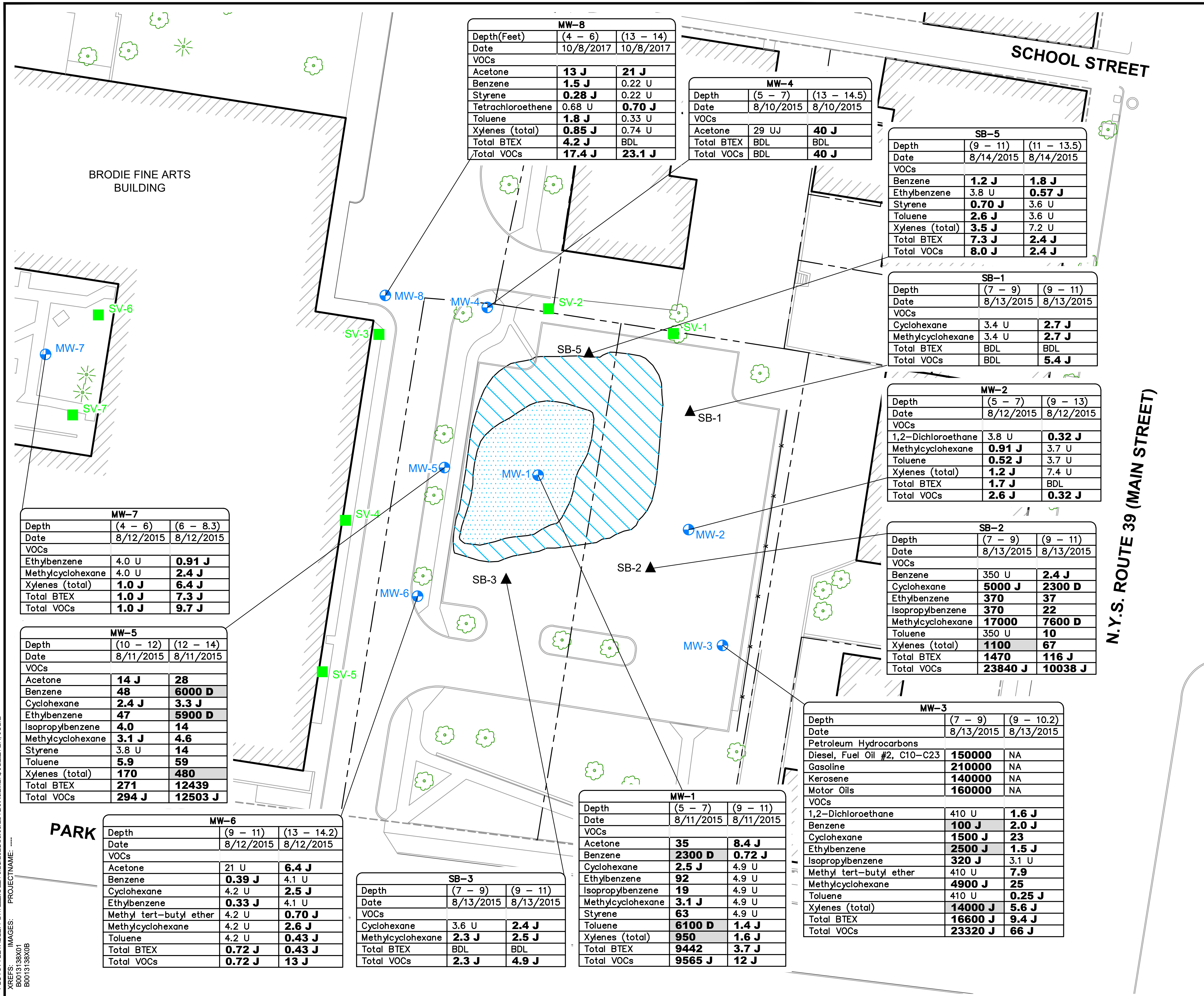
B0013138X0B



MW-8		
Depth(Feet)	(4 – 6)	(13 – 14)
Date	10/8/2017	10/8/2017
VOCs		
Acetone	**13 J**	**21 J**
Benzene	**1.5 J**	0.22 U
Styrene	**0.28 J**	0.22 U
Tetrachloroethene	0.68 U	**0.70 J**
Toluene	**1.8 J**	0.33 U
Xylenes (total)	**0.85 J**	0.74 U
Total BTEX	**4.2 J**	BDL
Total VOCs	**17.4 J**	**23.1 J**

MW-4		
Depth	(5 – 7)	(13 – 14.5)
Date	8/10/2015	8/10/2015
VOCs		
Acetone	29 UJ	**40 J**
Total BTEX	BDL	BDL
Total VOCs	BDL	**40 J**

SB-5		
Depth	(9 – 11)	(11 – 13.5)
Date	8/14/2015	8/14/2015
VOCs		
Benzene	**1.2 J**	**1.8 J**
Ethylbenzene	3.8 U	**0.57 J**
Styrene	**0.70 J**	3.6 U
Toluene	**2.6 J**	3.6 U
Xylenes (total)	**3.5 J**	7.2 U
Total BTEX	**7.3 J**	**2.4 J**
Total VOCs	**8.0 J**	**2.4 J**

SB-1		
Depth	(7 – 9)	(9 – 11)
Date	8/13/2015	8/13/2015
VOCs		
Cyclohexane	3.4 U	**2.7 J**
Methylcyclohexane	3.4 U	**2.7 J**
Total BTEX	BDL	BDL
Total VOCs	BDL	**5.4 J**

MW-2		
Depth	(5 – 7)	(9 – 13)
Date	8/12/2015	8/12/2015
VOCs		
1,2–Dichloroethane	3.8 U	**0.32 J**
Methylcyclohexane	**0.91 J**	3.7 U
Toluene	**0.52 J**	3.7 U
Xylenes (total)	**1.2 J**	7.4 U
Total BTEX	**1.7 J**	BDL
Total VOCs	**2.6 J**	**0.32 J**

SB-2		
Depth	(7 – 9)	(9 – 11)
Date	8/13/2015	8/13/2015
VOCs		
Benzene	350 U	**2.4 J**
Cyclohexane	**5000 J**	**2300 D**
Ethylbenzene	**370**	**37**
Isopropylbenzene	**370**	**22**
Methylcyclohexane	**17000**	**7600 D**
Toluene	350 U	**10**
Xylenes (total)	**1100**	**67**
Total BTEX	**1470**	**116 J**
Total VOCs	**23840 J**	**10038 J**

MW-7		
Depth	(4 – 6)	(6 – 8.3)
Date	8/12/2015	8/12/2015
VOCs		
Ethylbenzene	4.0 U	**0.91 J**
Methylcyclohexane	4.0 U	**2.4 J**
Xylenes (total)	**1.0 J**	**6.4 J**
Total BTEX	**1.0 J**	**7.3 J**
Total VOCs	**1.0 J**	**9.7 J**

MW-5		
Depth	(10 – 12)	(12 – 14)
Date	8/11/2015	8/11/2015
VOCs		
Acetone	**14 J**	**28**
Benzene	**48**	**6000 D**
Cyclohexane	**2.4 J**	**3.3 J**
Ethylbenzene	**47**	**5900 D**
Isopropylbenzene	**4.0**	**14**
Methylcyclohexane	**3.1 J**	**4.6**
Styrene	3.8 U	**14**
Toluene	**5.9**	**59**
Xylenes (total)	**170**	**480**
Total BTEX	**271**	**12439**
Total VOCs	**294 J**	**12503 J**

MW-6		
Depth	(9 – 11)	(13 – 14.2)
Date	8/12/2015	8/12/2015
VOCs		
Acetone	21 U	**6.4 J**
Benzene	**0.39 J**	4.1 U
Cyclohexane	4.2 U	**2.5 J**
Ethylbenzene	**0.33 J**	4.1 U
Methyl tert–butyl ether	4.2 U	**0.70 J**
Methylcyclohexane	4.2 U	**2.6 J**
Toluene	4.2 U	**0.43 J**
Total BTEX	**0.72 J**	**0.43 J**
Total VOCs	**0.72 J**	**13 J**

SB-3		
Depth	(7 – 9)	(9 – 11)
Date	8/13/2015	8/13/2015
VOCs		
Cyclohexane	3.6 U	**2.4 J**
Methylcyclohexane	**2.3 J**	**2.5 J**
Total BTEX	BDL	BDL
Total VOCs	**2.3 J**	**4.9 J**

MW-1		
Depth	(5 – 7)	(9 – 11)
Date	8/11/2015	8/11/2015
VOCs		
Acetone	**35**	**8.4 J**
Benzene	**2300 D**	**0.72 J**
Cyclohexane	**2.5 J**	4.9 U
Ethylbenzene	**92**	4.9 U
Isopropylbenzene	**19**	4.9 U
Methylcyclohexane	**3.1 J**	4.9 U
Styrene	**63**	4.9 U
Toluene	**6100 D**	**1.4 J**
Xylenes (total)	**950**	**1.6 J**
Total BTEX	**9442**	**3.7 J**
Total VOCs	**9565 J**	**12 J**

MW-3		
Depth	(7 – 9)	(9 – 10.2)
Date	8/13/2015	8/13/2015
Petroleum Hydrocarbons		
Diesel, Fuel Oil #2, C10–C23	**150000**	NA
Gasoline	**210000**	NA
Kerosene	**140000**	NA
Motor Oils	**160000**	NA
VOCs		
1,2–Dichloroethane	410 U	**1.6 J**
Benzene	**100 J**	**2.0 J**
Cyclohexane	**1500 J**	**23**
Ethylbenzene	**2500 J**	**1.5 J**
Isopropylbenzene	**320 J**	3.1 U
Methyl tert–butyl ether	410 U	**7.9**
Methylcyclohexane	**4900 J**	**25**
Toluene	410 U	**0.25 J**
Xylenes (total)	**14000 J**	**5.6 J**
Total BTEX	**16600 J**	**9.4 J**
Total VOCs	**23320 J**	**66 J**

LEGEND:

- PROPERTY LINE
- RIGHT–OF–WAY LINE
- BUILDING LINE
- FENCE LINE
- VEGETATION
- LIMITS OF BEDROCK EXCAVATION
- LIMITS OF OVERBURDEN EXCAVATION
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- SOIL VAPOR SAMPLE LOCATION

NOTES:

1. RESULTS ARE IN UNITS OF MILLIGRAM PER KILOGRAM (mg/kg)
2. ONLY DETECTED CONSTITUENTS ARE PRESENTED.
3. BTEX – BENZENE, TOLUENE, ETHYLBENZENE, XYLENE
4. VOC – VOLATILE ORGANIC COMPOUND
5. DEPTHS ARE IN FEET BELOW GROUND SURFACE
6. NA – NOT ANALYZED
7. BDL – BELOW DETECTION LIMITS
8. J – INDICATES AN ESTIMATED CONCENTRATION
9. U – INDICATES THE CONSTITUENT WAS NOT DETECTED ABOVE THE IDENTIFIED CONCENTRATION
10. A BOLD RESULT INDICATES CONSTITUENT DETECTION
11. GRAY SHADING INDICATES RESULT EXCEEDS THE NYSDEC PART 375 UNRESTRICTED USE SCO.
12. YELLOW SHADING INDICATES RESULT EXCEEDS THE NYSDEC PART 375 COMMERCIAL USE SCO.
13. FORMER LOCATIONS OF GAS WORKS STRUCTURES FROM SANBORN LIBRARY, LLC 1906 MAP. LOCATIONS ARE APPROXIMATE.
14. LIMITS OF THE 2002/2003 OVERBURDEN EXCAVATION, BEDROCK EXCAVATION, FROM REPORT OF ACTIVITIES AT LL–LOT, SUNY GENESEO (2003). LOCATIONS ARE APPROXIMATE.

SOURCE:

1. BASEMAP INFORMATION PROVIDED BY FISHER ASSOCIATES, LLC. DATED JUNE, 2015. FILENAME: GENESEO TOPO.DWG. GEOREFERENCED TO NEW YORK STATE PLANE NAD83 COORDINATE SYSTEM.

0 40' 80'

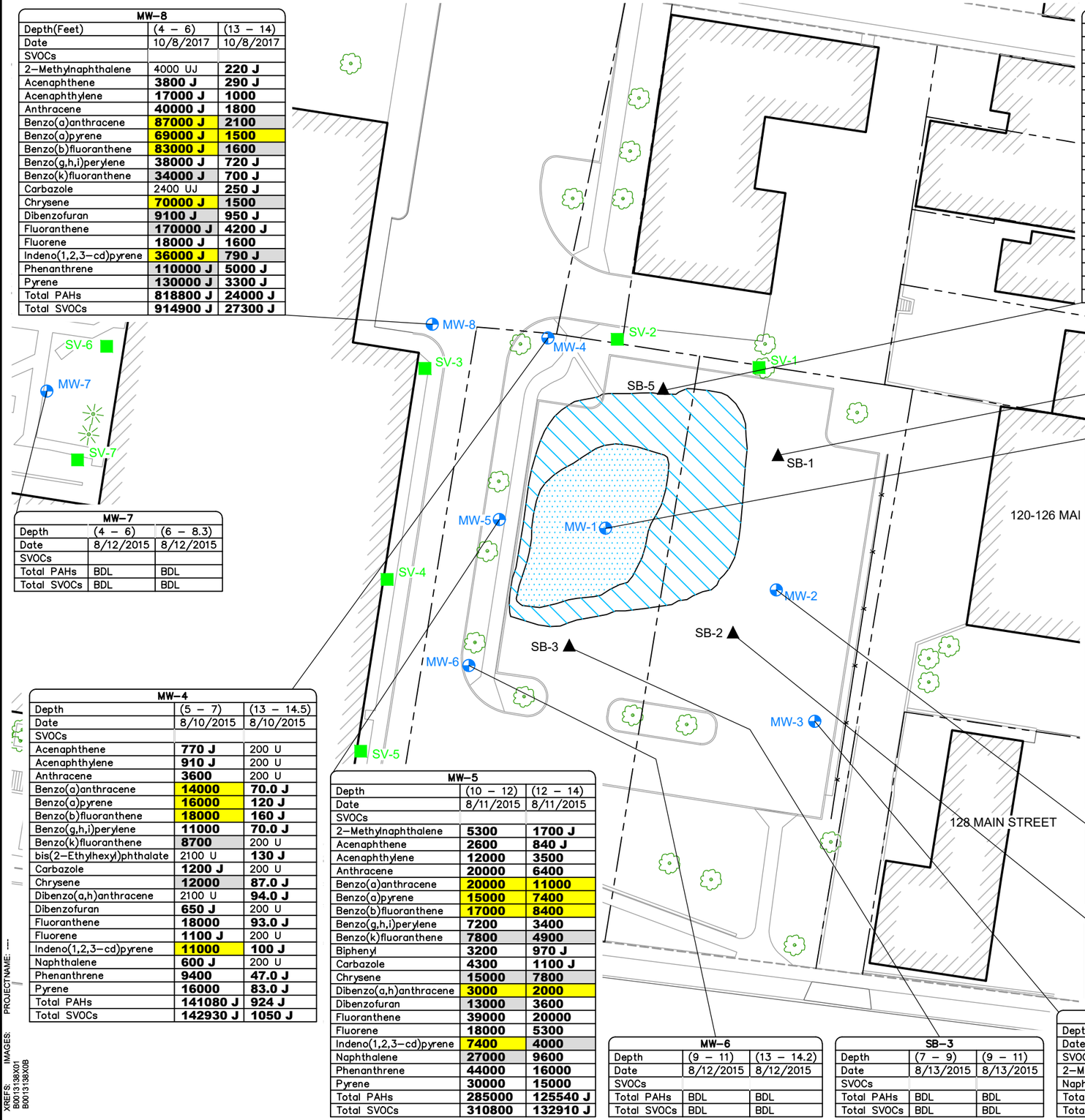
GRAPHIC SCALE

ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
FINAL ENGINEERING REPORT

SOIL VOC DATA

ARCADIS Design & Consultancy for natural and built assets

FIGURE **2**



MW-8		
Depth(Feet)	(4 – 6)	(13 – 14)
Date	10/8/2017	10/8/2017
SVOCs		
2-Methylnaphthalene	4000 UJ	**220 J**
Acenaphthene	**3800 J**	**290 J**
Acenaphthylene	**17000 J**	**1000**
Anthracene	**40000 J**	**1800**
Benzo(a)anthracene	**87000 J**	**2100**
Benzo(a)pyrene	**69000 J**	**1500**
Benzo(b)fluoranthene	**83000 J**	**1600**
Benzo(g,h,i)perylene	**38000 J**	**720 J**
Benzo(k)fluoranthene	**34000 J**	**700 J**
Carbazole	2400 UJ	**250 J**
Chrysene	**70000 J**	**1500**
Dibenzofuran	**9100 J**	**950 J**
Fluoranthene	**170000 J**	**4200 J**
Fluorene	**18000 J**	**1600**
Indeno(1,2,3-cd)pyrene	**36000 J**	**790 J**
Phenanthrene	**110000 J**	**5000 J**
Pyrene	**130000 J**	**3300 J**
Total PAHs	**818800 J**	**24000 J**
Total SVOCs	**914900 J**	**27300 J**

MW-7		
Depth	(4 – 6)	(6 – 8.3)
Date	8/12/2015	8/12/2015
SVOCs		
Total PAHs	BDL	BDL
Total SVOCs	BDL	BDL

MW-4		
Depth	(5 – 7)	(13 – 14.5)
Date	8/10/2015	8/10/2015
SVOCs		
Acenaphthene	**770 J**	200 U
Acenaphthylene	**910 J**	200 U
Anthracene	**3600**	200 U
Benzo(a)anthracene	**14000**	**70.0 J**
Benzo(a)pyrene	**16000**	**120 J**
Benzo(b)fluoranthene	**18000**	**160 J**
Benzo(g,h,i)perylene	**11000**	**70.0 J**
Benzo(k)fluoranthene	**8700**	200 U
bis(2-Ethylhexyl)phthalate	2100 U	**130 J**
Carbazole	**1200 J**	200 U
Chrysene	**12000**	**87.0 J**
Dibenzo(a,h)anthracene	2100 U	**94.0 J**
Dibenzofuran	**650 J**	200 U
Fluoranthene	**18000**	**93.0 J**
Fluorene	**1100 J**	200 U
Indeno(1,2,3-cd)pyrene	**11000**	**100 J**
Naphthalene	**600 J**	200 U
Phenanthrene	**9400**	**47.0 J**
Pyrene	**16000**	**83.0 J**
Total PAHs	**141080 J**	**924 J**
Total SVOCs	**142930 J**	**1050 J**

MW-5		
Depth	(10 – 12)	(12 – 14)
Date	8/11/2015	8/11/2015
SVOCs		
2-Methylnaphthalene	**5300**	**1700 J**
Acenaphthene	**2600**	**840 J**
Acenaphthylene	**12000**	**3500**
Anthracene	**20000**	**6400**
Benzo(a)anthracene	**20000**	**11000**
Benzo(a)pyrene	**15000**	**7400**
Benzo(b)fluoranthene	**17000**	**8400**
Benzo(g,h,i)perylene	**7200**	**3400**
Benzo(k)fluoranthene	**7800**	**4900**
Biphenyl	**3200**	**970 J**
Carbazole	**4300**	**1100 J**
Chrysene	**15000**	**7800**
Dibenzo(a,h)anthracene	**3000**	**2000**
Dibenzofuran	**13000**	**3600**
Fluoranthene	**39000**	**20000**
Fluorene	**18000**	**5300**
Indeno(1,2,3-cd)pyrene	**7400**	**4000**
Naphthalene	**27000**	**9600**
Phenanthrene	**44000**	**16000**
Pyrene	**30000**	**15000**
Total PAHs	**285000**	**125540 J**
Total SVOCs	**310800**	**132910 J**

MW-6		
Depth	(9 – 11)	(13 – 14.2)
Date	8/12/2015	8/12/2015
SVOCs		
Total PAHs	BDL	BDL
Total SVOCs	BDL	BDL

SB-3		
Depth	(7 – 9)	(9 – 11)
Date	8/13/2015	8/13/2015
SVOCs		
Total PAHs	BDL	BDL
Total SVOCs	BDL	BDL

SB-5		
Depth	(9 – 11)	(11 – 13.5)
Date	8/14/2015	8/14/2015
SVOCs		
Acenaphthylene	**8600 J**	4000 U
Anthracene	**18000 J**	4000 U
Benzo(a)anthracene	**36000 J**	**800 J**
Benzo(a)pyrene	**30000 J**	**740 J**
Benzo(b)fluoranthene	**32000 J**	4000 U
Benzo(g,h,i)perylene	**16000 J**	4000 U
Benzo(k)fluoranthene	**25000 J**	4000 U
Carbazole	**2500 J**	4000 U
Chrysene	**45000 J**	**1200 J**
Dibenzo(a,h)anthracene	**5000 J**	4000 U
Dibenzofuran	**4400 J**	4000 U
Fluoranthene	**82000 J**	**1800 J**
Fluorene	**8800 J**	4000 U
Indeno(1,2,3-cd)pyrene	**15000 J**	4000 U
Phenanthrene	**59000 J**	**1700 J**
Pyrene	**71000 J**	**1300 J**
Total PAHs	**451400 J**	**7540 J**
Total SVOCs	**458300 J**	**7540 J**

SB-1		
Depth	(7 – 9)	(9 – 11)
Date	8/13/2015	8/13/2015
SVOCs		
Fluoranthene	**340 J**	4000 U
Pyrene	**280 J**	4000 U
Total PAHs	**620 J**	BDL
Total SVOCs	**620 J**	BDL

MW-1		
Depth	(5 – 7)	(9 – 11)
Date	8/11/2015	8/11/2015
SVOCs		
2,4-Dimethylphenol	**5300**	200 U
2-Methylnaphthalene	**60000**	200 U
2-Methylphenol	**3600 J**	200 U
4-Methylphenol	**5900 J**	390 U
Acenaphthene	**9700**	200 U
Acenaphthylene	**11000**	200 U
Anthracene	**33000**	200 U
Benzo(a)anthracene	**30000**	200 U
Benzo(a)pyrene	**20000**	200 U
Benzo(b)fluoranthene	**22000**	200 U
Benzo(g,h,i)perylene	**9100**	200 U
Benzo(k)fluoranthene	**9200**	200 U
Biphenyl	**9400**	200 U
Carbazole	**9500**	200 U
Chrysene	**23000**	**84.0 J**
Dibenzofuran	**28000**	200 U
Fluoranthene	**58000**	200 U
Fluorene	**35000**	200 U
Indeno(1,2,3-cd)pyrene	**9200**	200 U
Naphthalene	**160000 D**	200 U
Phenanthrene	**140000 D**	200 U
Pyrene	**51000**	200 U
Total PAHs	**620200**	**84 J**
Total SVOCs	**741900 J**	**84 J**

MW-2		
Depth	(5 – 7)	(9 – 13)
Date	8/12/2015	8/12/2015
SVOCs		
Total PAHs	BDL	BDL
Total SVOCs	BDL	BDL

SB-2		
Depth	(7 – 9)	(9 – 11)
Date	8/13/2015	8/13/2015
SVOCs		
Total PAHs	BDL	BDL
Total SVOCs	BDL	BDL

MW-3		
Depth	(7 – 9)	(9 – 10.2)
Date	8/13/2015	8/13/2015
SVOCs		
2-Methylnaphthalene	**1200 J**	3600 U
Naphthalene	**940 J**	3600 U
Total PAHs	**940 J**	BDL
Total SVOCs	**2140 J**	BDL

LEGEND:

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- BUILDING LINE
- FENCE LINE
- VEGETATION
- LIMITS OF BEDROCK EXCAVATION
- LIMITS OF OVERBURDEN EXCAVATION
- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- SOIL VAPOR SAMPLE LOCATION

NOTES:

1. RESULTS ARE IN UNITS OF MILLIGRAM PER KILOGRAM (mg/kg)
2. ONLY DETECTED CONSTITUENTS ARE PRESENTED.
3. PAH – POLYCYCLIC AROMATIC HYDROCARBON
4. SVOC – SEMIVOLATILE ORGANIC COMPOUND
5. DEPTHS ARE IN FEET BELOW GROUND SURFACE
6. NA – NOT ANALYZED
7. BDL – BELOW DETECTION LIMITS
8. J – INDICATES AN ESTIMATED CONCENTRATION
9. U – INDICATES THE CONSTITUENT WAS NOT DETECTED ABOVE THE IDENTIFIED CONCENTRATION
10. A BOLD RESULT INDICATES CONSTITUENT DETECTION
11. GRAY SHADING INDICATES RESULT EXCEEDS THE NYSDEC PART 375 UNRESTRICTED USE SCO.
12. YELLOW SHADING INDICATES RESULT EXCEEDS THE NYSDEC PART 375 COMMERCIAL USE SCO.
13. FORMER LOCATIONS OF GAS WORKS STRUCTURES FROM SANBORN LIBRARY, LLC 1906 MAP. LOCATIONS ARE APPROXIMATE.
14. LIMITS OF THE 2002/2003 OVERBURDEN EXCAVATION, BEDROCK EXCAVATION, FROM REPORT OF ACTIVITIES AT LL-LOT, SUNY GENESEO (2003). LOCATIONS ARE APPROXIMATE.

SOURCE:

1. BASEMAP INFORMATION PROVIDED BY FISHER ASSOCIATES, LLC. DATED JUNE, 2015. FILENAME: GENESEO TOPO.DWG. GEOREFERENCED TO NEW YORK STATE PLANE NAD83 COORDINATE SYSTEM.

0 40' 80'

GRAPHIC SCALE

ROCHESTER GAS & ELECTRIC
PARK STREET FORMER MGP SITE
FINAL ENGINEERING REPORT

SOIL SVOC DATA

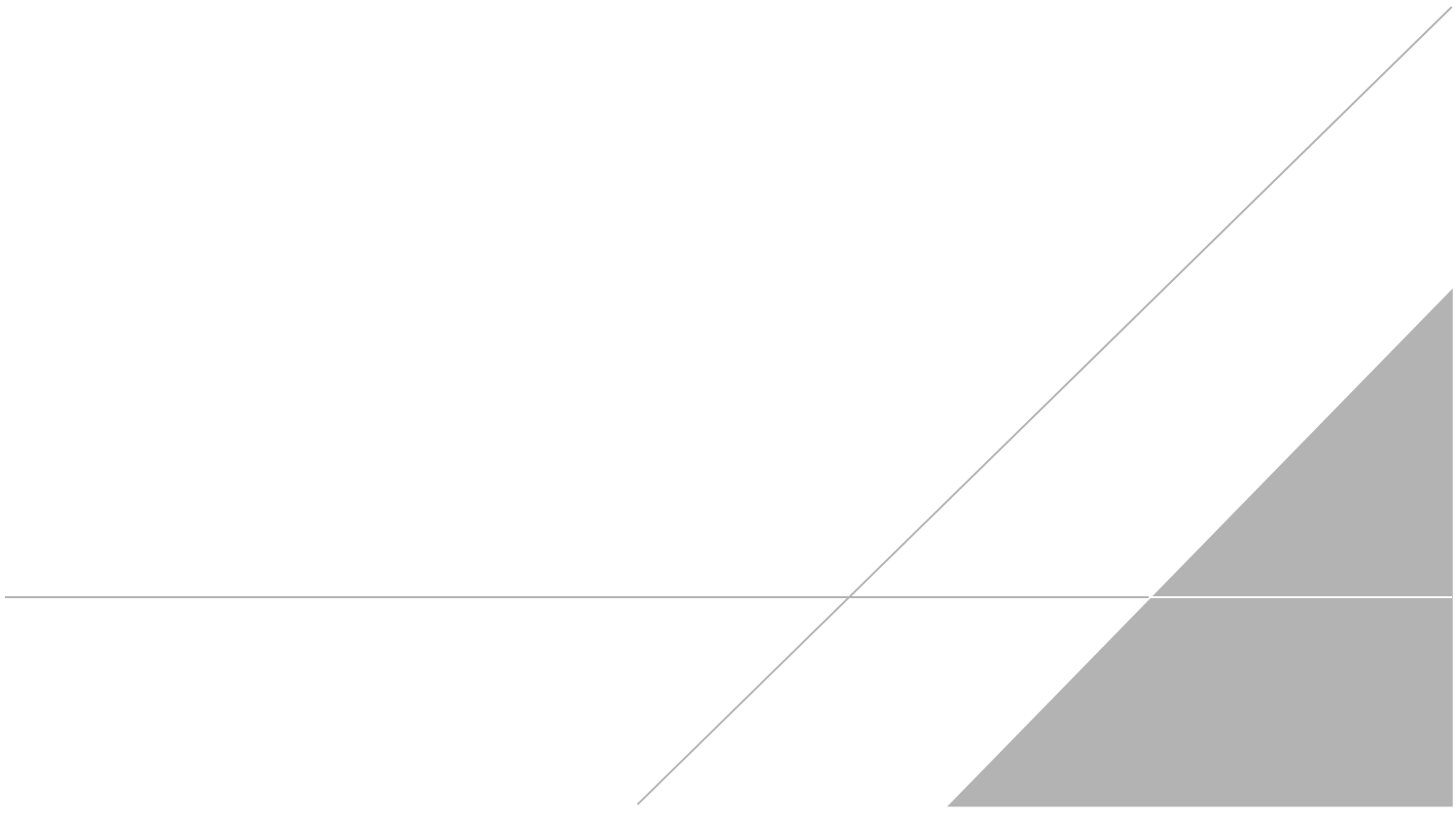
ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY:CRANBURY-NJ DIV/GROUP:ENV/CAD DB:JMEYER LD:JMEYER PIC:K.WHITE PM:B.AHRENS TM:B.AHRENS LYR:(OPT)ON=*;OFF=*REF*
C:\Users\jmeyer\OneDrive - ARCADIS\BIM 360 DOCS\ROCHESTER GAS & ELECTRIC\RG&E GENESEO\PARK ST - SITE CH\2018\B0013138.0008\01-DWG\0000\B0013138C02-SOIL SVOC DATA.dwg LAYOUT: 3 SAVED: 6/18/2018 9:32 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: ----
PLOTSTYLETABLE: ---- PLOTTED: 6/18/2018 9:37 AM BY: MEYER, JULIE PROJECTNAME: ----
XREFS: IMAGES:
B0013138X01
B0013138X0B

Appendix A

Survey Map, Metes and Bounds (on Compact Disk)



DESCRIPTION OF RESTRICTED PROPERTY (AS FILED IN THE LIVINGSTON COUNTY CLERK'S OFFICE AT LIBER 1053, PAGE 241

PROPERTY ADDRESS: 4 PARK STREET

TAX MAP NO. 80.16–1–34

ALL THAT TRACT OR PARCEL OF LAND, situate in the Village of Geneseo, Livingston County, New York, bounded and described as follows:

Beginning in the north line of Park Street, at the southeast corner of lands formerly of Frank K. Cook;

Running thence northerly, on the east line of said Cook, and a continuation thereof, 3 chains and 18 links, more or less, to land, now or formerly of Caroline Foote;

Running thence easterly, on the south line of said Foote's land, 1 chain and 18 links to the west line of Village Lots fronting on the west side of Main Street;

Running thence southerly, on the west line of said Village Lots, and parallel with the first mentioned line, 3 chains and 18 links, more or less, to the north line of Park Street; and

Running thence westerly, on the last mentioned line, 1 chain and 18 links to the place of beginning.

Containing 0.36 of an acre of land, more or less.

Being and intending to convey Parcel 2 as set out in a Bargain and Sale Deed from Paul J. Least to Gary L. Least dated September 15, 1977 and recorded in the Livingston County Clerks' Office on the same date in Liber 513 of Deeds at Page 205.

DESCRIPTION OF RESTRICTED PROPERTY (AS FILED IN THE LIVINGSTON COUNTY CLERK'S OFFICE AT LIBER 1053, PAGE 246

PROPERTY ADDRESS: 6 PARK STREET

TAX MAP NO. 80.16–1–33

ALL THAT TRACT OR PARCEL OF LAND, situated on the north side of Park Street in the Village of Geneseo, County of Livingston and the State of New York, bounded and described as follows:

Commencing at a point in the north line of Park Street, said point being located 178.6 feet, more or less, westerly from the west edge of the sidewalk on the west side of Main Street, said point also being the southwesterly corner of lands of C. Leslie Brion as described in a Deed recorded in the Office of the Livingston County Clerk in Liber 316 of Deeds, Page 180;

Thence (1) North 77° 30' 00" West and along the north line of Park Street for a distance of 81.18 feet to an iron pipe, said point being the intersection of the northerly line of Park Street with and easterly line of lands of the State of New York (State University College at Geneseo);

Thence (2) North 14° 33' 00" East and along an easterly line of lands of the State of New York for a distance of 214.52 feet to an iron pipe;

Thence (3) South 79° 35' 40" East and along a southerly line of lands of the State of New York for a distance of 28.94 feet to an iron pipe, said point being the southwest corner of lands of Dorothy Wright as described in Liber 373 of Deeds, Page 883;

Thence (4) South 76° 01' 37" East and along the southerly line of said Wright for a distance of 52.27 feet to an iron pipe at the northwest corner of the aforementioned Brion lands;

Thence (5) South 14° 33' 00" West and along the westerly line of said Brion lands for a distance of 214.23 feet to the point of beginning.

Containing 0.40034 acres.

Together with all of the right, title and interest of the Grantor in and to rights of way to and from the said premises as they may exist.

The said premises are more particularly described on a map of a survey made by Denluck, Thomas, McGrail & Associates dated October 5, 1970 which is recorded in the Livingston County Clerk's Office in Liber 407, Page 949.

Being and intending to convey Parcel 3 as set forth in a Bargain and Sale Deed from Paul J. Least to Gary L. Least dated September 15, 1977 and recorded in the Livingston County Clerk's Office on the same date in Liber 513 of Deeds at Page 205.

METES AND BOUNDS DESCRIPTION OF RESTRICTED PROPERTY (AS MEASURED) FOR TAX ID NO. 80.16–1–34 AND TAX ID NO. 80.16–1–33 THE PEOPLE OF THE STATE OF NEW YORK VILLAGE OF GENESEO, LIVINGSTON COUNTY, STATE OF NEW YORK

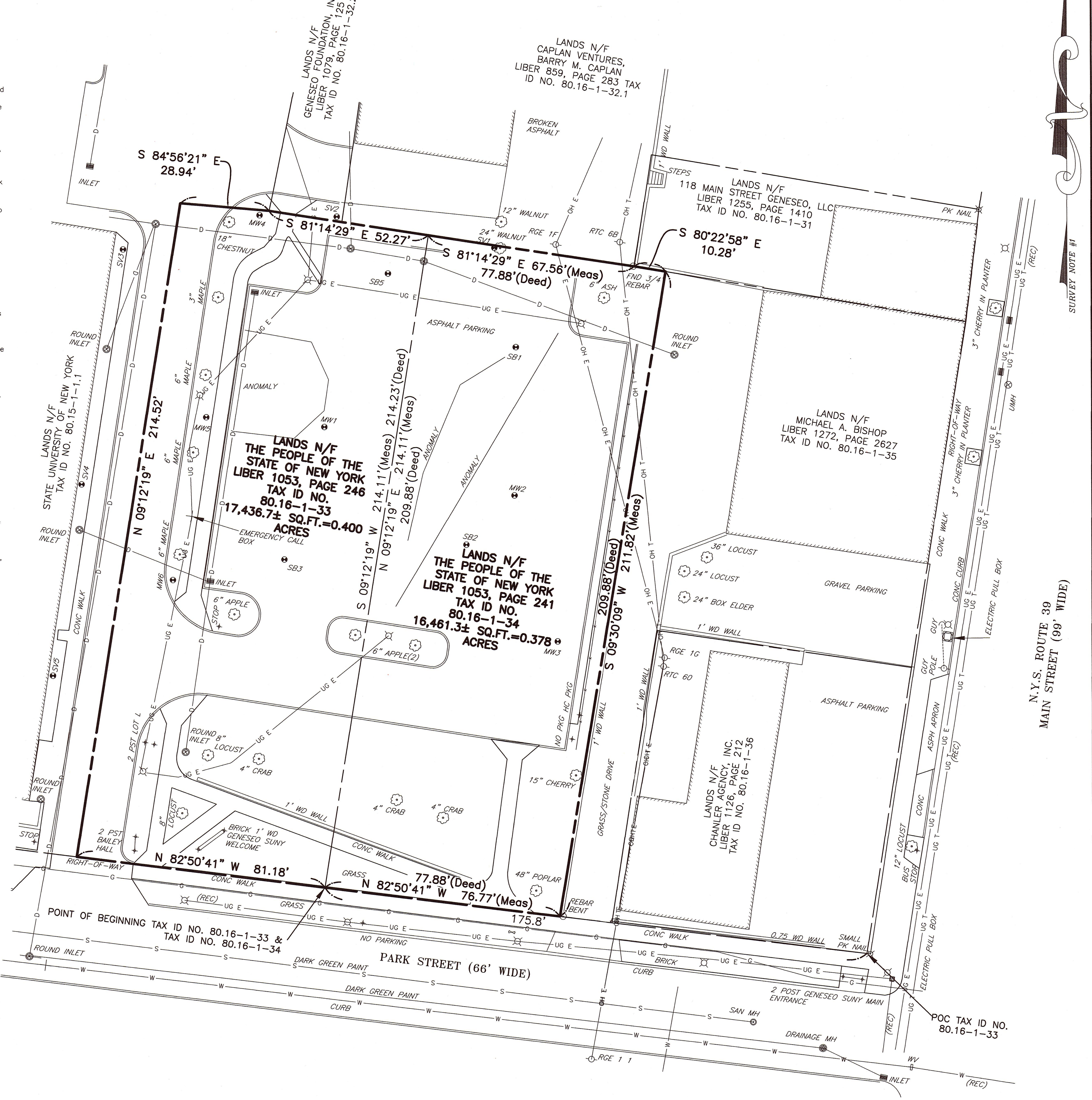
All that piece or parcel of land situate in the Village of Geneseo, County of Livingston, State of New York and being part bounded and described as follows:

Beginning at a point in the northerly right of way of Park Street (66' wide), said point being 175.8 feet westerly from the westerly right of way of Main Street (N.Y.S. Route 39) (99' wide) at its intersection with the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–34) on the east and the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–33) on the west; thence

1. North 82° 50' 41" West, along the northerly right of way of Park Street (66' wide) a distance of 81.18 feet to a point on the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–33) on the east and the lands of The State University of New York (reputed owner) (Tax ID. No. 80.15–1–1.1) on the west; thence
2. Northerly and Easterly along the last mentioned division line the following two (2) courses and distances:

   1) North 09° 12' 19" East, a distance of 214.52 feet to a point; thence

   2) South 84° 56' 21" East, a distance of 28.94 feet to a point on the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–33) on the south and the lands of Geneseo Foundation, Inc. (reputed owner) (Tax ID. No. 80.16–1–32.2) on the north; thence
3. South 81° 14' 29" East, along the last mentioned division line and the lands of Caplan Ventures, Barry Caplan (reputed owner) (Tax ID. No. 80.16–1–32.1) on the north a distance of 52.27 feet to a point on the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–33) on the west and the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–34) on the east; thence
4. South 81° 14' 29" East, a distance of 67.56 feet, along the division line between the lands of Caplan Ventures, Barry Caplan (reputed owner) (Tax ID. No. 80.16–1–32.1) on the north and the lands of the People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–34) on the south to a point on the division line between the lands of the People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–34) on the south and the lands of 118 Main Street Geneseo, LLC (reputed owner) (Tax ID. No. 80.16–1–31) on the north; thence
5. South 80° 22' 58" East, along the last mentioned division line a distance of 10.28 feet to a point on the division line between the lands of the People of the State of New York (reputed owner) (Tax ID. No. 80.16–1–34) on the west and the lands of Michael A. Bishop (reputed owner) (Tax ID. No. 80.16–1–35) on the east; thence
6. South 09° 30' 09" West, along the last mentioned division line a distance of 211.82 feet to a point in the northerly right of way of Park Street (66' wide); thence
7. North 82° 50' 41" West, along the northerly right of way of Park Street (66' wide) a distance of 76.77 feet to the point of beginning, being 0.778 acres more or less.



LEGEND

- PROPERTY LINE/LEASE PARCEL LINE
- RIGHT–OF–WAY LINE
- EASEMENT LINE
- BUILDING LINE
- S — SANITARY SEWER LINE W/MANHOLE & C.O.
- D — CULVERTS, STORM SEWER LINE W/MH & CATCH BASIN
- W — WATER LINE W/HYDRANT, VALVE & VAULT
- UG E — ELECTRIC LINE W/PULLBOX, METER & MANHOLE
- G — NATURAL GAS LINE W/METER, VALVE & LINE MARKER
- OH, OH E, OH T, OC — OVERHEAD WIRES, ELECTRIC, TELEPHONE & CABLE LINE
- UG T — UNDERGROUND TELEPHONE LINE W/MANHOLE
- UG FO — UNDERGROUND FIBER OPTIC LINE W/MANHOLE
- UTILITY POLE, GUY, LIGHT POLE, WALK LIGHT & TOP MOUNT LIGHT
- SIGN, ROADWAY DELINEATOR/REFLECTOR
- CONC — CONCRETE
- (REC) — RECORD
- SB5 — SOIL BORING
- MW5 — MONITORING WELL
- TREE

SURVEY NOTES:

1. COORDINATES AND NORTH ORIENTATION SHOWN HEREON ARE REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM, WEST ZONE, TRANSVERSE MERCATOR PROJECTION, NAD 83 (2011) EPOCH 2010.00 USING GPS PROCEDURES AND THE NEW YORK STATE DOT CORS NETWORK.
2. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID 12A) USING GPS PROCEDURES.
3. UNDERGROUND UTILITIES SHOWN HEREON WERE PLOTTED FROM VISIBLE EVIDENCE LOCATED AT THE TIME OF THE FIELD SURVEY, AND DESIGNATION MARKINGS BY A SUBSURFACE UTILITY ENGINEERING FIRM. THE LOCATIONS OF ALL UNDERGROUND UTILITIES SHOULD BE STAKED BY THE RESPECTIVE UTILITY COMPANY PRIOR TO ANY CONSTRUCTION.

FILE NAME: H:\Projects\182013–00–Park_St\Sur\CAD\4 & 6 Park Street.dwg
DATE/TIME: 6/21/2018 2:13:50 PM
USER: Mike Miller

THIS PROPERTY IS SUBJECT TO A DECLARATION OF COVENANTS AND RESTRICTIONS HELD BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. THE ENGINEERING AND INSTITUTIONAL CONTROLS FOR THIS DECLARATION OF COVENANTS AND RESTRICTIONS ARE SET FORTH IN THE SITE MANAGEMENT PLAN (SMP). A COPY OF THE SMP MUST BE OBTAINED BY ANY PARTY WITH AN INTEREST IN THE PROPERTY. THE SMP CAN BE OBTAINED FROM NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DIVISION OF ENVIRONMENTAL REMEDIATION, SITE CONTROL SECTION, 625 BROADWAY, ALBANY, NY 12233 OR AT DERWEB@DEC.NY.GOV

20 0 20 40
0m 6.10m 12.19m 18.29m
SCALE: 1" = 20' (6.096M)

WE: FISHER ASSOCIATES, P.E., L.S., L.A. D.P.C., AND MARK W. ELTZ N.Y.S.P.L.S., HEREBY CERTIFY TO ROCHESTER GAS AND ELECTRIC CORPORATION, THE STATE UNIVERSITY OF NEW YORK AND THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION THAT THIS MAP WAS PREPARED JUNE 11, 2018 FROM NOTES OF AN INSTRUMENT SURVEY COMPLETED BY US ON JUNE 8, 2015 AND JUNE 1, 2018 USING REFERENCES AND EVIDENCE SHOWN HEREON, AND THAT IN OUR PROFESSIONAL OPINION THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE CURRENT CODE OF PRACTICE FOR LAND TITLE SURVEYS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. THIS SURVEY IS CERTIFIED TO THOSE NAMED ABOVE AND DOES NOT EXTEND TO SUBSEQUENT OWNERS, MORTGAGEES OR TITLE INSURERS, UNLESS THIS SURVEY HAS BEEN RESURVEYED FOR THIS PURPOSE BY THE SURVEYOR. THIS MAP IS SUBJECT TO ANY EASEMENTS OR ENCUMBRANCES THAT AN ABSTRACT OF TITLE MAY SHOW.

BY: [signature]
MARK W. ELTZ N.Y.S.P.L.S. NO. 050285

DATE: Jun 21, 2018

REV	DESCRIPTION	DATE	BY
7			
6			
5			
4			
3			
2			
1			

FA PROJECT NO. 182013
PROJECT MANAGER M. ELTZ
DRAWN BY M. MILLER
SCALE 1"=20'
ISSUE DATE 6/8/18

STATE OF NEW YORK · MARK W. ELTZ · 050285 · LICENSED LAND SURVEYOR

FISHER ASSOCIATES
WWW.FISHERASSOC.COM
180 CHARLOTTE STREET
ROCHESTER, N.Y. 14607
585.334.1310

PROJECT
FORMER GENESEO 4 & 6 PARK STREET
MGP SITE (DEC SITE NO. V00731)
SUNY GENESEO CAMPUS
VILLAGE AND TOWN OF GENESEO, NY.

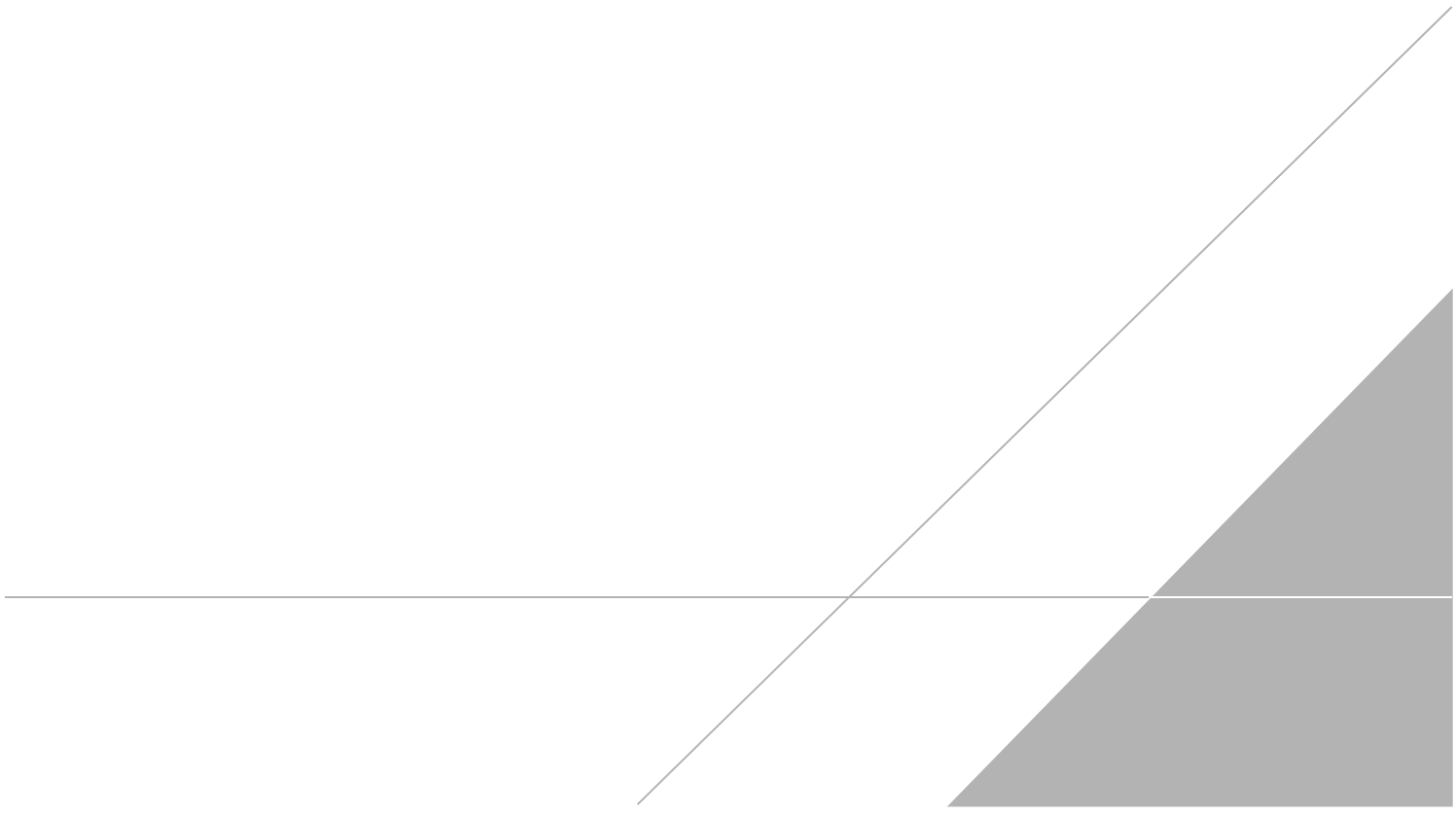
TITLE OF DRAWING
DEED RESTRICTION SURVEY

DRAWING NO.
FA-1

SHEET 1 OF 1

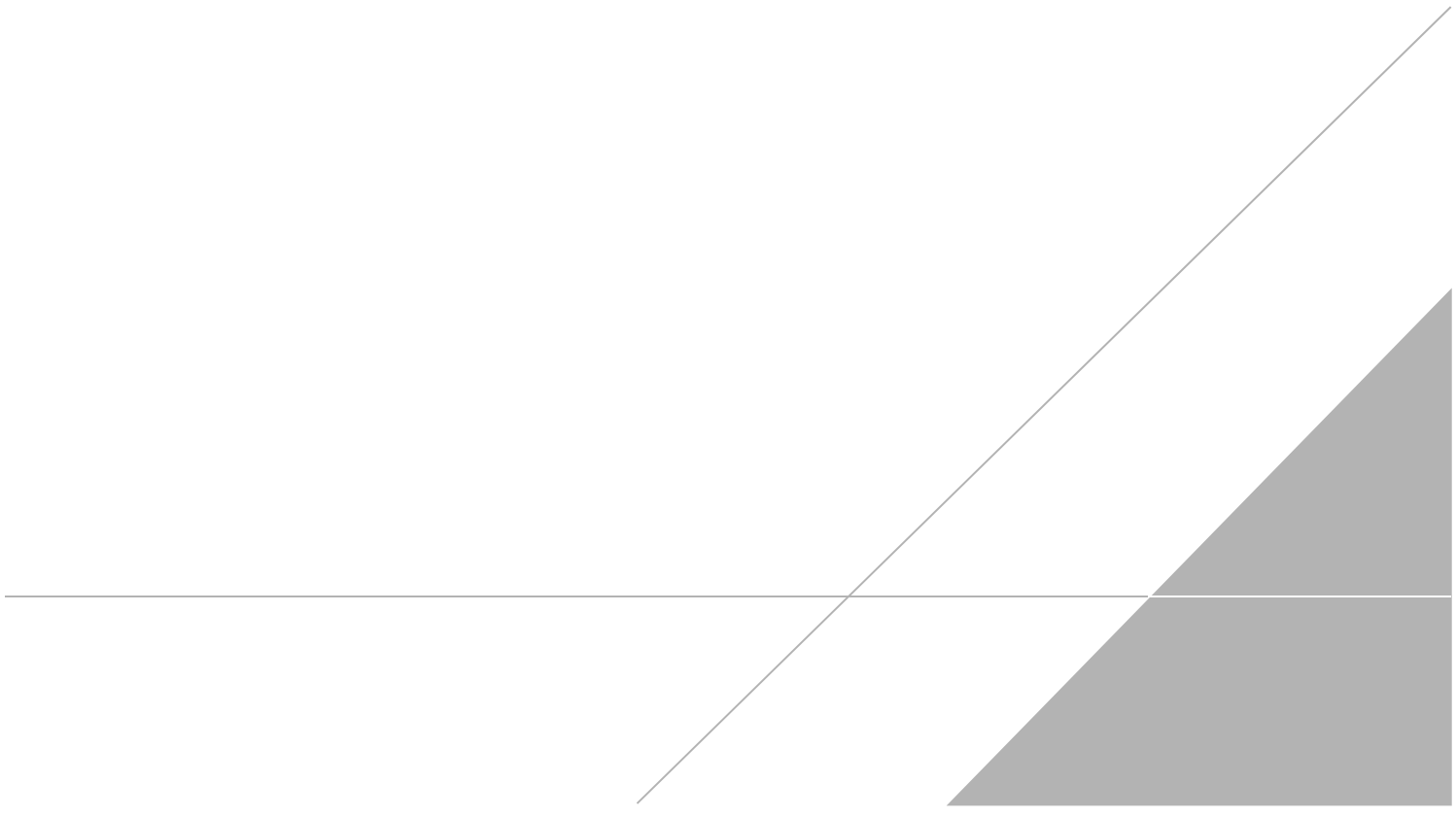
Appendix B

Copy of the FER (on Compact Disk)



Appendix C

Report of Activities at LL-Lot Letter Correspondence (on Compact Disk)



Geneseo

Department of
Environmental Health & Safety

Thursday, June 26, 2003

Mr. James Craft, Engineering Geologist
New York State Department of Environmental Conservation
Region 8 Office
6274 East Avon - Lima Road
Avon, New York 14414

RE: Report of Activities at LL-Lot, SUNY Geneseo

Dear Jim:

Enclosed please find two copies of a report on the activities conducted at the SUNY Geneseo LL-Lot after discovery of subsurface coal tar at that location on September 11, 2002.

Per our previous discussions, this report also includes photographs taken as these activities progressed and a brief history of the site. During the period 1872 to 1902 a coal gasification plant operated on property immediately adjacent to the LL-Lot.

I may be reached at 585-245-5512 or by email at dalton@geneseo.edu to discuss the contents of the report.

Sincerely,

Kimberly Dalton Ferris
Director, Environmental Health and Safety.

Cc: Levison

Summary of Activities

In November 2001, the State University of New York at Geneseo took ownership of two vacant properties on Park Street in the Village of Geneseo. The location of the properties, identified as 4 Park Street and 6 Park Street, is shown on Figure 1. Shortly after taking ownership design/construction activities were initiated to transform the approximately 0.75 acre parcel into a campus entrance that would include a small park with benches and a parking lot for 50 vehicles. The construction project is identified as State University Construction Fund Project 06312: Park Street Entrance Improvements. The project site is referred to as "LL Lot" and is located as shown on Figure 2.

On September 11, 2002, during final preparation for paving, the contractor, Babcock Enterprises LTD., of 10121 Poags Hole Road, Dansville, noticed a "soft spot". Excavating that area to determine the cause of the problem revealed a stone/brick containment structure approximately 4 feet below ground surface containing a black tarry substance. Wooden planks had been placed atop the structure and fill material placed on top of the planks. Photographs of the discovered tarry material are included in the Photos Section of this document.

The Project Site Inspector, John Villnave of Parrone Engineers, contacted NYSDEC Region 8 to report the discovery of the material. Samples of the tarry material were collected by Mr. Villnave and analyzed by Toxicity Characteristic Leaching Procedures (TCLP) at Paradigm Laboratories. The results of this analysis can be found in Attachment 1.

On September 25, 2002, after receipt of the analytical results, the SUNY Geneseo Environmental Health and Safety Department (EHS) was notified of the discovery of this subsurface material. EHS contacted Dixon Rollins of the Region 8 Office of the NYSDEC on October 4, 2002. Mr. Rollins visited the site the next day.

Following discussions between EHS and Mr. Rollins, it was determined that following sampling to identify constituents, the liquid material would be removed for incineration.

Surrounding soils containing visible contamination would be excavated and sampled for disposal. The walls of the excavation would be sampled and analyzed for identified constituents to determine extent of contamination. Sample results for the sample of tar are included as Attachment 2.

Excavation of the structure and its contents was initiated October 29, 2002. Photographs of the excavation taken immediately after removal of the structure are included in the Photos Section of this document. On November 6, 2002, the structure and its contents were transported for incineration under NYS Hazardous Waste Manifest # NYG1577817 to Ross Incineration Services, Grafton, Ohio. A copy of the manifest, Land Disposal Restriction Notification, and certificate of destruction are included as Attachment 3.

After additional discussions with Mr. Rollins, it was determined that additionally excavated materials were eligible to be managed under NYSDEC TAGM 4061: *Management of Coal Tar Waste and Coal Tar Contaminated Soils and Sediment from Former Manufactured Gas Plants* (MGPs). Between November 2002 and February 2003 approximately 800 Tons of contaminated subsurface materials were removed from the site. The materials were incinerated at American ReFuel of Niagara Falls.

The walls of the excavation were sampled as excavation continued. The results of laboratory analyses conducted on these samples were compared to objective level for volatiles published in NYSDEC TAGM 4046 and polycyclic aromatic hydrocarbons (PAHs) published in NYSDEC Records of Decision for other coal tar sites in New York State[1]. When samples indicated the presence of contaminants in excess of these levels or when visible coal tar was encountered, excavation continued. The approximate location of the coal tar structure and the aerial limits of excavation are shown on Figure 3.

[1] Niagara Mohawk Oneida – Sconondaga Street Former MGP Site, 6-33-041, March 2002.
Niagara Mohawk Rome - Kingsley Avenue MGP Site, Site No. 6-33-043, March 2002.
New York State Electric and Gas – Waterville MGP Site, Site No. 7-27-008, January 2002.

On January 10th and 28th and February 3rd, samples were collected from the base and sides of the excavation that, at the time, exceeded 20 feet in depth. Results of laboratory analyses of these samples indicated the objective levels had been met for the majority of constituents. The results of these analyses are summarized below. Laboratory analytical reports are included as Attachment 4.

Table 1
Summary of Subsurface Sampling and Analyses

	Category	Contaminant of Concern	Concentration Range (ppm)	Frequency Meeting Objective Levels	Objective Level (ppm)
Overburden	Semivolatile Organic Compounds (SVOCs)	tPAH	14.399 - 549.71	3 of 4	500*
		cPAH	2.6 - 367.5	3 of 4	10*
	Volatile Organic Compounds (VOCs)	benzene	ND	4 of 4	0.06**
		ethyl benzene	ND	4 of 4	1.5**
		toluene	ND	4 of 4	5.5**
		xylenes (total)	ND	4 of 4	1.2**
	Metals	Cyanide	ND - 4.1	NA	NA
Fractured Bedrock	Semivolatile Organic Compounds (SVOCs)	tPAH	ND - 180.02	6 of 6	500*
		cPAH	ND - 116.5	5 of 6	10*
	Volatile Organic Compounds (VOCs)	benzene	ND - 0.36	5 of 6	0.06**
		ethyl benzene	ND	6 of 6	1.5**
		toluene	ND - 0.224	6 of 6	5.5**
		xylenes (total)	ND - 0.777	6 of 6	1.2**
	Metals	Cyanide	4.1 - 22	NA	NA

* Objective Levels from NYSDEC Records of Decision, MCG Sites.
** Objective Levels from NYSDEC TAGM 4061.

cPAH is an abbreviation for "carcinogenic polycyclic aromatic hydrocarbons", including:

- indeno(1,2,3-cd)pyrene
- benzo(a)anthracene
- benzo(a)pyrene
- benzo(b)fluoranthene
- benzo(k)flouranthene
- chyrsene
- dibenzo(a,h)anthracene

tPAH is an abbreviation for "total polycyclic aromatic hyrdocarbons", including the cPAHs

The Photos section of this document includes pictures collected during the excavation process.

Very little groundwater was encountered during the excavation process. Any groundwater and/or precipitation collected in the excavation was pumped into a holding tank maintained at the site. On May 2nd and 5th , the liquid materials were transported from the site under Hazardous Waste Manifests #NYG2887056 and NYG3371535, respectively (included as Attachments 5 and 6). The total of approximately 3,200 gallons of materials were thermally treated at CECOS International, Niagara Falls, NY.

On January 10, 2003, Mr. Jim Craft of the NYSDEC Region 8 Office visited the site. After consultation with Mr. Craft, the decision was made to terminate excavation activities prior to the arrival of students for the spring semester due to the physical hazard created by the deep excavation. Structural fill was placed into the 20+ foot excavation and compacted.

During the excavation process, material that did not contain visible contamination was placed on bermed plastic on a paved portion of the site and covered. This material was originally intended to be returned to the excavation as structural fill. The material was later determined to be structurally unsuitable and required off-site disposal. During the week of May 8, 2003, this 200 Tons of excavated material was transported to BFI – Niagara Recycling in Niagara Falls, NY for landfilling.

Site History:

According to Mr. David Parish, Village and Town of Geneseo Historian, and other persons involved in tracing Geneseo history, the LL-Lot site was in the immediate vicinity of the Electric Power Plant for the Village of Geneseo, which operated during the early 1900s. The building that housed the coal-powered plant is immediately north of the site and currently houses the Sundance Bookstore (not affiliated with SUNY Geneseo). The location of this building is shown on Figure 4. The "Electrical Light Station," as the power plant was referred to, opened in 1902. The Village of Geneseo Gasworks

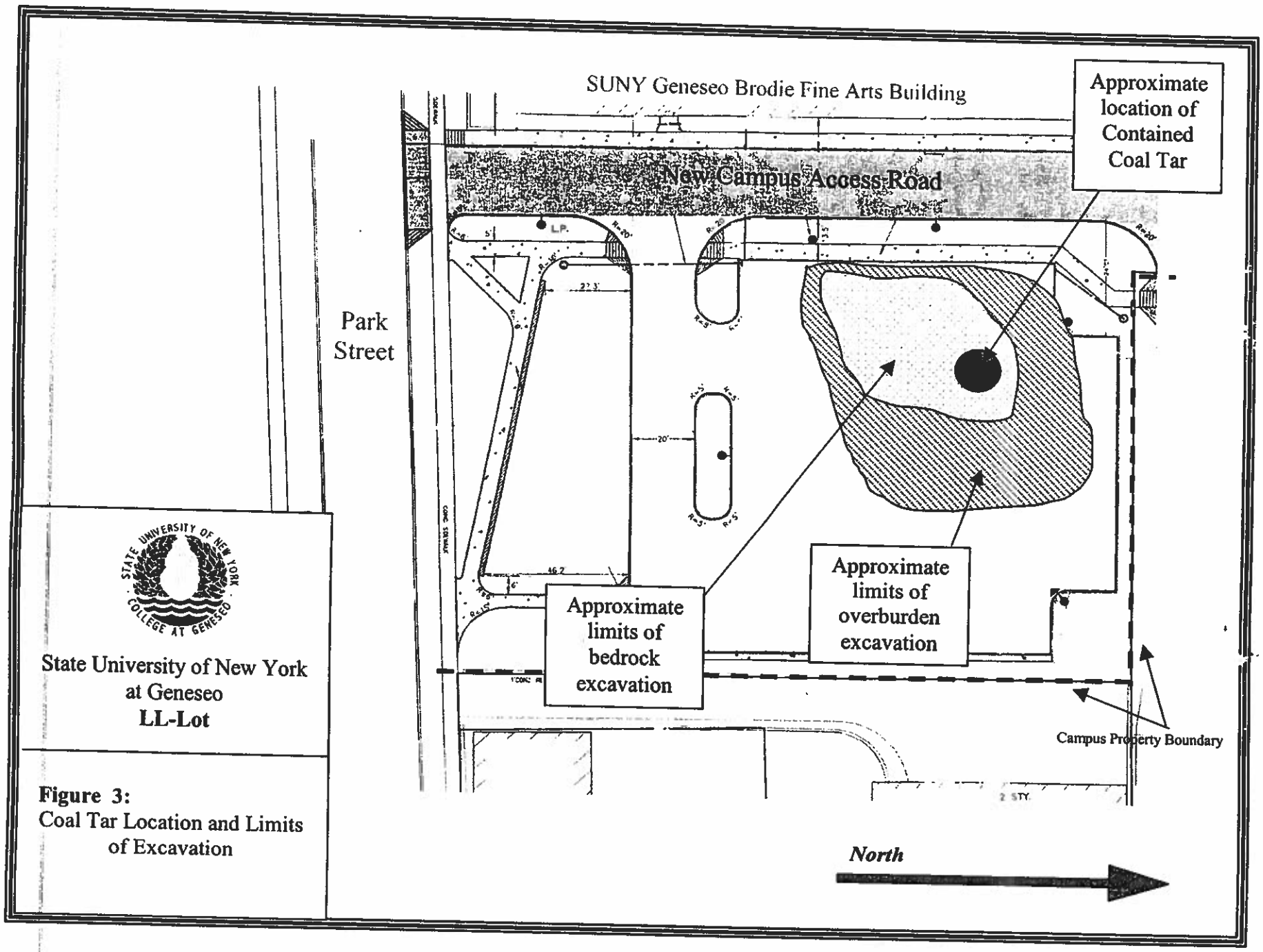
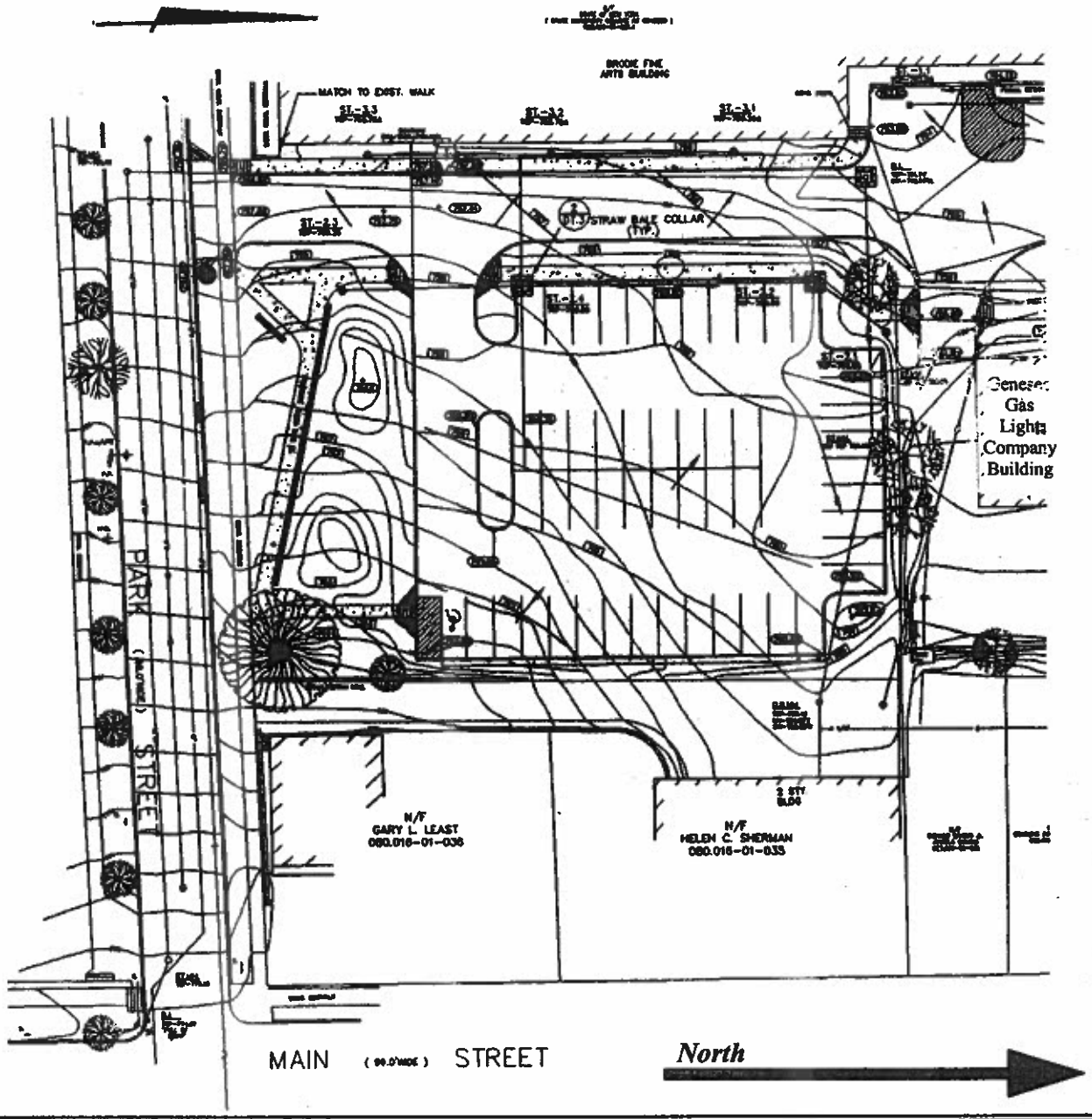


Figure 3:
Coal Tar Location and Limits of Excavation



State University of New York
at Geneseo
LL-Lot

Figure 4:
Surface Contour Map

Wooden Planking

Metal Pole used as attempt to determine depth of material (2 – 3 feet)

Photo 1: 9/26/02
Coal Tar at time of discovery.

Metal Pipe containing coal tar.
Approx. 4" OD.
Removed.

Photo 2: 9/26/02
Coal Tar at time of discovery.

Photo 3: 10/29/02
Excavation following removal of containment structure

Metal conduit installed by previous owners – later removed/disposed

Photo 4: 10/29/02
Excavation following removal of containment structure

Photo 5: 11/01/02
Excavation following removal of containment structure

Photo 6: 1/06/03
Walls of excavation - overburden

Photo 7: 12/30/02
West excavation wall

Photo 8: 12/31/02
Excavation

Approximate Bedrock/ Overburden Interface

Photo 9: 1/16/03
Excavation Maximum Depth – Looking South

Approximate Bedrock/ Overburden Interface

Photo 10: 1/16/03
Excavation Maximum Depth – Looking East

Building that housed Geneseo Gas Light Company and coal-fired Electrical Power Plant

SUNY Geneseo Brodie Fine Arts Building

Photo 11: 5/27/03
LL-Lot looking Northwest

Previous location of excavated coal tar structure (approximate)

New campus access road

Photo 12: : 5/27/03
LL-Lot looking North from Park Street

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SUNY Geneseo

Client Job Site: Parking Lot

Client Job No.: N/A

Lab Project No.: 02-2367

Sample Type: Sludge
Method: SW846 1010

Date(s) Sampled: 9/17/02
Date Received: 9/17/02
Date Analyzed: 9/19/02

ATTACHMENT 1

Laboratory Report for Flashpoint Analyis

Lab Sample No.	Field ID No.	Field Location	Flashpoint Results (°C)
8546	N/A	Tar Mix	>70

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:022367.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SUNY Geneseo

Client Job Site: Parking Lot

Client Job No.: N/A

Lab Project No.: 02-2367

Sample Type: Sludge
Method: SW846 9045C

Date(s) Sampled: 9/17/02
Date Received: 9/17/02

Date Analyzed: 9/18/02

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
8546	N/A	Tar Mix	6.57

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:022367.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SUNY Geneseo

Client Job Site: Parking Lot

Client Job No.: N/A

Lab Project No.: 02-2367

Sample Type: Sludge
Method: SM17 2540B

Date(s) Sampled: 9/17/02
Date Received: 9/17/02
Date Analyzed: 9/17/02

Laboratory Report for Percent Solids Analysis

Lab Sample No.	Field ID No.	Field Location	Percent Solids (%)
8546	N/A	Tar Mix	98.4

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:022367.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SUNY Geneseo

Client Job Site: Parking Lot

Client Job No.: N/A

Lab Project No.: 02-2367

Sample Type: Sludge
Method: SW846 9095

Date(s) Sampled: 9/17/02
Date Received: 9/17/02
Date Analyzed: 9/20/02

Laboratory Report for Paint Filter Analysis

Lab Sample No.	Field ID No.	Field Location	Paint Filter Test Result (Pass/Fail)
8546	N/A	Tar Mix	Fail

ELAP ID No.: 10958

Comments: Pass = No Free Liquids

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID: 022367.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

LABORATORY REPORT OF ANALYSIS

Client: SUNY Geneseo

Client Job Site: Parking Lot
Client Job No.: N/A

Field Location: Tar Mix

Lab Project No.: 02-2367
Lab Sample No.: 8546

Sample Type: Solid

Date Sampled: 09/17/2002
Date Received: 09/17/2002

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Cyanide Reactivity	09/24/2002	SW846, 7.3	ND<1 Non Reactive
Sulfide Reactivity	09/24/2002	SW846, 7.3	56 Non Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.
Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: Reac02-2367

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SUNY Geneseo
Client Job Site: Parking Lot
Client Job No.: N/A
Field Location: Tar Mix
Field ID No.: N/A

Lab Project No.: 02-2367
Lab Sample No.: 8546
Sample Type: TCLP Extract
Date Sampled: 09/17/2002
Date Received: 09/17/2002

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	09/20/2002	EPA 6010	<0.100	5.0
Barium	09/20/2002	EPA 6010	0.190	100.0
Cadmium	09/20/2002	EPA 6010	<0.025	1.0
Chromium	09/20/2002	EPA 6010	<0.050	5.0
Lead	09/20/2002	EPA 6010	<0.100	5.0
Mercury	09/20/2002	EPA 7470	<0.0020	0.2
Selenium	09/20/2002	EPA 6010	<0.100	1.0
Silver	09/20/2002	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:022367.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: SUNY Geneseo

Client Job Site:	Parking Lot	**Lab Project Number:**	02-2367
		Lab Sample Number:	8546
Client Job Number:	N/A		
Field Location:	Tar Mix	**Date Sampled:**	09/17/2002
Field ID Number:	N/A	**Date Received:**	09/17/2002
Sample Type:	TCLP Extract	**Date Analyzed:**	09/25/2002

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 2,000	7,500
2,4-Dinitrotoluene	ND< 2,000	130
Hexachlorobenzene	ND< 2,000	3,000
Hexachlorobutadiene	ND< 2,000	500
Hexachloroethane	ND< 2,000	130
Nitrobenzene	ND< 2,000	2,000
Pyridine	7,710	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	142,000	200,000
Pentachlorophenol	ND< 5,000	100,000
2,4,5-Trichlorophenol	ND< 5,000	400,000
2,4,6-Trichlorophenol	ND< 2,000	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 8815.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 022367S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Soils/Solids/Sludges

Client: SUNY Geneseo

Client Job Site:	Parking Lot	**Lab Project Number:**	02-2367
		Lab Sample Number:	8546
Client Job Number:	N/A		
Field Location:	Tar Mix	**Date Sampled:**	09/17/2002
Field ID Number:	N/A	**Date Received:**	09/17/2002
Sample Type:	Solid	**Date Analyzed:**	09/24/2002

PCB Identification	Results in mg / Kg
Aroclor 1016	ND< 0.406
Aroclor 1221	ND< 0.406
Aroclor 1232	ND< 0.406
Aroclor 1242	ND< 0.406
Aroclor 1248	ND< 0.406
Aroclor 1254	ND< 0.406
Aroclor 1260	ND< 0.406

ELAP Number 10958 Method: EPA 8082

Comments: ND denotes Non Detect
mg / Kg = milligram per Kilogram

Signature: Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 022367P1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: SUNY Geneseo

Client Job Site:	Parking Lot	**Lab Project Number:**	02-2367
		Lab Sample Number:	8546
Client Job Number:	N/A		
Field Location:	Tar Mix	**Date Sampled:**	09/17/2002
Field ID Number:	N/A	**Date Received:**	09/17/2002
Sample Type:	TCLP Extract	**Date Analyzed:**	09/21/2002

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	19,600	500
2-Butanone	ND< 500	200,000
Carbon tetrachloride	ND< 200	500
Chlorobenzene	ND< 200	100,000
Chloroform	ND< 200	6,000
1,2-Dichloroethane	ND< 200	500
1,1-Dichloroethene	ND< 200	700
Tetrachloroethene	ND< 200	700
Trichloroethene	ND< 200	500
Vinyl Chloride	ND< 200	200

ELAP Number 10958 Method: EPA 8260B Data File: 61821.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 022367V1.XLS

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

TCLP Herbicides

Client:	SUNY Geneseo	**Lab Project No:**	02-2367
		Lab Sample No:	8546
Client Job Site:	Parking Lot	**Sample Type:**	TCLP Extract
Client Job No:	N/A	**Date Sampled:**	09/17/2002
Field Location:	Tar Mix	**Date Received:**	09/17/2002
Field ID No:	N/A	**Date Analyzed:**	09/20/2002

Parameter	Result UG/L	Reporting Limit UG/L	Regulatory Limit UG/L
2,4-D	ND	2000	10,000
2,4,5-TP (Silvex)	ND	200	1,000

Analytical Method: EPA 8151 ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Approved By: _____
Bruce Hoogesteger, Technical Director

The Chain of Custody provides additional information.

File ID:TCLPHERB02-2367

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Pesticide Analysis Report for TCLP Extracts

Client: SUNY Geneseo

Client Job Site:	Parking Lot	**Lab Project Number:**	02-2367
		Lab Sample Number:	8546
Client Job Number:	N/A		
Field Location:	Tar Mix	**Date Sampled:**	09/17/2002
Field ID Number:	N/A	**Date Received:**	09/17/2002
Sample Type:	TCLP Extract	**Date Analyzed:**	09/24/2002

Pesticide	Results in ug / L	Regulatory Limits in ug / L
gamma-BHC (Lindane)	ND< 1.00	400
Chlordane	ND< 1.00	30
Endrin	ND< 1.00	20
Heptachlor	ND< 1.00	8
Heptachlor Epoxide	ND< 1.00	8
Methoxychlor	ND< 1.00	10,000
Toxaphene	ND< 50.0	500

ELAP Number 10958 Method: EPA 8081A

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 022367P2.XLS

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

Columbia Analytical Services, Inc.
An Employee-Owned Company
www.caslab.com

One Mustard St., Suite 250 • Rochester, NY 14609-0859 • (716) 288-5380 • 800-695-7222 x11 • FAX (716) 288-8475

PAGE 1 OF 1

SR #

CAS Contact

Project Name: Geneseo Parking Lot	Project Number: 02-2367
Project Manager: Bob Lyon	Report CC: Parrone Eng.
Company/Address: SUNY @ Geneseo, #1 College Circle, Geneseo, N.Y. 14454	
Phone #: 585-245-5511	FAX#
Sampler's Signature: X John Villnave	Sampler's Printed Name: X JOHN VILLNAVE

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 0 | 0 | 0 | 0

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOA's ☐ 8260 ☐ 624 ☐ CLP	GC/MS SVOA's ☐ 8270 ☐ 625 ☐ CLP	GC VOA's ☐ 8021 ☐ 601/602	PESTICIDES/PCB's ☐ 8081 ☐ 608 ☐ CLP ☒ 8082	STARS LIST 8021 VOA's ☐ TOTAL ☐ TCLP	STARS LIST 8270 SVOA's ☐ TOTAL ☐ TCLP	TCLP ☒ METALS ☐ VOA's ☐ SVOA's	WASTE CHARACTERIZATION ☒ TH/P ☒ React ☒ Corros. ☒ Ignit.	METALS, TOTAL (List in comments below)	METALS, DISSOLVED (List in comments below)	% Solids	PFT	REMARKS/ ALTERNATE DESCRIPTION
TAR MIX		09/17/02	0900	SD	3				X			X	X			X	X	# 8270

Brad Herman

SPECIAL INSTRUCTIONS/COMMENTS
Metals

Copy Report to: fax # 586-6752
Mr. John Villnave
Parrone Eng.
400 Whitney Rd.
Penfield, N.Y.
14526

Jeff Kaplan - SUNY @ Geneseo

Brad Herman phone 586-0200

See QAPP ☐

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 24 hr ____ 48 hr ____ 5 day
X STANDARD
REQUESTED FAX DATE
REQUESTED REPORT DATE

REPORT REQUIREMENTS
X I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
____ V. Speicalized Forms / Custom Report
Edata ____ Yes ____ No

INVOICE INFORMATION
PO#
BILL TO: SUNY Geneseo
SUBMISSION #:

SAMPLE RECEIPT: CONDITION/COOLER TEMP: 20°C CUSTODY SEALS: Y (N)

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: X John Villnave	Signature: Val Miller	Signature: Val Miller	Signature: Rane J. Daleia	Signature	Signature
Printed Name: JOHN VILLNAVE	Printed Name: V. Miller	Printed Name: V Miller	Printed Name: Paradigm	Printed Name	Printed Name
Firm	Firm: CAS	Firm: CAS	Firm	Firm	Firm
Date/Time: 09/17/02 1200	Date/Time: 9/17/02 @ 1200	Date/Time: 9/17/02 @ 1400	Date/Time: 9-17-02 1500	Date/Time	Date/Time

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

LABORATORY REPORT OF ANALYSIS

Client: NYE Tech
Client Job Site: SUNY Genese Parking Lot
Client Job No.: N/A

ATTACHMENT 2

Lab Project No.: 02-2632
Sample Type: Sludge
Analytical Method: EPA 9012
Date Sampled: 10/15/2002
Date Received: 10/15/2002
Date Analyzed: 10/24/2002

Lab Sample ID.	Sample Location/Field ID	Total Cyanide (mg/kg)
10253	S-1 Pit	4.2

ELAP ID No. 10709

Comments: ND denotes Non-Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: TCyanide022632.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

LABORATORY REPORT OF ANALYSIS

Client: NYE Tech

Client Job Site: SUNY Geneseo Parking Lot

Client Job No.: N/A

Lab Project No.: 02-2632

Sample Type: Water
Analytical Method: EPA 335.3
Date Sampled: 10/15/2002
Date Received: 10/15/2002
Date Analyzed: 10/24/2002

Lab Sample ID.	Sample Location/Field ID	Total Cyanide (mg/l)
10254	Field Blank	ND<0.01

ELAP ID No. 10709

Comments: ND denotes Non-Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: TCyanide022632p2.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYE Tech

Client Job Site:	SUNY Geneseo Parking Lot	**Lab Project Number:**	02-2632
		Lab Sample Number:	10253
Client Job Number:	N/A		
Field Location:	S-1 Pit	**Date Sampled:**	10/15/2002
Field ID Number:	N/A	**Date Received:**	10/15/2002
Sample Type:	Tar	**Date Analyzed:**	10/21/2002

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 8,470,000
Anthracene	ND< 8,470,000
Benzo (a) anthracene	ND< 8,470,000
Benzo (a) pyrene	ND< 8,470,000
Benzo (b) fluoranthene	ND< 8,470,000
Benzo (g,h,i) perylene	ND< 8,470,000
Benzo (k) fluoranthene	ND< 8,470,000
Chrysene	ND< 8,470,000
Dibenz (a,h) anthracene	ND< 8,470,000
Fluoranthene	14,000,000
Fluorene	ND< 8,470,000
Indeno (1,2,3-cd) pyrene	ND< 8,470,000
Naphthalene	58,400,000
Phenanthrene	23,500,000
Pyrene	10,900,000
Pyridine	ND< 8,470,000

ELAP Number 10958 Method: EPA 8270C Data File: 9032.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 022632s2.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi -Volatile STARS Analysis Report for Non-potable Water

Client: NYE Tech

Client Job Site:	SUNY Geneseo Parking Lot	**Lab Project Number:**	02-2632
		Lab Sample Number:	10254
Client Job Number:	N/A		
Field Location:	Field Blank	**Date Sampled:**	10/15/2002
Field ID Number:	N/A	**Date Received:**	10/15/2002
Sample Type:	Water	**Date Analyzed:**	10/21/2002

Base / Neutrals	Results in ug / L
Acenaphthene	ND< 10.0
Anthracene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Chrysene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Fluoranthene	ND< 10.0
Fluorene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0
Naphthalene	ND< 10.0
Phenanthrene	ND< 10.0
Pyrene	ND< 10.0
Pyridine	ND< 10.0

ELAP Number 10958 Method: EPA 8270C Data File: 9030.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 022632S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYE Tech

Client Job Site:	SUNY Geneseo Parking Lot	**Lab Project Number:**	02-2632
		Lab Sample Number:	10253
Client Job Number:	N/A		
Field Location:	Pit	**Date Sampled:**	10/15/2002
Field ID Number:	S-1	**Date Received:**	10/15/2002
Sample Type:	Tar	**Date Analyzed:**	10/17/2002

Aromatics	Results in ug / Kg
Benzene	285,000
Ethylbenzene	ND< 20,400
Toluene	206,000
m,p-Xylene	111,000
o-Xylene	34,800

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 12573.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 022632V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water

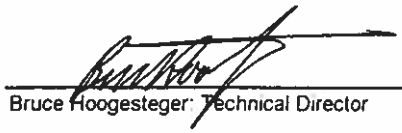
Client: NYE Tech

Client Job Site:	SUNY Geneseo Parking Lot	**Lab Project Number:**	02-2632
		Lab Sample Number:	10254
Client Job Number:	N/A		
Field Location:	Field Blank	**Date Sampled:**	10/15/2002
Field ID Number:	N/A	**Date Received:**	10/15/2002
Sample Type:	Water	**Date Analyzed:**	10/17/2002

Aromatics	Results in ug / L
Benzene	ND< 0.700
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 12574.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: 

Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
COMPANY: NYETECH	COMPANY:	LAB PROJECT #: 02-2632 / CLIENT PROJECT #:
ADDRESS:	ADDRESS:	
CITY: STATE: ZIP:	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)
PHONE: 436-5660 FAX: 436-6139	PHONE: FAX:	STD ☒ 5 / OTHER ☐ 1 ☐ 2 ☐ 3
PROJECT NAME/SITE NAME: SUNY GENESEO PARKING LOT	ATTN: FRANK BOOHER	ATTN:
COMMENTS: TECH SITE VISIT cell # 346-4488		

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	PAH (8270)	BTEX	TCN	PYRIDINE (8N)	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	10/15/02	1030		X	S-1 PIT		2	X	X	X	X		10253
2					FIELD BLANK		4	X	X	X	X		10254
3													
4													
5													
6													
7													
8													
9													
10													

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ☐ PRESERVATIONS: ☐ HOLDING TIME: ☐ TEMPERATURE: ☐ 17°C

Sampled By:	Date/Time: 10/15/02 1030	Relinquished By:	Date/Time:
Relinquished By:	Date/Time: 10/15/02 1210	Received By:	Date/Time:
Received By:	Date/Time:	Received @ Lab By:	Date/Time: 10/15/02 1720

Total Cost:

P.I.F.

NYG1577817

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple

(Hazardous Waste Manifest 1/5/99)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
NYD073693507781 7		1	

3. Generator's Name and Mailing Address: SUNY GENESEO, 1 COLLEGE CIRCLE, GENESEO NY 14454

4. Generator's Telephone Number: (585) 245-5511

A. NYG 1577817

B. Generator's ID: SAME

5. Transporter 1 (Company Name)	6. US EPA ID Number	C. State Transporter's ID: 55 79036 NY
PRICE TRUCKING	NYD046765574	D. Transporter's Telephone: (716) 822-1414
7. Transporter 2 (Company Name)	8. US EPA ID Number	E. State Transporter's ID
Robbie D. WOOD	ALD067138891	F. Transporter's Telephone ( )
9. Designated Facility Name and Site Address	10. US EPA ID Number	G. State Facility ID
ROSS INCINERATION SERVICES, 36790 GILES ROAD, GRAFTON OH 44044	OHD048415665	H. Facility Telephone: (800) 878-7677

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
GENERATOR a. *WASTE ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (BENZENE), 9, UN3077, PGIII	001	CM	29900	P	EPA D018
		C	40 0 0 2 0	G	STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

ATTACHMENT 3

J. Additional Descr

K. Handling Codes for Wastes Listed Above: a. S02 | b. | c. | d.

15. Special Handling Instructions and Additional Information: ERG 171 — IN CASE OF EMERGENCY: (585) 436-5660 — R3954 / PO#31829

Profile LDR on file

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Mo.	Day	Year
JEFFREY KAKAW		11	06	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
THOMAS PRICE		11	06	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
Elijah McLin	Elijah McLin	11	08	02

FACILITY

19. Discrepancy Indication Space: SECTIONS 12, 13, 14 UPDATED WITH GENERATOR PERMISSION T. SPARROW (RESI)

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
Brian Slak		11	11	02

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 1—Disposer State—Mailed by TSD Facility

SA-105374

NOTIFICATION OF WASTE SUBJECT TO LAND DISPOSAL RESTRICTIONS

Page 1 of
Revised 11/98
Manifest #
Shipper
U.S. EPA ID#

Generator STATE UNIVERSITY OF NEW YORK
Address
Phone

1. The generator named above hereby provides the following NOTIFICATION to Ross Incineration Services, Inc. (RIS) as required by 40 CFR 268.7(a)(2) and the OAC/3745-59-07(A)(2). The waste material shipped under the above manifest document number is subject to Land Disposal Restriction regulations as set forth in 40 CFR 268 Subpart D/OAC/3745-59.

2. Check all UNDERLYING HAZARDOUS CONSTITUENTS (UHC's), on the attached form, which can reasonably be expected to be present in the waste at a concentration above the constituent specific treatment standard listed in 40 CFR Part 268.48, table UTS - Universal Treatment Standards. UHC's must be identified for D001 (if not treated by CMBST or RORGS), D002, D003 (except reactive cyanides and unstabilized carbonate subcategories), D004-D011 (specific subcategories) and D012-D043. Wastewater forms of D012-D043 do not require that UHC's be identified.

Check all F001-F005 REGULATED HAZARDOUS CONSTITUENTS (RHC'S) which can be reasonably expected to be present in this waste at a concentration above the constituent specific treatment standard listed in 40 CFR Part 268.48.

3. A separate page must be used for each WFS in which RHC's or UHC's are present.

4. Waste Analysis is attached where available, otherwise, the information contained herein is based upon my thorough knowledge of the waste(s).

UNDERLYING HAZARDOUS CONSTITUENTS

Aldicarb sulfone
Barban
BHC-gamma
Carbofuran phenol
Carbosulfan
m-Cumenyl methylcarbamate
Dichlorvos
DMTC
Formetanate hydrochloride
Hexachlorobenzene
HxCDDs(All Hexachlorodibenzo-p-dioxins)
HxCDFs(All Hexachlorodibenzofurans)
3-Iodo-2-propynyl n-butylcarbamate
Methiocarb
Methomyl
Metolcarb
Mexacarbate
Nitrate
Oxamyl
Pebulate
PeCDDs(All Pentachlorodibenzo-p-dioxins)
PeCDFs(All Pentachlorodibenzofurans)
Physostigmine
Physostigmine salicylate
Promecarb
Propoxur
Prosulfocarb
TCDDs(All Tetrachlorodibenzo-p-dioxins)
TCDFs(All Tetrachlorodibenzofurans)
Thiocarbazide
Triethylamine
tris-(2,3-Dibromopropyl) phosphate
Vernolate
Mercury-Non Retort

(X) THE ABOVE UNDERLYING HAZARDOUS CONSTITUENTS ARE NOT "REASONABLY EXPECTED" TO BE PRESENT IN THE WASTE PROFILE SUBMITTED LISTED IN WASTES SUBJECT TO TREATMENT.

ROSS INCINERATION SERVICES, INC. CANNOT ACCEPT WASTE WITH THESE UNDERLYING HAZARDOUS CONSTITUENTS WITHOUT SPECIAL APPROVALS. PLEASE CONTACT YOUR ACCOUNT REPRESENTATIVE IF APPROVALS ARE NEEDED.

WASTES SUBJECT TO TREATMENT

Nonwastewater(NW) Wastewater(WW)

WFS #	Treatability Group		EPA Codes & Subcategory(if applicable)	Are UHC's or RHC's present?
NONE	NW	WW		YES NO

Signature X _____ Date 11/13/02

Name Jeffrey Lapan Title Director Facilities Planning & Construction

It is the generator's responsibility under 40 CFR 268/OAC3745-59 to ensure that appropriate notifications accompany each shipment of waste as required. RIS makes no representations as to the accuracy of this form and recommends that the generator independently verify notification requirements for the waste streams.

Universal Treatment Standards 40 CFR 268.48

Manifest: WPSK: 52011 Page __ of __

INSTRUCTIONS: This page needs completion only if "YES" is indicated under wastes Subject to Treatment section.

Indicate with an "X" any underlying Hazardous Constituent reasonably expected to be present in this waste.

Constituents by Chemical Name	NW Conc.	NNW Conc.	Constituents by Chemical Name	NW Conc.	NNW Conc.	Constituents by Chemical Name	NW Conc.	NNW Conc.
Acenaphthene	0.059	3.4	1,1-Dichloroethylene	0.025	6.0	o-Nitroaniline	0.27	14
Acetaldehyde	0.059	3.4	trans-1,2-Dichloro-ethylene	0.054	30	p-Nitroaniline	0.028	28
Acetone	0.28	160	2,4-Dichlorophenol	0.044	14	Nitrobenzene	0.068	14
Acetonitrile	0.24	38	2,6-Dichlorophenol	0.044	14	o-Nitrophenol	0.028	13
Acetophenone	0.010	9.7	2,4-D[2,4-Dichloro-phenoxyacetic Acid	0.72	10	p-Nitrophenol	0.12	29
2-Acetylaminofluorene	0.059	140	p,p'-DDD	0.023	0.087	N-Nitrosodiethylamine	0.40	28
Acrolein	0.29	NA	p,p'-DDE	0.031	0.087	N-Nitrosodimethylamine	0.40	2.3
Acrylamide	19	23	p,p'-DDT	0.0039	0.087	N-Nitrosodi-n-butyl-amine	0.40	17
Acrylonitrile	0.24	84	1,2-Dichloropropane	0.85	18	N-Nitrosomethyl-ethylamine	0.40	2.3
Aldrin	0.021	0.066	cis-1,3-Dichloro-propylene	0.036	18	N-Nitrosomorpholine	0.40	2.3
4-Aminobiphenyl	0.13	NA	trans-1,3-Dichloro-propylene	0.036	18	N-Nitrosopiperidine	0.013	35
Aniline	0.81	14	Dieldrin	0.017	0.13	N-Nitrosopyrrolidine	0.013	35
Anthracene	0.059	3.4	Diethyl Phthalate	0.20	28	Parathion	0.014	4.6
Aramite	0.36	NA	p-Dimethylaminoazo-benzene	0.13	29	Total PCB's	0.10	10
Barban	0.053	1.4	2,4-Dimethyl Phenol	0.036	14	Pentachlorobenzene	0.055	10
Bendiocarb	0.053	1.4	Dimethyl Phthalate	0.047	28	Pentachloroethane	0.055	5.6
Benomyl	0.053	1.4	Di-n-Butyl Phthalate	0.057	28	Pentachloronitrobenzene	0.055	4.8
Benz(a)anthracene	0.059	3.4	1,4-Dinitrobenzene	0.32	2.3	Pentachlorophenol	0.089	7.4
Benzal chloride	0.055	6.0	4,6-Dinitro-o-Cresol	0.28	160	Phenacetin	0.081	16
Benzene	0.14	10	2,4-Dinitrophenol	0.12	160	Phenanthrene	0.059	5.6
Benzo(b)fluoranthene	0.11	6.8	2,4-Dinitrotoluene	0.32	140	Phenol	0.039	6.2
Benzo(k)fluoranthene	0.11	6.8	2,6-Dinitrotoluene	0.55	28	Phorate	0.021	4.6
Benzo(g,h,i)perylene	0.0055	1.8	Di-n-Octyl Phthalate	0.017	28	Phthalic acid	0.055	28
Benzyl chloride	0.055	6.0	Di-n-Propylnitrosamine	0.40	14	Phthalic anhydride	0.055	28
BHC-alpha	0.00014	0.066	1,4-Dioxane	12.0	170	Prenamide	0.036	1.6
BHC-beta	0.00014	0.066	Diphenylamine	0.92	13	Promecarb	0.036	1.6
BHC-delta	0.023	0.066	Diphenylnitrosamine	0.92	13	Pronamide	0.036	1.6
BHC-gamma	0.0017	0.066	1,2-Diphenylhydrazine	0.087	89	Propoxur	0.036	1.6
Bromochloromethane	0.33	15	Disulfoton	0.017	6.2	Pyrene	0.067	8.2
Methyl bromide (Bromomethane)	0.11	15	Dithiocarbamates (total)	0.028	28	Pyridine	0.014	16
4-Bromophenyl Phenyl Ether	0.055	15	Endosulfan I	0.023	0.066	Safrole	0.081	22
n-Butyl alcohol	5.6	2.6	Endosulfan II	0.029	0.066	Silvex(2,4,5-TP)	0.72	7.9
Butyl benzyl phthalate	0.017	28	Endosulfan sulfate	0.029	0.13	1,2,4,5-Tetrachloro-benzene	0.055	14
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	0.066	2.5	Endrin	0.0028	0.13	1,1,1,2-Tetrachloroethane	0.057	6.0
Carbaryl	0.006	0.14	Endrin aldehyde	0.025	0.13	1,1,2,2-Tetrachloroethane	0.057	6.0
Carbenzadim	0.036	1.4	Ethyl acetate	0.34	160	Tetrachloroethylene	0.056	5.6
Carbofuran	0.006	0.14	Ethyl benzene	0.057	10	2,3,4,6-Tetrachlorophenol	0.030	30
Carbon disulfide	3.8	4.8mg/l	Ethyl cyanide (Propanenitrile)	0.24	360	Thiophanate	0.055	1.4
Carbon tetrachloride	0.057	6.0	Ethyl ether	0.12	160	Toluene	0.080	10
Chlordane (Alpha- and gamma- Isomers)	0.0033	0.26	Ethyl methacrylate	0.14	160	Toxaphene	0.0095	2.6
p-Chloroaniline	0.46	16	Ethylene oxide	0.12	NA	Triallate	0.032	1.4
Chlorobenzene	0.057	6.0	Bis(2-ethylhexyl) Phthalate	0.28	28	Tribromomethane (Bromoform)	0.63	15
Chlorobenzilate	0.10	NA	Famphur	0.017	15	1,2,4-Trichlorobenzene	0.055	19
2-Chloro-1,3-butadiene	0.057	0.28	Fluoranthene	0.068	3.4	1,1,1-Trichloroethane	0.054	6.0
Chlorodibromomethane	0.057	15	Fluorene	0.059	3.4	1,1,2-Trichloroethane	0.054	6.0
Chloroethane	0.27	6.0	Heptachlor	0.0012	0.066	Trichloroethylene	0.054	5.6
Bis(2-Chloroethyl) Ether	0.033	6.0	Heptachlor epoxide	0.016	0.066	Trichloromonofluoro-methane	0.020	30
2-Chloroethyl Vinyl Ether	0.062	NA	Hexachlorobenzene	0.055	10	2,4,5-Trichlorophenol	0.18	2.6
Chloroform	0.046	6.0	Hexachlorobutadiene	0.055	5.6	2,4,6-Trichlorophenol	0.035	6.2
Bis(2-Chloroisopropyl) Ether	0.055	7.2	Hexachlorocyclo-pentadiene	0.057	2.4	2,4,5-TP(2,4,5-Trichloro-phenoxypropionic acid)	0.72	7.9
Chloromethane (Methyl Chloride)	0.19	30	Hexachloroethane	0.055	30	1,2,3-Trichloropropane	0.85	30
2-Chloronaphthalene	0.055	5.6	Hexachlorophene	0.035	137	1,1,2-Trichloro-1,2,2-trifluoroethane	0.057	30
2-Chlorophenol	0.044	5.7	Hexachloropropylene	0.035	30	Vinyl chloride	0.27	6.0
3-Chloropropylene	0.036	30	Indeno(1,2,3-c,d) Pyrene	0.0055	3.4	Xylenes-Mixed Isomers (Sum of o,m,p Xyl)	0.32	30
Chrysene	0.059	3.4	Isobutyl alcohol	5.6	170	Antimony	1.9	1.15mg/l
o-Cresol	0.11	5.6	Isosafrole	0.081	2.6	Arsenic	1.4	5.0mg/l
m-Cresol	0.77	5.6	Kepone	0.0011	0.13	Barium	1.2	21.0mg/l
p-Cresol	0.77	5.6	Methacrylonitrile	0.24	84	Beryllium	0.82	1.22mg/l
Cresol-mixed Isomers	0.88	0.75mg/l	Methanol	5.6	0.75mg/l	Cadmium	0.69	0.11mg/l
p,p'-DDD	0.023	0.087	Methapyrilene	0.081	1.5	Chromium(Total)	2.77	0.60mg/l
p,p'-DDE	0.031	0.087	Methomyl	0.028	0.19	Cyanides (Total)	1.2	590
p,p'-DDT	0.0039	0.087	Methoxychlor	0.25	0.18	Cyanides (Amenable)	0.86	30
Dibenz(a,h)anthracene	0.055	8.2	Methyl ethyl ketone	0.28	36	Fluoride (Not UHC)	35	35
Dibenzofuran	0.059	NA	Methyl Isobutyl ketone	0.14	33	Lead	0.69	0.75mg/l
1,2-Dibromo-3-chloropropane	0.11	15	Methyl methacrylate	0.14	160	Mercury-All Others	0.15	0.025mg/l
Dibromomethane	0.11	15	Methyl methanesulfonate	0.018	NA	Mercury-Amalgamation	0.15	0.20mg/l
Di-n-butylamine	0.028	15	Methyl parathion	0.014	4.6	Nickel	3.98	11.0mg/l
Dichlorobenzene (1,2-Dichlorobenzene)	0.088	6.0	Methylene chloride	0.089	30	Selenium	0.82	5.7mg/l
Dichlorodifluoromethane	0.23	7.2	Naphthalene	0.059	5.6	Silver	0.43	0.14mg/l
1,1-Dichloroethane	0.059	6.0	1,4-Naphthoquinone	0.072	NA	Sulfide	14	14
1,2-Dichloroethane	0.21	6.0	1-Naphthylamine	0.52	NA	Thallium	1.4	0.20mg/l
1,1-Dichloroethylene	0.025	6.0	2-Naphthylamine	0.52	NA	Vanadium (Not UHC)	4.3	1.6mg/l
			Nitrobenzene	0.068	14	Zinc (Not UHC)	2.61	4.3mg/l

Additional Hazardous Constituents for PCBs/PCBs are indicated with (*)

Manifest: WPS#: 59011

Universal Treatment Standards 40 CFR 268.48

INSTRUCTIONS: This page needs completion only if "YES" is indicated under Wastes Subject to Treatment section.

Indicate with an "X" any Underlying Hazardous Constituent reasonably expected to be present in this waste.

Constituents by Chemical Name	WW Conc.	NWW Conc.
__ Acenaphthene	0.059	3.4
__ Acenaphthylene	0.059	3.4
__ Acetone*	0.28	160
__ Acetonitrile	3.6	38
__ Acetophenone	0.010	9.7
__ 2-Acetylaminofluorene	0.059	140
__ Acrolein	0.29	NA
__ Acrylamide	19	23
__ Acrylonitrile	0.24	84
__ Aldrin	0.021	0.066
__ 4-Aminobiphenyl	0.13	NA
__ Aniline	0.81	14
__ Anthracene	0.059	3.4
__ Aramite	0.36	NA
__ Benchiocarb	0.056	1.4
__ Benomyl	0.056	1.4
__ Benz(a)Anthracene	0.059	3.4
__ Benzal chloride	0.055	6.0
__ Benzene*	0.14	10
__ Benzo(b)-fluoranthene	0.11	6.8
__ Benzo(k)-fluoranthene	0.11	6.8
__ Benzo(g,h,i)perylene	0.0055	1.8
__ Benzo(a)pyrene	0.061	3.4
__ alpha-BHC	0.00014	0.066
__ beta-BHC	0.00014	0.066
__ delta-BHC	0.023	0.066
__ gamma-BHC	0.0017	0.066
__ Bromochloromethane	0.35	15
__ Methyl bromide-(Bromomethane)	0.11	15
__ 4-Bromophenyl Phenyl Ether	0.055	15
__ N-Butyl alcohol*	5.6	2.6
__ Butyl benzyl phthalate	0.017	28
__ 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	0.066	2.5
__ Carbaryl	0.006	0.14
__ Carbenzadim	0.056	1.4
__ Carbofuran	0.006	0.14
__ Carbon disulfide*	3.8	4.8mg/l
__ Carbon tetrachloride*	0.057	6.0
__ Chlordane (alpha- and gamma isomers)	0.0033	0.26
__ p-Chloroaniline	0.46	16
__ Chlorobenzene*	0.057	6.0
__ Chlorobenzilate	0.10	NA
__ 2-Chloro-1,3 butadiene	0.057	0.28
__ Chlorodibromomethane	0.057	15
__ Chloroethane	0.27	6.0
__ bis(2-Chloro-ethoxy) methane	0.036	7.2
__ bis(2-Chloroethyl)ether	0.033	6.0
__ 2-Chloroethyl Vinyl ether	0.062	NA
__ Chloroform	0.046	6.0
__ bis(2-Chloro-isopropyl)ether	0.055	7.2
__ p-Chloro-m-cresol	0.018	14
__ Chloromethane (Methyl Chloride)	0.19	30
__ 2-Chloronaphthalene	0.055	5.6
__ 2-Chlorophenol	0.044	5.7
__ 3-Chloropropylene	0.036	30
__ Chrysene	0.059	3.4
X __ o-Cresol*	0.11	5.6
X __ m-Cresol*	0.77	5.6
X __ p-Cresol*	0.77	5.6
__ Cyclohexanone*	0.36	0.75mg/l
__ o,p'-DDD	0.023	0.087
__ o,p'-DDE	0.031	0.087
__ o,p'-DDT	0.0039	0.087
__ Dibenz(a,h)Anthracene	0.055	8.2
__ Dibenz(a,e)pyrene	0.061	NA
__ 1,2-Dibromo-3-chloropropane	0.11	15
__ Ethylene dibromide - (1,2-Dibromoethane)	0.028	15
__ Dibromomethane	0.11	15
__ m-Dichlorobenzene	0.036	6.0
__ o-Dichlorobenzene*	0.088	6.0
__ p-Dichlorobenzene	0.090	6.0
__ Dichlorodifluoromethane	0.23	7.2
__ 1,1-Dichloroethane	0.059	6.0
__ 1,2-Dichloroethane	0.21	6.0
__ 1,1-Dichloroethylene	0.025	6.0
__ trans-1,2-Dichloro-ethylene	0.054	30
__ 2,4-Dichlorophenol	0.044	14
__ 2,6-Dichlorophenol	0.044	14
__ 2,4-D(2,4-Dichlorophenoxyacetic Acid	0.72	10
__ p,p'-DDD	0.023	0.087
__ p,p'-DDE	0.031	0.087
__ p,p'-DDT	0.0039	0.087
__ 1,2-Dichloropropane	0.85	18
__ cis-1,3-Dichloro-propylene	0.036	18
__ trans-1,3-Dichloro-propylene	0.036	18
__ Dieldrin	0.017	0.13
__ Diethyl Phthalate	0.20	28
__ p-Dimethylaminoazo-benzene	0.13	NA
__ 2,4-Dimethyl Phenol	0.036	14
__ Dimethyl Phthalate	0.047	28
__ Di-N-Butyl Phthalate	0.057	28
__ 1,4-Dinitrobenzene	0.32	2.3
__ 4,6-Dinitro-O-Cresol	0.28	160
__ 2,4-Dinitrophenol	0.12	160
__ 2,4-Dinitrotoluene	0.32	140
__ 2,6-Dinitrotoluene	0.55	28
__ Di-N-Octyl Phthalate	0.017	28
__ Di-N-Propylnitrosamine	0.40	14
__ 1,4-Dioxane	12.0	170
__ Diphenylamine	0.92	13
__ Diphenylnitrosamine	0.92	13
__ 1,2-Diphenylhydrazine	0.087	NA
__ Disulfoton	0.017	6.2
__ Dithiocarbamates (total)	0.028	28
__ Endosulfan I	0.023	0.066
__ Endosulfan II	0.029	0.13
__ Endosulfan sulfate	0.029	0.13
__ Endrin	0.0028	0.13
__ Endrin aldehyde	0.025	0.13
__ Ethyl acetate*	0.34	33
__ Ethyl benzene*	0.057	10
__ Ethyl cyanide (Propanenitrile)	0.24	360
__ Ethyl ether*	0.12	160
__ Ethyl methacrylate	0.14	160
__ Ethylene oxide	0.12	NA
__ bis(2-Ethyhexyl) Phthalate	0.28	28
__ Famphur	0.017	15
X __ Fluoranthene	0.068	3.4
__ Fluorene	0.059	3.4
__ Heptachlor	0.0012	0.066
__ Heptachlor epoxide	0.016	0.066
__ Hexachlorobenzene	0.055	10
__ Hexachlorobutadiene	0.055	5.6
__ Hexachlorocyclo-pentadiene	0.057	2.4
__ Hexachloroethane	0.055	30
__ Hexachloropropylene	0.035	30
__ Indeno(1,2,3-c,d) Pyrene	0.0055	3.4
__ Iodomethane	0.19	65
__ Isobutyl alcohol*	5.6	170
__ Isodrin	0.021	0.066
__ Isosafrole	0.081	2.6
__ Kepone	0.0011	0.13
__ Methacrylonitrile	0.24	84
__ Methanol*	5.6	0.75mg/l
__ Methapyrilene	0.081	1.5
__ Methoxychlor	0.25	0.18
__ Methyl ethyl ketone*	0.28	36
__ Methyl isobutyl ketone*	0.14	33
__ Methyl methacrylate	0.14	160
__ Methyl methansulfonate	0.018	NA
__ Methyl parathion	0.014	4.6
__ 3-Methylcholanthrene	0.0055	15
__ 4,4-Methylene Bis-(2-chloroaniline)	0.50	30
__ Methylene chloride*	0.089	30
X __ Naphthalene	0.059	5.6
__ 2-Naphthylamine	0.52	NA
__ o-Nitroaniline	0.27	14
__ p-Nitroaniline	0.028	28
__ Nitrobenzene*	0.068	14
__ 5-Nitro-O-toluidine	0.32	28
__ o-Nitrophenol	0.028	13
__ p-Nitrophenol	0.12	29
__ N-Nitrosodiethylamine	0.40	28
__ N-Nitrosodimethylamine	0.40	2.3
__ N-Nitroso-Di-N-Butyl-amine	0.40	17
__ N-Nitrosomethyl-ethylamine	0.40	2.3
__ N-Nitrosomorpholine	0.40	2.3
__ N-Nitrosopiperidine	0.013	35
__ N-Nitrosopyrrolidine	0.013	35
__ Parathion	0.014	4.6
__ Total PCB's	0.10	10
__ Pentachlorobenzene	0.055	10
__ Pentachloroethane	0.055	6.0
__ Pentachloronitrobenzene	0.055	4.8
__ Pentachlorophenol	0.089	7.4
__ Phenacetin	0.081	16
X __ Phenanthrene	0.059	5.6
__ Phenol	0.039	6.2
__ Phorate	0.021	4.6
__ Phthalic acid	0.055	28
__ Phthalic anhydride	0.055	28
__ Pronamide	0.093	1.5
__ Propoxur	0.056	1.4
X __ Pyrene	0.067	8.2
__ Pyridine*	0.014	16
__ Safrole	0.081	22
__ Silvex(2,4,5-TP)	0.72	7.9
__ 1,2,4,5-Tetrachloro-benzene	0.055	14
__ 1,1,1,2-Tetrachloroethane	0.057	6.0
__ 1,1,2,2-Tetrachloroethane	0.057	6.0
__ Tetrachloroethylene*	0.056	6.0
__ 2,3,4,6-Tetrachlorophenol	0.030	7.4
__ Thiodicarb	0.019	1.4
X __ Toluene*	0.080	10
__ Toxaphene	0.0095	2.6
__ Triallate	0.042	1.4
__ Bromoform (tribromo-methane	0.63	15
__ 1,2,4-Trichlorobenzene	0.055	19
__ 1,1,1-Trichloroethane*	0.054	6.0
__ 1,1,2-Trichloroethane*	0.054	6.0
__ Trichloroethylene*	0.054	6.0
__ Trichloromonofluoro-methane*	0.020	30
__ 2,4,5-Trichlorophenol	0.18	7.4
__ 2,4,6-Trichlorophenol	0.035	7.4
__ 2,4,5-T(2,4,5-Trichloro-phenoxyacetic acid)	0.72	7.9
__ 1,2,3-Trichloropropane	0.85	30
__ 1,1,2-Trichloro-1,2,2-trifluoroethane*	0.057	30
__ Vinyl chloride	0.27	6.0
X __ Xylenes-Mixed Isomers (=Sum of o,m,& p)*	0.32	30
__ Antimony	1.9	1.15mg/l
__ Arsenic	1.4	5.0mg/l
__ Barium	1.2	21.0mg/l
__ Beryllium	0.82	1.22mg/l
__ Cadmium	0.69	0.11mg/l
__ Chromium(Total)	2.77	0.60mg/l
__ Cyanides (Total)	1.2	590
__ Cyanides (Amenable)	0.86	30
__ Fluoride (Not UHC)	35	NA
__ Lead	0.69	0.75mg/l
__ Mercury-All Others	0.15	0.025mg/l
__ Nickel	3.98	11.0mg/l
__ Selenium	0.82	5.7mg/l
__ Silver	0.43	0.14mg/l
__ Sulfide	14	NA
__ Thallium	1.4	0.20mg/l
__ Vanadium (Not UHC)	4.3	1.6mg/l
__ Zinc (Not UHC)	2.61	4.3mg/l

Regulated Hazardous Constituents for F001-F005 are indicated with (*)

NOTIFICATON OF WASTE SUBJECT
TO LAND DISPOSAL RESTRICTIONS

Revised 11/98

Generator STATE UNIVERSITY OF NEW YORK
Address 1 COLLEGE CIRCLE
GENESEO 14454 - ___

Manifest # _____
Shipper # _____
U.S. EPA ID# NYD073669350

1. The generator named above hereby provides the following NOTIFICATION to Ross Incineration Services, Inc. (RIS) as required by 40 CFR 268.7(a)(1) and the OAC3745-59-07(A)(1). The waste material shipped under the above Manifest Document Number is subject to Land Disposal Restriction regulations as set forth in 40 CFR 268 Subpart D/OAC3745-59.

2. Check all UNDERLYING HAZARDOUS CONSTITUENTS (UHC's), on the attached form, which can reasonably be expected to be present in the waste at a concentration above the constituent specific treatment standard, listed in 40 CFR Part 268.48, Table UTS - Universal Treatment Standards. UHC's must be identified for D001 (if not treated by CMBST or RORGS), D002, D003 (except reactive cyanides and unexploded ordnance subcategories), D004-D011 (specific sub-categories) and D012-D043. Wastewater forms of D012-D017 do not require that UHC's be identified.

   Check all F001-F005 REGULATED HAZARDOUS CONSTITUENTS (RHC'S) which can be reasonably expected to be present in this waste at a concentration above the constituent specific treatment standard listed in 40 CFR Part 268.48.

3. A separate page must be used for each WPS in which RHC's or UHC's are present.

4. Waste Analysis is attached where available, otherwise, the information contained herein is based upon my thorough knowledge of the waste(s).

UNDERLYING HAZARDOUS CONSTITUENTS

Aldicarb sulfone	HxCDDs(All Hexachlorodibenzo-p-dioxins)	Physostigmine
Barban	HxCDFs(All Hexachlorodibenzofurans)	Physostigmine salicylate
Butylate	3-Iodo-2-propynyl n-butylcarbamate	Promecarb
Carbofuran phenol	Methiocarb	Propham
Carbosulfan	Methomyl	Prosulfocarb
m-Cumenyl methylcarbamate	Metolcarb	TCDDs(All Tetrachlorodibenzo-p-dioxins)
Cycloate	Mexacarbate	TCDFs(All Tetrachlorodibenzofurans)
EPTC	Molinate	Thiophanate-methyl
Formetanate hydrochloride	Oxamyl	Triethylamine
	Pebulate	tris-(2,3-Dibromopropyl) phosphate
	PeCDDs(All Pentachlorodibenzo-p-dioxins)	Vernolate
	PeCDFs(All Pentachlorodibenzofurans)	Mercury-NWW from Retort

(X) THE ABOVE UNDERLYING HAZARDOUS CONSTITUENTS ARE NOT "REASONABLY EXPECTED" TO BE PRESENT IN THE WASTE PRODUCT SURVEYS LISTED IN WASTES SUBJECT TO TREATMENT.

ROSS INCINERATION SERVICES, INC. CANNOT ACCEPT WASTE WITH THESE UNDERLYING HAZARDOUS CONSTITUENTS WITHOUT SPECIAL APPROVALS. PLEASE CONTACT YOUR ACCOUNT REPRESENTATIVE IF APPROVALS ARE NEEDED.

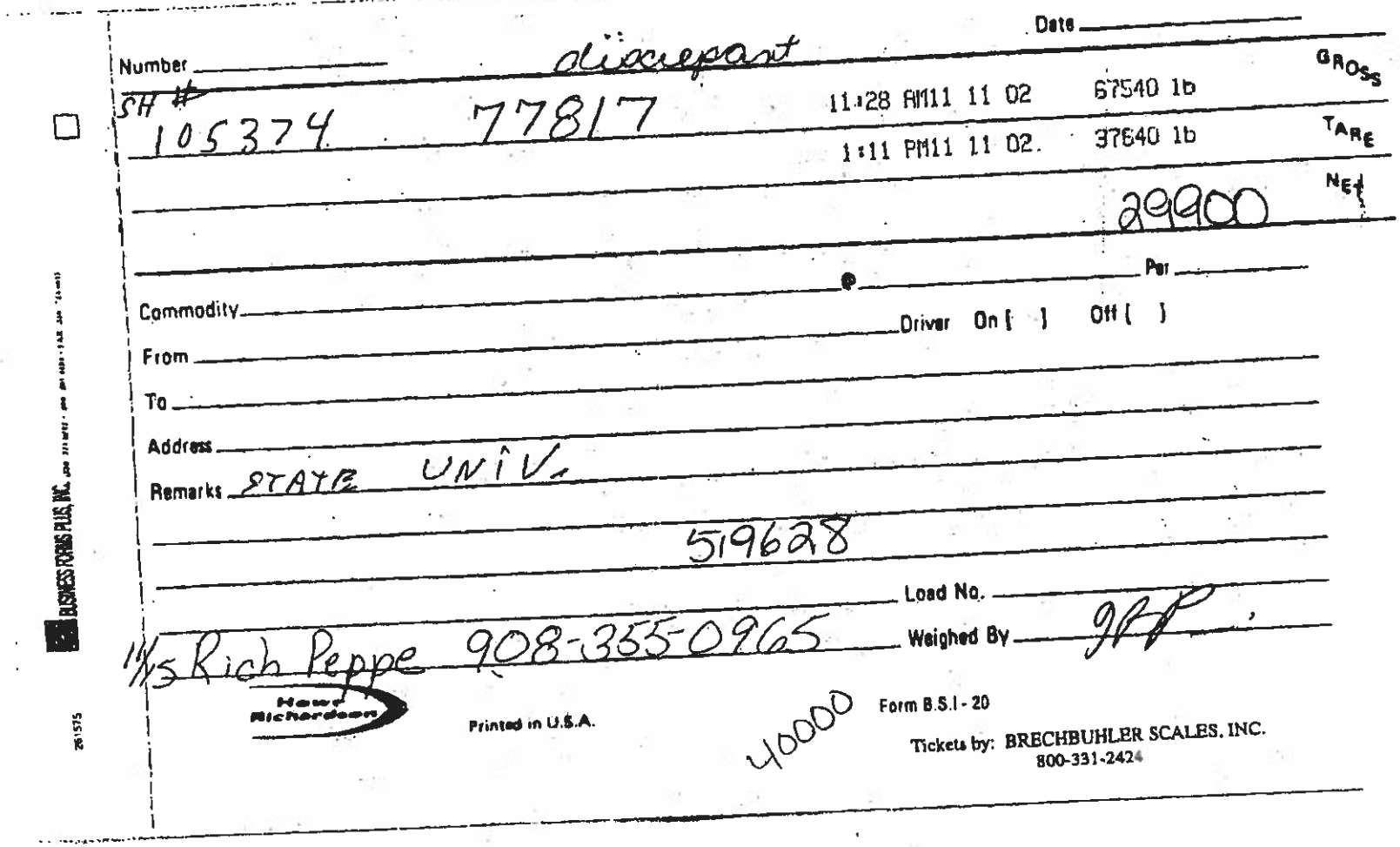
WASTES SUBJECT TO TREATMENT
Nonwastewater(NWW) Wastewater(WW)

WPS #	Treatability Group	EPA Codes & Subcategory(if applicable)	Are UHC's or RHC's present?
59011	NWW	D018	YES (circled) NO

Signature X _____ Date _____

Name _____ Title _____

It is the generator's responsibility under 40 CFR 268/OAC3745-59 to ensure that appropriate notifications accompany each shipment of waste as required. RIS makes no representations as to the accuracy of this form and recommends that the generator independently verify notification requirements for the waste streams.



Number discrepant Date

SH # 105374 77817

11:28 AM11 11 02 67540 lb GROSS

1:11 PM11 11 02 37640 lb TARE

29900 NET

Per

Commodity Driver On [ ] Off [ ]

From

To

Address

Remarks STATE UNIV.

519628

Load No.

11/5 Rich Peppe 908-355-0965 Weighed By JRP

Howe Richardson

Printed in U.S.A.

40000

Form B.S.I - 20

Tickets by: BRECHBUHLER SCALES, INC.
800-331-2424

BUSINESS FORMS PLUS, INC.

261575

Shipper 105374
Weight discrepant, originally manifested as 40000 lbs.
Changed to 29900 lbs.

CERTIFICATE OF TREATMENT

GENERATOR INFORMATION

STATE UNIVERSITY OF NEW YORK
GENESEO NY
EPA # NYD073669350

DATE RECEIVED..... 11/11/02

SHIPPER NUMBER..... 0105374

MANIFEST NUMBER..... 77817

PROCESSED AS OF..... 11/17/02

The above material has been processed at:

Ross Incineration Services, Inc.
36790 Giles Road
Grafton, Ohio 44044-9752
(440) 748-2171

US EPA ID # OHD048415665

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake ... 7-2530 FAX 585-647-3311

ATTACHMENT 4

LABORAT... SIS

Client: NYE TECH

Client Job Site: Suny Geneseo
Parking Lot Excavation

Client Job No.: 3954

Lab Project No.: 03-0196

Sample Type: Soil
Analytical Method: SW846, 9012
Date Sampled: 01/10/2003
Date Received: 01/10/2003
Date Analyzed: 01/16/2003

Lab Sample ID.	Field Location/Sample ID	T. Cyanide (mg/kg)
1324	S-1, NE Pit Floor	4.1
1325	S-2, SW Pit Floor	ND<0.5
1326	S-3, SW Pit Lower Wall	ND<0.5
1327	S-4, SW Pit Upper Wall	ND<0.5
1328	S-5, West Pit Lower Wall	ND<0.5
1329	S-6, West Pit Upper Wall	ND<0.5

ELAP ID No. 10709

Comments: ND denotes Non Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: VarLocCN03-0196

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1324
Client Job Number:	N/A		
Field Location:	NE Pit Floor	**Date Sampled:**	01/10/2003
Field ID Number:	S-1	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/17/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 3,470
Anthracene	3,510
Benzo (a) anthracene	17,300
Benzo (a) pyrene	26,600
Benzo (b) fluoranthene	27,300
Benzo (g,h,i) perylene	15,600
Benzo (k) fluoranthene	12,400
Chrysene	15,400
Dibenz (a,h) anthracene	ND< 3,470
Fluoranthene	18,300
Fluorene	ND< 3,470
Indeno (1,2,3-cd) pyrene	17,500
Naphthalene	ND< 3,470
Phenanthrene	5,810
Pyrene	20,300
Pyridine	ND< 3,470

ELAP Number 10958 Method: EPA 8270C Data File: 10070.D

179,620 (w/out adding NDs)

196,970 (w/NDs)

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information.

File ID: 030196S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1325
Client Job Number:	N/A		
Field Location:	SW Pit Floor	**Date Sampled:**	01/10/2003
Field ID Number:	S-2	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/14/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 332
Anthracene	ND< 332
Benzo (a) anthracene	428
Benzo (a) pyrene	404
Benzo (b) fluoranthene	456
Benzo (g,h,i) perylene	ND< 332
Benzo (k) fluoranthene	ND< 332
Chrysene	381
Dibenz (a,h) anthracene	ND< 332
Fluoranthene	744
Fluorene	ND< 332
Indeno (1,2,3-cd) pyrene	ND< 332
Naphthalene	ND< 332
Phenanthrene	485
Pyrene	661
Pyridine	ND< 332

ELAP Number 10958 Method: EPA 8270C Data File: 10021.D

3,559 (w/o ND's)
6,547 (w/ ND's)

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1326
Client Job Number:	N/A		
Field Location:	SW Pit Lower Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-3	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/14/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 299
Anthracene	ND< 299
Benzo (a) anthracene	ND< 299
Benzo (a) pyrene	ND< 299
Benzo (b) fluoranthene	ND< 299
Benzo (g,h,i) perylene	ND< 299
Benzo (k) fluoranthene	ND< 299
Chrysene	ND< 299
Dibenz (a,h) anthracene	ND< 299
Fluoranthene	ND< 299
Fluorene	ND< 299
Indeno (1,2,3-cd) pyrene	ND< 299
Naphthalene	ND< 299
Phenanthrene	ND< 299
Pyrene	ND< 299
Pyridine	ND< 299

ELAP Number 10958 Method: EPA 8270C Data File: 10022.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196S3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1327
Client Job Number:	N/A		
Field Location:	SW Pit Upper Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-4	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/14/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 327
Anthracene	ND< 327
Benzo (a) anthracene	1,020
Benzo (a) pyrene	1,060
Benzo (b) fluoranthene	1,200
Benzo (g,h,i) perylene	553
Benzo (k) fluoranthene	443
Chrysene	891
Dibenz (a,h) anthracene	ND< 327
Fluoranthene	1,650
Fluorene	ND< 327
Indeno (1,2,3-cd) pyrene	651
Naphthalene	ND< 327
Phenanthrene	434
Pyrene	1,510
Pyridine	ND< 327

ELAP Number 10958 Method: EPA 8270C Data File: 10023.D

9,412 (w/o ND's)
11,074 (w/ ND's)

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196S4.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1328
Client Job Number:	N/A		
Field Location:	West Pit Lower Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-5	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/17/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 2,940
Anthracene	5,940
Benzo (a) anthracene	10,500
Benzo (a) pyrene	9,050
Benzo (b) fluoranthene	10,900
Benzo (g,h,i) perylene	4,180
Benzo (k) fluoranthene	4,460
Chrysene	8,710
Dibenz (a,h) anthracene	ND< 2,940
Fluoranthene	21,400
Fluorene	3,350
Indeno (1,2,3-cd) pyrene	5,290
Naphthalene	ND< 2,940
Phenanthrene	18,100
Pyrene	17,300
Pyridine	ND< 2,940

ELAP Number 10958 Method: EPA 8270C Data File: 10071.D

119,180 (w/o ND's)

133,880 (w/ ND's)

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 030196s5.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1329
Client Job Number:	N/A		
Field Location:	West Pit Upper Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-6	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/14/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 359
Anthracene	670
Benzo (a) anthracene	725
Benzo (a) pyrene	620
Benzo (b) fluoranthene	679
Benzo (g,h,i) perylene	ND< 359
Benzo (k) fluoranthene	ND< 359
Chrysene	576
Dibenz (a,h) anthracene	ND< 359
Fluoranthene	1,440
Fluorene	699
Indeno (1,2,3-cd) pyrene	ND< 359
Naphthalene	5,860
Phenanthrene	2,070
Pyrene	1,090
Pyridine	ND< 359

ELAP Number 10958 Method: EPA 8270C Data File: 10025.D

14,429 (w/o ND's)

16,583 (w/ ND's)

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196S6.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1324
Client Job Number:	N/A		
Field Location:	NE Pit Floor	**Date Sampled:**	01/10/2003
Field ID Number:	S-1	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/15/2003

Aromatics	Results in ug / Kg
Benzene	ND< 8.56
Ethylbenzene	ND< 8.56
Toluene	ND< 8.56
m,p - Xylene	ND< 8.56
o - Xylene	ND< 8.56

ELAP Number 10958 Method: EPA 8260B Data File: 63545.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: 
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1325
Client Job Number:	N/A		
Field Location:	SW Pit Floor	**Date Sampled:**	01/10/2003
Field ID Number:	S-2	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/15/2003

Aromatics	Results in ug / Kg
Benzene	ND< 5.51
Ethylbenzene	ND< 5.51
Toluene	ND< 5.51
m,p - Xylene	6.29
o - Xylene	ND< 5.51

ELAP Number 10958 Method: EPA 8260B Data File: 63546.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196V2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1326
Client Job Number:	N/A		
Field Location:	SW Pit Lower Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-3	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/15/2003

Aromatics	Results in ug / Kg
Benzene	28.1
Ethylbenzene	ND< 6.08
Toluene	12.4
m,p - Xylene	11.1
o - Xylene	ND< 6.08

ELAP Number 10958 Method: EPA 8260B Data File: 63547.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196V3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1327
Client Job Number:	N/A		
Field Location:	SW Pit Upper Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-4	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/17/2003

Aromatics	Results in ug / Kg
Benzene	ND< 10.2
Ethylbenzene	ND< 10.2
Toluene	ND< 10.2
m,p - Xylene	ND< 10.2
o - Xylene	ND< 10.2

ELAP Number 10958 Method: EPA 8260B Data File: 63570.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196v4.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1328
Client Job Number:	N/A		
Field Location:	West Pit Lower Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-5	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/15/2003

Aromatics	Results in ug / Kg
Benzene	2,480
Ethylbenzene	ND< 1,130
Toluene	883
m,p - Xylene	3,330
o - Xylene	1,140

ELAP Number 10958 Method: EPA 8260B Data File: 63549.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196v5.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo Parking Lot Excavation	**Lab Project Number:**	03-0196
		Lab Sample Number:	1329
Client Job Number:	N/A		
Field Location:	West Pit Upper Wall	**Date Sampled:**	01/10/2003
Field ID Number:	S-6	**Date Received:**	01/10/2003
Sample Type:	Soil	**Date Analyzed:**	01/15/2003

Aromatics	Results in ug / Kg
Benzene	ND< 10.5
Ethylbenzene	ND< 10.5
Toluene	ND< 10.5
m,p - Xylene	ND< 10.5
o - Xylene	ND< 10.5

ELAP Number 10958 Method: EPA 8260B Data File: 63550.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030196V6.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(716) 647-2530 * (800) 724-1997

CHAIN OF CUSTODY

REPORT TO

COMPANY: NYETECH
ADDRESS: 230 McKee Rd.
CITY: Rochester STATE: NY ZIP: 14611
PHONE: 436-5660 FAX: 436-6139
ATTN: Frank Booher
COMMENTS:

INVOICE TO

COMPANY:
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 03-0196
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)
☐ 1 ☐ 2 ☐ 3 ☒ STD 5 ☐ OTHER

PROJECT NAME/SITE NAME:
SUNY Geneseo
Parking Lot Excavation

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	BTEX	Pyridene	TCN	8270							REMARKS	PARADIGM LAB SAMPLE NUMBER
1	1-10-03	1430		X	S-1 NE Pit Floor	S	1	X	X	X	X							Soil	13241
2				X	S-2 SW Pit Floor	S	1	X	X	X	X							Shale	13251
3				X	S-3 SW Pit Lower Wall	S	1	X	X	X	X							Shale	13261
4				X	S-4 SW Pit Upper Wall	S	1	X	X	X	X							Soil	13271
5				X	S-5 West Pit Lower Wall	S	1	X	X	X	X							Shale	13281
6				X	S-6 West Pit Upper Wall	S	1	X	X	X	X							Soil	13291
7																			
8																			
9																			
10																			

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ✓ 10°C

Sampled By: Date/Time: 1/10/03 1230
Relinquished By: Date/Time: 1/10/03 1430
Received By: Date/Time:

Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Date/Time: 1/10/03 @ 15:30

Total Cost:
P.I.F.

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

COMPANY: Nyatech	COMPANY: Same	LAB PROJECT #: 03-0408	CLIENT PROJECT #: 3952 Geneseo
ADDRESS: Mckee Rd.	ADDRESS:	TURNAROUND TIME: (WORKING DAYS)	
CITY: Rochester STATE: N.Y. ZIP:	CITY: STATE: ZIP:	☐ 1 ☐ 2 ☐ 3 ☑ 5 (STD)	OTHER ☐
PHONE: 585-436-5660 FAX:	PHONE: FAX:		
ATTN: Frank Bowen	ATTN:		
COMMENTS:			

PROJECT NAME/SITE NAME: Suny Geneseo

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	BTEX	8270 *	[illegible]	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	2/3/03				North wall	S	1	✓	✓	✓		2010
2	2/3/03				East wall	↓	1	✓	✓	✓		2012
3	2/3/03				Northwest wall	↓	1	✓	✓	✓		2014
4												
5												
6												
7												
8												
9												
10												

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:

CONTAINER TYPE: ☑ PRESERVATIONS: ☑ HOLDING TIME: ☑ TEMPERATURE: ☐ 19°C

Sampled By: Todd Kibler	Date/Time: 2/3/03 noon	Relinquished By:	Date/Time:	Total Cost:
Relinquished By: F. D. Bowen	Date/Time: 2/4/03 11:30	Received By:	Date/Time:	
Received By: Jane J. Orlena	Date/Time: 2/4/03 1130	Received @ Lab By: Jane J. Orlena	Date/Time: 2/4/03 1330	P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: NYE Tech

Client Job Site: SUNY Geneseo

Client Job No.: 3954 Geneseo

Lab Project No.: 03-0408

Sample Type: Soil
Analytical Method: SW 9012
Date Sampled: 02/03/2003
Date Received: 02/04/2003
Date Analyzed: 02/11-02/12/2003

Lab Sample ID.	Sample Location/Field ID	Total Cyanide (mg/kg)
2012	North Wall	22
2013	East Wall	11
2014	Northwest Wall	4.1

ELAP ID No. 10709

Comments: ND denotes Non-Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

RECEIVED
MAY 12 2003

Chain of Custody provides additional sample information.

File ID: TCN03-0408.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo	**Lab Project Number:**	03-0408
		Lab Sample Number:	2012
Client Job Number:	39521		
Field Location:	North Wall	**Date Sampled:**	02/03/2003
Field ID Number:	N/A	**Date Received:**	02/04/2003
Sample Type:	Soil	**Date Analyzed:**	02/10/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 3,630
Anthracene	8,910
Benzo (a) anthracene	59,700
Benzo (a) pyrene	75,700
Benzo (b) fluoranthene	79,600
Benzo (g,h,i) perylene	39,400
Benzo (k) fluoranthene	35,700
Chrysene	54,500
Dibenz (a,h) anthracene	14,900
Fluoranthene	60,400
Fluorene	ND< 3,630
Indeno (1,2,3-cd) pyrene	47,400
Naphthalene	ND< 3,630
Phenanthrene	14,100
Pyrene	59,400
Pyridine	ND< 3,630

ELAP Number 10958 Method: EPA 8270C Data File: 10244.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030408S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo	**Lab Project Number:**	03-0408
		Lab Sample Number:	2013
Client Job Number:	39521		
Field Location:	East Wall	**Date Sampled:**	02/03/2003
Field ID Number:	N/A	**Date Received:**	02/04/2003
Sample Type:	Soil	**Date Analyzed:**	02/10/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 3,370
Anthracene	ND< 3,370
Benzo (a) anthracene	13,600
Benzo (a) pyrene	15,800
Benzo (b) fluoranthene	16,800
Benzo (g,h,i) perylene	7,950
Benzo (k) fluoranthene	6,190
Chrysene	11,800
Dibenz (a,h) anthracene	ND< 3,370
Fluoranthene	13,500
Fluorene	ND< 3,370
Indeno (1,2,3-cd) pyrene	9,000
Naphthalene	ND< 3,370
Phenanthrene	5,670
Pyrene	11,900
Pyridine	ND< 3,370

ELAP Number 10958 Method: EPA 8270C Data File: 10245.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030408S2.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo	**Lab Project Number:**	03-0408
		Lab Sample Number:	2014
Client Job Number:	39521		
Field Location:	North-West Wall	**Date Sampled:**	02/03/2003
Field ID Number:	N/A	**Date Received:**	02/04/2003
Sample Type:	Soil	**Date Analyzed:**	02/10/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 3,470
Anthracene	ND< 3,470
Benzo (a) anthracene	17,700
Benzo (a) pyrene	23,200
Benzo (b) fluoranthene	23,000
Benzo (g,h,i) perylene	13,000
Benzo (k) fluoranthene	9,940
Chrysene	16,000
Dibenz (a,h) anthracene	4,980
Fluoranthene	15,500
Fluorene	ND< 3,470
Indeno (1,2,3-cd) pyrene	15,000
Naphthalene	ND< 3,470
Phenanthrene	6,390
Pyrene	14,500
Pyridine	ND< 3,470

ELAP Number 10958 Method: EPA 8270C Data File: 10246.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 030408S3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo	**Lab Project Number:**	03-0408
		Lab Sample Number:	2012
Client Job Number:	39521		
Field Location:	North Wall	**Date Sampled:**	02/03/2003
Field ID Number:	N/A	**Date Received:**	02/04/2003
Sample Type:	Soil	**Date Analyzed:**	02/10/2003

Aromatics	Results in ug / Kg
Benzene	ND< 9.10
Ethylbenzene	ND< 9.10
Toluene	ND< 9.10
m,p-Xylene	ND< 9.10
o-Xylene	ND< 9.10

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 13667.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: 
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo	**Lab Project Number:**	03-0408
		Lab Sample Number:	2013
Client Job Number:	39521		
Field Location:	East Wall	**Date Sampled:**	02/03/2003
Field ID Number:	N/A	**Date Received:**	02/04/2003
Sample Type:	Soil	**Date Analyzed:**	02/10/2003

Aromatics	Results in ug / Kg
Benzene	ND< 6.45
Ethylbenzene	ND< 6.45
Toluene	ND< 6.45
m,p-Xylene	ND< 6.45
o-Xylene	ND< 6.45

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 13668.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030408v2.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	SUNY Geneseo	**Lab Project Number:**	03-0408
		Lab Sample Number:	2014
Client Job Number:	39521		
Field Location:	North-West Wall	**Date Sampled:**	02/03/2003
Field ID Number:	N/A	**Date Received:**	02/04/2003
Sample Type:	Soil	**Date Analyzed:**	02/07/2003

Aromatics	Results in ug / Kg
Benzene	ND< 9.79
Ethylbenzene	ND< 9.79
Toluene	ND< 9.79
m,p-Xylene	ND< 9.79
o-Xylene	ND< 9.79

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 13657.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 030408V3.XLS

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:
COMPANY: NYSEG
ADDRESS: MCKEE RD. PO BOX 2437
CITY: ROCHESTER STATE: N.Y. ZIP: 14624
PHONE: 585-436-5660 FAX:
ATTN: FRANK BOOMER
COMMENTS:

INVOICE TO:
COMPANY: SAME
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 03-0408
CLIENT PROJECT #: 3954 GENESEO

TURNAROUND TIME: (WORKING DAYS)
STD ☑ 5 OTHER ☐ 1 ☐ 2 ☐ 3

PROJECT NAME/SITE NAME: SUNY Geneseo

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	BTEX	8270 *	1,2,4 TMB	TCL							REMARKS	PARADIGM LAB SAMPLE NUMBER
1	2/3/03				NORTH WALL	S	1	✓	✓	✓	✓								2012
2	2/3/03				EAST WALL	↓	1	✓	✓	✓	✓								2013
3	2/3/03				NORTH-WEST WALL	↓	1	✓	✓	✓	✓								2014
4																			
5																			
6																			
7																			
8																			
9																			
10																			

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: 19C

Sampled By: TODD KISLER Date/Time: 2/3/03 NOON
Relinquished By: T. D. Boomer Date/Time: 2/4/03 11:30 AM
Received By: Jane A Adams Date/Time: 2/4/03 1130

Relinquished By: Date/Time:
Received By: Date/Time:
Received @ Lab By: Jane A Adams Date/Time: 2/4/03 1330

Total Cost:
P.I.F.

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	Geneseo College	**Lab Project Number:**	03-0354
		Lab Sample Number:	1785
Client Job Number:	R-3954		
Field Location:	S/W Pit Wall	**Date Sampled:**	01/28/2003
Field ID Number:	#1	**Date Received:**	01/29/2003
Sample Type:	Soil	**Date Analyzed:**	01/30/2003

Aromatics	Results in ug / Kg
Benzene	360
Ethylbenzene	ND< 113
Toluene	224
m,p-Xylene	549
o-Xylene	228

ELAP Number 10958 Method: EPA 8021B (GC/MS) Data File: 13598.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 030354V1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges

Client: NYETECH

Client Job Site:	Geneseo College	**Lab Project Number:**	03-0354
		Lab Sample Number:	1785
Client Job Number:	R-3954		
Field Location:	S/W Pit Wall	**Date Sampled:**	01/28/2003
Field ID Number:	#1	**Date Received:**	01/29/2003
Sample Type:	Soil	**Date Analyzed:**	01/31/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 283
Anthracene	ND< 283
Benzo (a) anthracene	ND< 283
Benzo (a) pyrene	ND< 283
Benzo (b) fluoranthene	ND< 283
Benzo (g,h,i) perylene	ND< 283
Benzo (k) fluoranthene	ND< 283
Chrysene	ND< 283
Dibenz (a,h) anthracene	ND< 283
Fluoranthene	ND< 283
Fluorene	ND< 283
Indeno (1,2,3-cd) pyrene	ND< 283
Naphthalene	1,360
Phenanthrene	ND< 283
Pyrene	ND< 283
Pyridine	ND< 283

ELAP Number 10958 Method: EPA 8270C Data File: 10202.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature: _____
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 030354S1.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

LABORATORY REPORT OF ANALYSIS

Client: NYE Tech
Client Job Site: Geneseo College
Client Job No.: R-3954

Lab Project No.: 03-0354
Sample Type: Soil
Analytical Method: SW 9012
Date Sampled: 01/28/2003
Date Received: 01/28/2003
Date Analyzed: 02/05/2003

Lab Sample ID.	Sample Location/Field ID	Total Cyanide (mg/kg)
1785	S/W Pit Wall	ND<0.5

ELAP ID No. 10709

Comments: ND denotes Non-Detected.

Approved By Technical Director: _____
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: TCyanide03-0354.xls

Environmental PRODUCTS & SERVICES, INC.

(315) 471-0503/(800) 843-8265

CHAIN OF CUSTODY RECORD

EPS LAB LOG NO. ________

JOB NUMBER: ________ PIN NUMBER: ________

P.O. NUMBER: ________ SPILL NUMBER: ________

LABORATORY: ________

ADDRESS: ________

PHONE NO.: ________

REPORTING REQUIREMENTS (other than mail)

☐ PHONE NO.: ________

☐ FAX NO.: ________

Sample(s) State of Origin:
CT ☐ DE ☐ MA ☐ MD ☐ NH ☐ NJ ☐ NY ☒ PA ☐ RI ☐ VT ☐ — ☐

TURN AROUND TIME (CALL AHEAD FOR APPROVAL FOR RUSH)
24-HOUR ☐
48-HOUR ☐
NORMAL ☒
OTHER ☐ ________

LAB APPROVAL BY: ________

SPECIAL DETECTION LIMITS ☐ Yes (Specify) ☐ No

SPECIAL QA/QC LEVEL Yes ☐ (Specify) No ☐

WASTE SAMPLE Yes ☐ No ☐

SAMPLE TYPE:
G - GRAB
C - COMPOSITE
W - WIPE
SS - SURFACE SCRAPE
O - OTHER (SPECIFY)

CONTAINER TYPE:
V - VOA VIALS
G - GLASS
P- PLASTIC
O- OTHER ________

SITE ADDRESS

SPECIAL INSTRUCTIONS

ANALYSIS REQUESTED: CORROS ☐ FLASH ☐ REACT ☐ pH ☐; TCLP: METALS ☐ VOA ☐ SEMI-VOA ☐; TCLP: PEST ☐ HERB ☐; TOTAL METALS ☐ SPECIFY:; OIL AND GREASE: EPA 413.1 ☐; PH: GRO ☐ DRO ☐ TPH GC ☐; TPH: EPA 418.1(IR) ☐ NYS DOH 310-13(GC) ☐; EPA 503.1 ☐ EPA 524 ☐ W/ MTBE ☐; EPA 601 ☐ EPA 8010 ☐ EPA 802 ☐ W/ MTBE ☐; EPA 602 ☐ EPA 8020 ☐ BTEX ☒ W/ MTBE ☐; EPA 608 ☐ EPA 8080 ☐ PCB ONLY ☐; EPA 624 ☐ EPA 8240 ☐ EPA 8260 ☐; EPA 625 ☒ EPA 8270 ☒ EPA 8270 BN ☐; T [illegible]

Lab Use Only	SAMPLE I.D./ DESCRIPTION	DATE	TIME	Container: Number	Container: Size	Container: Type (Enter Code)	Matrix: Groundwater	Matrix: Soil	Matrix: Sludge	Matrix: Other	TYPE (ENTER CODE)	HCl	HNO_3	H_2SO_4	Ice (4°C)	Teflon Liner	Filtered	Other	EPA 602 (BTEX)	EPA 625/8270	T [illegible]	COMMENTS/ SAMPLING POINT(S)
1285	#1	1/29/03	12:00					X											X	X	X	[illegible]
[illegible]	#2	1/29/03	12:00					X														[illegible]

EPS CONTACT: ________ PHONE NO.: [illegible]

CUSTODY TRANSFERS

		DATE	TIME			DATE	TIME
RELINQUISHED BY: (SAMPLER)	[signature]	[illegible]	[illegible]	RECEIVED BY:	[signature]	1/29/03	[illegible]
RELINQUISHED BY:				RECEIVED BY:	[signature]	1/29/03	9:25
RELINQUISHED BY:				RECEIVED AT LAB BY:	[signature]	[illegible]	[illegible]

White - LABORATORY Canary - PROJECT COORDINATOR

2887056

OLID & HAZARDOUS ... HAZARDOUS WASTE MANIFEST ... Albany, New York 12212

Please type or print. Do not staple

ATTACHMENT 5

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

Manifest Doc. No. 0 | 2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

A. NYG 2887056

3. Generator's Name and Mailing Address: ...eseo, 1 College Circle, Geneseo NY 14454, ...imberly Dalton-Ferris

B. Generator's ID: SAME

4. Generator's Telephone Number (585) 245-5511

5. Transporter 1 (Company Name) [illegible]	6. US EPA ID Number [illegible]
C. State Transporter's ID	D. Transporter's Telephone (585) [illegible]
7. Transporter 2 (Company Name)	8. US EPA ID Number
E. State Transporter's ID	F. Transporter's Telephone ( )
9. Designated Facility Name and Site Address: CECOS International, Inc., 5600 Niagara Falls Blvd., Niagara Falls NY 14304-0340	10. US EPA ID Number: NYD080336241
G. State Facility ID	H. Facility Telephone (716) 282-2676

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Hazardous waste, liquid, n.o.s. (D018) 9, NA3082, III	001	TT	02760	G	EPA D018 / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above: a, b, c, d

K. Handling Codes for Wastes Listed Above: a T, b, c, d

15. Special Handling Instructions and Additional Information

WTS#8806 WO# 285799

Emer. Contact: [illegible] 585 [illegible]

a.12541-AAB, ERG# 171

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Mo.	Day	Year
Kimberly Dalton Ferris	[signature]	05	02	03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[signature]	[illegible]	[illegible]	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

19. Discrepancy Indication Space

Quantity received 11.24 Tons

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year
Tim Clark	Tim Clark	05	02	03

GENERATOR / TRANSPORTER / FACILITY

COPY 5—Generator—Mailed by TSD Facility

COPY 8—Generator—Retained by Generator

Land Disposal Restriction Form

ECOS International, Inc. EPA ID #: NYD080336241

5600 Niagara Falls Blvd.
Niagara Falls, NY 14304-0340

Generator Information:	*Site Information:*
EPA ID #: NYD073669350	
S.U.N.Y. @ Geneseo	S.U.N.Y. @ Geneseo
1 College Circle	1 College Circle
Geneseo, NY 14454	Geneseo, NY 14454
Billing Contact:	Phone: (585) 245-5511
Technical Contact:	Phone: (585) 245-5511

Name of Waste: Contaminated Groundwater Waste Codes: D018

State Manifest Number: NYG2887056 line item a

Federal Manifest Number:

Profile Number: 12541-AAB **LDR Nonwastewater Treatability Group**

A. F001-F005 Solvent Restrictions

There are no F001-F005 solvent restricted wastes present that are banned from land disposal under 40 CFR 268.30.

EPA Code(s)	Waste Description and Treatment/Regulatory Subcategory	Hazardous Constituent	Total Concentration in mg/l (WW), mg/kg (NWW); or Technology Code

B. Other Regulated Waste Notification

This section includes all wastes restricted from land disposal not included in other sections. If any treatment standards reference 268.48, then all underlying hazardous constituents are listed in Section D.

EPA Code(s)	Waste Description and Treatment/Regulatory Subcategory	Hazardous Constituent	Total Concentration in mg/l (WW), mg/kg (NWW); or Technology Code
D018	Wastes that are TC for Benzene based on the TCLP in SW846 Method 1311.	Benzene	10 and meet 268.48 standards

C. D001-D003

There are no D001-D003 restricted wastes present that are banned from land disposal.

EPA Code(s)	Waste Description and Treatment/Regulatory Subcategory	Hazardous Constituent	Total Concentration in mg/l (WW), mg/kg (NWW); or Technology Code

D: Underlying Hazardous Constituents

There are no underlying hazardous constituents present as defined in 268.2(i).

Hazardous Constituent	Total Concentration in mg/l (WW), mg/kg (NWW); or Technology Code

Land Disposal Restriction Form

COS International, Inc.

EPA ID #:NYD080336241

5600 Niagara Falls Blvd.

Niagara Falls, NY 14304-0340

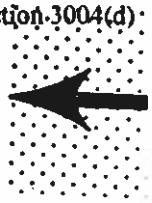
F. Non-Hazardous/Non-Restricted Waste

There are no EPA waste codes that are not subject to land disposal restrictions as specified in 40 CFR Subpart D or applicable prohibitions in 40 CFR 268.32 or RCRA.

Certifications

This waste must be treated to the applicable treatment standards set for in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d).

Signature _____ Date 5.2.03



NYG 3371535

Please type or print. Do not staple

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

STATE UNIVERSITY
ENV. HEALTH & SAFETY OFFICE
(Hazardous Waste Manifest 1/2000)

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD073669350 | Manifest Doc. No. 71535 | 2. Page 1 of 1 | Information in the heavy bordered areas is not required by Federal Law.

GENESEO, NEW YORK 14454-1452

3. Generator's Name and Mailing Address
SUNY GENESEO
1 COLLEGE CIRCLE
GENESEO NY 14454

4. Generator's Telephone Number (585) 245-5511

A. NYG 3371535

B. Generator's ID SAME

5. Transporter 1 (Company Name) ENVIRONMENTAL PRODUCTS & | 6. US EPA ID Number NYD980761191

C. State Transporter's ID

D. Transporter's Telephone (315) 471-0503

7. Transporter 2 (Company Name) | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CECOS INTERNATIONAL, INC.
5600 NIAGARA FALLS BLVD.
NIAGARA FALLS NY 14303

10. US EPA ID Number NYD008033624 1

G. State Facility ID

H. Facility Telephone (716) 282-2676

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ HAZARDOUS WASTE LIQUID, NOS (BENZENE), 9, NA3082, PGIII	001	TT	00239	GD	EPA STATE
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

ATTACHMENT 6

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above
a. 502 T | c. | b. | d.

15. Special Handling Instructions and Additional Information
IN CASE OF EMERGENCY: (585) 436-5660
WIS#8806 WO #285800

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name | Signature | Mo. 05 | Day 05 | Year 03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Mo. | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Mo. | Day | Year

FACILITY

19. Discrepancy Indication Space
Quantity Received = 3.38 tons

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Mo. 05 | Day 05 | Year 03

COPY 5—Generator—Mailed by TSD Facility

...Restriction Form

...International, Inc. EPA ID #:NYD080336241

5600 Niagara Falls Blvd.
Niagara Falls, NY 14304-0340

Generator Information:
EPA ID #: NYD073669350
S.U.N.Y. @ Geneseo
1 College Circle

Geneseo, NY 14454

Site Information:
S.U.N.Y. @ Geneseo
1 College Circle

Geneseo, NY 14454

Billing Contact: Phone: (585) 245-5511
Technical Contact: Phone: (585) 245-5511

Name of Waste: Contaminated Groundwater Waste Codes: D018

State Manifest Number: NYG2887065 line item a

Federal Manifest Number:

Profile Number: 12541-AAB **LDR Nonwastewater Treatability Group**

A. F001-F005 Solvent Restrictions

There are no F001-F005 solvent restricted wastes present that are banned from land disposal under 40 CFR 268.30.

EPA Code(s)	Waste Description and Treatment/Regulatory Subcategory	Hazardous Constituent	Total Concentration in mg/l (WW mg/kg (NWW); or Technology C

B. Other Regulated Waste Notification

This section includes all wastes restricted from land disposal not included in other sections. If any treatment standards reference 268.48, then all underlying hazardous constituen are listed in Section D.

EPA Code(s)	Waste Description and Treatment/Regulatory Subcategory	Hazardous Constituent	Total Concentration in mg/l (WW mg/kg (NWW); or Technology C
D018	Wastes that are TC for Benzene based on the TCLP in SW846 Method 1311.	Benzene	10 and meet 268.48 standards

C. D001-D003

There are no D001-D003 restricted wastes present that are banned from land disposal.

EPA Code(s)	Waste Description and Treatment/Regulatory Subcategory	Hazardous Constituent	Total Concentration in mg/l (WW mg/kg (NWW); or Technology C

D: Underlying Hazardous Constituents

There are no underlying hazardous constituents present as defined in 268.2(i).

Hazardous Constituent	Total Concentration in mg/l (WW mg/kg (NWW); or Technology C

...nstruction Form

...International, Inc.

EPA ID #:NYD080336241

5600 Niagara Falls Blvd.

Niagara Falls, NY 14304-0340

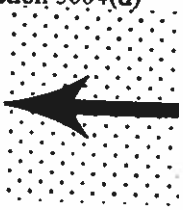
F. Non-Hazardous/Non-Restricted Waste

There are no EPA waste codes that are not subject to land disposal restrictions as specified in 40 CFR Subpart D or applicable prohibitions in 40 CFR 268.32 or RCRA.

Certifications

This waste must be treated to the applicable treatment standards set for in 40 CFR Part 268 Subpart D, 268.32, or RCRA Section 3004(d)

Signature _____ Date 05.05.03



ATTACHMENT 7

Environmental Data Resources, Inc.

The EDR Radius Map
with GeoCheck®

SUNY Geneseo-Park St Parking Facility
#4 and #6 Park Street
Geneseo, NY 14454

Inquiry Number: 0906581.1r

January 06, 2003

***The* Source For Environmental Risk Management Data**

3530 Post Road
Southport, Connecticut 06890

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

EXECUTIVE SUMMARY

STATE OR LOCAL ASTM SUPPLEMENTAL

SPILLS: Data collected on spills reported to NYSDEC. is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list, as provided by EDR, has revealed that there are 7 NY Spills sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
SUNY GENESEO	1 PARK PLACE	0 - 1/8 ESE	1	6
MARQUART (TJ) & SONS	ROUTE 20 / ROUTE 39	0 - 1/8 SE	B8	14

Lower Elevation	Address	Dist / Dir	Map ID	Page
SUNY GENESEO POWER PLANT	1 COLLEGE CIRCLE	0 - 1/8 W	A2	7
CLARK BUILDING	1 COLLEGE CIRCLE	0 - 1/8 W	A3	8
SUNY GENESEO UNION BLDG	1 COLLEGE DRIVE	0 - 1/8 W	A4	9
NEWTON BUILDING	1 COLLEGE CIRCLE	0 - 1/8 W	A5	11
SUNY GENESEO CLARK BLDG	1 COLLEGE CIRCLE	0 - 1/8 W	A6	12

PROPRIETARY DATABASES

Former Manufactured Gas (Coal Gas) Sites:

The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative

A review of the Coal Gas list, as provided by EDR, has revealed that there is 1 Coal Gas site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Dist / Dir	Map ID	Page
GENESEO GAS LIGHT CO.	BEHIND NORMAL ST.	1/2 - 1 NE	18	39

LIVINGSTON COUNTY SHERIFF (Continued) **S101508586**

Last Date: 09/29/1994
Num Times Material Entry In File: 21329
DEC Remarks: 12/04/81: DOT USING ABSORBENT PADS.
Spill Cause: WHILE REMOVING COUNTY GAOLINE TANK UNDERGROUND), A JOINT BROKE SPILLING FUEL.

18
NE
1/2-1
2730 ft.
Higher

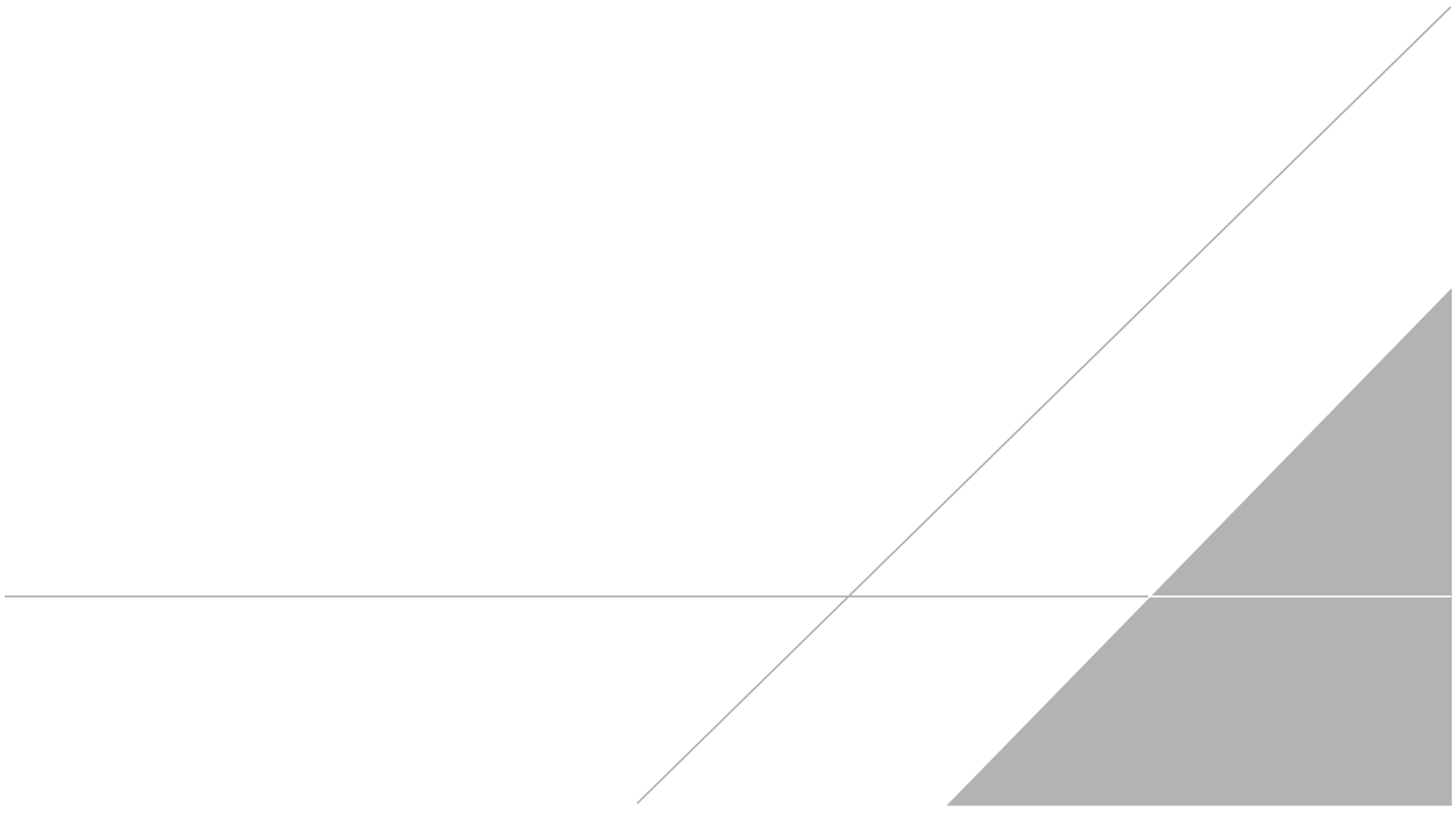
GENESEO GAS LIGHT CO.
BEHIND NORMAL ST.
GENESEO, NY 14454

Coal Gas **G000000551**
N/A

COAL GAS SITE DESCRIPTION:
Site is in the center of the block formed by Main St. to the east, Normal to the north, Wadsworth to the west and Park to the south. Site is gone by 1910.

Appendix D

CAMP Monitoring Data (on Compact Disk)



TrakPro Version 4.70 ASCII Data File

Model:,DustTrak II
Model Number:,8530
Serial Number:,8530121427
Test ID:,001
Test Abbreviation:,MANUAL_001
Start Date:,10/08/2017
Start Time:,08:08:39
Duration (dd:hh:mm:ss):,0:04:00:00
Log Interval (mm:ss):,15:00
Number of points:,16
Notes:,

Statistics,Channel:,AEROSOL
,Units:,mg/m^3
,Average:,0.013
,Minimum:,0.005
,Time of Minimum:,11:38:39
,Date of Minimum:,10/08/2017
,Maximum:,0.047
,Time of Maximum:,08:53:39
,Date of Maximum:,10/08/2017

Calibration,Sensor:,AEROSOL
,Cal. date,07/24/2017

Date,Time,AEROSOL
MM/dd/yyyy,hh:mm:ss,mg/m^3
10/08/2017,08:23:39,0.017
10/08/2017,08:38:39,0.009
10/08/2017,08:53:39,0.047
10/08/2017,09:08:39,0.021
10/08/2017,09:23:39,0.023
10/08/2017,09:38:39,0.015
10/08/2017,09:53:39,0.009
10/08/2017,10:08:39,0.006
10/08/2017,10:23:39,0.007
10/08/2017,10:38:39,0.007
10/08/2017,10:53:39,0.006
10/08/2017,11:08:39,0.006
10/08/2017,11:23:39,0.010
10/08/2017,11:38:39,0.005
10/08/2017,11:53:39,0.007
10/08/2017,12:08:39,0.016

TrakPro Version 4.70 ASCII Data File

Model:,DustTrak II
Model Number:,8530
Serial Number:,8530121427
Test ID:,002
Test Abbreviation:,MANUAL_002
Start Date:,10/09/2017
Start Time:,07:54:24
Duration (dd:hh:mm:ss):,0:03:45:00
Log Interval (mm:ss):,15:00
Number of points:,15
Notes:,

Statistics,Channel:,AEROSOL
,Units:,mg/m^3
,Average:,0.008
,Minimum:,0.002
,Time of Minimum:,11:39:24
,Date of Minimum:,10/09/2017
,Maximum:,0.016
,Time of Maximum:,08:09:24
,Date of Maximum:,10/09/2017

Calibration,Sensor:,AEROSOL
,Cal. date,07/24/2017

Date,Time,AEROSOL
MM/dd/yyyy,hh:mm:ss,mg/m^3
10/09/2017,08:09:24,0.016
10/09/2017,08:24:24,0.010
10/09/2017,08:39:24,0.006
10/09/2017,08:54:24,0.011
10/09/2017,09:09:24,0.010
10/09/2017,09:24:24,0.008
10/09/2017,09:39:24,0.008
10/09/2017,09:54:24,0.009
10/09/2017,10:09:24,0.008
10/09/2017,10:24:24,0.008
10/09/2017,10:39:24,0.004
10/09/2017,10:54:24,0.006
10/09/2017,11:09:24,0.006
10/09/2017,11:24:24,0.006
10/09/2017,11:39:24,0.002

==========
17/10/08 08:11
****
Summary

Unit Name MiniRAE 3000(PGM-7320)
Unit SN 592-912861
Unit Firmware Ver V1.20A

Running Mode Hygiene Mode
Measure Type Avg; Max; Real
Datalog Mode Continuous
Datalog Type Auto
Diagnostic Mode No
Stop Reason Power Down

Site ID 12345678
User ID 12345678

Begin 10/8/2017 08:11:14
End 10/8/2017 12:14:01
Sample Period(s) 900
Number of Records 16

Sensor VOC(ppm)
Span 100.000
Span 2 N/A
Low Alarm 50.000
High Alarm 100.000
Over Alarm 15000.000
STEL Alarm 25.000
TWA Alarm 10.000
Measurement Gas Isobutylene
Calibration Time 10/6/2017 08:27
Peak 0.010
Min 0.000
Average 0.001

****
Datalog

Index	Date/Time	VOC(ppm) (Avg)	VOC(ppm) (Max)	VOC(ppm) (Real)
001	10/8/2017 08:26:14	0.000	0.000	0.000
002	10/8/2017 08:41:14	0.000	0.000	0.000
003	10/8/2017 08:56:14	0.000	0.000	0.000
004	10/8/2017 09:11:14	0.000	0.000	0.000
005	10/8/2017 09:26:14	0.000	0.000	0.000
006	10/8/2017 09:41:14	0.000	0.000	0.000
007	10/8/2017 09:56:14	0.000	0.000	0.000
008	10/8/2017 10:11:14	0.000	0.000	0.000
009	10/8/2017 10:26:14	0.000	0.000	0.000
010	10/8/2017 10:41:14	0.000	0.000	0.000
011	10/8/2017 10:56:14	0.000	0.001	0.000
012	10/8/2017 11:11:14	0.000	0.000	0.000
013	10/8/2017 11:26:14	0.000	0.005	0.000
014	10/8/2017 11:41:14	0.000	0.027	0.000

015	10/8/2017 11:56:14	0.002	0.035 0.005
016	10/8/2017 12:11:14	0.010	0.039 0.010
Peak		0.010	0.039 0.010
Min		0.000	0.000 0.000
Average		0.001	0.007 0.001

****

TWA/STEL

Index	Date/Time	VOC(ppm) (TWA)	VOC(ppm) (STEL)
001	10/8/2017 08:26:14	0.000	0.000
002	10/8/2017 08:41:14	0.000	0.000
003	10/8/2017 08:56:14	0.000	0.000
004	10/8/2017 09:11:14	0.000	0.000
005	10/8/2017 09:26:14	0.000	0.000
006	10/8/2017 09:41:14	0.000	0.000
007	10/8/2017 09:56:14	0.000	0.000
008	10/8/2017 10:11:14	0.000	0.000
009	10/8/2017 10:26:14	0.000	0.000
010	10/8/2017 10:41:14	0.000	0.000
011	10/8/2017 10:56:14	0.000	0.000
012	10/8/2017 11:11:14	0.000	0.000
013	10/8/2017 11:26:14	0.000	0.000
014	10/8/2017 11:41:14	0.000	0.000
015	10/8/2017 11:56:14	0.000	0.005
016	10/8/2017 12:11:14	0.000	0.010

==========
17/10/09 07:57
****
Summary

Unit Name MiniRAE 3000(PGM-7320)
Unit SN 592-912861
Unit Firmware Ver V1.20A

Running Mode Hygiene Mode
Measure Type Avg; Max; Real
Datalog Mode Continuous
Datalog Type Auto
Diagnostic Mode No
Stop Reason Power Down

Site ID 12345678
User ID 12345678

Begin 10/9/2017 07:57:12
End 10/9/2017 11:56:47
Sample Period(s) 900
Number of Records 15

Sensor VOC(ppm)
Span 100.000
Span 2 N/A
Low Alarm 50.000
High Alarm 100.000
Over Alarm 15000.000
STEL Alarm 25.000
TWA Alarm 10.000
Measurement Gas Isobutylene
Calibration Time 10/6/2017 08:27
Peak 0.001
Min 0.000
Average 0.000

****
Datalog

Index	Date/Time	VOC(ppm) (Avg)	VOC(ppm) (Max)	VOC(ppm) (Real)
001	10/9/2017 08:12:12	0.000	0.000	0.000
002	10/9/2017 08:27:12	0.000	0.000	0.000
003	10/9/2017 08:42:12	0.000	0.000	0.000
004	10/9/2017 08:57:12	0.000	0.000	0.000
005	10/9/2017 09:12:12	0.000	0.000	0.000
006	10/9/2017 09:27:12	0.000	0.000	0.000
007	10/9/2017 09:42:12	0.000	0.000	0.000
008	10/9/2017 09:57:12	0.000	0.000	0.000
009	10/9/2017 10:12:12	0.000	0.000	0.000
010	10/9/2017 10:27:12	0.000	0.000	0.000
011	10/9/2017 10:42:12	0.000	0.017	0.001
012	10/9/2017 10:57:12	0.001	0.212	0.000
013	10/9/2017 11:12:12	0.001	0.128	0.000
014	10/9/2017 11:27:12	0.002	0.140	0.000

015 10/9/2017 11:42:12 0.0000.0510.000
Peak 0.0020.2120.001
Min 0.0000.0000.000
Average 0.0000.0370.000

****

TWA/STEL

Index	Date/Time	VOC(ppm) (TWA)	VOC(ppm) (STEL)
001	10/9/2017 08:12:12	0.000	0.000
002	10/9/2017 08:27:12	0.000	0.000
003	10/9/2017 08:42:12	0.000	0.000
004	10/9/2017 08:57:12	0.000	0.000
005	10/9/2017 09:12:12	0.000	0.000
006	10/9/2017 09:27:12	0.000	0.000
007	10/9/2017 09:42:12	0.000	0.000
008	10/9/2017 09:57:12	0.000	0.000
009	10/9/2017 10:12:12	0.000	0.000
010	10/9/2017 10:27:12	0.000	0.000
011	10/9/2017 10:42:12	0.000	0.001
012	10/9/2017 10:57:12	0.000	0.000
013	10/9/2017 11:12:12	0.000	0.000
014	10/9/2017 11:27:12	0.000	0.000
015	10/9/2017 11:42:12	0.000	0.000

TrakPro Version 4.70 ASCII Data File

Model:,DustTrak II
Model Number:,8530
Serial Number:,8530143417
Test ID:,001
Test Abbreviation:,MANUAL_001
Start Date:,10/08/2017
Start Time:,08:04:02
Duration (dd:hh:mm:ss):,0:04:00:00
Log Interval (mm:ss):,15:00
Number of points:,16
Notes:,

Statistics,Channel:,AEROSOL
,Units:,mg/m^3
,Average:,0.001
,Minimum:,0.000
,Time of Minimum:,09:49:02
,Date of Minimum:,10/08/2017
,Maximum:,0.006
,Time of Maximum:,08:19:02
,Date of Maximum:,10/08/2017

Calibration,Sensor:,AEROSOL
,Cal. date,03/07/2017

Date,Time,AEROSOL
MM/dd/yyyy,hh:mm:ss,mg/m^3
10/08/2017,08:19:02,0.006
10/08/2017,08:34:02,0.004
10/08/2017,08:49:02,0.003
10/08/2017,09:04:02,0.002
10/08/2017,09:19:02,0.002
10/08/2017,09:34:02,0.001
10/08/2017,09:49:02,0.000
10/08/2017,10:04:02,0.000
10/08/2017,10:19:02,0.000
10/08/2017,10:34:02,0.000
10/08/2017,10:49:02,0.000
10/08/2017,11:04:02,0.000
10/08/2017,11:19:02,0.000
10/08/2017,11:34:02,0.000
10/08/2017,11:49:02,0.000
10/08/2017,12:04:02,0.000

TrakPro Version 4.70 ASCII Data File

Model:,DustTrak II
Model Number:,8530
Serial Number:,8530143417
Test ID:,002
Test Abbreviation:,MANUAL_002
Start Date:,10/09/2017
Start Time:,07:57:20
Duration (dd:hh:mm:ss):,0:03:45:00
Log Interval (mm:ss):,15:00
Number of points:,15
Notes:,

Statistics,Channel:,AEROSOL
,Units:,mg/m^3
,Average:,0.001
,Minimum:,-0.002
,Time of Minimum:,10:57:20
,Date of Minimum:,10/09/2017
,Maximum:,0.008
,Time of Maximum:,08:57:20
,Date of Maximum:,10/09/2017

Calibration,Sensor:,AEROSOL
,Cal. date,03/07/2017

Date,Time,AEROSOL
MM/dd/yyyy,hh:mm:ss,mg/m^3
10/09/2017,08:12:20,0.002
10/09/2017,08:27:20,0.003
10/09/2017,08:42:20,0.005
10/09/2017,08:57:20,0.008
10/09/2017,09:12:20,0.003
10/09/2017,09:27:20,0.003
10/09/2017,09:42:20,0.002
10/09/2017,09:57:20,0.000
10/09/2017,10:12:20,0.000
10/09/2017,10:27:20,0.000
10/09/2017,10:42:20,-0.001
10/09/2017,10:57:20,-0.002
10/09/2017,11:12:20,-0.001
10/09/2017,11:27:20,-0.001
10/09/2017,11:42:20,-0.001

==========
17/10/08 08:05
****
Summary

Unit Name MiniRAE 3000(PGM-7320)
Unit SN 592-906598
Unit Firmware Ver V1.10A

Running Mode Hygiene Mode
Measure Type Avg; Max; Real
Datalog Mode Continuous
Datalog Type Auto
Diagnostic Mode No
Stop Reason Power Down

Site ID 12345678
User ID 12345678

Begin 10/8/2017 08:05:46
End 10/8/2017 12:12:07
Sample Period(s) 900
Number of Records 16

Sensor VOC(ppm)
Span 100.000
Span 2 N/A
Low Alarm 50.000
High Alarm 100.000
Over Alarm 15000.000
STEL Alarm 25.000
TWA Alarm 10.000
Measurement Gas Isobutylene
Calibration Time 10/6/2017 08:26
Peak 0.069
Min 0.000
Average 0.013

****
Datalog

Index	Date/Time	VOC(ppm) (Avg)	VOC(ppm) (Max)	VOC(ppm) (Real)
001	10/8/2017 08:20:46	0.000	0.000	0.000
002	10/8/2017 08:35:46	0.000	0.000	0.000
003	10/8/2017 08:50:46	0.000	0.000	0.000
004	10/8/2017 09:05:46	0.000	0.000	0.000
005	10/8/2017 09:20:46	0.000	0.000	0.000
006	10/8/2017 09:35:46	0.000	0.000	0.000
007	10/8/2017 09:50:46	0.000	0.000	0.000
008	10/8/2017 10:05:46	0.003	0.015	0.012
009	10/8/2017 10:20:46	0.013	0.030	0.020
010	10/8/2017 10:35:46	0.015	0.026	0.017
011	10/8/2017 10:50:46	0.018	0.026	0.011
012	10/8/2017 11:05:46	0.010	0.017	0.010
013	10/8/2017 11:20:46	0.015	0.023	0.014
014	10/8/2017 11:35:46	0.004	0.014	0.000

015	10/8/2017 11:50:46	0.025	0.054
016	10/8/2017 12:05:46	0.064	0.069
Peak		0.064	0.069
Min		0.000	0.000
Average		0.010	0.013

****

TWA/STEL

Index	Date/Time	VOC(ppm) (TWA)	VOC(ppm) (STEL)
001	10/8/2017 08:20:46	0.000	0.000
002	10/8/2017 08:35:46	0.000	0.000
003	10/8/2017 08:50:46	0.000	0.000
004	10/8/2017 09:05:46	0.000	0.000
005	10/8/2017 09:20:46	0.000	0.000
006	10/8/2017 09:35:46	0.000	0.000
007	10/8/2017 09:50:46	0.000	0.000
008	10/8/2017 10:05:46	0.000	0.012
009	10/8/2017 10:20:46	0.001	0.020
010	10/8/2017 10:35:46	0.002	0.017
011	10/8/2017 10:50:46	0.002	0.011
012	10/8/2017 11:05:46	0.002	0.010
013	10/8/2017 11:20:46	0.003	0.014
014	10/8/2017 11:35:46	0.003	0.000
015	10/8/2017 11:50:46	0.004	0.054
016	10/8/2017 12:05:46	0.006	0.069

==========
17/10/09 07:59
****
Summary

Unit Name MiniRAE 3000(PGM-7320)
Unit SN 592-906598
Unit Firmware Ver V1.10A

Running Mode Hygiene Mode
Measure Type Avg; Max; Real
Datalog Mode Continuous
Datalog Type Auto
Diagnostic Mode No
Stop Reason Power Down

Site ID 12345678
User ID 12345678

Begin 10/9/2017 07:59:21
End 10/9/2017 11:58:27
Sample Period(s) 900
Number of Records 15

Sensor VOC(ppm)
Span 100.000
Span 2 N/A
Low Alarm 50.000
High Alarm 100.000
Over Alarm 15000.000
STEL Alarm 25.000
TWA Alarm 10.000
Measurement Gas Isobutylene
Calibration Time 10/6/2017 08:26
Peak 0.000
Min 0.000
Average 0.000

****
Datalog

Index	Date/Time	VOC(ppm) (Avg)	VOC(ppm) (Max)	VOC(ppm) (Real)
001	10/9/2017 08:14:21	0.000	0.000	0.000
002	10/9/2017 08:29:21	0.000	0.000	0.000
003	10/9/2017 08:44:21	0.000	0.000	0.000
004	10/9/2017 08:59:21	0.000	0.000	0.000
005	10/9/2017 09:14:21	0.000	0.000	0.000
006	10/9/2017 09:29:21	0.000	0.000	0.000
007	10/9/2017 09:44:21	0.000	0.000	0.000
008	10/9/2017 09:59:21	0.000	0.000	0.000
009	10/9/2017 10:14:21	0.000	0.000	0.000
010	10/9/2017 10:29:21	0.000	0.000	0.000
011	10/9/2017 10:44:21	0.000	0.000	0.000
012	10/9/2017 10:59:21	0.000	0.000	0.000
013	10/9/2017 11:14:21	0.000	0.000	0.000
014	10/9/2017 11:29:21	0.000	0.000	0.000

015 10/9/2017 11:44:21 0.0000.0000.000
Peak 0.0000.0000.000
Min 0.0000.0000.000
Average 0.0000.0000.000

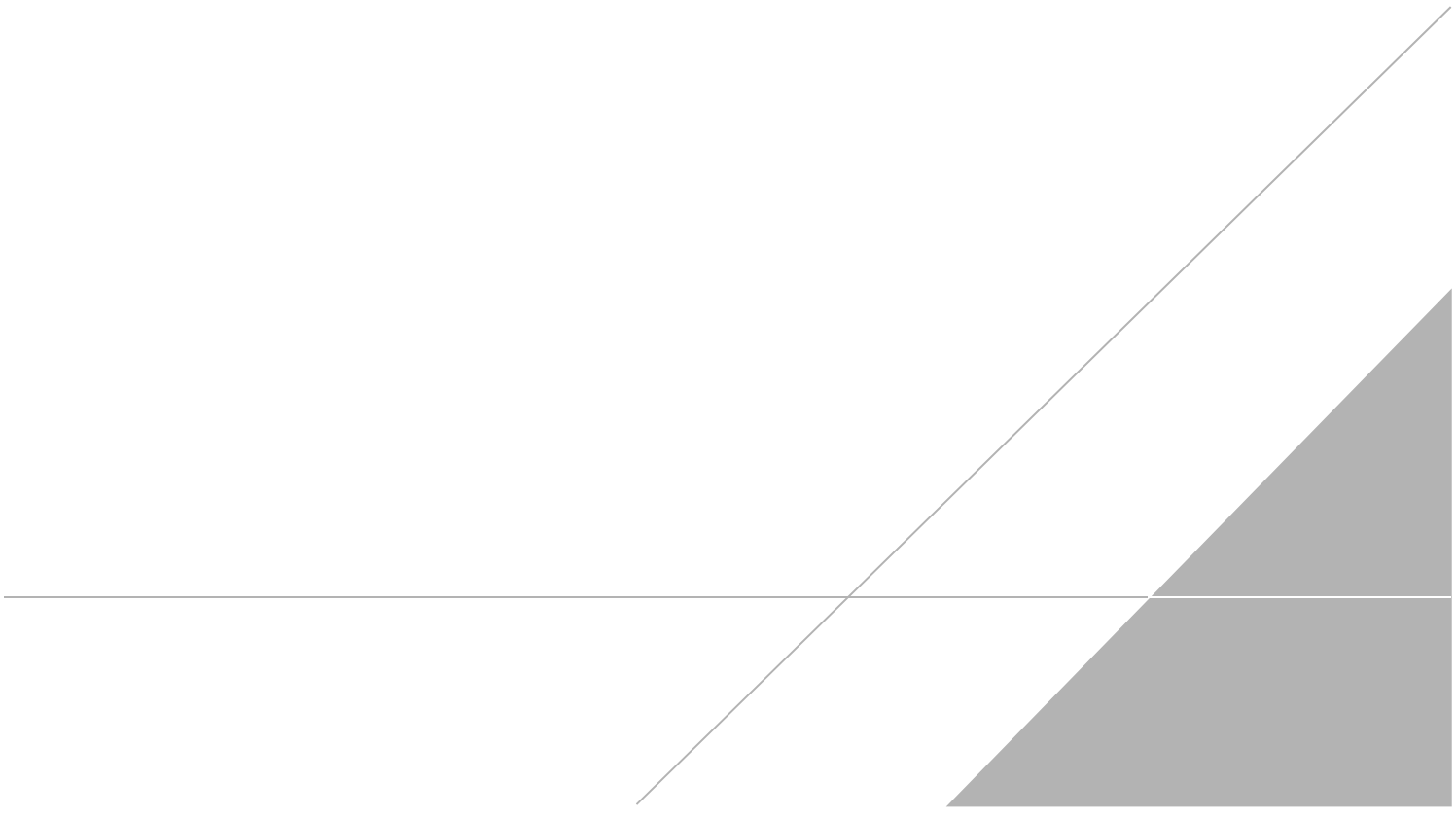
****

TWA/STEL

Index	Date/Time	VOC(ppm) (TWA)	VOC(ppm) (STEL)
001	10/9/2017 08:14:21	0.0000.000	
002	10/9/2017 08:29:21	0.0000.000	
003	10/9/2017 08:44:21	0.0000.000	
004	10/9/2017 08:59:21	0.0000.000	
005	10/9/2017 09:14:21	0.0000.000	
006	10/9/2017 09:29:21	0.0000.000	
007	10/9/2017 09:44:21	0.0000.000	
008	10/9/2017 09:59:21	0.0000.000	
009	10/9/2017 10:14:21	0.0000.000	
010	10/9/2017 10:29:21	0.0000.000	
011	10/9/2017 10:44:21	0.0000.000	
012	10/9/2017 10:59:21	0.0000.000	
013	10/9/2017 11:14:21	0.0000.000	
014	10/9/2017 11:29:21	0.0000.000	
015	10/9/2017 11:44:21	0.0000.000	

Appendix E

Waste Disposal Documentation



NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone 800-535-5053	4. Waste Tracking Number 005879

RECEIVED
NOV 20 2017
KBH Environmental, LLC

GENERATOR

5. Generator's Name and Mailing Address
RG&E Geneseo Site
6 Park Street
Geneseo, NY 14454
Generator's Phone: 585-363-3204

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Environmental Service Group, Inc 716.695.6720 — U.S. EPA ID Number: NYD986903904

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
American Recyclers Company
177 Wales Avenue
Tonawanda, NY 14150
Facility's Phone: 716.695.6720 — U.S. EPA ID Number: NYR000030809

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1	Non RCRA Non DOT Regulated , (Coal Tar, Water)	0006	DM	0330	G	
2	Non RCRA Non DOT Regulated, (Soil Cuttings)	0001	DM	0250	P	EST
3						
4						

13. Special Handling Instructions and Additional Information

ERG:
1 -
2 -
3 -
4 -

Approval #:
1 - X-10946IN
2 - A-13060L
3 -
4 -

Handling Codes:
1 - None
2 - None
3 -
4 -

24 Hour Emergency Contact: INFOTRAC (Caller Must ID ESG)

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Michael W Peterson (Agent for RG&E) — Signature — Month 11 Day 09 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Michael W Peterson — Signature — Month 11 Day 09 Year 17

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

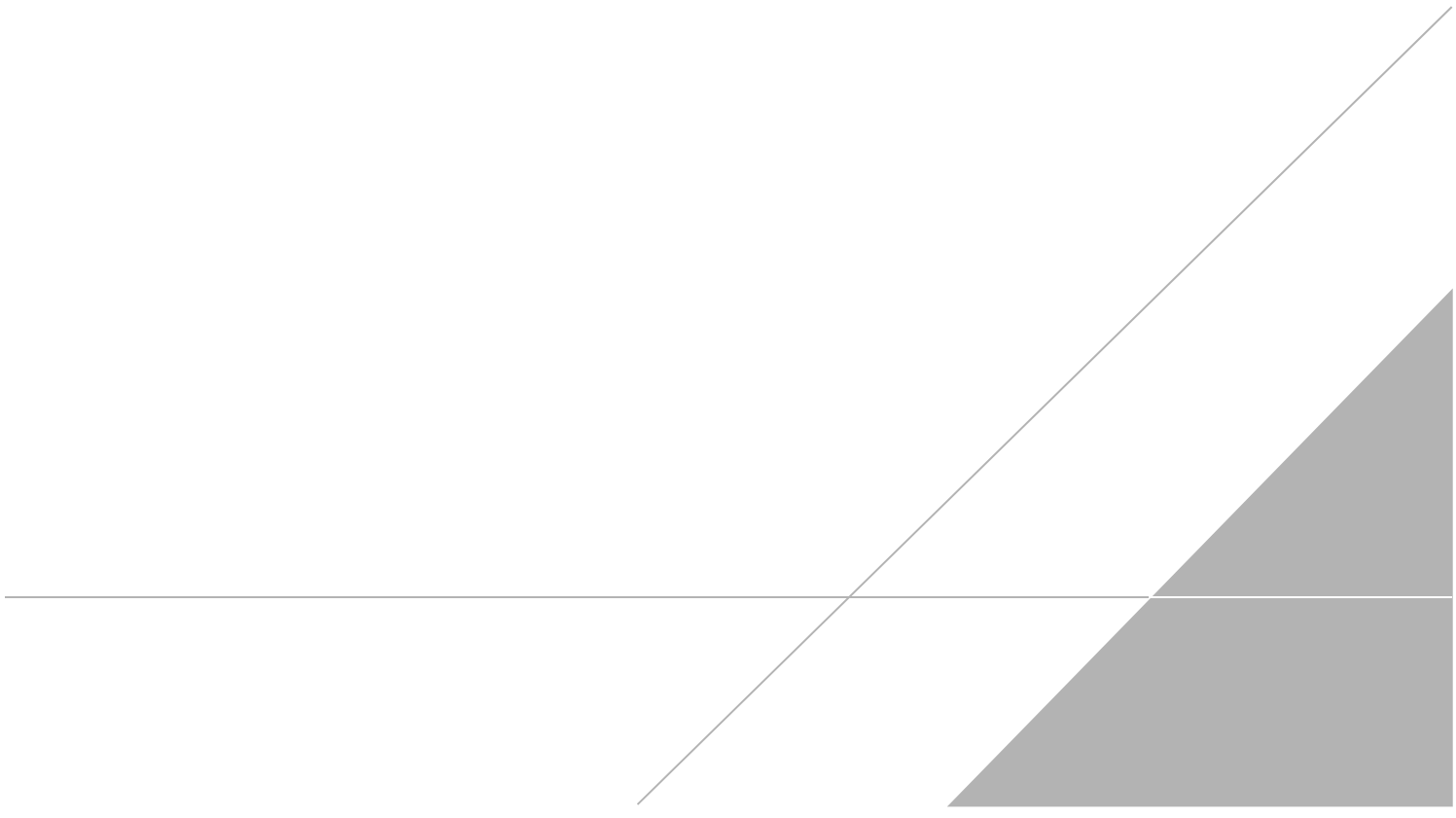
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Sultan Mastropoli — Signature — Month 11 Day 09 Year 17

DESIGNATED FACILITY TO GENERATOR

Appendix F

Waste Characterization Analytical Report (on Compact Disk)



PARADIGM

ENVIRONMENTAL SERVICES, INC.

Analytical Report For

KBH Environmental, LLC

For Lab Project ID

153380

Referencing

SUNY Geneseo - 6 Park Street

Prepared

Wednesday, August 19, 2015

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 1 / Drum #5
Lab Sample ID: 153380-01 **Date Sampled:** 8/12/2015
Matrix: Soil **Date Received:** 8/12/2015

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1221	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1232	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1242	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1248	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1254	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1260	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1262	< 0.375	mg/Kg		8/16/2015 23:05
PCB-1268	< 0.375	mg/Kg		8/16/2015 23:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**113**	33.3 - 147		8/16/2015 23:05
Tetrachloro-m-xylene	**100**	4.91 - 155		8/16/2015 23:05

Method Reference(s): EPA 8082A
EPA 3550C
Preparation Date: 8/13/2015

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	**391**	ug/Kg		8/14/2015 18:45
Acenaphthylene	< 339	ug/Kg		8/14/2015 18:45
Anthracene	**921**	ug/Kg		8/14/2015 18:45
Benzo (a) anthracene	**4130**	ug/Kg		8/14/2015 18:45
Benzo (a) pyrene	**6070**	ug/Kg		8/14/2015 18:45
Benzo (b) fluoranthene	**5660**	ug/Kg		8/14/2015 18:45
Benzo (g,h,i) perylene	**4240**	ug/Kg		8/14/2015 18:45
Benzo (k) fluoranthene	**3080**	ug/Kg		8/14/2015 18:45
Chrysene	**3810**	ug/Kg		8/14/2015 18:45
Dibenz (a,h) anthracene	**1640**	ug/Kg		8/14/2015 18:45
Fluoranthene	**3840**	ug/Kg		8/14/2015 18:45
Fluorene	< 339	ug/Kg		8/14/2015 18:45

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 1 / Drum #5
Lab Sample ID: 153380-01 **Date Sampled:** 8/12/2015
Matrix: Soil **Date Received:** 8/12/2015

Indeno (1,2,3-cd) pyrene	**6640**	ug/Kg			8/14/2015 18:45
Naphthalene	< 339	ug/Kg			8/14/2015 18:45
Phenanthrene	**2420**	ug/Kg			8/14/2015 18:45
Pyrene	**3370**	ug/Kg			8/14/2015 18:45

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**50.2**	35.3 - 100.3		8/14/2015 18:45
Nitrobenzene-d5	**42.7**	35.9 - 90.7		8/14/2015 18:45
Terphenyl-d14	**56.0**	61.9 - 109.1	*	8/14/2015 18:45

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 8/14/2015
Data File: B06992.D

Volatile Organics (Petroleum)

Analyte	Result	Units	Qualifier	Date Analyzed
1,2,4-Trimethylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
1,3,5-Trimethylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
Benzene	< 7.96	ug/Kg		8/14/2015 17:06
Ethylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
Isopropylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
m,p-Xylene	< 7.96	ug/Kg		8/14/2015 17:06
Methyl tert-butyl Ether	< 7.96	ug/Kg		8/14/2015 17:06
Naphthalene	< 19.9	ug/Kg		8/14/2015 17:06
n-Butylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
n-Propylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
o-Xylene	< 7.96	ug/Kg		8/14/2015 17:06
p-Isopropyltoluene	< 7.96	ug/Kg		8/14/2015 17:06
sec-Butylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
tert-Butylbenzene	< 7.96	ug/Kg		8/14/2015 17:06
Toluene	< 7.96	ug/Kg		8/14/2015 17:06

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 1 / Drum #5

Lab Sample ID: 153380-01 **Date Sampled:** 8/12/2015

Matrix: Soil **Date Received:** 8/12/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**105**	84.1 - 121		8/14/2015 17:06
4-Bromofluorobenzene	**79.4**	83.4 - 113	*	8/14/2015 17:06
Pentafluorobenzene	**95.4**	91.4 - 110		8/14/2015 17:06
Toluene-D8	**89.9**	91.5 - 106	*	8/14/2015 17:06

Method Reference(s): EPA 8260C
EPA 5035A

Data File: x25411.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier:	MW 1 / Drum #5		
Lab Sample ID:	153380-01A	**Date Sampled:**	8/12/2015
Matrix:	TCLP Extract	**Date Received:**	8/12/2015

TCLP Mercury

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Mercury	< 0.00200	mg/L	0.2		8/18/2015 15:14

Method Reference(s): EPA 7470A
EPA 1311
Preparation Date: 8/17/2015
Data File: Hg150818A

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Arsenic	< 0.100	mg/L	5		8/17/2015 11:55
Barium	**0.880**	mg/L	100		8/17/2015 11:55
Cadmium	< 0.0250	mg/L	1		8/17/2015 11:55
Chromium	< 0.0500	mg/L	5		8/17/2015 11:55
Lead	< 0.100	mg/L	5		8/17/2015 11:55
Selenium	< 0.100	mg/L	1		8/17/2015 11:55
Silver	< 0.0500	mg/L	5		8/17/2015 11:55

Method Reference(s): EPA 6010C
EPA 1311 / 3005
Preparation Date: 8/14/2015
Data File: 081715b

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 1 / Drum #1
Lab Sample ID: 153380-02 **Date Sampled:** 8/12/2015
Matrix: Water **Date Received:** 8/12/2015

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 1.00	ug/L		8/18/2015 19:17
PCB-1221	< 1.00	ug/L		8/18/2015 19:17
PCB-1232	< 1.00	ug/L		8/18/2015 19:17
PCB-1242	< 1.00	ug/L		8/18/2015 19:17
PCB-1248	< 1.00	ug/L		8/18/2015 19:17
PCB-1254	< 1.00	ug/L		8/18/2015 19:17
PCB-1260	< 1.00	ug/L		8/18/2015 19:17
PCB-1262	< 1.00	ug/L		8/18/2015 19:17
PCB-1268	< 1.00	ug/L		8/18/2015 19:17

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**78.1**	0 - 147.5		8/18/2015 19:17
Tetrachloro-m-xylene	**10.5**	2.06 - 91.3		8/18/2015 19:17

Method Reference(s): EPA 8082A
EPA 3510C
Preparation Date: 8/17/2015

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		8/17/2015 18:43
Acenaphthylene	< 10.0	ug/L		8/17/2015 18:43
Anthracene	< 10.0	ug/L		8/17/2015 18:43
Benzo (a) anthracene	< 10.0	ug/L		8/17/2015 18:43
Benzo (a) pyrene	< 10.0	ug/L		8/17/2015 18:43
Benzo (b) fluoranthene	< 10.0	ug/L		8/17/2015 18:43
Benzo (g,h,i) perylene	< 10.0	ug/L		8/17/2015 18:43
Benzo (k) fluoranthene	< 10.0	ug/L		8/17/2015 18:43
Chrysene	< 10.0	ug/L		8/17/2015 18:43
Dibenz (a,h) anthracene	< 10.0	ug/L		8/17/2015 18:43
Fluoranthene	< 10.0	ug/L		8/17/2015 18:43
Fluorene	< 10.0	ug/L		8/17/2015 18:43

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 1 / Drum #1
Lab Sample ID: 153380-02 **Date Sampled:** 8/12/2015
Matrix: Water **Date Received:** 8/12/2015

Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		8/17/2015 18:43
Naphthalene	**53.1**	ug/L		8/17/2015 18:43
Phenanthrene	< 10.0	ug/L		8/17/2015 18:43
Pyrene	< 10.0	ug/L		8/17/2015 18:43

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**45.1**	27.3 - 103.3		8/17/2015 18:43
Nitrobenzene-d5	**64.6**	47.5 - 103.2		8/17/2015 18:43
Terphenyl-d14	**79.3**	53.4 - 112.6		8/17/2015 18:43

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 8/17/2015
Data File: B07017.D

Volatile Organics (Petroleum)

Analyte	Result	Units	Qualifier	Date Analyzed
1,2,4-Trimethylbenzene	< 2.00	ug/L		8/13/2015 22:21
1,3,5-Trimethylbenzene	< 2.00	ug/L		8/13/2015 22:21
Benzene	**1.26**	ug/L		8/13/2015 22:21
Ethylbenzene	< 2.00	ug/L		8/13/2015 22:21
Isopropylbenzene	< 2.00	ug/L		8/13/2015 22:21
m,p-Xylene	**2.77**	ug/L		8/13/2015 22:21
Methyl tert-butyl Ether	< 2.00	ug/L		8/13/2015 22:21
Naphthalene	**85.8**	ug/L		8/13/2015 22:21
n-Butylbenzene	< 2.00	ug/L		8/13/2015 22:21
n-Propylbenzene	< 2.00	ug/L		8/13/2015 22:21
o-Xylene	< 2.00	ug/L		8/13/2015 22:21
p-Isopropyltoluene	< 2.00	ug/L		8/13/2015 22:21
sec-Butylbenzene	< 2.00	ug/L		8/13/2015 22:21
tert-Butylbenzene	< 2.00	ug/L		8/13/2015 22:21
Toluene	**3.53**	ug/L		8/13/2015 22:21

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 1 / Drum #1

Lab Sample ID: 153380-02 **Date Sampled:** 8/12/2015

Matrix: Water **Date Received:** 8/12/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**107**	81.1 - 116		8/13/2015 22:21
4-Bromofluorobenzene	**89.7**	82.3 - 113		8/13/2015 22:21
Pentafluorobenzene	**96.6**	91.1 - 110		8/13/2015 22:21
Toluene-D8	**90.9**	91.4 - 106	*	8/13/2015 22:21

Method Reference(s): EPA 8260C
EPA 5030

Data File: x25394.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier:	MW 1 / Drum #1		
Lab Sample ID:	153380-02A	**Date Sampled:**	8/12/2015
Matrix:	TCLP Extract	**Date Received:**	8/12/2015

TCLP Mercury

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Mercury	< 0.00200	mg/L	0.2		8/18/2015 15:17

Method Reference(s): EPA 7470A
EPA 1311
Preparation Date: 8/17/2015
Data File: Hg150818A

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Arsenic	< 0.100	mg/L	5		8/14/2015 11:50
Barium	< 0.500	mg/L	100		8/14/2015 11:50
Cadmium	< 0.0250	mg/L	1		8/14/2015 11:50
Chromium	**0.183**	mg/L	5		8/14/2015 11:50
Lead	< 0.100	mg/L	5		8/14/2015 11:50
Selenium	< 0.100	mg/L	1		8/14/2015 11:50
Silver	< 0.0500	mg/L	5		8/14/2015 11:50

Method Reference(s): EPA 6010C
EPA 1311 / 3005
Preparation Date: 8/13/2015
Data File: 081415a

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 3,4,5 / Drum #9
Lab Sample ID: 153380-03 **Date Sampled:** 8/12/2015
Matrix: Soil **Date Received:** 8/12/2015

PCBs

Analyte	Result	Units	Qualifier	Date Analyzed
PCB-1016	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1221	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1232	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1242	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1248	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1254	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1260	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1262	< 0.339	mg/Kg		8/16/2015 23:29
PCB-1268	< 0.339	mg/Kg		8/16/2015 23:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
Decachlorobiphenyl	**109**	33.3 - 147		8/16/2015 23:29
Tetrachloro-m-xylene	**102**	4.91 - 155		8/16/2015 23:29

Method Reference(s): EPA 8082A
EPA 3550C
Preparation Date: 8/13/2015

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 323	ug/Kg		8/14/2015 19:14
Acenaphthylene	< 323	ug/Kg		8/14/2015 19:14
Anthracene	< 323	ug/Kg		8/14/2015 19:14
Benzo (a) anthracene	< 323	ug/Kg		8/14/2015 19:14
Benzo (a) pyrene	< 323	ug/Kg		8/14/2015 19:14
Benzo (b) fluoranthene	< 323	ug/Kg		8/14/2015 19:14
Benzo (g,h,i) perylene	< 323	ug/Kg		8/14/2015 19:14
Benzo (k) fluoranthene	< 323	ug/Kg		8/14/2015 19:14
Chrysene	< 323	ug/Kg		8/14/2015 19:14
Dibenz (a,h) anthracene	< 323	ug/Kg		8/14/2015 19:14
Fluoranthene	< 323	ug/Kg		8/14/2015 19:14
Fluorene	< 323	ug/Kg		8/14/2015 19:14

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 3,4,5 / Drum #9
Lab Sample ID: 153380-03 **Date Sampled:** 8/12/2015
Matrix: Soil **Date Received:** 8/12/2015

Indeno (1,2,3-cd) pyrene	< 323	ug/Kg			8/14/2015 19:14
Naphthalene	< 323	ug/Kg			8/14/2015 19:14
Phenanthrene	< 323	ug/Kg			8/14/2015 19:14
Pyrene	< 323	ug/Kg			8/14/2015 19:14

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**40.6**	35.3 - 100.3		8/14/2015 19:14
Nitrobenzene-d5	**37.2**	35.9 - 90.7		8/14/2015 19:14
Terphenyl-d14	**60.3**	61.9 - 109.1	*	8/14/2015 19:14

Method Reference(s): EPA 8270D
EPA 3550C
Preparation Date: 8/14/2015
Data File: B06993.D

Volatile Organics (Petroleum)

Analyte	Result	Units	Qualifier	Date Analyzed
1,2,4-Trimethylbenzene	**4260**	ug/Kg		8/14/2015 18:42
1,3,5-Trimethylbenzene	**1550**	ug/Kg		8/14/2015 18:42
Benzene	< 70.0	ug/Kg		8/14/2015 18:42
Ethylbenzene	**104**	ug/Kg		8/14/2015 18:42
Isopropylbenzene	< 70.0	ug/Kg		8/14/2015 18:42
m,p-Xylene	**903**	ug/Kg		8/14/2015 18:42
Methyl tert-butyl Ether	< 70.0	ug/Kg		8/14/2015 18:42
Naphthalene	**3390**	ug/Kg		8/14/2015 18:42
n-Butylbenzene	< 70.0	ug/Kg		8/14/2015 18:42
n-Propylbenzene	**245**	ug/Kg		8/14/2015 18:42
o-Xylene	< 70.0	ug/Kg		8/14/2015 18:42
p-Isopropyltoluene	**74.6**	ug/Kg		8/14/2015 18:42
sec-Butylbenzene	< 70.0	ug/Kg		8/14/2015 18:42
tert-Butylbenzene	< 70.0	ug/Kg		8/14/2015 18:42
Toluene	< 70.0	ug/Kg		8/14/2015 18:42

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier: MW 3,4,5 / Drum #9

Lab Sample ID: 153380-03 **Date Sampled:** 8/12/2015

Matrix: Soil **Date Received:** 8/12/2015

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**94.1**	84.1 - 121		8/14/2015 18:42
4-Bromofluorobenzene	**99.3**	83.4 - 113		8/14/2015 18:42
Pentafluorobenzene	**101**	91.4 - 110		8/14/2015 18:42
Toluene-D8	**103**	91.5 - 106		8/14/2015 18:42

Method Reference(s): EPA 8260C
EPA 5035A

Data File: x25415.D

This sample was not collected following SW846 5035A specifications. Accordingly, any Volatiles soil results that are less than 200 ug/Kg, including Non Detects, may be biased low, per ELAP method 5035 guidance document from 11/15/2012.

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 153380

Client: **KBH Environmental, LLC**

Project Reference: SUNY Geneseo - 6 Park Street

Sample Identifier:	MW 3,4,5 / Drum #9		
Lab Sample ID:	153380-03A	**Date Sampled:**	8/12/2015
Matrix:	TCLP Extract	**Date Received:**	8/12/2015

TCLP Mercury

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Mercury	< 0.00200	mg/L	0.2		8/18/2015 15:21

Method Reference(s): EPA 7470A
EPA 1311
Preparation Date: 8/17/2015
Data File: Hg150818A

TCLP RCRA Metals (ICP)

Analyte	Result	Units	Regulatory Limit	Qualifier	Date Analyzed
Arsenic	< 0.100	mg/L	5		8/17/2015 12:00
Barium	**2.59**	mg/L	100		8/17/2015 12:00
Cadmium	< 0.0250	mg/L	1		8/17/2015 12:00
Chromium	< 0.0500	mg/L	5		8/17/2015 12:00
Lead	< 0.100	mg/L	5		8/17/2015 12:00
Selenium	< 0.100	mg/L	1		8/17/2015 12:00
Silver	< 0.0500	mg/L	5		8/17/2015 12:00

Method Reference(s): EPA 6010C
EPA 1311 / 3005
Preparation Date: 8/14/2015
Data File: 081715b

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM ENVIRONMENTAL SERVICES, INC.

CHAIN OF CUSTODY

~~1 of 2~~ 1 of 3 GP 8/13/15

REPORT TO:		INVOICE TO:			
COMPANY:	KBH ENVIRONMENTAL, LLC	COMPANY:	KBH ENVIRONMENTAL, LLC	LAB PROJECT #: 153380	CLIENT PROJECT #:
ADDRESS:	88 W. RIVER ROAD	ADDRESS:	PO BOX 168	TURNAROUND TIME: (WORKING DAYS)	
CITY:	SCOTTSVILLE STATE: NY ZIP: 14546	CITY:	SCOTTSVILLE STATE: NY ZIP:	☐ 1 ☐ 2 ☐ 3 ☒ 5 (STD)	☐ OTHER
PHONE:	585-889-1135 FAX: 585-889-6018	PHONE:	FAX:		
ATTN:	HEATHER KING (HEATHER@KBHENV.COM)	ATTN:			
COMMENTS:				Quotation #	

PROJECT NAME/SITE NAME: SUNY Geneseo - 6 Park Street

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	8260 STARS	8270 STARS	PCB's	TCLP RCRA Meta							REMARKS	PARADIGM LAB SAMPLE NUMBER
1	8/12/15	9:10		X	MW1/Brum#5	SO	1	X	X	X	X							A for TCLP extract.	01 A
2	8/12/15	9:15		X	MW1/Brum#1	WA	1	X	X	X	X							GP 8/12/15	02 A
3	8/12/15	9:30		X	MW3,4,5/Brum#4	SO	1	X	X	X	X								03 A
4																		Extra volume for	
5																		Water Sample (02)	
6																		received 8/13/15.	
7																		1L amber glass, 8oz	
8																		glass jar, 2-40ml	
9																		HCl preserved voa vials.	
10																		GP 8/13/15	

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type: Comments:	Y ☐	N ☐
Preservation: Comments:	Y ☐	N ☐
Holding Time: Comments:	Y ☐	N ☐
Temperature: Comments: 24°C 8/12/15 15:20	Y ☐	N ☐

Sampled By: Bruce W. Sones	Date/Time: 8/12/15	Total Cost:
Relinquished By: Bruce W. Sones	Date/Time: 8/12/15 - 1510	
Received By: Jane J. Dalvia	Date/Time: 8/12/15 1510	P.I.F.
Received @ Lab By: [signature]	Date/Time: 8/12/15 16:21	

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM ENVIRONMENTAL SERVICES, LLC

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:			
COMPANY:	KBH ENVIRONMENTAL, LLC	COMPANY:	KBH ENVIRONMENTAL, LLC	LAB PROJECT #: 153380	CLIENT PROJECT #:
ADDRESS:	88 W. RIVER ROAD	ADDRESS:	PO BOX 168		
CITY:	SCOTTSVILLE STATE: NY ZIP: 14546	CITY:	SCOTTSVILLE STATE: NY ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE:	585-889-1135 FAX: 585-889-6018	PHONE:	FAX:	STD	OTHER
ATTN:	HEATHER KING (HEATHER@KBHENV.COM)	ATTN:		1 2 3 X 5	
COMMENTS:				Quotation #	

PROJECT NAME/SITE NAME: SUNY Geneseo - 6 Park Street

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	8260 STARS	8270 STARS	PCB's	TCLP RCRA Metal							REMARKS	PARADIGM LAB SAMPLE NUMBER				
1	8/13/15	9:10		X	MW 1/Drum #1	WA		X	X	X	X							Extra Containers				0	2 A
2																		A for TCLP extract.					
3																		6P 8/13/15					
4																							
5																							
6																							
7																							
8																							
9																							
10																							

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments:		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature:	Y ☐	N ☐
Comments: 23°C 8/13/15 10:28		

Sampled By — Date/Time: 8/13/15 - 9:10

Relinquished By — Date/Time: 8/13/15 - 10:20

Received By — Date/Time: 8/13/15 1020.

Received @ Lab By — Date/Time

Total Cost:

P.I.F.

~~2 of 2~~
3 of 3
GP 8/13/15

Chain of Custody Supplement

Client: KBH Environmental
Completed by: Glenn Pezzulo
Lab Project ID: 153380
Date: 8/12/15

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	X	X VOA (water)	
Comments	Sample 02 (water) collected in 1L amber unpreserved, transferred portion of sample to 1-40ml HCl preserved voa vial.		
Transferred to method-compliant container	X 53 to 1 VOA (water)		X
Headspace (<1 mL)	X VOA (water)		X
Comments			
Preservation	X VOA (water)		X
Comments			
Chlorine Absent (<0.10 ppm per test strip)			X
Comments			
Holding Time	X		
Comments			
Temperature		X	X Metals
Comments	24°C 23°C - extra volume received 8/13/15		
Sufficient Sample Quantity	X	X SVOA PCB (water)	
Comments	Limited volume for SVOA/PCB on Sample 02 (water) Extra volume for Sample 02 (water) received 8/13/15, sufficient volume.		

GP 8/13/15

Appendix G

Data Usability Summary Report (on Compact Disk)

Rochester Gas & Electric – Geneseo Park Street Site

Data Usability Summary Report

GENESEO, NEW YORK

Volatile, Semivolatile and Metals Analyses

SDG #480-125579-1

Analyses Performed By:
TestAmerica
Amherst, New York

Report #28628R
Review Level: Tier III
Project: B0013138.0006.00001

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #480-125579-1 for samples collected in association with the Rochester Gas & Electric Geneseo Park Street Site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

SDG	Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
						VOC	SVOC	TPH	MET	MISC
480-125579-1	MW-8 (4-6)	480-125579-1	Soil	10/8/2017		X	X		X	
	MW-8 (13-14)	480-125579-2	Soil	10/8/2017		X	X		X	
	DUP-100817	480-125579-3	Soil	10/8/2017	MW-8 (13-14)	X	X		X	
	TRIP BLANK	480-125579-4	Water	10/8/2017		X				

Notes:

1. Miscellaneous parameters include total cyanide.
2. Matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-8 (4-6).

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260C and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8260	Water	14 days from collection to analysis (preserved) 7 days from collection to analysis (non-preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u.
	Soil	48 hours from collection to extraction and 14 days from extraction to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-8 (4-6) MW-8 (13-14)	CCV %D	Dichlorodifluoromethane	25.8%
		Carbon disulfide	20.9%
		Carbon tetrachloride	41.5%
		Bromodichloromethane	29.0%
		cis-1,3-Dichloropropene	21.5%
		Dibromochloromethane	23.1%
		Bromoform	50.6%
DUP-100817	CCV %D	Chloromethane	-22.3%
		Bromoform	21.4%
TRIP BLANK	CCV %D	Acetone	30.9%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
MiInitial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 20% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ

Initial/Continuing	Criteria	Sample Result	Qualification
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-8 (4-6)	1,2,4-Trichlorobenzene	<LL but >10%	<LL but >10%
	1,2-Dibromo-3-Chloropropane		
	1,2-Dibromoethane		
	1,2-Dichlorobenzene		
	1,3-Dichlorobenzene		

Sample Locations	Compound	MS Recovery	MSD Recovery
	1,4-Dichlorobenzene		
	2-Butanone (MEK)		
	cis-1,3-Dichloropropene		
	Styrene		
	1,1,2,2-Tetrachloroethane	AC	<LL but >10%
	1,2-Dichloroethane		
	2-Hexanone		
	4-Methyl-2-pentanone (MIBK)		
	1,1,2-Trichloroethane		
	Bromoform		
	Carbon disulfide		
	Chlorobenzene		
	cis-1,2-Dichloroethene		
	Dibromochloromethane		
	Ethylbenzene		
	trans-1,2-Dichloroethene		
	Trichloroethene		
	Acetone	<LL but >10%	AC

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery
MW-8 (4-6) MW-8 (13-14)	Bromoform	>UL

The criteria used to evaluate the LCS/LCSD recoveries are presented in the following table. In the case of an LCS/LCSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-8 (13-14)/ DUP-100817	2-Butanone (MEK)	22 U	2.6 J	AC
	Acetone	21 J	42	
	Tetrachloroethene	0.70 J	0.62 J	

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW-846 8260C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS)		X	X		
Laboratory Control Sample Duplicate(LCSD)					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS)		X	X		
Matrix Spike Duplicate(MSD)		X	X		
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	

VOCs: SW-846 8260C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

SEMIVOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 8270D	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6°C
	Soil	14 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
MW-8 (13-14) DUP-100817	CCV %D	Benzaldehyde	-24.7%
		Pentachlorophenol	-28.6%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 20% or a correlation coefficient <0.99	Non-detect	UJ
		Detect	J
	%RSD >90%	Non-detect	R
		Detect	J
Continuing Calibration	%D >20% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >20% (decrease in sensitivity)	Non-detect	UJ
		Detect	J
	%D >90% (increase/decrease in sensitivity)	Non-detect	R
		Detect	J

[1] RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketones, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC

analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Surrogate	Recovery
MW-8 (4-6)	2,4,6-Tribromophenol	D
	2-Fluorophenol	
	Nitrobenzene-d5	
	2-Fluorobiphenyl	
	Terphenyl-d14	
	Phenol-d5	

D Diluted

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	No Action
	Detect	J
< LL but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Surrogates diluted below the calibration curve due to the high concentration of a target compounds	Non-detect	J[1]
	Detect	

[1] A more concentrated analysis was not performed with surrogate compounds within the calibration range; therefore, no determination of extraction efficiency could be made.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-8 (4-6)	Acenaphthene	AC	>UL

AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

Sample locations associated with MS/MSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
MW-8 (4-6)	Carbazole

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-8 (13-14)/ DUP-100817	2-Methylnaphthalene	220 J	620 J	AC
	Acenaphthene	290 J	810 J	
	Acenaphthylene	1000	2700	
	Anthracene	1800	5000	
	Benzo[a]anthracene	2100	5800	
	Benzo[a]pyrene	1500	4300	
	Benzo[b]fluoranthene	1600	5000	
	Benzo[g,h,i]perylene	720 J	2100	
	Benzo[k]fluoranthene	700 J	2000	
	Carbazole	250 J	630 J	
	Chrysene	1500	4200	
	Dibenzofuran	950 J	2500	
	Fluorene	1600	4300	
	Indeno[1,2,3-cd]pyrene	790 J	2300	
	Naphthalene	130	330 J	
	Phenanthrene	5000	14000	NC
	Fluoranthene	4200	12000	
	Pyrene	3300	9000	

AC Acceptable
NC Not Compliant

The compounds Phenanthrene, Fluoranthene and Pyrene associated with sample locations MW-8 (13-14) and DUP-100817 exhibited a field duplicate RPD greater than the control limit. The associated sample results from sample locations for the listed analyte were qualified as estimated.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Note: Method(s) 8270D: The following samples were diluted due to color and appearance: MW-8 (13-14) (480-125579-2) and DUP-100817 (480-125579-3). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: MW-8 (4-6) (480-125579-1). Elevated reporting limits (RLs) are provided.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR SVOCs

SVOCs: SW-846 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate(LCSD) %R					X
LCS/LCSD Precision (RPD)					X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X	X		
Field/Lab Duplicate (RPD)		X	X		
Surrogate Spike Recoveries		X	X		
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6010C and 7471B. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within control limits.

    * Duplicate analysis is not within control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010C	Soil	180 days from collection to analysis	Cool to <6 °C.
SW-846 7471B	Soil	28 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated QA blanks; however, the associated sample results were greater than the BAL and/or were non-detect. Therefore, sample results greater than the BAL resulted in the removal of the laboratory qualifier (B). No qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. All initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 Low Level Continuing Calibration Standard

The low level continuing calibration check standard (ICVL/CCVL) serves to verify the linearity of calibration of the analysis at the RL.

All analytes associated with RL standard recoveries were within control limits with the exception of the

analytes presented in the following table.

Sample Locations	Analytes	RL Recovery
DUP-100817	Copper	184%
	Manganese	403%
	Zinc	148%

The criteria applied to evaluate the RL Standard criteria are presented below. In the case of a calibration deviation, the sample results are qualified.

RL Standard Recovery Criteria			
Analytes	**Control Limit**	**Sample Result**	**Qualification**
All analytes, with the exception of Al, Ba, Ca, Fe, Mg, Na, and K	RL %R <50% (<30% for Sb, Pb, Tl) ICP-MS (<30% for Co, Mn, Zn)	Sample results ≥ MDL but <2x RL	R
		Non-detect sample results	R
		Detected sample results ≥ 2x RL	J
	RL %R 50-69% (30-49% for Sb, Pb, Tl) ICP-MS (30-49% for Co, Mn, Zn)	Sample results ≥ MDL but <2x RL	J
		Non-detect sample results	UJ
		Detected sample results ≥ 2x RL	No Action
	%R >130% but <180% (>150% but <200% for Sb, Pb, Tl) ICP-MS (>150% but <200% for Co, Mn, Zn)	Sample results ≥ MDL but <2x RL	J
		Non-detect sample results	No Action
		Detected sample results ≥ 2x RL	No Action
	RL %R >180% (>200% for Sb, Pb, Tl) ICP-MS (>200% for Co, Mn, Zn)	Sample results ≥ MDL	R

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

All analytes associated with MS/MSD recoveries were within control limits with the exception of the following analyte present in the table below.

Sample Location	Analyte	MS Recovery	MSD Recovery
MW-8 (4-6)	Antimony	47%	49%
	Copper	143%	67%
	Magnesium	190%	142%
	Potassium	223%	238%
	Vanadium	125%	238%

The criteria used to evaluate MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified. The qualifications are applied to all sample results associated with this SDG.

Control limit	Sample Result	Qualification
MS/MSD percent recovery 30% to 74%	Non-detect	UJ
	Detect	J
MS/MSD percent recovery <30%	Non-detect	R
	Detect	J
MS/MSD percent recovery >125%	Non-detect	No Action
	Detect	J

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 35% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result	Duplicate Result	RPD
MW-8 (13-14)/ DUP-100817	Aluminum	15100	21300	34.0 %
	Arsenic	2.3 J	6.4	AC
	Barium	45.9	65.2	34.7 %
	Beryllium	0.89	1.2	AC
	Calcium	16800	25300	40.3 %
	Chromium	21.8	31.8	37.3 %
	Cobalt	8.9	19.1	72.8 %
	Copper	26.2	45.3	53.4 %
	Iron	17900	30800	52.9 %
	Lead	8.8	20.2	78.6 %
	Magnesium	5420	8480	44.0 %
	Manganese	173	339	64.8 %
	Mercury	0.013 J	0.039	AC
	Nickel	33.3	55.7	50.3 %
	Potassium	4350	5760	27.8 %
	Selenium	0.47 J	4.8 U	AC
	Sodium	411	471	13.6 %
	Vanadium	22.5	30.8	31.1 %
	Zinc	35.9	52.8	38.1 %

AC Acceptable

The analytes Cobalt, Copper, Iron, Lead, Manganese and Nickel associated with sample locations MW-8 (13-14) and DUP-100817 exhibited a field duplicate RPD greater than the control limit. The associated sample results from sample locations for the listed analyte were qualified as estimated.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the certified reference material control limits.

The LCS analysis exhibited recoveries within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

All serial dilutions were within control limits, with the exception of the analytes presented in the following table. The sample locations associated with the deviant %D are also presented in the following table.

Sample Locations	Analytes	Serial Dilution (%D)
MW-8 (4-6)	Chromium	14%
	Manganese	11%
	Iron	12%
	Magnesium	11%
	Zinc	14%

The criteria used to evaluate the serial dilution are presented in the following table. In the case of a serial dilution deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METALS

METALS: SW-846 6010C and 7471B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks					X
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		X	X		
MS/MSD Precision (RPD)		X		X	
Lab Duplicate (RPD)					X
Field Duplicate (RPD)		X	X		
ICP Serial Dilution		X	X		
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CCVL Standard		X	X		
ICP Interference Check		X		X	
Transcription/calculations acceptable		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

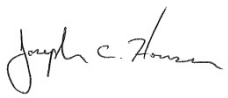
%R Percent recovery
RPD Relative percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]					Noncompliance
					VOC	SVOC	TPH	MET	MISC	
480-125579-1	10/8/2017	SW846	MW-8 (4-6)	Soil	No	No	-	No	-	VOC: MS/MSD %R SVOC: Surrogate %R, MSD %R, MS/MSD RPD MET: MS/MSD %R, Field Duplicate, Serial Dil
	10/8/2017	SW846	MW-8 (13-14)	Soil	Yes	No	-	No	-	SVOC: Field Duplicate, CCAL %D MET: MS/MSD %R, Field Duplicate, Serial Dil
	10/8/2017	SW846	DUP-100817	Soil	No	No	-	No	-	VOC: CCAL %D SVOC: Field Duplicate, CCAL %D MET: MS/MSD %R, Field Duplicate, Serial Dil
	10/8/2017	SW846	TRIP BLANK	Water	Yes	-	-	-	-	

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

VALIDATION PERFORMED BY: Joseph C. Houser

SIGNATURE: 

DATE: November 6, 2017

PEER REVIEW: Jeffrey L. Davin

DATE: November 17, 2017

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

Client Sample ID: MW-8 (4-6)
Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1
Matrix: Solid
Percent Solids: 84.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.37	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1,2,2-Tetrachloroethane	ND	~~F1~~ UJ	5.0	0.82	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1,2-Trichloroethane	ND	~~F1~~ UJ	5.0	0.65	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2,4-Trichlorobenzene	ND	~~F1~~ UJ	5.0	0.31	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dibromo-3-Chloropropane	ND	~~F1~~	5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dibromoethane	ND	~~F1~~	5.0	0.65	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dichlorobenzene	ND	~~F1~~	5.0	0.39	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dichloroethane	ND	~~F1~~	5.0	0.25	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,3-Dichlorobenzene	ND	~~F1~~ UJ	5.0	0.26	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,4-Dichlorobenzene	ND	~~F1~~	5.0	0.71	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
2-Butanone (MEK)	ND	~~F1~~	25	1.8	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
2-Hexanone	ND	~~F1~~	25	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
4-Methyl-2-pentanone (MIBK)	ND	~~F1~~	25	1.7	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Acetone	13	J ~~F1~~	25	4.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Benzene	1.5	J	5.0	0.25	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Bromodichloromethane	ND		5.0	0.68	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Bromoform	ND	F1 UJ	5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Carbon disulfide	ND	~~F1~~ UJ	5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Carbon tetrachloride	ND		5.0	0.49	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chlorobenzene	ND	~~F1~~ UJ	5.0	0.67	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chloroform	ND		5.0	0.31	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
cis-1,2-Dichloroethene	ND	~~F1~~ UJ	5.0	0.64	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
cis-1,3-Dichloropropene	ND	~~F1~~ UJ	5.0	0.73	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Cyclohexane	ND		5.0	0.71	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Dibromochloromethane	ND	~~F1~~ UJ	5.0	0.64	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Dichlorodifluoromethane	ND		5.0	0.42	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Ethylbenzene	ND	~~F1~~ UJ	5.0	0.35	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Isopropylbenzene	ND		5.0	0.76	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methylcyclohexane	ND		5.0	0.77	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Styrene	0.28	J ~~F1~~	5.0	0.25	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Tetrachloroethene	ND		5.0	0.68	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Toluene	1.8	J	5.0	0.38	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
trans-1,2-Dichloroethene	ND	~~F1~~ UJ	5.0	0.52	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
trans-1,3-Dichloropropene	ND	~~F1~~	5.0	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Trichloroethene	ND	~~F1~~	5.0	1.1	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Trichlorofluoromethane	ND		5.0	0.48	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Xylenes, Total	0.85	J ~~F1~~	10	0.85	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1

Client Sample ID: MW-8 (4-6)
Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1
Matrix: Solid
Percent Solids: 84.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 126	10/10/17 10:30	10/16/17 18:28	1
4-Bromofluorobenzene (Surr)	100		72 - 126	10/10/17 10:30	10/16/17 18:28	1
Dibromofluoromethane (Surr)	103		60 - 140	10/10/17 10:30	10/16/17 18:28	1
Toluene-d8 (Surr)	100		71 - 125	10/10/17 10:30	10/16/17 18:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		20000	5400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4,6-Trichlorophenol	ND		20000	4000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dichlorophenol	ND		20000	2100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dimethylphenol	ND		20000	4800	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dinitrophenol	ND		200000	93000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dinitrotoluene	ND		20000	4100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,6-Dinitrotoluene	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Chloronaphthalene	ND		20000	3300	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Chlorophenol	ND		20000	3700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Methylnaphthalene	ND		20000	4000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Methylphenol	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Nitroaniline	ND		39000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Nitrophenol	ND		20000	5700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
3,3'-Dichlorobenzidine	ND		39000	24000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
3-Nitroaniline	ND		39000	5500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4,6-Dinitro-2-methylphenol	ND		39000	20000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Bromophenyl phenyl ether	ND		20000	2800	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Chloro-3-methylphenol	ND		20000	5000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Chloroaniline	ND		20000	5000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Chlorophenyl phenyl ether	ND		20000	2500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Methylphenol	ND		39000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Nitroaniline	ND		39000	11000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Nitrophenol	ND		39000	14000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Acenaphthene	3800	J ~~F1~~	20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Acenaphthylene	17000	J ~~F2~~	20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Acetophenone	ND		20000	2700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Anthracene	40000	~~F2~~ J	20000	5000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Atrazine	ND		20000	7000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzaldehyde	ND		20000	16000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[a]anthracene	87000	~~F2~~ J	20000	2000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[a]pyrene	69000	~~F2~~	20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[b]fluoranthene	83000	~~F2~~	20000	3200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[g,h,i]perylene	38000	~~F2~~	20000	2100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[k]fluoranthene	34000		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Biphenyl	ND		20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
bis (2-chloroisopropyl) ether	ND		20000	4000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Bis(2-chloroethoxy)methane	ND		20000	4200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Bis(2-chloroethyl)ether	ND		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Bis(2-ethylhexyl) phthalate	ND		20000	6800	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Butyl benzyl phthalate	ND		20000	3300	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Caprolactam	ND		20000	6000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Carbazole	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Chrysene	70000	~~F2~~ J	20000	4500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100

Client Sample ID: MW-8 (4-6)
Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1
Matrix: Solid
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND	UJ	20000	3500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Dibenzofuran	**9100**	**J F2**	20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Diethyl phthalate	ND	UJ	20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Dimethyl phthalate	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Di-n-butyl phthalate	ND		20000	3400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Di-n-octyl phthalate	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Fluoranthene	**170000**	**F2** J	20000	2100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Fluorene	**18000**	**J F2**	20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachlorobenzene	ND	UJ	20000	2700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachlorobutadiene	ND		20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachlorocyclopentadiene	ND		20000	2700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachloroethane	ND		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Indeno[1,2,3-cd]pyrene	**36000**	**F2** J	20000	2500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Isophorone	ND	UJ	20000	4200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Naphthalene	ND		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Nitrobenzene	ND		20000	2200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
N-Nitrosodi-n-propylamine	ND		20000	3400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
N-Nitrosodiphenylamine	ND		20000	16000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Pentachlorophenol	ND		39000	20000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Phenanthrene	**110000**	**F2** J	20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Phenol	ND	UJ	20000	3100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Pyrene	**130000**	**F2** J	20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*0*	*X*	*54 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
2-Fluorobiphenyl	*83*		*60 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
2-Fluorophenol	*0*	*X*	*52 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
Nitrobenzene-d5	*0*	*X*	*53 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
Phenol-d5	*0*	*X*	*54 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
p-Terphenyl-d14	*0*	*X*	*65 - 121*	*10/11/17 14:06*	*10/16/17 21:58*	*100*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15400**		11.7	5.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Antimony	ND	F1 UJ	17.6	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Arsenic	**18.5**		2.3	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Barium	**184**	**F1**	0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Beryllium	**0.96**		0.23	0.033	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Cadmium	**1.1**		0.23	0.035	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Calcium	**26100**	**F2 B**	58.6	3.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Chromium	**31.3**	J	0.59	0.23	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Cobalt	**13.1**	J	0.59	0.059	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Copper	**60.5**	**F2 F1** J	1.2	0.25	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Iron	**25000**	J	11.7	4.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Lead	**679**	J	1.2	0.28	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Magnesium	**5870**	**F1** J	23.4	1.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Manganese	**308**	J	0.23	0.037	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Nickel	**39.1**	J	5.9	0.27	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Potassium	**4310**	**F1** J	35.1	23.4	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Selenium	**4.0**	J	4.7	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1

Client Sample ID: MW-8 (4-6)

Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1
Matrix: Solid
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.26	J	0.70	0.23	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Sodium	565		164	15.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Thallium	ND		7.0	0.35	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Vanadium	29.1	F1 J	0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Zinc	482	J	2.3	0.75	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35		0.024	0.0099	mg/Kg	☼	10/10/17 13:30	10/10/17 15:10	1

Client Sample ID: MW-8 (13-14)

Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2
Matrix: Solid
Percent Solids: 81.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dibromoethane	ND		4.4	0.57	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Acetone	21	J	22	3.7	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Benzene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Bromomethane	ND		4.4	0.40	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chloroethane	ND		4.4	0.99	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chloromethane	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Cyclohexane	ND		4.4	0.62	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1

Client Sample ID: MW-8 (13-14)
Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2
Matrix: Solid
Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methylcyclohexane	ND		4.4	0.67	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Styrene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Tetrachloroethene	**0.70**	**J**	4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Toluene	ND		4.4	0.33	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Trichlorofluoromethane	ND		4.4	0.42	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Xylenes, Total	ND		8.8	0.74	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*10/10/17 10:30*	*10/16/17 18:54*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*10/10/17 10:30*	*10/16/17 18:54*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*10/10/17 10:30*	*10/16/17 18:54*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*10/10/17 10:30*	*10/16/17 18:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dinitrophenol	ND		10000	4700	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Chlorophenol	ND		1000	190	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Methylnaphthalene	**220**	**J**	1000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
3-Nitroaniline	ND		2000	280	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Nitroaniline	ND		2000	530	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Nitrophenol	ND		2000	710	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Acenaphthene	**290**	**J**	1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Acenaphthylene	**1000**		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Acetophenone	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Anthracene	**1800**		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5

Client Sample ID: MW-8 (13-14)
Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2
Matrix: Solid
Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		1000	350	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzaldehyde	ND	UJ	1000	810	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[a]anthracene	**2100**		1000	100	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[a]pyrene	**1500**		1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[b]fluoranthene	**1600**		1000	160	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[g,h,i]perylene	**720**	J	1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[k]fluoranthene	**700**	J	1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Biphenyl	ND		1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Bis(2-ethylhexyl) phthalate	ND		1000	350	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Caprolactam	ND		1000	310	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Carbazole	**250**	J	1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Chrysene	**1500**		1000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Dibenzofuran	**950**	J	1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Fluoranthene	**4200**	J	1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Fluorene	**1600**		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Indeno[1,2,3-cd]pyrene	**790**	J	1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Isophorone	ND		1000	220	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Naphthalene	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
N-Nitrosodiphenylamine	ND		1000	830	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Pentachlorophenol	ND	UJ	2000	1000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Phenanthrene	**5000**	J	1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Phenol	ND		1000	160	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Pyrene	**3300**	J	1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*111*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
2-Fluorobiphenyl	*88*		*60 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
2-Fluorophenol	*73*		*52 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
Nitrobenzene-d5	*55*		*53 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
Phenol-d5	*82*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
p-Terphenyl-d14	*98*		*65 - 121*	*10/11/17 14:06*	*10/13/17 08:02*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	15100		11.8	5.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1

Client Sample ID: MW-8 (13-14)

Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2
Matrix: Solid
Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	UJ	17.7	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Arsenic	2.3	J	2.4	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Barium	45.9		0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Beryllium	0.89		0.24	0.033	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Cadmium	ND		0.24	0.035	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Calcium	16800	~~B~~	59.1	3.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Chromium	21.8	J	0.59	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Cobalt	8.9	J	0.59	0.059	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Copper	26.2	J	1.2	0.25	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Iron	17900	~~J~~ J	11.8	4.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Lead	8.8	J	1.2	0.28	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Magnesium	5420	J	23.6	1.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Manganese	173	J	0.24	0.038	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Nickel	33.3	J	5.9	0.27	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Potassium	4350	J	35.5	23.6	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Selenium	0.47	J	4.7	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Silver	ND		0.71	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Sodium	411		165	15.4	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Thallium	ND		7.1	0.35	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Vanadium	22.5	J	0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Zinc	35.9	J	2.4	0.76	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.024	0.0098	mg/Kg	☼	10/10/17 13:30	10/10/17 15:16	1

Client Sample ID: DUP-100817

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3
Matrix: Solid
Percent Solids: 84.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
2-Butanone (MEK)	2.6	J	22	1.6	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Acetone	42		22	3.7	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1

Client Sample ID: DUP-100817
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.4	0.21	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Bromomethane	ND		4.4	0.39	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chloroethane	ND		4.4	0.99	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chloromethane	ND	UJ	4.4	0.26	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Cyclohexane	ND		4.4	0.61	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methyl acetate	ND		22	2.6	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methylcyclohexane	ND		4.4	0.67	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Styrene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Tetrachloroethene	**0.62**	**J**	4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Toluene	ND		4.4	0.33	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Trichlorofluoromethane	ND		4.4	0.41	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Xylenes, Total	ND		8.8	0.74	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*10/10/17 10:30*	*10/17/17 14:11*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 126*	*10/10/17 10:30*	*10/17/17 14:11*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*10/10/17 10:30*	*10/17/17 14:11*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*10/10/17 10:30*	*10/17/17 14:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		2000	530	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4,6-Trichlorophenol	ND		2000	390	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dichlorophenol	ND		2000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dimethylphenol	ND		2000	470	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dinitrophenol	ND		19000	9100	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dinitrotoluene	ND		2000	410	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,6-Dinitrotoluene	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Chloronaphthalene	ND		2000	320	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Chlorophenol	ND		2000	360	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Methylnaphthalene	**620**	**J**	2000	390	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Methylphenol	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10

Client Sample ID: DUP-100817
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		3800	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Nitrophenol	ND		2000	560	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
3,3'-Dichlorobenzidine	ND		3800	2300	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
3-Nitroaniline	ND		3800	540	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4,6-Dinitro-2-methylphenol	ND		3800	2000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Bromophenyl phenyl ether	ND		2000	280	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Chloro-3-methylphenol	ND		2000	490	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Chloroaniline	ND		2000	490	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Chlorophenyl phenyl ether	ND		2000	240	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Methylphenol	ND		3800	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Nitroaniline	ND		3800	1000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Nitrophenol	ND		3800	1400	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Acenaphthene	**810**	J	2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Acenaphthylene	**2700**		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Acetophenone	ND		2000	270	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Anthracene	**5000**		2000	490	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Atrazine	ND		2000	680	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzaldehyde	ND	UJ	2000	1600	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[a]anthracene	**5800**		2000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[a]pyrene	**4300**		2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[b]fluoranthene	**5000**		2000	310	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[g,h,i]perylene	**2100**		2000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[k]fluoranthene	**2000**		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Biphenyl	ND		2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
bis (2-chloroisopropyl) ether	ND		2000	390	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Bis(2-chloroethoxy)methane	ND		2000	420	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Bis(2-chloroethyl)ether	ND		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Bis(2-ethylhexyl) phthalate	ND		2000	670	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Butyl benzyl phthalate	ND		2000	320	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Caprolactam	ND		2000	590	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Carbazole	**630**	J	2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Chrysene	**4200**		2000	440	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Dibenz(a,h)anthracene	ND		2000	350	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Dibenzofuran	**2500**		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Diethyl phthalate	ND		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Dimethyl phthalate	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Di-n-butyl phthalate	ND		2000	340	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Di-n-octyl phthalate	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Fluoranthene	**12000**	J	2000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Fluorene	**4300**		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachlorobenzene	ND		2000	270	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachlorobutadiene	ND		2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachlorocyclopentadiene	ND		2000	270	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachloroethane	ND		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Indeno[1,2,3-cd]pyrene	**2300**		2000	240	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Isophorone	ND		2000	420	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Naphthalene	**330**	J	2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Nitrobenzene	ND		2000	220	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
N-Nitrosodi-n-propylamine	ND		2000	340	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10

Client Sample ID: DUP-100817

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		2000	1600	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Pentachlorophenol	ND	UJ	3800	2000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Phenanthrene	14000	J	2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Phenol	ND		2000	300	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Pyrene	9000	J	2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*119*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
2-Fluorobiphenyl	*87*		*60 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
2-Fluorophenol	*72*		*52 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
Nitrobenzene-d5	*78*		*53 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
Phenol-d5	*59*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
p-Terphenyl-d14	*95*		*65 - 121*	*10/11/17 14:06*	*10/13/17 08:28*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	21300		11.9	5.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Antimony	ND	UJ	17.9	0.48	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Arsenic	6.4		2.4	0.48	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Barium	65.2		0.60	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Beryllium	1.2		0.24	0.033	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Cadmium	ND		0.24	0.036	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Calcium	25300	B	59.7	3.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Chromium	31.8	J	0.60	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Cobalt	19.1	J	0.60	0.060	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Copper	45.3	J	1.2	0.25	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Iron	30800	J	11.9	4.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Lead	20.2	J	1.2	0.29	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Magnesium	8480	J	23.9	1.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Manganese	339	J	0.24	0.038	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Nickel	55.7	J	6.0	0.27	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Potassium	5760	J	35.8	23.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Selenium	ND		4.8	0.48	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Silver	ND		0.72	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Sodium	471		167	15.5	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Thallium	ND		7.2	0.36	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Vanadium	30.8	J	0.60	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Zinc	52.8	J	2.4	0.76	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.022	0.0089	mg/Kg	☼	10/10/17 13:30	10/10/17 15:22	1

Client Sample ID: TRIP BLANK

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/18/17 18:32	1

Client Sample ID: TRIP BLANK
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/17 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/18/17 18:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/17 18:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/17 18:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/17 18:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/18/17 18:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/18/17 18:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/18/17 18:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/18/17 18:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/17 18:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/17 18:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/18/17 18:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/18/17 18:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/17 18:32	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/17 18:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/17 18:32	1
Acetone	ND		10	3.0	ug/L			10/18/17 18:32	1
Benzene	ND		1.0	0.41	ug/L			10/18/17 18:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/17 18:32	1
Bromoform	ND		1.0	0.26	ug/L			10/18/17 18:32	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/17 18:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/17 18:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/17 18:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/17 18:32	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/17 18:32	1
Chloroform	ND		1.0	0.34	ug/L			10/18/17 18:32	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/17 18:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/18/17 18:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/17 18:32	1
Cyclohexane	ND		1.0	0.18	ug/L			10/18/17 18:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/17 18:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/18/17 18:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/17 18:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/18/17 18:32	1
Methyl acetate	ND		2.5	1.3	ug/L			10/18/17 18:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/18/17 18:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/18/17 18:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/17 18:32	1
Styrene	ND		1.0	0.73	ug/L			10/18/17 18:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/17 18:32	1
Toluene	ND		1.0	0.51	ug/L			10/18/17 18:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/18/17 18:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/17 18:32	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/17 18:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/18/17 18:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/17 18:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/17 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*10/18/17 18:32*	*1*

Client Sample ID: TRIP BLANK
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*10/18/17 18:32*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*10/18/17 18:32*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/18/17 18:32*	*1*

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record

187970

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Rina Arons	Site Contact: Klaus Beyer	Date: 10/8/17	COC No:
Company Name: RGE/Arcadis	Tel/Fax:	Lab Contact: Melissa Diggo	Carrier:	1 of 1 COCs
Address: 295 Woodcliff Drive	Analysis Turnaround Time			Sampler:
City/State/Zip: Fairport NY 14429	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 585.385-0090	TAT if different from Below Standard			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampl:
Project Name: RGE Park St	☐ 1 week			Job / S
Site:	☐ 2 days			
P O #	☐ 1 day			480-125579 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	VOC TCL	SVOC TCL	TAL Metals	Hg	Sample Specific Notes:
MW-8 (4-6)	10/8/17	1130		S	6			X	X	X	X	
MW-8 (13-14)	↓	1200		S	18		X	X	X	X	X	
DUP-080817	↓	—		S	6			X	X	X	X	
RINSE BLANK	—	—		W	2			X				

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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☑ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
(*) Per Contract
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

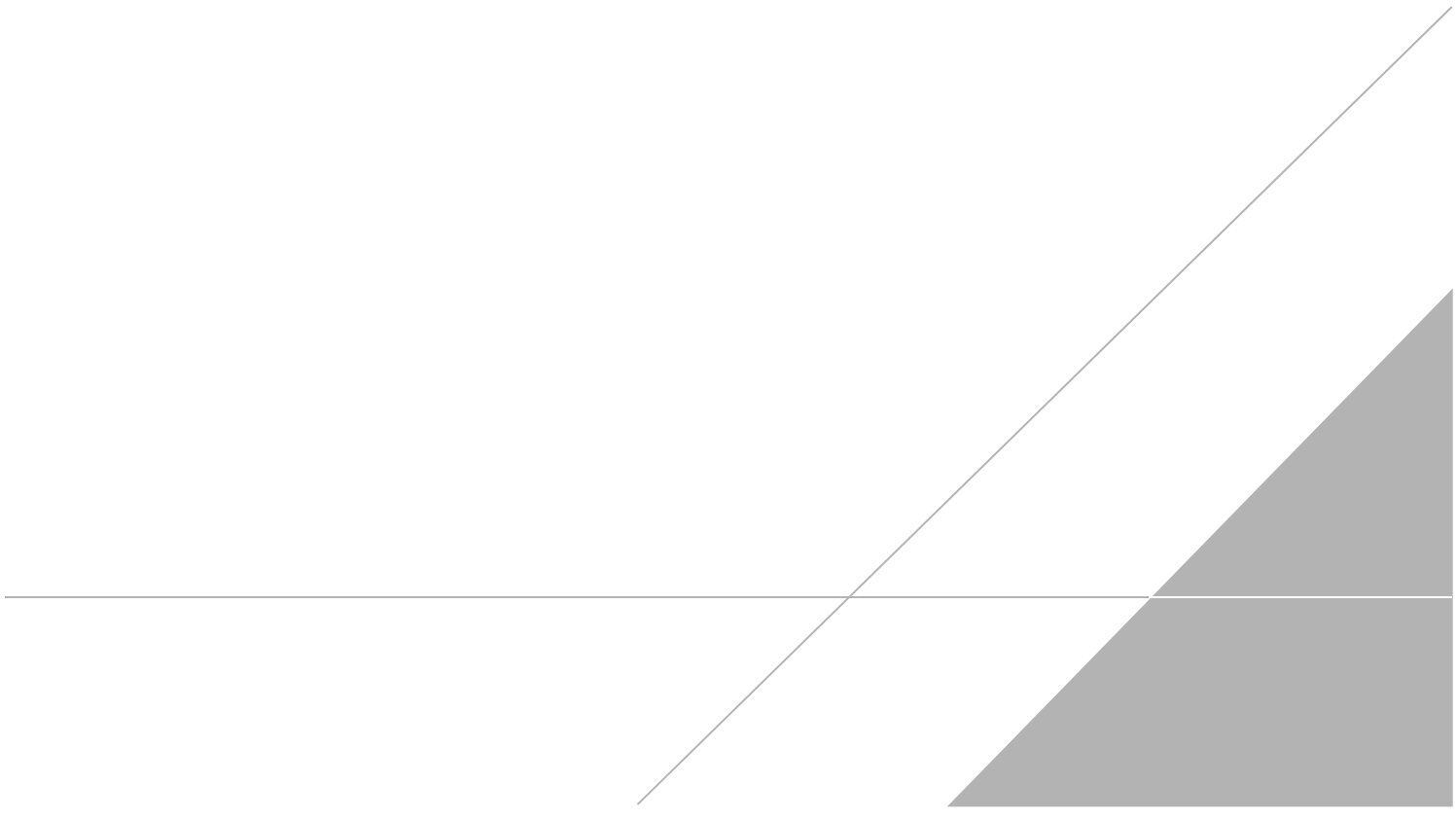
2.1 IR1

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:
Relinquished by: Nicholas Beyer	Company: Arcadis	Date/Time: 10/9/17 1345	Received by:	Company:	Date/Time: 10/10/17 0950
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

10/24/2017

Appendix H

Laboratory Analytical Report for Remedial Action (on Compact Disk)



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

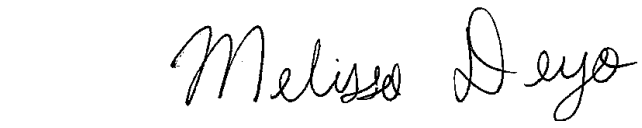
ANALYTICAL REPORT

Job Number: 480-125579-1

Job Description: RGE - Park St.

For:
ARCADIS U.S. Inc
Arcadis
295 Woodcliff Drive
#2. 3rd Floor, Suite 301
Fairport, NY 14450

Attention: Bruce Ahrens



Approved for release.
Melissa L Deyo
Project Manager I
10/24/2017 3:44 PM

Melissa L Deyo, Project Manager I
10 Hazelwood Drive, Amherst, NY, 14228-2298
(716)504-9874
melissa.deyo@testamericainc.com
10/24/2017

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report.

TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

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Job Narrative
480-125579-1

Receipt
The samples were received on 10/10/2017 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. QC was checked off on the wrong sample, logged in as per pm direction.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-381944 recovered above the upper control limit for Bromoform, Carbon disulfide, Carbon tetrachloride, Dibromochloromethane, cis-1,3-Dichloropropene and Bromodichloromethane. The samples associated with this CCV were non-detects or below the reporting limit for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-8 (4-6) (480-125579-1) and MW-8 (13-14) (480-125579-2).

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-382014 and analytical batch 480-381944 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-8 (4-6) (480-125579-1) and MW-8 (13-14) (480-125579-2).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-382134 recovered outside acceptance criteria, low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: DUP-100817 (480-125579-3).

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-382187 and analytical batch 480-382134 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The following samples are impacted: MW-8 (4-6) (480-125579-1[MS]) and MW-8 (4-6) (480-125579-1[MSD]).

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

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-381534 recovered outside acceptance criteria, low biased, for Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: MW-8 (13-14) (480-125579-2) and DUP-100817 (480-125579-3).

Method(s) 8270D: The following samples was diluted due to color and viscosity: MW-8 (13-14) (480-125579-2) and DUP-100817 (480-125579-3). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-8 (4-6) (480-125579-1). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following sample required a dilution due to the nature of the sample matrix: MW-8 (4-6) (480-125579-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The following samples was diluted due to the nature of the sample matrix: MW-8 (4-6) (480-125579-1[MS]) and MW-8 (4-6) (480-125579-1[MSD]). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery and precision calculation does not provide useful information.

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

Metals
Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-382167/18) contained Total Zinc outside the control limits. All reported samples (MB 480-381758/1-A) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 6010, 6010C: The Low Level Continuing Calibration Verification (CCVL 480-382167/34) contained Total Iron outside the control limits. All reported samples MW-8 (4-6) (480-125579-1), MW-8 (4-6) (480-125579-1[MS]), MW-8 (4-6) (480-125579-1[MSD]), MW-8 (13-14) (480-125579-2), DUP-100817 (480-125579-3), (LCDSRM 480-381758/3-), (LCSSRM 480-381758/2-), (480-125579-E-1-B PDS) and (480-125579-E-1-B SD) associated with this CCVL were either below the laboratory's standard reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 6010C: The Serial Dilution (480-125579-E-1-B SD) in batch 480-381758, exhibited results outside the quality control limits for Total Beryllium, Cadmium, Chromium, Iron, Magnesium, and Zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary

Method(s) 6010C: The % recovery of Post Spike, (480-125579-E-1-B PDS), in batch 480-381758 exhibited results outside the quality control limits for Total Aluminum, Barium, Potassium, and Sodium. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary

Method(s) 6010C: The Serial Dilution and Post Spike (480-125579-E-1-B PDS) and (480-125579-E-1-B SD) exceeded the quality control limits for Total Manganese. Sample matrix is suspected, therefore, no corrective action was necessary.

Method(s) 6010C: The continuing calibration blank (CCB 480-382167/45) contained Total iron and Manganese above the reporting limits (RLs). All reported samples DUP-100817 (480-125579-3) associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method(s) 6010C: The Low Level Continuing Calibration Verification (CCVL 480-382167/46) contained Total Copper, Iron, Manganese, and Zinc outside the control limits. All reported samples DUP-100817 (480-125579-3) associated with this CCVL were either below the laboratory's standard reporting limit for these analyte or contained these analytes at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

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

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

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-125579-1	MW-8 (4-6)	Solid	10/08/17 11:30	10/10/17 09:50
480-125579-2	MW-8 (13-14)	Solid	10/08/17 12:00	10/10/17 09:50
480-125579-3	DUP-100817	Solid	10/08/17 00:00	10/10/17 09:50
480-125579-4	TRIP BLANK	Water	10/08/17 00:00	10/10/17 09:50

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

Client Sample ID: MW-8 (4-6) — Lab Sample ID: 480-125579-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J F1	25	4.2	ug/Kg	1	☼	8260C	Total/NA
Benzene	1.5	J	5.0	0.25	ug/Kg	1	☼	8260C	Total/NA
Styrene	0.28	J F1	5.0	0.25	ug/Kg	1	☼	8260C	Total/NA
Toluene	1.8	J	5.0	0.38	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	0.85	J F1	10	0.85	ug/Kg	1	☼	8260C	Total/NA
Acenaphthene	3800	J F1	20000	3000	ug/Kg	100	☼	8270D	Total/NA
Acenaphthylene	17000	J F2	20000	2600	ug/Kg	100	☼	8270D	Total/NA
Anthracene	40000	F2	20000	5000	ug/Kg	100	☼	8270D	Total/NA
Benzo[a]anthracene	87000	F2	20000	2000	ug/Kg	100	☼	8270D	Total/NA
Benzo[a]pyrene	69000	F2	20000	3000	ug/Kg	100	☼	8270D	Total/NA
Benzo[b]fluoranthene	83000	F2	20000	3200	ug/Kg	100	☼	8270D	Total/NA
Benzo[g,h,i]perylene	38000	F2	20000	2100	ug/Kg	100	☼	8270D	Total/NA
Benzo[k]fluoranthene	34000		20000	2600	ug/Kg	100	☼	8270D	Total/NA
Chrysene	70000	F2	20000	4500	ug/Kg	100	☼	8270D	Total/NA
Dibenzofuran	9100	J F2	20000	2400	ug/Kg	100	☼	8270D	Total/NA
Fluoranthene	170000	F2	20000	2100	ug/Kg	100	☼	8270D	Total/NA
Fluorene	18000	J F2	20000	2400	ug/Kg	100	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	36000	F2	20000	2500	ug/Kg	100	☼	8270D	Total/NA
Phenanthrene	110000	F2	20000	3000	ug/Kg	100	☼	8270D	Total/NA
Pyrene	130000	F2	20000	2400	ug/Kg	100	☼	8270D	Total/NA
Aluminum	15400		11.7	5.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	18.5		2.3	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	184	F1	0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.96		0.23	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.1		0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	26100	F2 B	58.6	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	31.3		0.59	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	13.1		0.59	0.059	mg/Kg	1	☼	6010C	Total/NA
Copper	60.5	F2 F1	1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	25000	^	11.7	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	679		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5870	F1	23.4	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	308		0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	39.1		5.9	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	4310	F1	35.1	23.4	mg/Kg	1	☼	6010C	Total/NA
Selenium	4.0	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Silver	0.26	J	0.70	0.23	mg/Kg	1	☼	6010C	Total/NA
Sodium	565		164	15.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	29.1	F1	0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	482		2.3	0.75	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.35		0.024	0.0099	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: MW-8 (13-14) — Lab Sample ID: 480-125579-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21	J	22	3.7	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.70	J	4.4	0.59	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	220	J	1000	200	ug/Kg	5	☼	8270D	Total/NA
Acenaphthene	290	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	1000		1000	130	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-8 (13-14) (Continued) — Lab Sample ID: 480-125579-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	1800		1000	250	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2100		1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	1500		1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1600		1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	720	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	700	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Carbazole	250	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	1500		1000	230	ug/Kg	5	☼	8270D	Total/NA
Dibenzofuran	950	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	4200		1000	110	ug/Kg	5	☼	8270D	Total/NA
Fluorene	1600		1000	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	790	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	5000		1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	3300		1000	120	ug/Kg	5	☼	8270D	Total/NA
Aluminum	15100		11.8	5.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.3	J	2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	45.9		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.89		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	16800	B	59.1	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	21.8		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.9		0.59	0.059	mg/Kg	1	☼	6010C	Total/NA
Copper	26.2		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	17900	^	11.8	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	8.8		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5420		23.6	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	173		0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	33.3		5.9	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	4350		35.5	23.6	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.47	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Sodium	411		165	15.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.5		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	35.9		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.013	J	0.024	0.0098	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: DUP-100817 — Lab Sample ID: 480-125579-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.6	J	22	1.6	ug/Kg	1	☼	8260C	Total/NA
Acetone	42		22	3.7	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.62	J	4.4	0.59	ug/Kg	1	☼	8260C	Total/NA
2-Methylnaphthalene	620	J	2000	390	ug/Kg	10	☼	8270D	Total/NA
Acenaphthene	810	J	2000	290	ug/Kg	10	☼	8270D	Total/NA
Acenaphthylene	2700		2000	250	ug/Kg	10	☼	8270D	Total/NA
Anthracene	5000		2000	490	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	5800		2000	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	4300		2000	290	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	5000		2000	310	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2100		2000	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	2000		2000	250	ug/Kg	10	☼	8270D	Total/NA
Carbazole	630	J	2000	230	ug/Kg	10	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-100817 (Continued) — Lab Sample ID: 480-125579-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chrysene	4200		2000	440	ug/Kg	10	☼	8270D	Total/NA
Dibenzofuran	2500		2000	230	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	12000		2000	210	ug/Kg	10	☼	8270D	Total/NA
Fluorene	4300		2000	230	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2300		2000	240	ug/Kg	10	☼	8270D	Total/NA
Naphthalene	330	J	2000	250	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	14000		2000	290	ug/Kg	10	☼	8270D	Total/NA
Pyrene	9000		2000	230	ug/Kg	10	☼	8270D	Total/NA
Aluminum	21300		11.9	5.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.4		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	65.2		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	1.2		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	25300	B	59.7	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	31.8		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	19.1		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	45.3	^	1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	30800	^	11.9	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	20.2		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	8480		23.9	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	339	^	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	55.7		6.0	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	5760		35.8	23.9	mg/Kg	1	☼	6010C	Total/NA
Sodium	471		167	15.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	30.8		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	52.8	^	2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.039		0.022	0.0089	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-125579-4

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Client Sample ID: MW-8 (4-6)

Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1

Matrix: Solid
Percent Solids: 84.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.37	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1,2,2-Tetrachloroethane	ND	F1	5.0	0.82	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1,2-Trichloroethane	ND	F1	5.0	0.65	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2,4-Trichlorobenzene	ND	F1	5.0	0.31	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dibromo-3-Chloropropane	ND	F1	5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dibromoethane	ND	F1	5.0	0.65	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dichlorobenzene	ND	F1	5.0	0.39	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dichloroethane	ND	F1	5.0	0.25	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,3-Dichlorobenzene	ND	F1	5.0	0.26	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
1,4-Dichlorobenzene	ND	F1	5.0	0.71	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
2-Butanone (MEK)	ND	F1	25	1.8	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
2-Hexanone	ND	F1	25	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
4-Methyl-2-pentanone (MIBK)	ND	F1	25	1.7	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Acetone	**13**	**J F1**	25	4.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Benzene	**1.5**	**J**	5.0	0.25	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Bromodichloromethane	ND		5.0	0.68	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Bromoform	ND	F1 *	5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Carbon disulfide	ND	F1	5.0	2.5	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Carbon tetrachloride	ND		5.0	0.49	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chlorobenzene	ND	F1	5.0	0.67	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chloroform	ND		5.0	0.31	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
cis-1,2-Dichloroethene	ND	F1	5.0	0.64	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
cis-1,3-Dichloropropene	ND	F1	5.0	0.73	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Cyclohexane	ND		5.0	0.71	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Dibromochloromethane	ND	F1	5.0	0.64	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Dichlorodifluoromethane	ND		5.0	0.42	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Ethylbenzene	ND	F1	5.0	0.35	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Isopropylbenzene	ND		5.0	0.76	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methylcyclohexane	ND		5.0	0.77	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Styrene	**0.28**	**J F1**	5.0	0.25	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Tetrachloroethene	ND		5.0	0.68	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Toluene	**1.8**	**J**	5.0	0.38	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
trans-1,2-Dichloroethene	ND	F1	5.0	0.52	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
trans-1,3-Dichloropropene	ND	F1	5.0	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Trichloroethene	ND	F1	5.0	1.1	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Trichlorofluoromethane	ND		5.0	0.48	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1
Xylenes, Total	**0.85**	**J F1**	10	0.85	ug/Kg	☼	10/10/17 10:30	10/16/17 18:28	1

Client Sample ID: MW-8 (4-6)

Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1

Matrix: Solid
Percent Solids: 84.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 126*	*10/10/17 10:30*	*10/16/17 18:28*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*10/10/17 10:30*	*10/16/17 18:28*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*10/10/17 10:30*	*10/16/17 18:28*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*10/10/17 10:30*	*10/16/17 18:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		20000	5400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4,6-Trichlorophenol	ND		20000	4000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dichlorophenol	ND		20000	2100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dimethylphenol	ND		20000	4800	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dinitrophenol	ND		200000	93000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,4-Dinitrotoluene	ND		20000	4100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2,6-Dinitrotoluene	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Chloronaphthalene	ND		20000	3300	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Chlorophenol	ND		20000	3700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Methylnaphthalene	ND		20000	4000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Methylphenol	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Nitroaniline	ND		39000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
2-Nitrophenol	ND		20000	5700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
3,3'-Dichlorobenzidine	ND		39000	24000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
3-Nitroaniline	ND		39000	5500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4,6-Dinitro-2-methylphenol	ND		39000	20000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Bromophenyl phenyl ether	ND		20000	2800	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Chloro-3-methylphenol	ND		20000	5000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Chloroaniline	ND		20000	5000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Chlorophenyl phenyl ether	ND		20000	2500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Methylphenol	ND		39000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Nitroaniline	ND		39000	11000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
4-Nitrophenol	ND		39000	14000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Acenaphthene	**3800**	**J F1**	20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Acenaphthylene	**17000**	**J F2**	20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Acetophenone	ND		20000	2700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Anthracene	**40000**	**F2**	20000	5000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Atrazine	ND		20000	7000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzaldehyde	ND		20000	16000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[a]anthracene	**87000**	**F2**	20000	2000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[a]pyrene	**69000**	**F2**	20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[b]fluoranthene	**83000**	**F2**	20000	3200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[g,h,i]perylene	**38000**	**F2**	20000	2100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Benzo[k]fluoranthene	**34000**		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Biphenyl	ND		20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
bis (2-chloroisopropyl) ether	ND		20000	4000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Bis(2-chloroethoxy)methane	ND		20000	4200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Bis(2-chloroethyl)ether	ND		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Bis(2-ethylhexyl) phthalate	ND		20000	6800	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Butyl benzyl phthalate	ND		20000	3300	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Caprolactam	ND		20000	6000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Carbazole	ND	F2	20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Chrysene	**70000**	**F2**	20000	4500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100

Client Sample ID: MW-8 (4-6)

Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1

Matrix: Solid
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		20000	3500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Dibenzofuran	**9100**	**J F2**	20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Diethyl phthalate	ND		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Dimethyl phthalate	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Di-n-butyl phthalate	ND		20000	3400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Di-n-octyl phthalate	ND		20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Fluoranthene	**170000**	**F2**	20000	2100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Fluorene	**18000**	**J F2**	20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachlorobenzene	ND		20000	2700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachlorobutadiene	ND		20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachlorocyclopentadiene	ND		20000	2700	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Hexachloroethane	ND		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Indeno[1,2,3-cd]pyrene	**36000**	**F2**	20000	2500	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Isophorone	ND		20000	4200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Naphthalene	ND		20000	2600	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Nitrobenzene	ND		20000	2200	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
N-Nitrosodi-n-propylamine	ND		20000	3400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
N-Nitrosodiphenylamine	ND		20000	16000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Pentachlorophenol	ND		39000	20000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Phenanthrene	**110000**	**F2**	20000	3000	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Phenol	ND		20000	3100	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100
Pyrene	**130000**	**F2**	20000	2400	ug/Kg	☼	10/11/17 14:06	10/16/17 21:58	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*0*	*X*	*54 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
2-Fluorobiphenyl	*83*		*60 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
2-Fluorophenol	*0*	*X*	*52 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
Nitrobenzene-d5	*0*	*X*	*53 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
Phenol-d5	*0*	*X*	*54 - 120*	*10/11/17 14:06*	*10/16/17 21:58*	*100*
p-Terphenyl-d14	*0*	*X*	*65 - 121*	*10/11/17 14:06*	*10/16/17 21:58*	*100*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15400**		11.7	5.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Antimony	ND	F1	17.6	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Arsenic	**18.5**		2.3	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Barium	**184**	**F1**	0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Beryllium	**0.96**		0.23	0.033	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Cadmium	**1.1**		0.23	0.035	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Calcium	**26100**	**F2 B**	58.6	3.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Chromium	**31.3**		0.59	0.23	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Cobalt	**13.1**		0.59	0.059	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Copper	**60.5**	**F2 F1**	1.2	0.25	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Iron	**25000**	**^**	11.7	4.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Lead	**679**		1.2	0.28	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Magnesium	**5870**	**F1**	23.4	1.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Manganese	**308**		0.23	0.037	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Nickel	**39.1**		5.9	0.27	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Potassium	**4310**	**F1**	35.1	23.4	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Selenium	**4.0**	**J**	4.7	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1

Client Sample ID: MW-8 (4-6)

Lab Sample ID: 480-125579-1

Date Collected: 10/08/17 11:30
Matrix: Solid
Date Received: 10/10/17 09:50
Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	**0.26**	**J**	0.70	0.23	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Sodium	**565**		164	15.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Thallium	ND		7.0	0.35	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Vanadium	**29.1**	**F1**	0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1
Zinc	**482**		2.3	0.75	mg/Kg	☼	10/13/17 16:34	10/16/17 12:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.35**		0.024	0.0099	mg/Kg	☼	10/10/17 13:30	10/10/17 15:10	1

Client Sample ID: MW-8 (13-14)

Lab Sample ID: 480-125579-2

Date Collected: 10/08/17 12:00
Matrix: Solid
Date Received: 10/10/17 09:50
Percent Solids: 81.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1-Dichloroethane	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dibromoethane	ND		4.4	0.57	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,3-Dichlorobenzene	ND		4.4	0.23	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
1,4-Dichlorobenzene	ND		4.4	0.62	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Acetone	**21**	**J**	22	3.7	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Benzene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Bromoform	ND	*	4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Bromomethane	ND		4.4	0.40	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Carbon tetrachloride	ND		4.4	0.43	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chloroethane	ND		4.4	0.99	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Chloromethane	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Cyclohexane	ND		4.4	0.62	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1

Client Sample ID: MW-8 (13-14)

Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2

Matrix: Solid
Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methylcyclohexane	ND		4.4	0.67	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Styrene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Tetrachloroethene	**0.70**	**J**	4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Toluene	ND		4.4	0.33	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Trichloroethene	ND		4.4	0.97	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Trichlorofluoromethane	ND		4.4	0.42	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Vinyl chloride	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1
Xylenes, Total	ND		8.8	0.74	ug/Kg	☼	10/10/17 10:30	10/16/17 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*10/10/17 10:30*	*10/16/17 18:54*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 126*	*10/10/17 10:30*	*10/16/17 18:54*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*10/10/17 10:30*	*10/16/17 18:54*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*10/10/17 10:30*	*10/16/17 18:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dinitrophenol	ND		10000	4700	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Chlorophenol	ND		1000	190	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Methylnaphthalene	**220**	**J**	1000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
3-Nitroaniline	ND		2000	280	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Nitroaniline	ND		2000	530	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
4-Nitrophenol	ND		2000	710	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Acenaphthene	**290**	**J**	1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Acenaphthylene	**1000**		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Acetophenone	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Anthracene	**1800**		1000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5

Client Sample ID: MW-8 (13-14)

Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2

Matrix: Solid
Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		1000	350	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzaldehyde	ND		1000	810	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[a]anthracene	**2100**		1000	100	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[a]pyrene	**1500**		1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[b]fluoranthene	**1600**		1000	160	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[g,h,i]perylene	**720**	**J**	1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Benzo[k]fluoranthene	**700**	**J**	1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Biphenyl	ND		1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Bis(2-ethylhexyl) phthalate	ND		1000	350	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Caprolactam	ND		1000	310	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Carbazole	**250**	**J**	1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Chrysene	**1500**		1000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Dibenzofuran	**950**	**J**	1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Fluoranthene	**4200**		1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Fluorene	**1600**		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Indeno[1,2,3-cd]pyrene	**790**	**J**	1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Isophorone	ND		1000	220	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Naphthalene	ND		1000	130	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
N-Nitrosodiphenylamine	ND		1000	830	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Pentachlorophenol	ND		2000	1000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Phenanthrene	**5000**		1000	150	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Phenol	ND		1000	160	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5
Pyrene	**3300**		1000	120	ug/Kg	☼	10/11/17 14:06	10/13/17 08:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*111*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
2-Fluorobiphenyl	*88*		*60 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
2-Fluorophenol	*73*		*52 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
Nitrobenzene-d5	*55*		*53 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
Phenol-d5	*82*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:02*	*5*
p-Terphenyl-d14	*98*		*65 - 121*	*10/11/17 14:06*	*10/13/17 08:02*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15100**		11.8	5.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1

Client Sample ID: MW-8 (13-14)

Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2

Matrix: Solid
Percent Solids: 81.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		17.7	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Arsenic	**2.3**	**J**	2.4	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Barium	**45.9**		0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Beryllium	**0.89**		0.24	0.033	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Cadmium	ND		0.24	0.035	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Calcium	**16800**	**B**	59.1	3.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Chromium	**21.8**		0.59	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Cobalt	**8.9**		0.59	0.059	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Copper	**26.2**		1.2	0.25	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Iron	**17900**	**^**	11.8	4.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Lead	**8.8**		1.2	0.28	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Magnesium	**5420**		23.6	1.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Manganese	**173**		0.24	0.038	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Nickel	**33.3**		5.9	0.27	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Potassium	**4350**		35.5	23.6	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Selenium	**0.47**	**J**	4.7	0.47	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Silver	ND		0.71	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Sodium	**411**		165	15.4	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Thallium	ND		7.1	0.35	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Vanadium	**22.5**		0.59	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1
Zinc	**35.9**		2.4	0.76	mg/Kg	☼	10/13/17 16:34	10/16/17 12:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J**	0.024	0.0098	mg/Kg	☼	10/10/17 13:30	10/10/17 15:16	1

Client Sample ID: DUP-100817

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3

Matrix: Solid
Percent Solids: 84.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,1-Dichloroethene	ND		4.4	0.54	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
2-Butanone (MEK)	**2.6**	**J**	22	1.6	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Acetone	**42**		22	3.7	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1

Client Sample ID: DUP-100817

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3

Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.4	0.21	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Bromodichloromethane	ND		4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Bromomethane	ND		4.4	0.39	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chloroethane	ND		4.4	0.99	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Chloromethane	ND		4.4	0.26	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Cyclohexane	ND		4.4	0.61	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methyl acetate	ND		22	2.6	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methylcyclohexane	ND		4.4	0.67	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Styrene	ND		4.4	0.22	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Tetrachloroethene	**0.62**	**J**	4.4	0.59	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Toluene	ND		4.4	0.33	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Trichlorofluoromethane	ND		4.4	0.41	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1
Xylenes, Total	ND		8.8	0.74	ug/Kg	☼	10/10/17 10:30	10/17/17 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*10/10/17 10:30*	*10/17/17 14:11*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 126*	*10/10/17 10:30*	*10/17/17 14:11*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*10/10/17 10:30*	*10/17/17 14:11*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*10/10/17 10:30*	*10/17/17 14:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		2000	530	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4,6-Trichlorophenol	ND		2000	390	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dichlorophenol	ND		2000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dimethylphenol	ND		2000	470	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dinitrophenol	ND		19000	9100	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,4-Dinitrotoluene	ND		2000	410	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2,6-Dinitrotoluene	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Chloronaphthalene	ND		2000	320	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Chlorophenol	ND		2000	360	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Methylnaphthalene	**620**	**J**	2000	390	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Methylphenol	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10

Client Sample ID: DUP-100817
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3
Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		3800	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
2-Nitrophenol	ND		2000	560	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
3,3'-Dichlorobenzidine	ND		3800	2300	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
3-Nitroaniline	ND		3800	540	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4,6-Dinitro-2-methylphenol	ND		3800	2000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Bromophenyl phenyl ether	ND		2000	280	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Chloro-3-methylphenol	ND		2000	490	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Chloroaniline	ND		2000	490	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Chlorophenyl phenyl ether	ND		2000	240	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Methylphenol	ND		3800	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Nitroaniline	ND		3800	1000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
4-Nitrophenol	ND		3800	1400	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Acenaphthene	**810**	**J**	2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Acenaphthylene	**2700**		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Acetophenone	ND		2000	270	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Anthracene	**5000**		2000	490	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Atrazine	ND		2000	680	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzaldehyde	ND		2000	1600	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[a]anthracene	**5800**		2000	200	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[a]pyrene	**4300**		2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[b]fluoranthene	**5000**		2000	310	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[g,h,i]perylene	**2100**		2000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Benzo[k]fluoranthene	**2000**		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Biphenyl	ND		2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
bis (2-chloroisopropyl) ether	ND		2000	390	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Bis(2-chloroethoxy)methane	ND		2000	420	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Bis(2-chloroethyl)ether	ND		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Bis(2-ethylhexyl) phthalate	ND		2000	670	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Butyl benzyl phthalate	ND		2000	320	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Caprolactam	ND		2000	590	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Carbazole	**630**	**J**	2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Chrysene	**4200**		2000	440	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Dibenz(a,h)anthracene	ND		2000	350	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Dibenzofuran	**2500**		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Diethyl phthalate	ND		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Dimethyl phthalate	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Di-n-butyl phthalate	ND		2000	340	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Di-n-octyl phthalate	ND		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Fluoranthene	**12000**		2000	210	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Fluorene	**4300**		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachlorobenzene	ND		2000	270	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachlorobutadiene	ND		2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachlorocyclopentadiene	ND		2000	270	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Hexachloroethane	ND		2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Indeno[1,2,3-cd]pyrene	**2300**		2000	240	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Isophorone	ND		2000	420	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Naphthalene	**330**	**J**	2000	250	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Nitrobenzene	ND		2000	220	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
N-Nitrosodi-n-propylamine	ND		2000	340	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10

Client Sample ID: DUP-100817

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3

Matrix: Solid
Percent Solids: 84.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		2000	1600	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Pentachlorophenol	ND		3800	2000	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Phenanthrene	**14000**		2000	290	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Phenol	ND		2000	300	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10
Pyrene	**9000**		2000	230	ug/Kg	☼	10/11/17 14:06	10/13/17 08:28	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*119*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
2-Fluorobiphenyl	*87*		*60 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
2-Fluorophenol	*72*		*52 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
Nitrobenzene-d5	*78*		*53 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
Phenol-d5	*59*		*54 - 120*	*10/11/17 14:06*	*10/13/17 08:28*	*10*
p-Terphenyl-d14	*95*		*65 - 121*	*10/11/17 14:06*	*10/13/17 08:28*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**21300**		11.9	5.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Antimony	ND		17.9	0.48	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Arsenic	**6.4**		2.4	0.48	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Barium	**65.2**		0.60	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Beryllium	**1.2**		0.24	0.033	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Cadmium	ND		0.24	0.036	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Calcium	**25300**	**B**	59.7	3.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Chromium	**31.8**		0.60	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Cobalt	**19.1**		0.60	0.060	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Copper	**45.3**	**^**	1.2	0.25	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Iron	**30800**	**^**	11.9	4.2	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Lead	**20.2**		1.2	0.29	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Magnesium	**8480**		23.9	1.1	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Manganese	**339**	**^**	0.24	0.038	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Nickel	**55.7**		6.0	0.27	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Potassium	**5760**		35.8	23.9	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Selenium	ND		4.8	0.48	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Silver	ND		0.72	0.24	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Sodium	**471**		167	15.5	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Thallium	ND		7.2	0.36	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Vanadium	**30.8**		0.60	0.13	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1
Zinc	**52.8**	**^**	2.4	0.76	mg/Kg	☼	10/13/17 16:34	10/16/17 12:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.039**		0.022	0.0089	mg/Kg	☼	10/10/17 13:30	10/10/17 15:22	1

Client Sample ID: TRIP BLANK

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/18/17 18:32	1

Client Sample ID: TRIP BLANK

Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/17 18:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/18/17 18:32	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/17 18:32	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/17 18:32	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/17 18:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/18/17 18:32	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/18/17 18:32	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/18/17 18:32	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/18/17 18:32	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/17 18:32	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/17 18:32	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/18/17 18:32	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/18/17 18:32	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/17 18:32	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/17 18:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/17 18:32	1
Acetone	ND		10	3.0	ug/L			10/18/17 18:32	1
Benzene	ND		1.0	0.41	ug/L			10/18/17 18:32	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/17 18:32	1
Bromoform	ND		1.0	0.26	ug/L			10/18/17 18:32	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/17 18:32	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/17 18:32	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/17 18:32	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/17 18:32	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/17 18:32	1
Chloroform	ND		1.0	0.34	ug/L			10/18/17 18:32	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/17 18:32	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/18/17 18:32	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/17 18:32	1
Cyclohexane	ND		1.0	0.18	ug/L			10/18/17 18:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/17 18:32	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/18/17 18:32	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/17 18:32	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/18/17 18:32	1
Methyl acetate	ND		2.5	1.3	ug/L			10/18/17 18:32	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/18/17 18:32	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/18/17 18:32	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/17 18:32	1
Styrene	ND		1.0	0.73	ug/L			10/18/17 18:32	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/17 18:32	1
Toluene	ND		1.0	0.51	ug/L			10/18/17 18:32	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/18/17 18:32	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/17 18:32	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/17 18:32	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/18/17 18:32	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/17 18:32	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/17 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*10/18/17 18:32*	*1*

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

Client Sample ID: TRIP BLANK
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		73 - 120		10/18/17 18:32	1
Dibromofluoromethane (Surr)	102		75 - 123		10/18/17 18:32	1
Toluene-d8 (Surr)	100		80 - 120		10/18/17 18:32	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-125579-1	MW-8 (4-6)	98	100	103	100
480-125579-1 MS	MW-8 (4-6)	87	95	100	104
480-125579-1 MSD	MW-8 (4-6)	87	94	103	106
480-125579-2	MW-8 (13-14)	107	105	106	98
480-125579-3	DUP-100817	107	103	104	98
LCS 480-382014/1-A	Lab Control Sample	98	103	105	98
LCS 480-382187/1-A	Lab Control Sample	99	104	104	100
MB 480-382014/2-A	Method Blank	100	104	108	99
MB 480-382187/2-A	Method Blank	101	106	102	101

Surrogate Legend

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

Method: 8260C - Volatile Organic Compounds by GC/MS

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-125579-4	TRIP BLANK	107	102	102	100
LCS 480-382381/5	Lab Control Sample	99	106	104	104
MB 480-382381/7	Method Blank	97	105	100	104

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(65-121)
480-125579-1	MW-8 (4-6)	0 X	83	0 X	0 X	0 X	0 X
480-125579-1 MS	MW-8 (4-6)	0 X	0 X	0 X	0 X	0 X	0 X
480-125579-1 MSD	MW-8 (4-6)	0 X	75	47 X	63	0 X	119
480-125579-2	MW-8 (13-14)	111	88	73	55	82	98
480-125579-3	DUP-100817	119	87	72	78	59	95
LCS 480-381332/2-A	Lab Control Sample	95	80	76	77	78	96
MB 480-381332/1-A	Method Blank	86	84	77	73	80	101

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = p-Terphenyl-d14

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-382014/2-A
Matrix: Solid
Analysis Batch: 381944

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382014

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
2-Hexanone	ND		25	2.5	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Acetone	ND		25	4.2	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Benzene	ND		5.0	0.25	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Bromoform	ND		5.0	2.5	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Bromomethane	ND		5.0	0.45	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Chloroethane	ND		5.0	1.1	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Chloroform	ND		5.0	0.31	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Chloromethane	ND		5.0	0.30	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Cyclohexane	ND		5.0	0.70	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Methyl acetate	ND		25	3.0	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Styrene	ND		5.0	0.25	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Toluene	ND		5.0	0.38	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Trichloroethene	ND		5.0	1.1	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		10/16/17 11:39	10/16/17 13:08	1
Xylenes, Total	ND		10	0.84	ug/Kg		10/16/17 11:39	10/16/17 13:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*	*10/16/17 11:39*	*10/16/17 13:08*	*1*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*10/16/17 11:39*	*10/16/17 13:08*	*1*
Dibromofluoromethane (Surr)	*108*		*60 - 140*	*10/16/17 11:39*	*10/16/17 13:08*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*10/16/17 11:39*	*10/16/17 13:08*	*1*

Lab Sample ID: LCS 480-382014/1-A
Matrix: Solid
Analysis Batch: 381944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	55.4		ug/Kg		111	77 - 121
1,1,2,2-Tetrachloroethane	50.0	47.5		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.2		ug/Kg		104	60 - 140
1,1,2-Trichloroethane	50.0	49.2		ug/Kg		98	78 - 122
1,1-Dichloroethane	50.0	51.9		ug/Kg		104	73 - 126
1,1-Dichloroethene	50.0	52.3		ug/Kg		105	59 - 125
1,2,4-Trichlorobenzene	50.0	53.6		ug/Kg		107	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	63 - 124
1,2-Dibromoethane	50.0	52.4		ug/Kg		105	78 - 120
1,2-Dichlorobenzene	50.0	49.5		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	49.5		ug/Kg		99	77 - 122
1,2-Dichloropropane	50.0	52.0		ug/Kg		104	75 - 124
1,3-Dichlorobenzene	50.0	49.6		ug/Kg		99	74 - 120
1,4-Dichlorobenzene	50.0	49.6		ug/Kg		99	73 - 120
2-Butanone (MEK)	250	239		ug/Kg		96	70 - 134
2-Hexanone	250	236		ug/Kg		94	59 - 130
4-Methyl-2-pentanone (MIBK)	250	230		ug/Kg		92	65 - 133
Acetone	250	247		ug/Kg		99	61 - 137
Benzene	50.0	50.9		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	60.9		ug/Kg		122	80 - 122
Bromoform	50.0	71.5	*	ug/Kg		143	68 - 126
Bromomethane	50.0	50.8		ug/Kg		102	37 - 149
Carbon disulfide	50.0	57.6		ug/Kg		115	64 - 131
Carbon tetrachloride	50.0	67.5		ug/Kg		135	75 - 135
Chlorobenzene	50.0	52.0		ug/Kg		104	76 - 124
Chloroethane	50.0	50.6		ug/Kg		101	69 - 135
Chloroform	50.0	51.0		ug/Kg		102	80 - 120
Chloromethane	50.0	42.6		ug/Kg		85	63 - 127
cis-1,2-Dichloroethene	50.0	51.7		ug/Kg		103	81 - 120
cis-1,3-Dichloropropene	50.0	57.7		ug/Kg		115	80 - 120
Cyclohexane	50.0	51.2		ug/Kg		102	65 - 120
Dibromochloromethane	50.0	59.5		ug/Kg		119	76 - 125
Dichlorodifluoromethane	50.0	59.7		ug/Kg		119	57 - 142
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 120
Isopropylbenzene	50.0	49.0		ug/Kg		98	72 - 120
Methyl acetate	100	92.1		ug/Kg		92	55 - 136
Methyl tert-butyl ether	50.0	48.4		ug/Kg		97	63 - 125
Methylcyclohexane	50.0	52.7		ug/Kg		105	60 - 140
Methylene Chloride	50.0	52.8		ug/Kg		106	61 - 127
Styrene	50.0	50.8		ug/Kg		102	80 - 120
Tetrachloroethene	50.0	55.3		ug/Kg		111	74 - 122
Toluene	50.0	49.8		ug/Kg		100	74 - 128
trans-1,2-Dichloroethene	50.0	52.3		ug/Kg		105	78 - 126

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

Lab Sample ID: LCS 480-382014/1-A
Matrix: Solid
Analysis Batch: 381944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382014

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	55.9		ug/Kg		112	73 - 123
Trichloroethene	50.0	52.8		ug/Kg		106	77 - 129
Trichlorofluoromethane	50.0	54.4		ug/Kg		109	65 - 146
Vinyl chloride	50.0	47.4		ug/Kg		95	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*64 - 126*
4-Bromofluorobenzene (Surr)	*103*		*72 - 126*
Dibromofluoromethane (Surr)	*105*		*60 - 140*
Toluene-d8 (Surr)	*98*		*71 - 125*

Lab Sample ID: MB 480-382187/2-A
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
2-Hexanone	ND		25	2.5	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Acetone	ND		25	4.2	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Benzene	ND		5.0	0.25	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Bromoform	ND		5.0	2.5	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Bromomethane	ND		5.0	0.45	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Chloroethane	ND		5.0	1.1	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Chloroform	ND		5.0	0.31	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Chloromethane	ND		5.0	0.30	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Cyclohexane	ND		5.0	0.70	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		10/17/17 09:33	10/17/17 10:58	1

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

Lab Sample ID: MB 480-382187/2-A
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Methyl acetate	ND		25	3.0	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Styrene	ND		5.0	0.25	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Toluene	ND		5.0	0.38	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Trichloroethene	ND		5.0	1.1	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		10/17/17 09:33	10/17/17 10:58	1
Xylenes, Total	ND		10	0.84	ug/Kg		10/17/17 09:33	10/17/17 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*10/17/17 09:33*	*10/17/17 10:58*	*1*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*	*10/17/17 09:33*	*10/17/17 10:58*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*10/17/17 09:33*	*10/17/17 10:58*	*1*
Toluene-d8 (Surr)	*101*		*71 - 125*	*10/17/17 09:33*	*10/17/17 10:58*	*1*

Lab Sample ID: LCS 480-382187/1-A
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	52.8		ug/Kg		106	77 - 121
1,1,2,2-Tetrachloroethane	50.0	48.4		ug/Kg		97	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.1		ug/Kg		106	60 - 140
1,1,2-Trichloroethane	50.0	50.2		ug/Kg		100	78 - 122
1,1-Dichloroethane	50.0	50.4		ug/Kg		101	73 - 126
1,1-Dichloroethene	50.0	52.1		ug/Kg		104	59 - 125
1,2,4-Trichlorobenzene	50.0	54.9		ug/Kg		110	64 - 120
1,2-Dibromo-3-Chloropropane	50.0	45.0		ug/Kg		90	63 - 124
1,2-Dibromoethane	50.0	52.4		ug/Kg		105	78 - 120
1,2-Dichlorobenzene	50.0	50.5		ug/Kg		101	75 - 120
1,2-Dichloroethane	50.0	48.4		ug/Kg		97	77 - 122
1,2-Dichloropropane	50.0	50.7		ug/Kg		101	75 - 124
1,3-Dichlorobenzene	50.0	50.9		ug/Kg		102	74 - 120
1,4-Dichlorobenzene	50.0	51.0		ug/Kg		102	73 - 120
2-Butanone (MEK)	250	234		ug/Kg		94	70 - 134
2-Hexanone	250	230		ug/Kg		92	59 - 130
4-Methyl-2-pentanone (MIBK)	250	224		ug/Kg		89	65 - 133
Acetone	250	242		ug/Kg		97	61 - 137
Benzene	50.0	51.1		ug/Kg		102	79 - 127

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

Lab Sample ID: LCS 480-382187/1-A
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	50.0	57.1		ug/Kg		114	80 - 122
Bromoform	50.0	59.9		ug/Kg		120	68 - 126
Bromomethane	50.0	52.5		ug/Kg		105	37 - 149
Carbon disulfide	50.0	54.9		ug/Kg		110	64 - 131
Carbon tetrachloride	50.0	57.6		ug/Kg		115	75 - 135
Chlorobenzene	50.0	52.7		ug/Kg		105	76 - 124
Chloroethane	50.0	50.8		ug/Kg		102	69 - 135
Chloroform	50.0	50.6		ug/Kg		101	80 - 120
Chloromethane	50.0	40.7		ug/Kg		81	63 - 127
cis-1,2-Dichloroethene	50.0	51.1		ug/Kg		102	81 - 120
cis-1,3-Dichloropropene	50.0	54.0		ug/Kg		108	80 - 120
Cyclohexane	50.0	49.4		ug/Kg		99	65 - 120
Dibromochloromethane	50.0	52.8		ug/Kg		106	76 - 125
Dichlorodifluoromethane	50.0	60.0		ug/Kg		120	57 - 142
Ethylbenzene	50.0	52.0		ug/Kg		104	80 - 120
Isopropylbenzene	50.0	50.7		ug/Kg		101	72 - 120
Methyl acetate	100	88.7		ug/Kg		89	55 - 136
Methyl tert-butyl ether	50.0	48.3		ug/Kg		97	63 - 125
Methylcyclohexane	50.0	53.2		ug/Kg		106	60 - 140
Methylene Chloride	50.0	52.2		ug/Kg		104	61 - 127
Styrene	50.0	52.1		ug/Kg		104	80 - 120
Tetrachloroethene	50.0	57.1		ug/Kg		114	74 - 122
Toluene	50.0	51.3		ug/Kg		103	74 - 128
trans-1,2-Dichloroethene	50.0	53.0		ug/Kg		106	78 - 126
trans-1,3-Dichloropropene	50.0	51.6		ug/Kg		103	73 - 123
Trichloroethene	50.0	53.4		ug/Kg		107	77 - 129
Trichlorofluoromethane	50.0	57.9		ug/Kg		116	65 - 146
Vinyl chloride	50.0	47.9		ug/Kg		96	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*
Dibromofluoromethane (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*100*		*71 - 125*

Lab Sample ID: 480-125579-1 MS
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 382187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		48.0	41.6		ug/Kg	☼	87	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1	48.0	39.9		ug/Kg	☼	83	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		48.0	42.5		ug/Kg	☼	89	60 - 140
1,1,2-Trichloroethane	ND	F1	48.0	40.5		ug/Kg	☼	84	78 - 122
1,1-Dichloroethane	ND		48.0	43.8		ug/Kg	☼	91	73 - 126
1,1-Dichloroethene	ND		48.0	40.0		ug/Kg	☼	83	59 - 125
1,2,4-Trichlorobenzene	ND	F1	48.0	18.8	F1	ug/Kg	☼	39	64 - 120

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

Lab Sample ID: 480-125579-1 MS
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 382187

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F1	48.0	25.8	F1	ug/Kg	☼	54	63 - 124
1,2-Dibromoethane	ND	F1	48.0	35.6	F1	ug/Kg	☼	74	78 - 120
1,2-Dichlorobenzene	ND	F1	48.0	33.9	F1	ug/Kg	☼	71	75 - 120
1,2-Dichloroethane	ND	F1	48.0	37.5		ug/Kg	☼	78	77 - 122
1,2-Dichloropropane	ND		48.0	42.3		ug/Kg	☼	88	75 - 124
1,3-Dichlorobenzene	ND	F1	48.0	34.2	F1	ug/Kg	☼	71	74 - 120
1,4-Dichlorobenzene	ND	F1	48.0	32.3	F1	ug/Kg	☼	67	73 - 120
2-Butanone (MEK)	ND	F1	240	146	F1	ug/Kg	☼	61	70 - 134
2-Hexanone	ND	F1	240	153		ug/Kg	☼	64	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	F1	240	161		ug/Kg	☼	67	65 - 133
Acetone	13	J F1	240	156	F1	ug/Kg	☼	59	61 - 137
Benzene	1.5	J	48.0	45.2		ug/Kg	☼	91	79 - 127
Bromodichloromethane	ND		48.0	43.3		ug/Kg	☼	90	80 - 122
Bromoform	ND	F1 *	48.0	37.4		ug/Kg	☼	78	68 - 126
Bromomethane	ND		48.0	46.1		ug/Kg	☼	96	37 - 149
Carbon disulfide	ND	F1	48.0	34.7		ug/Kg	☼	72	64 - 131
Carbon tetrachloride	ND		48.0	39.9		ug/Kg	☼	83	75 - 135
Chlorobenzene	ND	F1	48.0	40.1		ug/Kg	☼	83	76 - 124
Chloroethane	ND		48.0	44.2		ug/Kg	☼	92	69 - 135
Chloroform	ND		48.0	43.5		ug/Kg	☼	91	80 - 120
Chloromethane	ND		48.0	33.4		ug/Kg	☼	70	63 - 127
cis-1,2-Dichloroethene	ND	F1	48.0	39.7		ug/Kg	☼	83	80 - 120
cis-1,3-Dichloropropene	ND	F1	48.0	36.8	F1	ug/Kg	☼	77	80 - 120
Cyclohexane	ND		48.0	36.7		ug/Kg	☼	76	65 - 120
Dibromochloromethane	ND	F1	48.0	38.8		ug/Kg	☼	81	76 - 125
Dichlorodifluoromethane	ND		48.0	49.0		ug/Kg	☼	102	57 - 142
Ethylbenzene	ND	F1	48.0	41.4		ug/Kg	☼	86	80 - 120
Isopropylbenzene	ND		48.0	45.9		ug/Kg	☼	96	72 - 120
Methyl acetate	ND		96.0	62.2		ug/Kg	☼	65	55 - 136
Methyl tert-butyl ether	ND		48.0	40.8		ug/Kg	☼	85	63 - 125
Methylcyclohexane	ND		48.0	34.2		ug/Kg	☼	71	60 - 140
Methylene Chloride	ND		48.0	43.0		ug/Kg	☼	90	61 - 127
Styrene	0.28	J F1	48.0	38.3	F1	ug/Kg	☼	79	80 - 120
Tetrachloroethene	ND		48.0	43.9		ug/Kg	☼	91	74 - 122
Toluene	1.8	J	48.0	46.7		ug/Kg	☼	94	74 - 128
trans-1,2-Dichloroethene	ND	F1	48.0	37.9		ug/Kg	☼	79	78 - 126
Trichloroethene	ND	F1	48.0	38.9		ug/Kg	☼	81	77 - 129
Trichlorofluoromethane	ND		48.0	48.3		ug/Kg	☼	101	65 - 146
Vinyl chloride	ND		48.0	35.4		ug/Kg	☼	74	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*64 - 126*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*104*		*71 - 125*

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

Lab Sample ID: 480-125579-1 MSD
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 382187

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		54.9	47.0		ug/Kg	☼	86	77 - 121	12	30
1,1,2,2-Tetrachloroethane	ND	F1	54.9	42.9	F1	ug/Kg	☼	78	80 - 120	7	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		54.9	45.1		ug/Kg	☼	82	60 - 140	6	30
1,1,2-Trichloroethane	ND	F1	54.9	41.1	F1	ug/Kg	☼	75	78 - 122	2	30
1,1-Dichloroethane	ND		54.9	47.0		ug/Kg	☼	86	73 - 126	7	30
1,1-Dichloroethene	ND		54.9	41.3		ug/Kg	☼	75	59 - 125	3	30
1,2,4-Trichlorobenzene	ND	F1	54.9	19.1	F1	ug/Kg	☼	35	64 - 120	1	30
1,2-Dibromo-3-Chloropropane	ND	F1	54.9	30.1	F1	ug/Kg	☼	55	63 - 124	15	30
1,2-Dibromoethane	ND	F1	54.9	32.7	F1	ug/Kg	☼	60	78 - 120	9	30
1,2-Dichlorobenzene	ND	F1	54.9	33.0	F1	ug/Kg	☼	60	75 - 120	3	30
1,2-Dichloroethane	ND	F1	54.9	36.2	F1	ug/Kg	☼	66	77 - 122	3	30
1,2-Dichloropropane	ND		54.9	45.3		ug/Kg	☼	83	75 - 124	7	30
1,3-Dichlorobenzene	ND	F1	54.9	31.9	F1	ug/Kg	☼	58	74 - 120	7	30
1,4-Dichlorobenzene	ND	F1	54.9	29.5	F1	ug/Kg	☼	54	73 - 120	9	30
2-Butanone (MEK)	ND	F1	274	155	F1	ug/Kg	☼	56	70 - 134	6	30
2-Hexanone	ND	F1	274	154	F1	ug/Kg	☼	56	59 - 130	1	30
4-Methyl-2-pentanone (MIBK)	ND	F1	274	173	F1	ug/Kg	☼	63	65 - 133	7	30
Acetone	13	J F1	274	181		ug/Kg	☼	61	61 - 137	15	30
Benzene	1.5	J	54.9	46.4		ug/Kg	☼	82	79 - 127	2	30
Bromodichloromethane	ND		54.9	44.0		ug/Kg	☼	80	80 - 122	2	30
Bromoform	ND	F1 *	54.9	36.4	F1	ug/Kg	☼	66	68 - 126	3	30
Bromomethane	ND		54.9	47.7		ug/Kg	☼	87	37 - 149	3	30
Carbon disulfide	ND	F1	54.9	28.1	F1	ug/Kg	☼	51	64 - 131	21	30
Carbon tetrachloride	ND		54.9	45.6		ug/Kg	☼	83	75 - 135	13	30
Chlorobenzene	ND	F1	54.9	37.2	F1	ug/Kg	☼	68	76 - 124	7	30
Chloroethane	ND		54.9	44.9		ug/Kg	☼	82	69 - 135	2	30
Chloroform	ND		54.9	45.4		ug/Kg	☼	83	80 - 120	4	30
Chloromethane	ND		54.9	34.6		ug/Kg	☼	63	63 - 127	4	30
cis-1,2-Dichloroethene	ND	F1	54.9	35.4	F1	ug/Kg	☼	65	80 - 120	12	30
cis-1,3-Dichloropropene	ND	F1	54.9	31.9	F1	ug/Kg	☼	58	80 - 120	14	30
Cyclohexane	ND		54.9	37.7		ug/Kg	☼	69	65 - 120	3	30
Dibromochloromethane	ND	F1	54.9	37.2	F1	ug/Kg	☼	68	76 - 125	4	30
Dichlorodifluoromethane	ND		54.9	53.4		ug/Kg	☼	97	57 - 142	8	30
Ethylbenzene	ND	F1	54.9	41.0	F1	ug/Kg	☼	75	80 - 120	1	30
Isopropylbenzene	ND		54.9	48.6		ug/Kg	☼	89	72 - 120	6	30
Methyl acetate	ND		110	66.3		ug/Kg	☼	60	55 - 136	6	30
Methyl tert-butyl ether	ND		54.9	46.2		ug/Kg	☼	84	63 - 125	12	30
Methylcyclohexane	ND		54.9	35.0		ug/Kg	☼	64	60 - 140	2	30
Methylene Chloride	ND		54.9	39.6		ug/Kg	☼	72	61 - 127	8	30
Styrene	0.28	J F1	54.9	35.3	F1	ug/Kg	☼	64	80 - 120	8	30
Tetrachloroethene	ND		54.9	44.0		ug/Kg	☼	80	74 - 122	0	30
Toluene	1.8	J	54.9	45.5		ug/Kg	☼	80	74 - 128	2	30
trans-1,2-Dichloroethene	ND	F1	54.9	31.4	F1	ug/Kg	☼	57	78 - 126	19	30
Trichloroethene	ND	F1	54.9	37.3	F1	ug/Kg	☼	68	77 - 129	4	30
Trichlorofluoromethane	ND		54.9	52.1		ug/Kg	☼	95	65 - 146	8	30
Vinyl chloride	ND		54.9	35.2		ug/Kg	☼	64	61 - 133	0	30

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

Lab Sample ID: 480-125579-1 MSD
Matrix: Solid
Analysis Batch: 382134

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 382187

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*64 - 126*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*
Dibromofluoromethane (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*106*		*71 - 125*

Lab Sample ID: MB 480-382381/7
Matrix: Water
Analysis Batch: 382381

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/18/17 11:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/18/17 11:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/18/17 11:20	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/18/17 11:20	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/18/17 11:20	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/18/17 11:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/18/17 11:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/18/17 11:20	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/18/17 11:20	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/18/17 11:20	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/18/17 11:20	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/18/17 11:20	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/18/17 11:20	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/18/17 11:20	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/18/17 11:20	1
2-Hexanone	ND		5.0	1.2	ug/L			10/18/17 11:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/18/17 11:20	1
Acetone	ND		10	3.0	ug/L			10/18/17 11:20	1
Benzene	ND		1.0	0.41	ug/L			10/18/17 11:20	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/18/17 11:20	1
Bromoform	ND		1.0	0.26	ug/L			10/18/17 11:20	1
Bromomethane	ND		1.0	0.69	ug/L			10/18/17 11:20	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/18/17 11:20	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/18/17 11:20	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/18/17 11:20	1
Chloroethane	ND		1.0	0.32	ug/L			10/18/17 11:20	1
Chloroform	ND		1.0	0.34	ug/L			10/18/17 11:20	1
Chloromethane	ND		1.0	0.35	ug/L			10/18/17 11:20	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/18/17 11:20	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/18/17 11:20	1
Cyclohexane	ND		1.0	0.18	ug/L			10/18/17 11:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/18/17 11:20	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/18/17 11:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/18/17 11:20	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/18/17 11:20	1
Methyl acetate	ND		2.5	1.3	ug/L			10/18/17 11:20	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/18/17 11:20	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/18/17 11:20	1

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

Lab Sample ID: MB 480-382381/7
Matrix: Water
Analysis Batch: 382381

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.44	ug/L			10/18/17 11:20	1
Styrene	ND		1.0	0.73	ug/L			10/18/17 11:20	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/18/17 11:20	1
Toluene	ND		1.0	0.51	ug/L			10/18/17 11:20	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/18/17 11:20	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/18/17 11:20	1
Trichloroethene	ND		1.0	0.46	ug/L			10/18/17 11:20	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/18/17 11:20	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/18/17 11:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/18/17 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*10/18/17 11:20*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*10/18/17 11:20*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*10/18/17 11:20*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*10/18/17 11:20*	*1*

Lab Sample ID: LCS 480-382381/5
Matrix: Water
Analysis Batch: 382381

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.5		ug/L		98	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.3		ug/L		89	61 - 148
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	76 - 122
1,1-Dichloroethane	25.0	23.8		ug/L		95	77 - 120
1,1-Dichloroethene	25.0	20.7		ug/L		83	66 - 127
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		96	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.9		ug/L		92	56 - 134
1,2-Dibromoethane	25.0	24.5		ug/L		98	77 - 120
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	23.1		ug/L		93	75 - 120
1,2-Dichloropropane	25.0	24.0		ug/L		96	76 - 120
1,3-Dichlorobenzene	25.0	24.8		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.9		ug/L		99	80 - 120
2-Butanone (MEK)	125	135		ug/L		108	57 - 140
2-Hexanone	125	137		ug/L		110	65 - 127
4-Methyl-2-pentanone (MIBK)	125	132		ug/L		106	71 - 125
Acetone	125	152		ug/L		121	56 - 142
Benzene	25.0	23.5		ug/L		94	71 - 124
Bromodichloromethane	25.0	25.2		ug/L		101	80 - 122
Bromoform	25.0	25.9		ug/L		104	61 - 132
Bromomethane	25.0	24.7		ug/L		99	55 - 144
Carbon disulfide	25.0	22.6		ug/L		90	59 - 134
Carbon tetrachloride	25.0	29.7		ug/L		119	72 - 134
Chlorobenzene	25.0	24.6		ug/L		98	80 - 120

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

Lab Sample ID: LCS 480-382381/5
Matrix: Water
Analysis Batch: 382381

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	24.0		ug/L		96	69 - 136
Chloroform	25.0	23.4		ug/L		93	73 - 127
Chloromethane	25.0	25.4		ug/L		102	68 - 124
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	74 - 124
cis-1,3-Dichloropropene	25.0	23.9		ug/L		95	74 - 124
Cyclohexane	25.0	23.1		ug/L		93	59 - 135
Dibromochloromethane	25.0	25.9		ug/L		103	75 - 125
Dichlorodifluoromethane	25.0	25.5		ug/L		102	59 - 135
Ethylbenzene	25.0	23.9		ug/L		96	77 - 123
Isopropylbenzene	25.0	24.9		ug/L		99	77 - 122
Methyl acetate	50.0	49.5		ug/L		99	74 - 133
Methyl tert-butyl ether	25.0	24.0		ug/L		96	77 - 120
Methylcyclohexane	25.0	21.7		ug/L		87	68 - 134
Methylene Chloride	25.0	19.8		ug/L		79	75 - 124
Styrene	25.0	25.1		ug/L		101	80 - 120
Tetrachloroethene	25.0	24.3		ug/L		97	74 - 122
Toluene	25.0	24.8		ug/L		99	80 - 122
trans-1,2-Dichloroethene	25.0	22.2		ug/L		89	73 - 127
trans-1,3-Dichloropropene	25.0	25.2		ug/L		101	80 - 120
Trichloroethene	25.0	23.1		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	25.3		ug/L		101	62 - 150
Vinyl chloride	25.0	25.7		ug/L		103	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*
Toluene-d8 (Surr)	*104*		*80 - 120*

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

Lab Sample ID: MB 480-381332/1-A
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2-Chloronaphthalene	ND		170	28	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2-Chlorophenol	ND		170	31	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2-Methylnaphthalene	ND		170	34	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2-Methylphenol	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
2-Nitroaniline	ND		330	25	ug/Kg		10/11/17 14:06	10/16/17 20:13	1

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

Lab Sample ID: MB 480-381332/1-A
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		170	47	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
3-Nitroaniline	ND		330	46	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4-Chloroaniline	ND		170	41	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4-Methylphenol	ND		330	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4-Nitroaniline	ND		330	88	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
4-Nitrophenol	ND		330	120	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Acenaphthene	ND		170	25	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Acenaphthylene	ND		170	22	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Acetophenone	ND		170	23	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Anthracene	ND		170	41	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Atrazine	ND		170	58	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Benzaldehyde	ND		170	130	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Benzo[a]anthracene	ND		170	17	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Benzo[a]pyrene	ND		170	25	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Biphenyl	ND		170	25	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Caprolactam	ND		170	50	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Carbazole	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Chrysene	ND		170	38	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Dibenzofuran	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Diethyl phthalate	ND		170	22	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Dimethyl phthalate	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Fluoranthene	ND		170	18	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Fluorene	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Hexachlorobenzene	ND		170	23	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Hexachlorobutadiene	ND		170	25	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Hexachloroethane	ND		170	22	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Isophorone	ND		170	36	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Naphthalene	ND		170	22	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Nitrobenzene	ND		170	19	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		10/11/17 14:06	10/16/17 20:13	1

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

Lab Sample ID: MB 480-381332/1-A
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381332

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Pentachlorophenol	ND		330	170	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Phenanthrene	ND		170	25	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Phenol	ND		170	26	ug/Kg		10/11/17 14:06	10/16/17 20:13	1
Pyrene	ND		170	20	ug/Kg		10/11/17 14:06	10/16/17 20:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*86*		*54 - 120*	*10/11/17 14:06*	*10/16/17 20:13*	*1*
2-Fluorobiphenyl	*84*		*60 - 120*	*10/11/17 14:06*	*10/16/17 20:13*	*1*
2-Fluorophenol	*77*		*52 - 120*	*10/11/17 14:06*	*10/16/17 20:13*	*1*
Nitrobenzene-d5	*73*		*53 - 120*	*10/11/17 14:06*	*10/16/17 20:13*	*1*
Phenol-d5	*80*		*54 - 120*	*10/11/17 14:06*	*10/16/17 20:13*	*1*
p-Terphenyl-d14	*101*		*65 - 121*	*10/11/17 14:06*	*10/16/17 20:13*	*1*

Lab Sample ID: LCS 480-381332/2-A
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	1620	1350		ug/Kg		83	59 - 126
2,4,6-Trichlorophenol	1620	1290		ug/Kg		80	59 - 123
2,4-Dichlorophenol	1620	1310		ug/Kg		80	61 - 120
2,4-Dimethylphenol	1620	1300		ug/Kg		80	59 - 120
2,4-Dinitrophenol	3250	1870		ug/Kg		58	41 - 146
2,4-Dinitrotoluene	1620	1380		ug/Kg		85	63 - 120
2,6-Dinitrotoluene	1620	1350		ug/Kg		83	66 - 120
2-Chloronaphthalene	1620	1250		ug/Kg		77	57 - 120
2-Chlorophenol	1620	1180		ug/Kg		73	53 - 120
2-Methylnaphthalene	1620	1280		ug/Kg		79	59 - 120
2-Methylphenol	1620	1270		ug/Kg		78	54 - 120
2-Nitroaniline	1620	1260		ug/Kg		78	61 - 120
2-Nitrophenol	1620	1220		ug/Kg		75	56 - 120
3,3'-Dichlorobenzidine	3250	2940		ug/Kg		91	54 - 120
3-Nitroaniline	1620	1300		ug/Kg		80	48 - 120
4,6-Dinitro-2-methylphenol	3250	2620		ug/Kg		81	49 - 122
4-Bromophenyl phenyl ether	1620	1490		ug/Kg		92	58 - 120
4-Chloro-3-methylphenol	1620	1340		ug/Kg		83	61 - 120
4-Chloroaniline	1620	1180		ug/Kg		73	38 - 120
4-Chlorophenyl phenyl ether	1620	1360		ug/Kg		84	63 - 124
4-Methylphenol	1620	1330		ug/Kg		82	55 - 120
4-Nitroaniline	1620	1310		ug/Kg		81	56 - 120
4-Nitrophenol	3250	2720		ug/Kg		84	43 - 147
Acenaphthene	1620	1330		ug/Kg		82	62 - 120
Acenaphthylene	1620	1310		ug/Kg		81	58 - 121
Acetophenone	1620	1230		ug/Kg		76	54 - 120
Anthracene	1620	1480		ug/Kg		91	62 - 120
Atrazine	3250	3030		ug/Kg		93	60 - 127
Benzaldehyde	3250	2130		ug/Kg		66	10 - 150

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

Lab Sample ID: LCS 480-381332/2-A
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381332

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	1620	1510		ug/Kg		93	65 - 120
Benzo[a]pyrene	1620	1860		ug/Kg		115	64 - 120
Benzo[b]fluoranthene	1620	1940		ug/Kg		119	64 - 120
Benzo[g,h,i]perylene	1620	1970		ug/Kg		122	45 - 145
Benzo[k]fluoranthene	1620	1770		ug/Kg		109	65 - 120
Biphenyl	1620	1300		ug/Kg		80	59 - 120
bis (2-chloroisopropyl) ether	1620	1140		ug/Kg		70	44 - 120
Bis(2-chloroethoxy)methane	1620	1180		ug/Kg		73	55 - 120
Bis(2-chloroethyl)ether	1620	1150		ug/Kg		71	45 - 120
Bis(2-ethylhexyl) phthalate	1620	1490		ug/Kg		92	61 - 133
Butyl benzyl phthalate	1620	1480		ug/Kg		91	61 - 129
Caprolactam	3250	2790		ug/Kg		86	47 - 120
Carbazole	1620	1510		ug/Kg		93	65 - 120
Chrysene	1620	1490		ug/Kg		92	64 - 120
Dibenz(a,h)anthracene	1620	1950		ug/Kg		120	54 - 132
Dibenzofuran	1620	1360		ug/Kg		84	63 - 120
Diethyl phthalate	1620	1440		ug/Kg		89	66 - 120
Dimethyl phthalate	1620	1420		ug/Kg		88	65 - 124
Di-n-butyl phthalate	1620	1510		ug/Kg		93	58 - 130
Di-n-octyl phthalate	1620	1540		ug/Kg		95	57 - 133
Fluoranthene	1620	1530		ug/Kg		94	62 - 120
Fluorene	1620	1350		ug/Kg		83	63 - 120
Hexachlorobenzene	1620	1500		ug/Kg		92	60 - 120
Hexachlorobutadiene	1620	1220		ug/Kg		75	45 - 120
Hexachlorocyclopentadiene	1620	1160		ug/Kg		71	47 - 120
Hexachloroethane	1620	1160		ug/Kg		72	41 - 120
Indeno[1,2,3-cd]pyrene	1620	1940		ug/Kg		120	56 - 134
Isophorone	1620	1300		ug/Kg		80	56 - 120
Naphthalene	1620	1230		ug/Kg		76	55 - 120
Nitrobenzene	1620	1240		ug/Kg		77	54 - 120
N-Nitrosodi-n-propylamine	1620	1220		ug/Kg		75	52 - 120
Pentachlorophenol	3250	2440		ug/Kg		75	51 - 120
Phenanthrene	1620	1480		ug/Kg		91	60 - 120
Phenol	1620	1290		ug/Kg		80	53 - 120
Pyrene	1620	1480		ug/Kg		91	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*95*		*54 - 120*
2-Fluorobiphenyl	*80*		*60 - 120*
2-Fluorophenol	*76*		*52 - 120*
Nitrobenzene-d5	*77*		*53 - 120*
Phenol-d5	*78*		*54 - 120*
p-Terphenyl-d14	*96*		*65 - 121*

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

Lab Sample ID: 480-125579-1 MS
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381332

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		1930	ND		ug/Kg	☼	NC	46 - 120
2,4,6-Trichlorophenol	ND		1930	ND		ug/Kg	☼	NC	41 - 123
2,4-Dichlorophenol	ND		1930	ND		ug/Kg	☼	NC	45 - 120
2,4-Dimethylphenol	ND		1930	ND		ug/Kg	☼	NC	52 - 120
2,4-Dinitrophenol	ND		3850	ND		ug/Kg	☼	NC	41 - 146
2,4-Dinitrotoluene	ND		1930	ND		ug/Kg	☼	NC	63 - 125
2,6-Dinitrotoluene	ND		1930	ND		ug/Kg	☼	NC	66 - 120
2-Chloronaphthalene	ND		1930	ND		ug/Kg	☼	NC	57 - 120
2-Chlorophenol	ND		1930	ND		ug/Kg	☼	NC	43 - 120
2-Methylnaphthalene	ND		1930	4060	J	ug/Kg	☼	NC	55 - 120
2-Methylphenol	ND		1930	ND		ug/Kg	☼	NC	48 - 120
2-Nitroaniline	ND		1930	ND		ug/Kg	☼	NC	61 - 120
2-Nitrophenol	ND		1930	ND		ug/Kg	☼	NC	37 - 120
3,3'-Dichlorobenzidine	ND		3850	ND		ug/Kg	☼	NC	37 - 126
3-Nitroaniline	ND		1930	ND		ug/Kg	☼	NC	48 - 120
4,6-Dinitro-2-methylphenol	ND		3850	ND		ug/Kg	☼	NC	23 - 149
4-Bromophenyl phenyl ether	ND		1930	ND		ug/Kg	☼	NC	58 - 120
4-Chloro-3-methylphenol	ND		1930	ND		ug/Kg	☼	NC	49 - 125
4-Chloroaniline	ND		1930	ND		ug/Kg	☼	NC	38 - 120
4-Chlorophenyl phenyl ether	ND		1930	ND		ug/Kg	☼	NC	63 - 124
4-Methylphenol	ND		1930	ND		ug/Kg	☼	NC	50 - 120
4-Nitroaniline	ND		1930	ND		ug/Kg	☼	NC	47 - 120
4-Nitrophenol	ND		3850	ND		ug/Kg	☼	NC	31 - 147
Acenaphthene	3800	J F1	1930	5760	J	ug/Kg	☼	101	60 - 120
Acenaphthylene	17000	J F2	1930	16700	J 4	ug/Kg	☼	3	58 - 121
Acetophenone	ND		1930	ND		ug/Kg	☼	NC	47 - 120
Anthracene	40000	F2	1930	39700	4	ug/Kg	☼	-38	62 - 120
Atrazine	ND		3850	ND		ug/Kg	☼	NC	60 - 150
Benzaldehyde	ND		3850	ND		ug/Kg	☼	NC	10 - 150
Benzo[a]anthracene	87000	F2	1930	78500	4	ug/Kg	☼	-442	65 - 120
Benzo[a]pyrene	69000	F2	1930	73300	4	ug/Kg	☼	224	64 - 120
Benzo[b]fluoranthene	83000	F2	1930	79300	4	ug/Kg	☼	-206	64 - 120
Benzo[g,h,i]perylene	38000	F2	1930	41300	4	ug/Kg	☼	179	45 - 145
Benzo[k]fluoranthene	34000		1930	47600	4	ug/Kg	☼	694	65 - 120
Biphenyl	ND		1930	ND		ug/Kg	☼	NC	58 - 120
bis (2-chloroisopropyl) ether	ND		1930	ND		ug/Kg	☼	NC	31 - 120
Bis(2-chloroethoxy)methane	ND		1930	ND		ug/Kg	☼	NC	52 - 120
Bis(2-chloroethyl)ether	ND		1930	ND		ug/Kg	☼	NC	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1930	ND		ug/Kg	☼	NC	61 - 133
Butyl benzyl phthalate	ND		1930	ND		ug/Kg	☼	NC	61 - 120
Caprolactam	ND		3850	ND		ug/Kg	☼	NC	37 - 133
Carbazole	ND	F2	1930	3420	J	ug/Kg	☼	NC	59 - 120
Chrysene	70000	F2	1930	64700	4	ug/Kg	☼	-291	64 - 120
Dibenz(a,h)anthracene	ND		1930	ND		ug/Kg	☼	NC	54 - 132
Dibenzofuran	9100	J F2	1930	13100	J 4	ug/Kg	☼	209	62 - 120
Diethyl phthalate	ND		1930	ND		ug/Kg	☼	NC	66 - 120
Dimethyl phthalate	ND		1930	ND		ug/Kg	☼	NC	65 - 124
Di-n-butyl phthalate	ND		1930	ND		ug/Kg	☼	NC	58 - 130

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

Lab Sample ID: 480-125579-1 MS
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381332

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	ND		1930	ND		ug/Kg	☼	NC	57 - 133
Fluoranthene	170000	F2	1930	152000	4	ug/Kg	☼	-705	62 - 120
Fluorene	18000	J F2	1930	22000	4	ug/Kg	☼	232	63 - 120
Hexachlorobenzene	ND		1930	ND		ug/Kg	☼	NC	60 - 120
Hexachlorobutadiene	ND		1930	ND		ug/Kg	☼	NC	45 - 120
Hexachlorocyclopentadiene	ND		1930	ND		ug/Kg	☼	NC	31 - 120
Hexachloroethane	ND		1930	ND		ug/Kg	☼	NC	21 - 120
Indeno[1,2,3-cd]pyrene	36000	F2	1930	40800	4	ug/Kg	☼	236	56 - 134
Isophorone	ND		1930	ND		ug/Kg	☼	NC	56 - 120
Naphthalene	ND		1930	3040	J	ug/Kg	☼	NC	46 - 120
Nitrobenzene	ND		1930	ND		ug/Kg	☼	NC	49 - 120
N-Nitrosodi-n-propylamine	ND		1930	ND		ug/Kg	☼	NC	46 - 120
Pentachlorophenol	ND		3850	ND		ug/Kg	☼	NC	25 - 136
Phenanthrene	110000	F2	1930	117000	4	ug/Kg	☼	420	60 - 122
Phenol	ND		1930	ND		ug/Kg	☼	NC	50 - 120
Pyrene	130000	F2	1930	124000	4	ug/Kg	☼	-527	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*0*	*X*	*54 - 120*
2-Fluorobiphenyl	*0*	*X*	*60 - 120*
2-Fluorophenol	*0*	*X*	*52 - 120*
Nitrobenzene-d5	*0*	*X*	*53 - 120*
Phenol-d5	*0*	*X*	*54 - 120*
p-Terphenyl-d14	*0*	*X*	*65 - 121*

Lab Sample ID: 480-125579-1 MSD
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381332

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		1940	ND		ug/Kg	☼	NC	46 - 120	NC	18
2,4,6-Trichlorophenol	ND		1940	ND		ug/Kg	☼	NC	41 - 123	NC	19
2,4-Dichlorophenol	ND		1940	ND		ug/Kg	☼	NC	45 - 120	NC	19
2,4-Dimethylphenol	ND		1940	ND		ug/Kg	☼	NC	52 - 120	NC	42
2,4-Dinitrophenol	ND		3870	ND		ug/Kg	☼	NC	41 - 146	NC	22
2,4-Dinitrotoluene	ND		1940	ND		ug/Kg	☼	NC	63 - 125	NC	20
2,6-Dinitrotoluene	ND		1940	ND		ug/Kg	☼	NC	66 - 120	NC	15
2-Chloronaphthalene	ND		1940	ND		ug/Kg	☼	NC	57 - 120	NC	21
2-Chlorophenol	ND		1940	ND		ug/Kg	☼	NC	43 - 120	NC	25
2-Methylnaphthalene	ND		1940	ND		ug/Kg	☼	NC	55 - 120	NC	21
2-Methylphenol	ND		1940	ND		ug/Kg	☼	NC	48 - 120	NC	27
2-Nitroaniline	ND		1940	ND		ug/Kg	☼	NC	61 - 120	NC	15
2-Nitrophenol	ND		1940	ND		ug/Kg	☼	NC	37 - 120	NC	18
3,3'-Dichlorobenzidine	ND		3870	ND		ug/Kg	☼	NC	37 - 126	NC	25
3-Nitroaniline	ND		1940	ND		ug/Kg	☼	NC	48 - 120	NC	19
4,6-Dinitro-2-methylphenol	ND		3870	ND		ug/Kg	☼	NC	23 - 149	NC	15
4-Bromophenyl phenyl ether	ND		1940	ND		ug/Kg	☼	NC	58 - 120	NC	15
4-Chloro-3-methylphenol	ND		1940	ND		ug/Kg	☼	NC	49 - 125	NC	27

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

Lab Sample ID: 480-125579-1 MSD
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381332

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloroaniline	ND		1940	ND		ug/Kg	☼	NC	38 - 120	NC	22
4-Chlorophenyl phenyl ether	ND		1940	ND		ug/Kg	☼	NC	63 - 124	NC	16
4-Methylphenol	ND		1940	ND		ug/Kg	☼	NC	50 - 120	NC	24
4-Nitroaniline	ND		1940	ND		ug/Kg	☼	NC	47 - 120	NC	24
4-Nitrophenol	ND		3870	ND		ug/Kg	☼	NC	31 - 147	NC	25
Acenaphthene	3800	J F1	1940	7940	J F1	ug/Kg	☼	213	60 - 120	32	35
Acenaphthylene	17000	J F2	1940	26500	4 F2	ug/Kg	☼	505	58 - 121	45	18
Acetophenone	ND		1940	ND		ug/Kg	☼	NC	47 - 120	NC	20
Anthracene	40000	F2	1940	60700	4 F2	ug/Kg	☼	1042	62 - 120	42	15
Atrazine	ND		3870	ND		ug/Kg	☼	NC	60 - 150	NC	20
Benzaldehyde	ND		3870	ND		ug/Kg	☼	NC	10 - 150	NC	20
Benzo[a]anthracene	87000	F2	1940	120000	4 F2	ug/Kg	☼	1687	65 - 120	42	15
Benzo[a]pyrene	69000	F2	1940	113000	4 F2	ug/Kg	☼	2250	64 - 120	42	15
Benzo[b]fluoranthene	83000	F2	1940	137000	4 F2	ug/Kg	☼	2768	64 - 120	53	15
Benzo[g,h,i]perylene	38000	F2	1940	62700	4 F2	ug/Kg	☼	1283	45 - 145	41	15
Benzo[k]fluoranthene	34000		1940	55000	4	ug/Kg	☼	1071	65 - 120	14	22
Biphenyl	ND		1940	ND		ug/Kg	☼	NC	58 - 120	NC	20
bis (2-chloroisopropyl) ether	ND		1940	ND		ug/Kg	☼	NC	31 - 120	NC	24
Bis(2-chloroethoxy)methane	ND		1940	ND		ug/Kg	☼	NC	52 - 120	NC	17
Bis(2-chloroethyl)ether	ND		1940	ND		ug/Kg	☼	NC	45 - 120	NC	21
Bis(2-ethylhexyl) phthalate	ND		1940	ND		ug/Kg	☼	NC	61 - 133	NC	15
Butyl benzyl phthalate	ND		1940	ND		ug/Kg	☼	NC	61 - 120	NC	16
Caprolactam	ND		3870	ND		ug/Kg	☼	NC	37 - 133	NC	20
Carbazole	ND	F2	1940	4700	J F2	ug/Kg	☼	NC	59 - 120	31	20
Chrysene	70000	F2	1940	98100	4 F2	ug/Kg	☼	1437	64 - 120	41	15
Dibenz(a,h)anthracene	ND		1940	ND		ug/Kg	☼	NC	54 - 132	NC	15
Dibenzofuran	9100	J F2	1940	15500	J 4 F2	ug/Kg	☼	332	62 - 120	17	15
Diethyl phthalate	ND		1940	ND		ug/Kg	☼	NC	66 - 120	NC	15
Dimethyl phthalate	ND		1940	ND		ug/Kg	☼	NC	65 - 124	NC	15
Di-n-butyl phthalate	ND		1940	ND		ug/Kg	☼	NC	58 - 130	NC	15
Di-n-octyl phthalate	ND		1940	ND		ug/Kg	☼	NC	57 - 133	NC	16
Fluoranthene	170000	F2	1940	233000	4 F2	ug/Kg	☼	3468	62 - 120	42	15
Fluorene	18000	J F2	1940	29500	4 F2	ug/Kg	☼	622	63 - 120	29	15
Hexachlorobenzene	ND		1940	ND		ug/Kg	☼	NC	60 - 120	NC	15
Hexachlorobutadiene	ND		1940	ND		ug/Kg	☼	NC	45 - 120	NC	44
Hexachlorocyclopentadiene	ND		1940	ND		ug/Kg	☼	NC	31 - 120	NC	49
Hexachloroethane	ND		1940	ND		ug/Kg	☼	NC	21 - 120	NC	46
Indeno[1,2,3-cd]pyrene	36000	F2	1940	63400	4 F2	ug/Kg	☼	1404	56 - 134	43	15
Isophorone	ND		1940	ND		ug/Kg	☼	NC	56 - 120	NC	17
Naphthalene	ND		1940	4050	J	ug/Kg	☼	NC	46 - 120	28	29
Nitrobenzene	ND		1940	ND		ug/Kg	☼	NC	49 - 120	NC	24
N-Nitrosodi-n-propylamine	ND		1940	ND		ug/Kg	☼	NC	46 - 120	NC	31
Pentachlorophenol	ND		3870	ND		ug/Kg	☼	NC	25 - 136	NC	35
Phenanthrene	110000	F2	1940	165000	4 F2	ug/Kg	☼	2906	60 - 122	34	15
Phenol	ND		1940	ND		ug/Kg	☼	NC	50 - 120	NC	35
Pyrene	130000	F2	1940	189000	4 F2	ug/Kg	☼	2852	61 - 133	42	35

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

Lab Sample ID: 480-125579-1 MSD
Matrix: Solid
Analysis Batch: 382085

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381332

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*0*	*X*	*54 - 120*
2-Fluorobiphenyl	*75*		*60 - 120*
2-Fluorophenol	*47*	*X*	*52 - 120*
Nitrobenzene-d5	*63*		*53 - 120*
Phenol-d5	*0*	*X*	*54 - 120*
p-Terphenyl-d14	*119*		*65 - 121*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-381758/1-A
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381758

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.5	4.2	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Antimony	ND		14.2	0.38	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Arsenic	ND		1.9	0.38	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Barium	ND		0.47	0.10	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Beryllium	ND		0.19	0.027	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Cadmium	ND		0.19	0.028	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Calcium	6.53	J	47.3	3.1	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Chromium	ND		0.47	0.19	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Cobalt	ND		0.47	0.047	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Copper	ND		0.95	0.20	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Iron	ND		9.5	3.3	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Lead	ND		0.95	0.23	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Magnesium	ND		18.9	0.88	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Manganese	ND		0.19	0.030	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Nickel	ND		4.7	0.22	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Potassium	ND		28.4	18.9	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Selenium	ND		3.8	0.38	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Silver	ND		0.57	0.19	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Sodium	ND		133	12.3	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Thallium	ND		5.7	0.28	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Vanadium	ND		0.47	0.10	mg/Kg		10/13/17 16:34	10/16/17 11:43	1
Zinc	ND	^	1.9	0.61	mg/Kg		10/13/17 16:34	10/16/17 11:43	1

Lab Sample ID: LCDSRM 480-381758/3-A
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 381758

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum			8090	9312		mg/Kg		115.1	39.6 - 160.7	2	20
Antimony			99.3	62.56		mg/Kg		63.0	21.6 - 256.8	1	20
Arsenic			100	89.24		mg/Kg		89.2	69.6 - 131.0	2	20

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

Lab Sample ID: LCDSRM 480-381758/3-A
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 381758

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	217	185.7		mg/Kg		85.6	73.7 - 128.1	0	20
Beryllium	147	130.8		mg/Kg		89.0	75.5 - 125.9	2	20
Cadmium	83.7	71.20		mg/Kg		85.1	73.2 - 131.4	2	20
Calcium	6010	5438		mg/Kg		90.5	73.7 - 126.3	3	20
Chromium	107	94.17		mg/Kg		88.0	69.4 - 134.6	1	20
Cobalt	123	127.0		mg/Kg		103.2	74.3 - 130.1	2	20
Copper	166	141.7		mg/Kg		85.4	75.3 - 128.3	3	20
Iron	14600	15770	^	mg/Kg		108.0	36.1 - 163.7	4	20
Lead	88.4	92.44		mg/Kg		104.6	69.9 - 130.1	1	20
Magnesium	2930	2744		mg/Kg		93.6	65.9 - 134.5	3	20
Manganese	311	272.9		mg/Kg		87.7	74.9 - 125.4	1	20
Nickel	49.8	52.11		mg/Kg		104.6	69.1 - 135.1	2	20
Potassium	2620	2635		mg/Kg		100.6	61.1 - 138.9	2	20
Selenium	87.7	80.75		mg/Kg		92.1	64.1 - 135.7	3	20
Silver	41.4	35.46		mg/Kg		85.7	65.9 - 133.8	3	20
Sodium	252	242.2		mg/Kg		96.1	32.9 - 167.5	2	20
Thallium	58.1	62.62		mg/Kg		107.8	63.9 - 136.3	3	20
Vanadium	140	132.4		mg/Kg		94.6	69.9 - 129.3	2	20
Zinc	145	129.6		mg/Kg		89.4	67.7 - 132.4	2	20

Lab Sample ID: LCSSRM 480-381758/2-A
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381758

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	8090	9097		mg/Kg		112.4	39.6 - 160.7
Antimony	99.3	61.79		mg/Kg		62.2	21.6 - 256.8
Arsenic	100	87.66		mg/Kg		87.7	69.6 - 131.0
Barium	217	185.3		mg/Kg		85.4	73.7 - 128.1
Beryllium	147	128.7		mg/Kg		87.5	75.5 - 125.9

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

Lab Sample ID: LCSSRM 480-381758/2-A
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381758

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	83.7	69.57		mg/Kg		83.1	73.2 - 131.4
Calcium	6010	5274		mg/Kg		87.8	73.7 - 126.3
Chromium	107	92.96		mg/Kg		86.9	69.4 - 134.6
Cobalt	123	124.6		mg/Kg		101.3	74.3 - 130.1
Copper	166	137.8		mg/Kg		83.0	75.3 - 128.3
Iron	14600	15210	^	mg/Kg		104.2	36.1 - 163.7
Lead	88.4	91.16		mg/Kg		103.1	69.9 - 130.1
Magnesium	2930	2668		mg/Kg		91.0	65.9 - 134.5
Manganese	311	275.4		mg/Kg		88.5	74.9 - 125.4
Nickel	49.8	51.05		mg/Kg		102.5	69.1 - 135.1
Potassium	2620	2594		mg/Kg		99.0	61.1 - 138.9
Selenium	87.7	78.35		mg/Kg		89.3	64.1 - 135.7
Silver	41.4	34.32		mg/Kg		82.9	65.9 - 133.8
Sodium	252	238.4		mg/Kg		94.6	32.9 - 167.5
Thallium	58.1	60.51		mg/Kg		104.2	63.9 - 136.3
Vanadium	140	130.3		mg/Kg		93.1	69.9 - 129.3
Zinc	145	127.1		mg/Kg		87.7	67.7 - 132.4

Lab Sample ID: 480-125579-1 MS
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381758

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	15400		2280	25540	4	mg/Kg	☼	445	75 - 125
Antimony	ND	F1	45.5	21.37	F1	mg/Kg	☼	47	75 - 125
Arsenic	18.5		45.5	58.09		mg/Kg	☼	87	75 - 125
Barium	184	F1	45.5	276.7	4	mg/Kg	☼	204	75 - 125
Beryllium	0.96		45.5	41.70		mg/Kg	☼	89	75 - 125
Cadmium	1.1		45.5	43.03		mg/Kg	☼	92	75 - 125
Calcium	26100	F2 B	2280	35650	4	mg/Kg	☼	419	75 - 125
Chromium	31.3		45.5	76.35		mg/Kg	☼	99	75 - 125
Cobalt	13.1		45.5	57.92		mg/Kg	☼	98	75 - 125
Copper	60.5	F2 F1	45.5	125.5	F1	mg/Kg	☼	143	75 - 125
Iron	25000	^	2280	22220	^ 4	mg/Kg	☼	-123	75 - 125
Lead	679		45.5	463.7	4	mg/Kg	☼	-473	75 - 125
Magnesium	5870	F1	2280	10190	F1	mg/Kg	☼	190	75 - 125

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

Lab Sample ID: 480-125579-1 MS
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381758

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	308		45.5	365.9	4	mg/Kg	☼	127	75 - 125
Nickel	39.1		45.5	79.55		mg/Kg	☼	89	75 - 125
Potassium	4310	F1	2280	9390	F1	mg/Kg	☼	223	75 - 125
Selenium	4.0	J	45.5	45.48		mg/Kg	☼	91	75 - 125
Silver	0.26	J	11.4	11.15		mg/Kg	☼	96	75 - 125
Sodium	565		2280	2699		mg/Kg	☼	94	75 - 125
Thallium	ND		45.5	44.79		mg/Kg	☼	98	75 - 125
Vanadium	29.1	F1	45.5	86.26		mg/Kg	☼	125	75 - 125
Zinc	482		45.5	400.8	4	mg/Kg	☼	-178	75 - 125

Lab Sample ID: 480-125579-1 MSD
Matrix: Solid
Analysis Batch: 382167

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381758

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	15400		2300	27000	4	mg/Kg	☼	503	75 - 125	6	20
Antimony	ND	F1	46.1	22.79	F1	mg/Kg	☼	49	75 - 125	6	20
Arsenic	18.5		46.1	55.84		mg/Kg	☼	81	75 - 125	4	20
Barium	184	F1	46.1	242.5	F1	mg/Kg	☼	128	75 - 125	13	20
Beryllium	0.96		46.1	42.09		mg/Kg	☼	89	75 - 125	1	20
Cadmium	1.1		46.1	42.91		mg/Kg	☼	91	75 - 125	0	20
Calcium	26100	F2 B	2300	26210	4 F2	mg/Kg	☼	4	75 - 125	31	20
Chromium	31.3		46.1	80.08		mg/Kg	☼	106	75 - 125	5	20
Cobalt	13.1		46.1	57.95		mg/Kg	☼	97	75 - 125	0	20
Copper	60.5	F2 F1	46.1	91.59	F2 F1	mg/Kg	☼	67	75 - 125	31	20
Iron	25000	^	2300	26580	^ 4	mg/Kg	☼	68	75 - 125	18	20
Lead	679		46.1	530.8	4	mg/Kg	☼	-322	75 - 125	13	20
Magnesium	5870	F1	2300	9143	F1	mg/Kg	☼	142	75 - 125	11	20
Manganese	308		46.1	331.0	4	mg/Kg	☼	50	75 - 125	10	20
Nickel	39.1		46.1	80.48		mg/Kg	☼	90	75 - 125	1	20
Potassium	4310	F1	2300	9786	F1	mg/Kg	☼	238	75 - 125	4	20
Selenium	4.0	J	46.1	44.12		mg/Kg	☼	87	75 - 125	3	20
Silver	0.26	J	11.5	11.11		mg/Kg	☼	94	75 - 125	0	20
Sodium	565		2310	2685		mg/Kg	☼	92	75 - 125	1	20
Thallium	ND		46.1	45.53		mg/Kg	☼	99	75 - 125	2	20
Vanadium	29.1	F1	46.1	88.19	F1	mg/Kg	☼	128	75 - 125	2	20
Zinc	482		46.1	331.6	4	mg/Kg	☼	-326	75 - 125	19	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-381100/1-A
Matrix: Solid
Analysis Batch: 381152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0083	mg/Kg		10/10/17 13:30	10/10/17 15:02	1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-381100/2-A ^10
Matrix: Solid
Analysis Batch: 381152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381100

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			12.6	11.17		mg/Kg		88.7	44.4 - 128.6		

Lab Sample ID: 480-125579-1 MS
Matrix: Solid
Analysis Batch: 381152

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381100

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.35		0.398	0.773		mg/Kg	☼	107	80 - 120		

Lab Sample ID: 480-125579-1 MSD
Matrix: Solid
Analysis Batch: 381152

Client Sample ID: MW-8 (4-6)
Prep Type: Total/NA
Prep Batch: 381100

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.35		0.405	0.756		mg/Kg	☼	101	80 - 120	2	20

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
W	PS: Post-digestion spike was outside control limits
V	Serial Dilution exceeds the control limits

Glossary

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

GC/MS VOA

Analysis Batch: 381944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	8260C	382014
480-125579-2	MW-8 (13-14)	Total/NA	Solid	8260C	382014
MB 480-382014/2-A	Method Blank	Total/NA	Solid	8260C	382014
LCS 480-382014/1-A	Lab Control Sample	Total/NA	Solid	8260C	382014

Prep Batch: 382014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	5035A_L	
480-125579-2	MW-8 (13-14)	Total/NA	Solid	5035A_L	
MB 480-382014/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-382014/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 382134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-3	DUP-100817	Total/NA	Solid	8260C	382187
MB 480-382187/2-A	Method Blank	Total/NA	Solid	8260C	382187
LCS 480-382187/1-A	Lab Control Sample	Total/NA	Solid	8260C	382187
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	8260C	382187
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	8260C	382187

Prep Batch: 382187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-3	DUP-100817	Total/NA	Solid	5035A_L	
MB 480-382187/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-382187/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	5035A_L	
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	5035A_L	

Analysis Batch: 382381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-4	TRIP BLANK	Total/NA	Water	8260C	
MB 480-382381/7	Method Blank	Total/NA	Water	8260C	
LCS 480-382381/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 381332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	3550C	
480-125579-2	MW-8 (13-14)	Total/NA	Solid	3550C	
480-125579-3	DUP-100817	Total/NA	Solid	3550C	
MB 480-381332/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-381332/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	3550C	
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	3550C	

Analysis Batch: 381534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-2	MW-8 (13-14)	Total/NA	Solid	8270D	381332
480-125579-3	DUP-100817	Total/NA	Solid	8270D	381332

GC/MS Semi VOA (Continued)

Analysis Batch: 382085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	8270D	381332
MB 480-381332/1-A	Method Blank	Total/NA	Solid	8270D	381332
LCS 480-381332/2-A	Lab Control Sample	Total/NA	Solid	8270D	381332
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	8270D	381332
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	8270D	381332

Metals

Prep Batch: 381100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	7471B	
480-125579-2	MW-8 (13-14)	Total/NA	Solid	7471B	
480-125579-3	DUP-100817	Total/NA	Solid	7471B	
MB 480-381100/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-381100/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	7471B	
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	7471B	

Analysis Batch: 381152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	7471B	381100
480-125579-2	MW-8 (13-14)	Total/NA	Solid	7471B	381100
480-125579-3	DUP-100817	Total/NA	Solid	7471B	381100
MB 480-381100/1-A	Method Blank	Total/NA	Solid	7471B	381100
LCSSRM 480-381100/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	381100
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	7471B	381100
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	7471B	381100

Prep Batch: 381758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	3050B	
480-125579-2	MW-8 (13-14)	Total/NA	Solid	3050B	
480-125579-3	DUP-100817	Total/NA	Solid	3050B	
MB 480-381758/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-381758/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-381758/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	3050B	
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	3050B	

Analysis Batch: 382167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	6010C	381758
480-125579-2	MW-8 (13-14)	Total/NA	Solid	6010C	381758
480-125579-3	DUP-100817	Total/NA	Solid	6010C	381758
MB 480-381758/1-A	Method Blank	Total/NA	Solid	6010C	381758
LCDSRM 480-381758/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	381758
LCSSRM 480-381758/2-A	Lab Control Sample	Total/NA	Solid	6010C	381758
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	6010C	381758
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	6010C	381758

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

General Chemistry

Analysis Batch: 381195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-125579-1	MW-8 (4-6)	Total/NA	Solid	Moisture	
480-125579-2	MW-8 (13-14)	Total/NA	Solid	Moisture	
480-125579-3	DUP-100817	Total/NA	Solid	Moisture	
480-125579-1 MS	MW-8 (4-6)	Total/NA	Solid	Moisture	
480-125579-1 MSD	MW-8 (4-6)	Total/NA	Solid	Moisture	

Client Sample ID: MW-8 (4-6)
Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	381195	10/11/17 04:49	CSW	TAL BUF

Client Sample ID: MW-8 (4-6)
Date Collected: 10/08/17 11:30
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-1
Matrix: Solid
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			382014	10/10/17 10:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	381944	10/16/17 18:28	CDC	TAL BUF
Total/NA	Prep	3550C			381332	10/11/17 14:06	BEK	TAL BUF
Total/NA	Analysis	8270D		100	382085	10/16/17 21:58	DMR	TAL BUF
Total/NA	Prep	3050B			381758	10/13/17 16:34	MJW	TAL BUF
Total/NA	Analysis	6010C		1	382167	10/16/17 12:07	LMH	TAL BUF
Total/NA	Prep	7471B			381100	10/10/17 13:30	BMB	TAL BUF
Total/NA	Analysis	7471B		1	381152	10/10/17 15:10	BMB	TAL BUF

Client Sample ID: MW-8 (13-14)
Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	381195	10/11/17 04:49	CSW	TAL BUF

Client Sample ID: MW-8 (13-14)
Date Collected: 10/08/17 12:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-2
Matrix: Solid
Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			382014	10/10/17 10:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	381944	10/16/17 18:54	CDC	TAL BUF
Total/NA	Prep	3550C			381332	10/11/17 14:06	BEK	TAL BUF
Total/NA	Analysis	8270D		5	381534	10/13/17 08:02	DMR	TAL BUF
Total/NA	Prep	3050B			381758	10/13/17 16:34	MJW	TAL BUF
Total/NA	Analysis	6010C		1	382167	10/16/17 12:25	LMH	TAL BUF
Total/NA	Prep	7471B			381100	10/10/17 13:30	BMB	TAL BUF
Total/NA	Analysis	7471B		1	381152	10/10/17 15:16	BMB	TAL BUF

Client Sample ID: DUP-100817
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	381195	10/11/17 04:49	CSW	TAL BUF

Client Sample ID: DUP-100817
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-3
Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			382187	10/10/17 10:30	CDC	TAL BUF
Total/NA	Analysis	8260C		1	382134	10/17/17 14:11	CDC	TAL BUF
Total/NA	Prep	3550C			381332	10/11/17 14:06	BEK	TAL BUF
Total/NA	Analysis	8270D		10	381534	10/13/17 08:28	DMR	TAL BUF
Total/NA	Prep	3050B			381758	10/13/17 16:34	MJW	TAL BUF
Total/NA	Analysis	6010C		1	382167	10/16/17 12:39	LMH	TAL BUF
Total/NA	Prep	7471B			381100	10/10/17 13:30	BMB	TAL BUF
Total/NA	Analysis	7471B		1	381152	10/10/17 15:22	BMB	TAL BUF

Client Sample ID: TRIP BLANK
Date Collected: 10/08/17 00:00
Date Received: 10/10/17 09:50

Lab Sample ID: 480-125579-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	382381	10/18/17 18:32	RLB	TAL BUF

Laboratory References:
TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: RGE - Park St.

TestAmerica Job ID: 480-125579-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MW-8 (4-6)	480-125579-1	103	98	100	100
MW-8 (13-14)	480-125579-2	106	107	98	105
DUP-100817	480-125579-3	104	107	98	103
	MB 480-382014/2-A	108	100	99	104
	MB 480-382187/2-A	102	101	101	106
	LCS 480-382014/1-A	105	98	98	103
	LCS 480-382187/1-A	104	99	100	104
MW-8 (4-6) MS	480-125579-1 MS	100	87	104	95
MW-8 (4-6) MSD	480-125579-1 MSD	103	87	106	94

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM II 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (60) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TRIP BLANK	480-125579-4	102	107	100	102
	MB 480-382381/7	100	97	104	105
	LCS 480-382381/5	104	99	104	106

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	75-123
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8271.D

Lab ID: LCS 480-382014/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	55.4	111	77-121	
1,1,2,2-Tetrachloroethane	50.0	47.5	95	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	52.2	104	60-140	
1,1,2-Trichloroethane	50.0	49.2	98	78-122	
1,1-Dichloroethane	50.0	51.9	104	73-126	
1,1-Dichloroethene	50.0	52.3	105	59-125	
1,2,4-Trichlorobenzene	50.0	53.6	107	64-120	
1,2-Dibromo-3-Chloropropane	50.0	51.4	103	63-124	
1,2-Dibromoethane	50.0	52.4	105	78-120	
1,2-Dichlorobenzene	50.0	49.5	99	75-120	
1,2-Dichloroethane	50.0	49.5	99	77-122	
1,2-Dichloropropane	50.0	52.0	104	75-124	
1,3-Dichlorobenzene	50.0	49.6	99	74-120	
1,4-Dichlorobenzene	50.0	49.6	99	73-120	
2-Butanone (MEK)	250	239	96	70-134	
2-Hexanone	250	236	94	59-130	
4-Methyl-2-pentanone (MIBK)	250	230	92	65-133	
Acetone	250	247	99	61-137	
Benzene	50.0	50.9	102	79-127	
Bromodichloromethane	50.0	60.9	122	80-122	
Bromoform	50.0	71.5	143	68-126	*
Bromomethane	50.0	50.8	102	37-149	
Carbon disulfide	50.0	57.6	115	64-131	
Carbon tetrachloride	50.0	67.5	135	75-135	
Chlorobenzene	50.0	52.0	104	76-124	
Chloroethane	50.0	50.6	101	69-135	
Chloroform	50.0	51.0	102	80-120	
Chloromethane	50.0	42.6	85	63-127	
cis-1,2-Dichloroethene	50.0	51.7	103	81-120	
cis-1,3-Dichloropropene	50.0	57.7	115	80-120	
Cyclohexane	50.0	51.2	102	65-120	
Dibromochloromethane	50.0	59.5	119	76-125	
Dichlorodifluoromethane	50.0	59.7	119	57-142	
Ethylbenzene	50.0	50.4	101	80-120	
Isopropylbenzene	50.0	49.0	98	72-120	
Methyl acetate	100	92.1	92	55-136	
Methyl tert-butyl ether	50.0	48.4	97	63-125	
Methylcyclohexane	50.0	52.7	105	60-140	
Methylene Chloride	50.0	52.8	106	61-127	
Styrene	50.0	50.8	102	80-120	
Tetrachloroethene	50.0	55.3	111	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8271.D

Lab ID: LCS 480-382014/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	49.8	100	74-128	
trans-1,2-Dichloroethene	50.0	52.3	105	78-126	
trans-1,3-Dichloropropene	50.0	55.9	112	73-123	
Trichloroethene	50.0	52.8	106	77-129	
Trichlorofluoromethane	50.0	54.4	109	65-146	
Vinyl chloride	50.0	47.4	95	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8296.D

Lab ID: LCS 480-382187/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	52.8	106	77-121	
1,1,2,2-Tetrachloroethane	50.0	48.4	97	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53.1	106	60-140	
1,1,2-Trichloroethane	50.0	50.2	100	78-122	
1,1-Dichloroethane	50.0	50.4	101	73-126	
1,1-Dichloroethene	50.0	52.1	104	59-125	
1,2,4-Trichlorobenzene	50.0	54.9	110	64-120	
1,2-Dibromo-3-Chloropropane	50.0	45.0	90	63-124	
1,2-Dibromoethane	50.0	52.4	105	78-120	
1,2-Dichlorobenzene	50.0	50.5	101	75-120	
1,2-Dichloroethane	50.0	48.4	97	77-122	
1,2-Dichloropropane	50.0	50.7	101	75-124	
1,3-Dichlorobenzene	50.0	50.9	102	74-120	
1,4-Dichlorobenzene	50.0	51.0	102	73-120	
2-Butanone (MEK)	250	234	94	70-134	
2-Hexanone	250	230	92	59-130	
4-Methyl-2-pentanone (MIBK)	250	224	89	65-133	
Acetone	250	242	97	61-137	
Benzene	50.0	51.1	102	79-127	
Bromodichloromethane	50.0	57.1	114	80-122	
Bromoform	50.0	59.9	120	68-126	
Bromomethane	50.0	52.5	105	37-149	
Carbon disulfide	50.0	54.9	110	64-131	
Carbon tetrachloride	50.0	57.6	115	75-135	
Chlorobenzene	50.0	52.7	105	76-124	
Chloroethane	50.0	50.8	102	69-135	
Chloroform	50.0	50.6	101	80-120	
Chloromethane	50.0	40.7	81	63-127	
cis-1,2-Dichloroethene	50.0	51.1	102	81-120	
cis-1,3-Dichloropropene	50.0	54.0	108	80-120	
Cyclohexane	50.0	49.4	99	65-120	
Dibromochloromethane	50.0	52.8	106	76-125	
Dichlorodifluoromethane	50.0	60.0	120	57-142	
Ethylbenzene	50.0	52.0	104	80-120	
Isopropylbenzene	50.0	50.7	101	72-120	
Methyl acetate	100	88.7	89	55-136	
Methyl tert-butyl ether	50.0	48.3	97	63-125	
Methylcyclohexane	50.0	53.2	106	60-140	
Methylene Chloride	50.0	52.2	104	61-127	
Styrene	50.0	52.1	104	80-120	
Tetrachloroethene	50.0	57.1	114	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8296.D

Lab ID: LCS 480-382187/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	51.3	103	74-128	
trans-1,2-Dichloroethene	50.0	53.0	106	78-126	
trans-1,3-Dichloropropene	50.0	51.6	103	73-123	
Trichloroethene	50.0	53.4	107	77-129	
Trichlorofluoromethane	50.0	57.9	116	65-146	
Vinyl chloride	50.0	47.9	96	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 93255P.D

Lab ID: LCS 480-382381/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	24.5	98	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.8	99	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.3	89	61-148	
1,1,2-Trichloroethane	25.0	23.8	95	76-122	
1,1-Dichloroethane	25.0	23.8	95	77-120	
1,1-Dichloroethene	25.0	20.7	83	66-127	
1,2,4-Trichlorobenzene	25.0	24.1	96	79-122	
1,2-Dibromo-3-Chloropropane	25.0	22.9	92	56-134	
1,2-Dibromoethane	25.0	24.5	98	77-120	
1,2-Dichlorobenzene	25.0	25.2	101	80-124	
1,2-Dichloroethane	25.0	23.1	93	75-120	
1,2-Dichloropropane	25.0	24.0	96	76-120	
1,3-Dichlorobenzene	25.0	24.8	99	77-120	
1,4-Dichlorobenzene	25.0	24.9	99	80-120	
2-Butanone (MEK)	125	135	108	57-140	
2-Hexanone	125	137	110	65-127	
4-Methyl-2-pentanone (MIBK)	125	132	106	71-125	
Acetone	125	152	121	56-142	
Benzene	25.0	23.5	94	71-124	
Bromodichloromethane	25.0	25.2	101	80-122	
Bromoform	25.0	25.9	104	61-132	
Bromomethane	25.0	24.7	99	55-144	
Carbon disulfide	25.0	22.6	90	59-134	
Carbon tetrachloride	25.0	29.7	119	72-134	
Chlorobenzene	25.0	24.6	98	80-120	
Chloroethane	25.0	24.0	96	69-136	
Chloroform	25.0	23.4	93	73-127	
Chloromethane	25.0	25.4	102	68-124	
cis-1,2-Dichloroethene	25.0	23.7	95	74-124	
cis-1,3-Dichloropropene	25.0	23.9	95	74-124	
Cyclohexane	25.0	23.1	93	59-135	
Dibromochloromethane	25.0	25.9	103	75-125	
Dichlorodifluoromethane	25.0	25.5	102	59-135	
Ethylbenzene	25.0	23.9	96	77-123	
Isopropylbenzene	25.0	24.9	99	77-122	
Methyl acetate	50.0	49.5	99	74-133	
Methyl tert-butyl ether	25.0	24.0	96	77-120	
Methylcyclohexane	25.0	21.7	87	68-134	
Methylene Chloride	25.0	19.8	79	75-124	
Styrene	25.0	25.1	101	80-120	
Tetrachloroethene	25.0	24.3	97	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 93255P.D

Lab ID: LCS 480-382381/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	24.8	99	80-122	
trans-1,2-Dichloroethene	25.0	22.2	89	73-127	
trans-1,3-Dichloropropene	25.0	25.2	101	80-120	
Trichloroethene	25.0	23.1	92	74-123	
Trichlorofluoromethane	25.0	25.3	101	62-150	
Vinyl chloride	25.0	25.7	103	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8306.D

Lab ID: 480-125579-1 MS Client ID: MW-8 (4-6) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	48.0	ND	41.6	87	77-121	
1,1,2,2-Tetrachloroethane	48.0	ND	39.9	83	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	48.0	ND	42.5	89	60-140	
1,1,2-Trichloroethane	48.0	ND	40.5	84	78-122	
1,1-Dichloroethane	48.0	ND	43.8	91	73-126	
1,1-Dichloroethene	48.0	ND	40.0	83	59-125	
1,2,4-Trichlorobenzene	48.0	ND	18.8	39	64-120	F1
1,2-Dibromo-3-Chloropropane	48.0	ND	25.8	54	63-124	F1
1,2-Dibromoethane	48.0	ND	35.6	74	78-120	F1
1,2-Dichlorobenzene	48.0	ND	33.9	71	75-120	F1
1,2-Dichloroethane	48.0	ND	37.5	78	77-122	
1,2-Dichloropropane	48.0	ND	42.3	88	75-124	
1,3-Dichlorobenzene	48.0	ND	34.2	71	74-120	F1
1,4-Dichlorobenzene	48.0	ND	32.3	67	73-120	F1
2-Butanone (MEK)	240	ND	146	61	70-134	F1
2-Hexanone	240	ND	153	64	59-130	
4-Methyl-2-pentanone (MIBK)	240	ND	161	67	65-133	
Acetone	240	13 J	156	59	61-137	F1
Benzene	48.0	1.5 J	45.2	91	79-127	
Bromodichloromethane	48.0	ND	43.3	90	80-122	
Bromoform	48.0	ND	37.4	78	68-126	
Bromomethane	48.0	ND	46.1	96	37-149	
Carbon disulfide	48.0	ND	34.7	72	64-131	
Carbon tetrachloride	48.0	ND	39.9	83	75-135	
Chlorobenzene	48.0	ND	40.1	83	76-124	
Chloroethane	48.0	ND	44.2	92	69-135	
Chloroform	48.0	ND	43.5	91	80-120	
Chloromethane	48.0	ND	33.4	70	63-127	
cis-1,2-Dichloroethene	48.0	ND	39.7	83	80-120	
cis-1,3-Dichloropropene	48.0	ND	36.8	77	80-120	F1
Cyclohexane	48.0	ND	36.7	76	65-120	
Dibromochloromethane	48.0	ND	38.8	81	76-125	
Dichlorodifluoromethane	48.0	ND	49.0	102	57-142	
Ethylbenzene	48.0	ND	41.4	86	80-120	
Isopropylbenzene	48.0	ND	45.9	96	72-120	
Methyl acetate	96.0	ND	62.2	65	55-136	
Methyl tert-butyl ether	48.0	ND	40.8	85	63-125	
Methylcyclohexane	48.0	ND	34.2	71	60-140	
Methylene Chloride	48.0	ND	43.0	90	61-127	
Styrene	48.0	0.28 J	38.3	79	80-120	F1
Tetrachloroethene	48.0	ND	43.9	91	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8306.D

Lab ID: 480-125579-1 MS Client ID: MW-8 (4-6) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Toluene	48.0	1.8 J	46.7	94	74-128	
trans-1,2-Dichloroethene	48.0	ND	37.9	79	78-126	
Trichloroethene	48.0	ND	38.9	81	77-129	
Trichlorofluoromethane	48.0	ND	48.3	101	65-146	
Vinyl chloride	48.0	ND	35.4	74	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8307.D

Lab ID: 480-125579-1 MSD Client ID: MW-8 (4-6) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	54.9	47.0	86	12	30	77-121	
1,1,2,2-Tetrachloroethane	54.9	42.9	78	7	30	80-120	F1
1,1,2-Trichloro-1,2,2-trifluoroethane	54.9	45.1	82	6	30	60-140	
1,1,2-Trichloroethane	54.9	41.1	75	2	30	78-122	F1
1,1-Dichloroethane	54.9	47.0	86	7	30	73-126	
1,1-Dichloroethene	54.9	41.3	75	3	30	59-125	
1,2,4-Trichlorobenzene	54.9	19.1	35	1	30	64-120	F1
1,2-Dibromo-3-Chloropropane	54.9	30.1	55	15	30	63-124	F1
1,2-Dibromoethane	54.9	32.7	60	9	30	78-120	F1
1,2-Dichlorobenzene	54.9	33.0	60	3	30	75-120	F1
1,2-Dichloroethane	54.9	36.2	66	3	30	77-122	F1
1,2-Dichloropropane	54.9	45.3	83	7	30	75-124	
1,3-Dichlorobenzene	54.9	31.9	58	7	30	74-120	F1
1,4-Dichlorobenzene	54.9	29.5	54	9	30	73-120	F1
2-Butanone (MEK)	274	155	56	6	30	70-134	F1
2-Hexanone	274	154	56	1	30	59-130	F1
4-Methyl-2-pentanone (MIBK)	274	173	63	7	30	65-133	F1
Acetone	274	181	61	15	30	61-137	
Benzene	54.9	46.4	82	2	30	79-127	
Bromodichloromethane	54.9	44.0	80	2	30	80-122	
Bromoform	54.9	36.4	66	3	30	68-126	F1
Bromomethane	54.9	47.7	87	3	30	37-149	
Carbon disulfide	54.9	28.1	51	21	30	64-131	F1
Carbon tetrachloride	54.9	45.6	83	13	30	75-135	
Chlorobenzene	54.9	37.2	68	7	30	76-124	F1
Chloroethane	54.9	44.9	82	2	30	69-135	
Chloroform	54.9	45.4	83	4	30	80-120	
Chloromethane	54.9	34.6	63	4	30	63-127	
cis-1,2-Dichloroethene	54.9	35.4	65	12	30	80-120	F1
cis-1,3-Dichloropropene	54.9	31.9	58	14	30	80-120	F1
Cyclohexane	54.9	37.7	69	3	30	65-120	
Dibromochloromethane	54.9	37.2	68	4	30	76-125	F1
Dichlorodifluoromethane	54.9	53.4	97	8	30	57-142	
Ethylbenzene	54.9	41.0	75	1	30	80-120	F1
Isopropylbenzene	54.9	48.6	89	6	30	72-120	
Methyl acetate	110	66.3	60	6	30	55-136	
Methyl tert-butyl ether	54.9	46.2	84	12	30	63-125	
Methylcyclohexane	54.9	35.0	64	2	30	60-140	
Methylene Chloride	54.9	39.6	72	8	30	61-127	
Styrene	54.9	35.3	64	8	30	80-120	F1
Tetrachloroethene	54.9	44.0	80	0	30	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F8307.D

Lab ID: 480-125579-1 MSD Client ID: MW-8 (4-6) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	54.9	45.5	80	2	30	74-128	
trans-1,2-Dichloroethene	54.9	31.4	57	19	30	78-126	F1
Trichloroethene	54.9	37.3	68	4	30	77-129	F1
Trichlorofluoromethane	54.9	52.1	95	8	30	65-146	
Vinyl chloride	54.9	35.2	64	0	30	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: F8273.D Lab Sample ID: MB 480-382014/2-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: HP5973F Date Analyzed: 10/16/2017 13:08

GC Column: ZB-624 (30) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-382014/1-A	F8271.D	10/16/2017 12:17
MW-8 (4-6)	480-125579-1	F8285.D	10/16/2017 18:28
MW-8 (13-14)	480-125579-2	F8286.D	10/16/2017 18:54

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: F8298.D Lab Sample ID: MB 480-382187/2-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: HP5973F Date Analyzed: 10/17/2017 10:58

GC Column: ZB-624 (30) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-382187/1-A	F8296.D	10/17/2017 10:07
DUP-100817	480-125579-3	F8305.D	10/17/2017 14:11
MW-8 (4-6) MS	480-125579-1 MS	F8306.D	10/17/2017 14:36
MW-8 (4-6) MSD	480-125579-1 MSD	F8307.D	10/17/2017 15:02

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: 93257P.D Lab Sample ID: MB 480-382381/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973P Date Analyzed: 10/18/2017 11:20

GC Column: ZB-624 (60) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-382381/5	93255P.D	10/18/2017 10:25
TRIP BLANK	480-125579-4	93272P.D	10/18/2017 18:32

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: F7934.D BFB Injection Date: 09/29/2017

Instrument ID: HP5973F BFB Injection Time: 15:08

Analysis Batch No.: 379439

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.8	
75	30.0 - 60.0 % of mass 95	45.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.1	(0.2) 1
174	50.0 - 120.00 % of mass 95	81.5	
175	5.0 - 9.0 % of mass 174	6.4	(7.9) 1
176	95.0 - 101.0 % of mass 174	78.7	(96.6) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-379439/6	F7936.D	09/29/2017	15:58
	IC 480-379439/7	F7937.D	09/29/2017	16:24
	IC 480-379439/8	F7938.D	09/29/2017	16:50
	IC 480-379439/9	F7939.D	09/29/2017	17:16
	ICIS 480-379439/10	F7940.D	09/29/2017	17:41
	IC 480-379439/11	F7941.D	09/29/2017	18:07
	IC 480-379439/12	F7942.D	09/29/2017	18:33

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: F8268.D BFB Injection Date: 10/16/2017

Instrument ID: HP5973F BFB Injection Time: 10:20

Analysis Batch No.: 381944

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.0	
75	30.0 - 60.0 % of mass 95	45.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.1	(0.1) 1
174	50.0 - 120.00 % of mass 95	88.0	
175	5.0 - 9.0 % of mass 174	6.5	(7.4) 1
176	95.0 - 101.0 % of mass 174	84.8	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.5) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-381944/4	F8269.D	10/16/2017	10:53
	LCS 480-382014/1-A	F8271.D	10/16/2017	12:17
	MB 480-382014/2-A	F8273.D	10/16/2017	13:08
MW-8 (4-6)	480-125579-1	F8285.D	10/16/2017	18:28
MW-8 (13-14)	480-125579-2	F8286.D	10/16/2017	18:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: F8293.D BFB Injection Date: 10/17/2017

Instrument ID: HP5973F BFB Injection Time: 08:39

Analysis Batch No.: 382134

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	43.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	91.5	
175	5.0 - 9.0 % of mass 174	7.3	(7.9) 1
176	95.0 - 101.0 % of mass 174	87.4	(95.5) 1
177	5.0 - 9.0 % of mass 176	4.4	(5.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-382134/3	F8294.D	10/17/2017	09:07
	LCS 480-382187/1-A	F8296.D	10/17/2017	10:07
	MB 480-382187/2-A	F8298.D	10/17/2017	10:58
DUP-100817	480-125579-3	F8305.D	10/17/2017	14:11
MW-8 (4-6) MS	480-125579-1 MS	F8306.D	10/17/2017	14:36
MW-8 (4-6) MSD	480-125579-1 MSD	F8307.D	10/17/2017	15:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: P3040P.D BFB Injection Date: 10/10/2017

Instrument ID: HP5973P BFB Injection Time: 15:02

Analysis Batch No.: 381079

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	32.9	
75	30.0 - 60.0 % of mass 95	53.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.4	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	84.0	
175	5.0 - 9.0 % of mass 174	6.6	(7.9) 1
176	95.0 - 101.0 % of mass 174	82.3	(98.0) 1
177	5.0 - 9.0 % of mass 176	6.1	(7.4) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-381079/5	P3042P.D	10/10/2017	16:02
	IC 480-381079/6	P3043P.D	10/10/2017	16:29
	IC 480-381079/7	P3044P.D	10/10/2017	16:56
	IC 480-381079/8	P3045P.D	10/10/2017	17:24
	ICIS 480-381079/9	P3046P.D	10/10/2017	17:51
	IC 480-381079/10	P3047P.D	10/10/2017	19:55
	IC 480-381079/11	P3048P.D	10/10/2017	20:22

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: 93252P.D BFB Injection Date: 10/18/2017

Instrument ID: HP5973P BFB Injection Time: 09:04

Analysis Batch No.: 382381

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	36.2	
75	30.0 - 60.0 % of mass 95	51.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	95.9	
175	5.0 - 9.0 % of mass 174	7.5	(7.9) 1
176	95.0 - 101.0 % of mass 174	91.3	(95.2) 1
177	5.0 - 9.0 % of mass 176	5.2	(5.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-382381/3	93253P.D	10/18/2017	09:31
	LCS 480-382381/5	93255P.D	10/18/2017	10:25
	MB 480-382381/7	93257P.D	10/18/2017	11:20
TRIP BLANK	480-125579-4	93272P.D	10/18/2017	18:32

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: ICIS 480-379439/10 Date Analyzed: 09/29/2017 17:41

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm)

Lab File ID (Standard): F7940.D Heated Purge: (Y/N) Y

Calibration ID: 31629

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		274919	5.20	549368	7.99	566141	10.36
UPPER LIMIT		549838	5.70	1098736	8.49	1132282	10.86
LOWER LIMIT		137460	4.70	274684	7.49	283071	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-381944/4		291050	5.19	615889	7.99	662491	10.36
CCVIS 480-382134/3		275571	5.20	565500	7.99	604551	10.36

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: CCVIS 480-381944/4 Date Analyzed: 10/16/2017 10:53

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm)

Lab File ID (Standard): F8269.D Heated Purge: (Y/N) Y

Calibration ID: 31632

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		291050	5.19	615889	7.99	662491	10.36
UPPER LIMIT		582100	5.69	1231778	8.49	1324982	10.86
LOWER LIMIT		145525	4.69	307945	7.49	331246	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-382014/1-A		289139	5.19	604935	7.99	646823	10.36
MB 480-382014/2-A		266370	5.20	566057	7.99	606218	10.36
480-125579-1	MW-8 (4-6)	255785	5.19	524083	7.99	520201	10.36
480-125579-2	MW-8 (13-14)	250857	5.19	535782	7.99	571765	10.36

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: CCVIS 480-382134/3 Date Analyzed: 10/17/2017 09:07

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm)

Lab File ID (Standard): F8294.D Heated Purge: (Y/N) Y

Calibration ID: 31632

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		275571	5.20	565500	7.99	604551	10.36
UPPER LIMIT		551142	5.70	1131000	8.49	1209102	10.86
LOWER LIMIT		137786	4.70	282750	7.49	302276	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-382187/1-A		270885	5.19	560814	7.99	595966	10.36
MB 480-382187/2-A		244765	5.19	500962	7.99	540122	10.36
480-125579-3	DUP-100817	245420	5.19	514800	7.99	535008	10.36
480-125579-1 MS	MW-8 (4-6) MS	253909	5.20	488993	7.99	433524	10.36
480-125579-1 MSD	MW-8 (4-6) MSD	249751	5.19	485423	7.99	414471	10.36

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: ICIS 480-381079/9 Date Analyzed: 10/10/2017 17:51

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm)

Lab File ID (Standard): P3046P.D Heated Purge: (Y/N) N

Calibration ID: 31704

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		179568	10.43	401868	14.39	439698	17.35
UPPER LIMIT		359136	10.93	803736	14.89	879396	17.85
LOWER LIMIT		89784	9.93	200934	13.89	219849	16.85
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-382381/3		182584	10.43	401251	14.38	445448	17.34

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: CCVIS 480-382381/3 Date Analyzed: 10/18/2017 09:31

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm)

Lab File ID (Standard): 93253P.D Heated Purge: (Y/N) N

Calibration ID: 31702

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		182584	10.43	401251	14.38	445448	17.34
UPPER LIMIT		365168	10.93	802502	14.88	890896	17.84
LOWER LIMIT		91292	9.93	200626	13.88	222724	16.84
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-382381/5		196682	10.43	423713	14.38	458294	17.34
MB 480-382381/7		190146	10.43	403178	14.38	424452	17.34
480-125579-4	TRIP BLANK	174601	10.43	385417	14.38	405625	17.35

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) Lab Sample ID: 480-125579-1

Matrix: Solid Lab File ID: F8285.D

Analysis Method: 8260C Date Collected: 10/08/2017 11:30

Sample wt/vol: 5.881(g) Date Analyzed: 10/16/2017 18:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.6 Level: (low/med) Low

Analysis Batch No.: 381944 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.37
79-34-5	1,1,2,2-Tetrachloroethane	ND	F1	5.0	0.82
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND	F1	5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.62
120-82-1	1,2,4-Trichlorobenzene	ND	F1	5.0	0.31
96-12-8	1,2-Dibromo-3-Chloropropane	ND	F1	5.0	2.5
106-93-4	1,2-Dibromoethane	ND	F1	5.0	0.65
95-50-1	1,2-Dichlorobenzene	ND	F1	5.0	0.39
107-06-2	1,2-Dichloroethane	ND	F1	5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND	F1	5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND	F1	5.0	0.71
78-93-3	2-Butanone (MEK)	ND	F1	25	1.8
591-78-6	2-Hexanone	ND	F1	25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	F1	25	1.7
67-64-1	Acetone	13	J F1	25	4.2
71-43-2	Benzene	1.5	J	5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.68
75-25-2	Bromoform	ND	F1 *	5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND	F1	5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.49
108-90-7	Chlorobenzene	ND	F1	5.0	0.67
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND	F1	5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND	F1	5.0	0.73
110-82-7	Cyclohexane	ND		5.0	0.71
124-48-1	Dibromochloromethane	ND	F1	5.0	0.64
75-71-8	Dichlorodifluoromethane	ND		5.0	0.42
100-41-4	Ethylbenzene	ND	F1	5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.76

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) | Lab Sample ID: 480-125579-1

Matrix: Solid | Lab File ID: F8285.D

Analysis Method: 8260C | Date Collected: 10/08/2017 11:30

Sample wt/vol: 5.881(g) | Date Analyzed: 10/16/2017 18:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.6 | Level: (low/med) Low

Analysis Batch No.: 381944 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	3.0
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.77
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	0.28	J F1	5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.68
108-88-3	Toluene	1.8	J	5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND	F1	5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND	F1	5.0	2.2
79-01-6	Trichloroethene	ND	F1	5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.48
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	0.85	J F1	10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		64-126
460-00-4	4-Bromofluorobenzene (Surr)	100		72-126
1868-53-7	Dibromofluoromethane (Surr)	103		60-140
2037-26-5	Toluene-d8 (Surr)	100		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8285.D
Lims ID: 480-125579-B-1-A
Client ID: MW-8 (4-6)
Sample Type: Client
Inject. Date: 16-Oct-2017 18:28:30 ALS Bottle#: 12 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-125579-B-1-A
Misc. Info.: 480-0066422-020
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 08:59:01 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 09:00:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	255785	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	85	524083	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	520201	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	326685	51.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.953	0.001	0	198970	48.9	
$ 5 Toluene-d8 (Surr)	98	6.560	6.559	0.001	92	1289039	49.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	94	423530	50.1	
10 Dichlorodifluoromethane	85		1.814				ND	
12 Chloromethane	50		1.997				ND	
13 Vinyl chloride	62		2.088				ND	
14 Bromomethane	94		2.362				ND	
15 Chloroethane	64		2.410				ND	
17 Trichlorofluoromethane	101		2.611				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.958				ND	
22 1,1-Dichloroethene	96		2.976				ND	
23 Acetone	43	3.031	3.025	0.006	99	35559	13.4	
26 Carbon disulfide	76		3.177				ND	
27 Methyl acetate	43		3.238				ND	
30 Methylene Chloride	84		3.353				ND	
32 Methyl tert-butyl ether	73		3.499				ND	
34 trans-1,2-Dichloroethene	96		3.530				ND	
39 1,1-Dichloroethane	63		3.858				ND	
43 2-Butanone (MEK)	43		4.290				ND	
45 cis-1,2-Dichloroethene	96		4.302				ND	
50 Chloroform	83		4.540				ND	
51 1,1,1-Trichloroethane	97		4.680				ND	
52 Cyclohexane	56		4.710				ND	
55 Carbon tetrachloride	117		4.807				ND	
57 Benzene	78	4.978	4.978	0.000	96	41955	1.47	
58 1,2-Dichloroethane	62		5.014				ND	
62 Trichloroethene	95		5.495				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/kg	Flags
64 Methylcyclohexane	83		5.629				ND	
65 1,2-Dichloropropane	63		5.714				ND	
68 Dichlorobromomethane	83		5.951				ND	
72 cis-1,3-Dichloropropene	75		6.328				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.432				ND	
74 Toluene	92	6.621	6.620	0.001	98	33137	1.78	
77 trans-1,3-Dichloropropene	75		6.845				ND	
79 1,1,2-Trichloroethane	83		7.040				ND	
81 Tetrachloroethene	166	7.138	7.137	0.001	92	4385	0.5480	
80 2-Hexanone	43		7.223				ND	
83 Chlorodibromomethane	129		7.442				ND	
84 Ethylene Dibromide	107		7.569				ND	
87 Chlorobenzene	112		8.020				ND	
88 Ethylbenzene	91		8.086				ND	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	98	11644	0.8461	
91 o-Xylene	106		8.628				ND	
92 Styrene	104	8.652	8.652	0.000	91	6299	0.2751	
95 Bromoform	173		8.920				ND	
94 Isopropylbenzene	105		8.999				ND	
97 1,1,2,2-Tetrachloroethane	83		9.388				ND	
111 1,3-Dichlorobenzene	146		10.301				ND	
113 1,4-Dichlorobenzene	146		10.380				ND	
116 1,2-Dichlorobenzene	146		10.733				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.414				ND	
119 1,2,4-Trichlorobenzene	180		12.053				ND	
S 124 Xylenes, Total	1				0		0.8461	

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

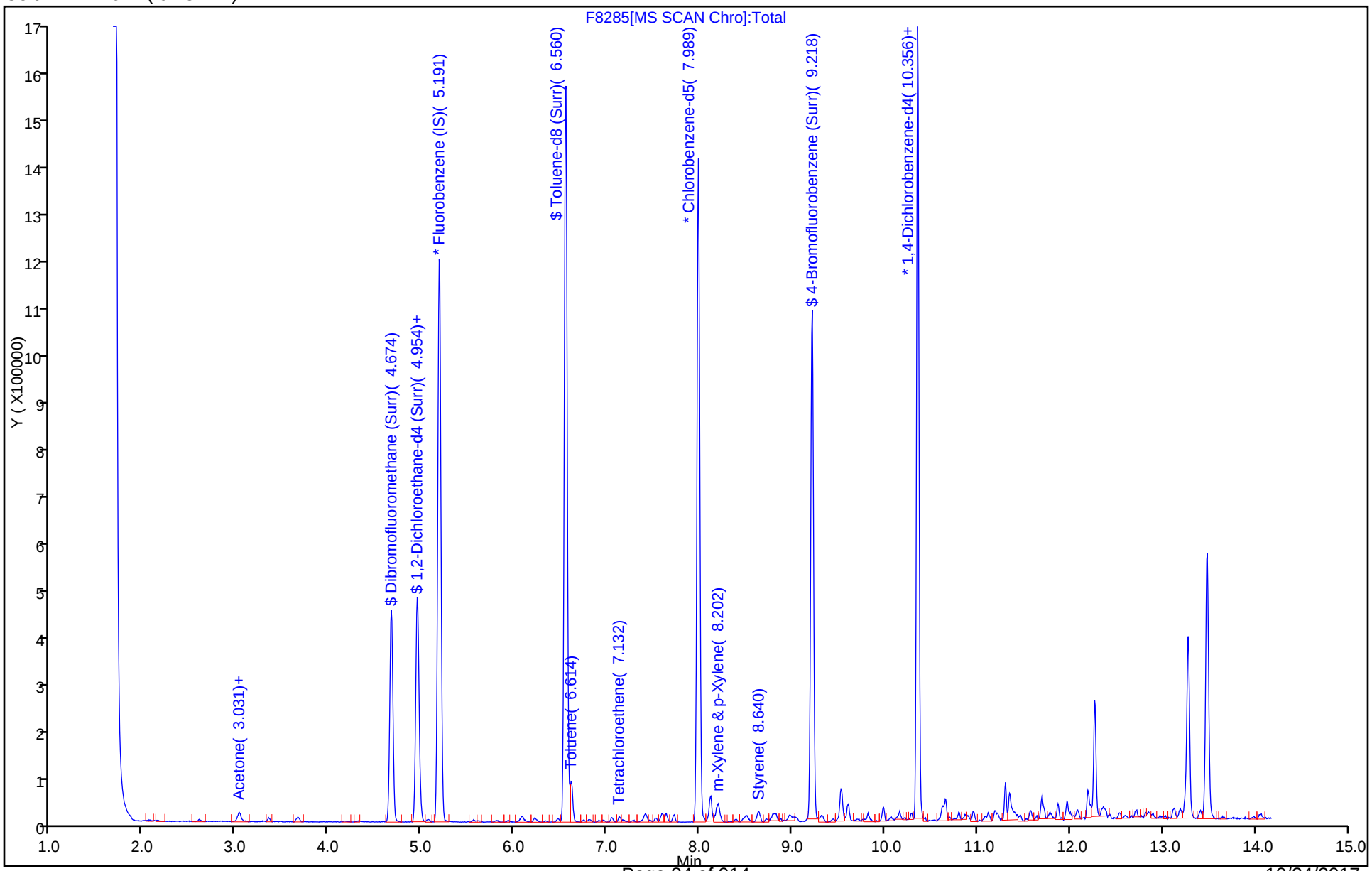
Report Date: 17-Oct-2017 09:00:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8285.D

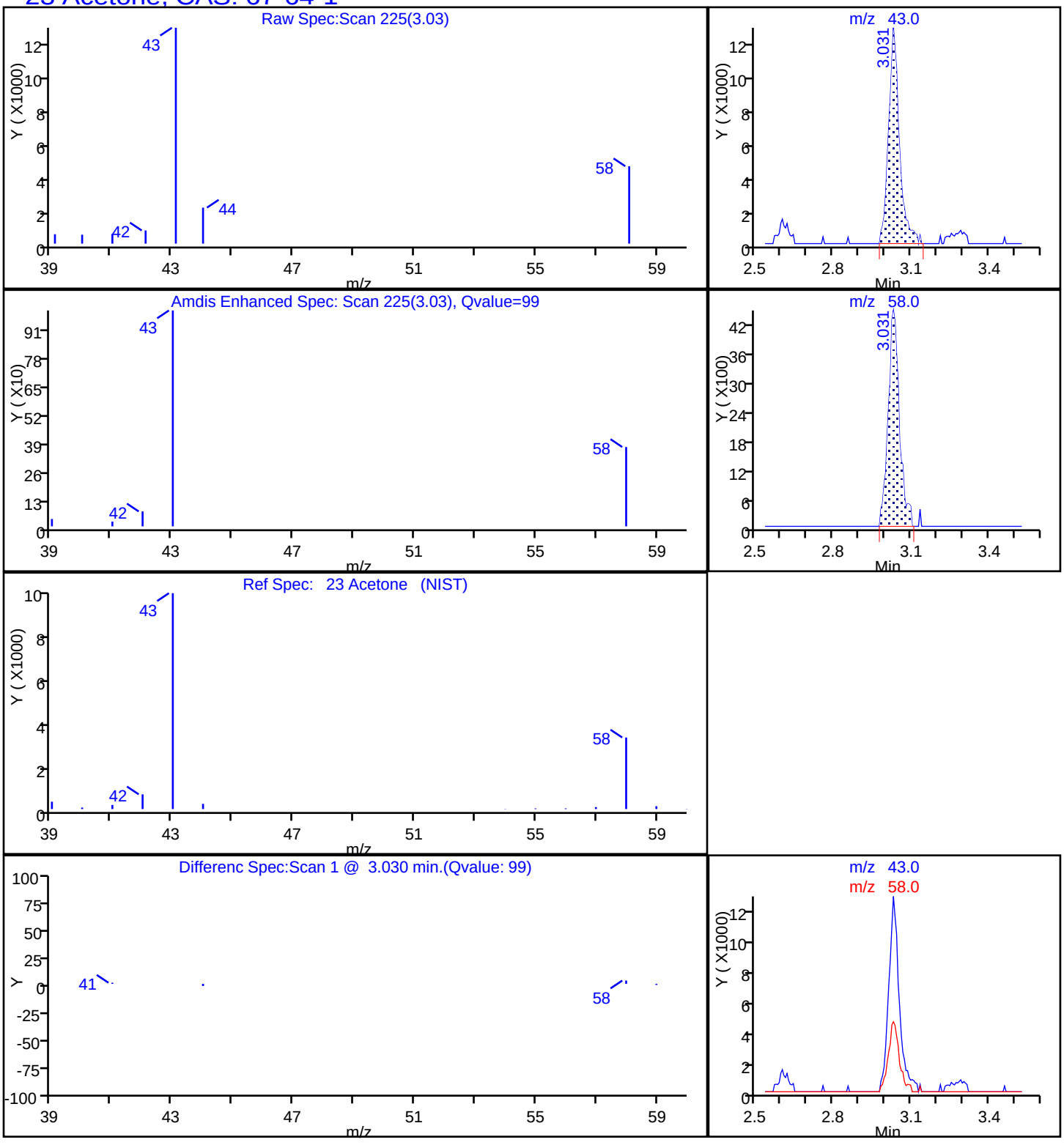
Injection Date:	16-Oct-2017 18:28:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	480-125579-B-1-A	Lab Sample ID:	480-125579-1	Worklist Smp#:	20
Client ID:	MW-8 (4-6)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8285.D
Injection Date: 16-Oct-2017 18:28:30 Instrument ID: HP5973F
Lims ID: 480-125579-B-1-A Lab Sample ID: 480-125579-1
Client ID: MW-8 (4-6)
Operator ID: CDC ALS Bottle#: 12 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

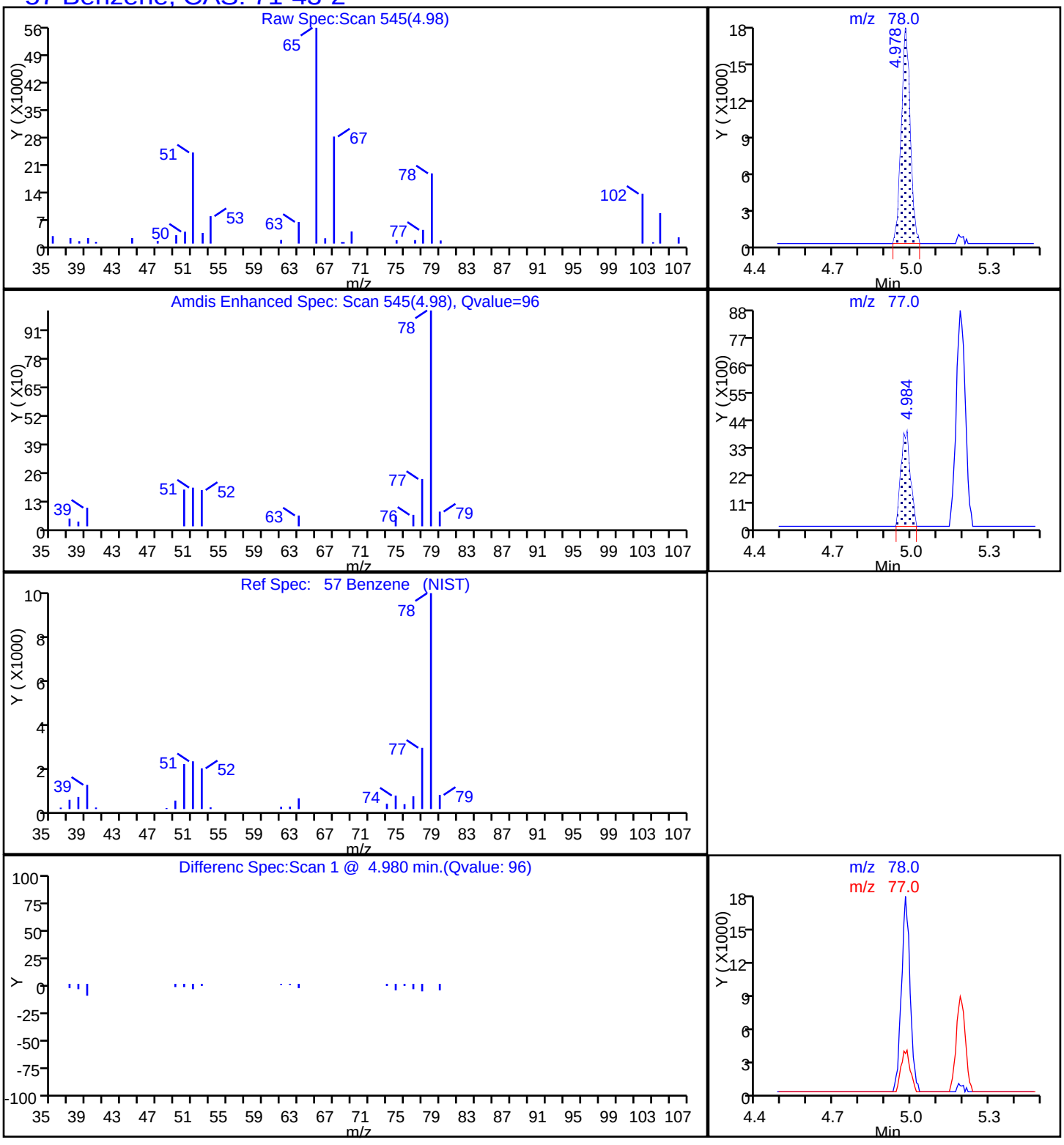


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8285.D

Injection Date:	16-Oct-2017 18:28:30	Instrument ID:	HP5973F		
Lims ID:	480-125579-B-1-A	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	CDC	ALS Bottle#:	12	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

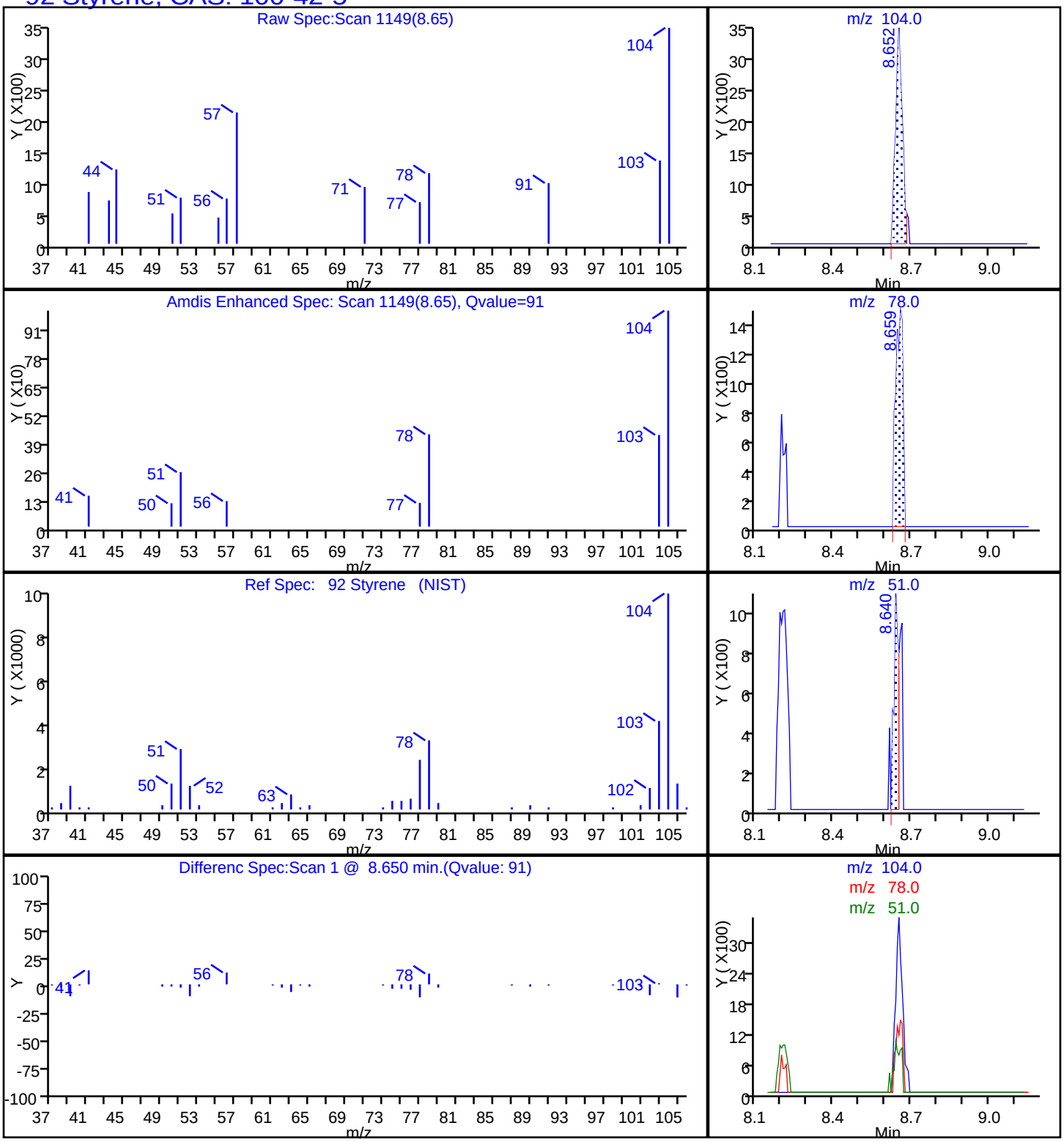
57 Benzene, CAS: 71-43-2



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8285.D				
Injection Date:	16-Oct-2017 18:28:30	Instrument ID:	HP5973F		
Lims ID:	480-125579-B-1-A	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	CDC	ALS Bottle#:	12	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

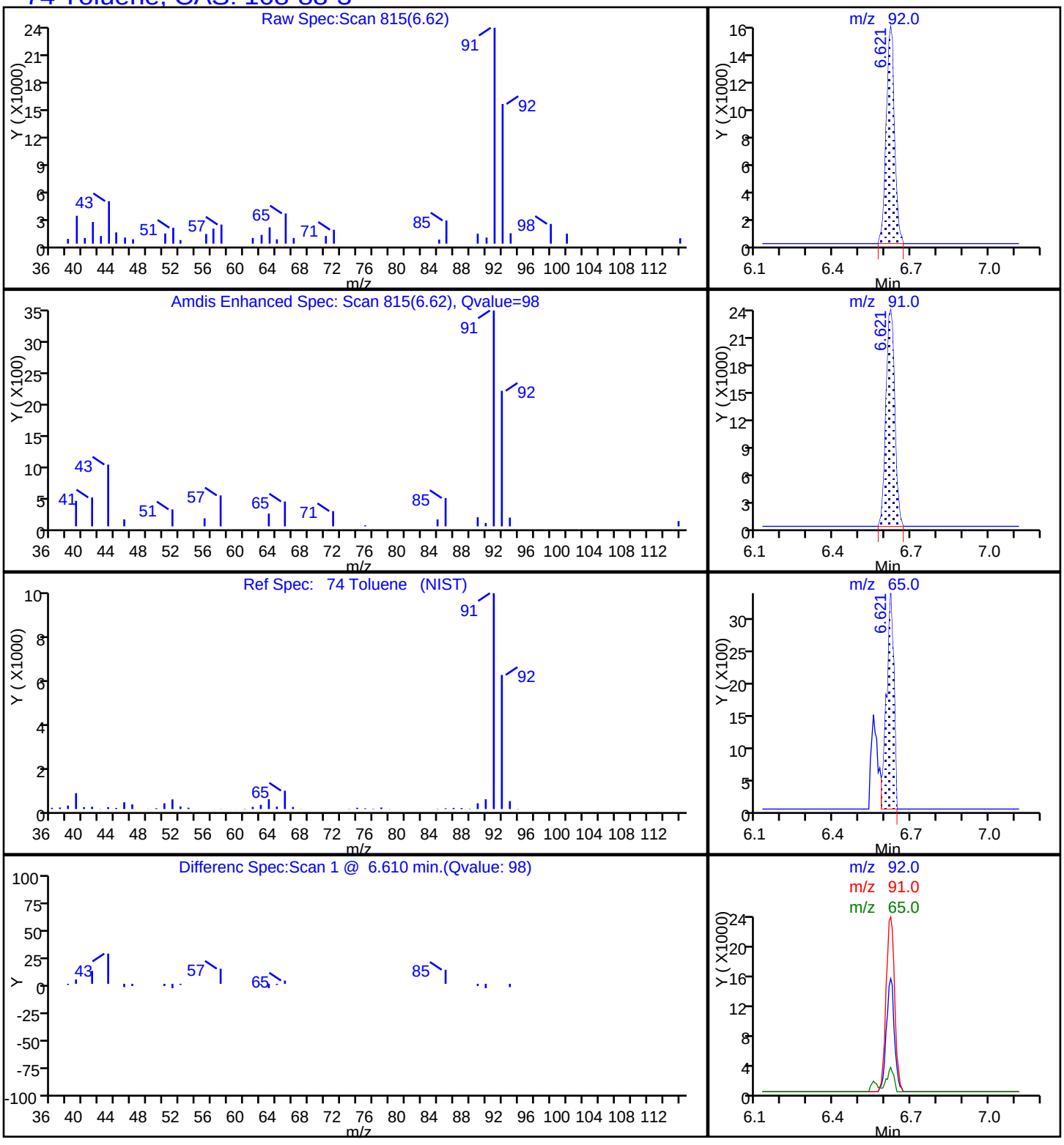
92 Styrene, CAS: 100-42-5



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8285.D				
Injection Date:	16-Oct-2017 18:28:30	Instrument ID:	HP5973F		
Lims ID:	480-125579-B-1-A	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	CDC	ALS Bottle#:	12	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

74 Toluene, CAS: 108-88-3



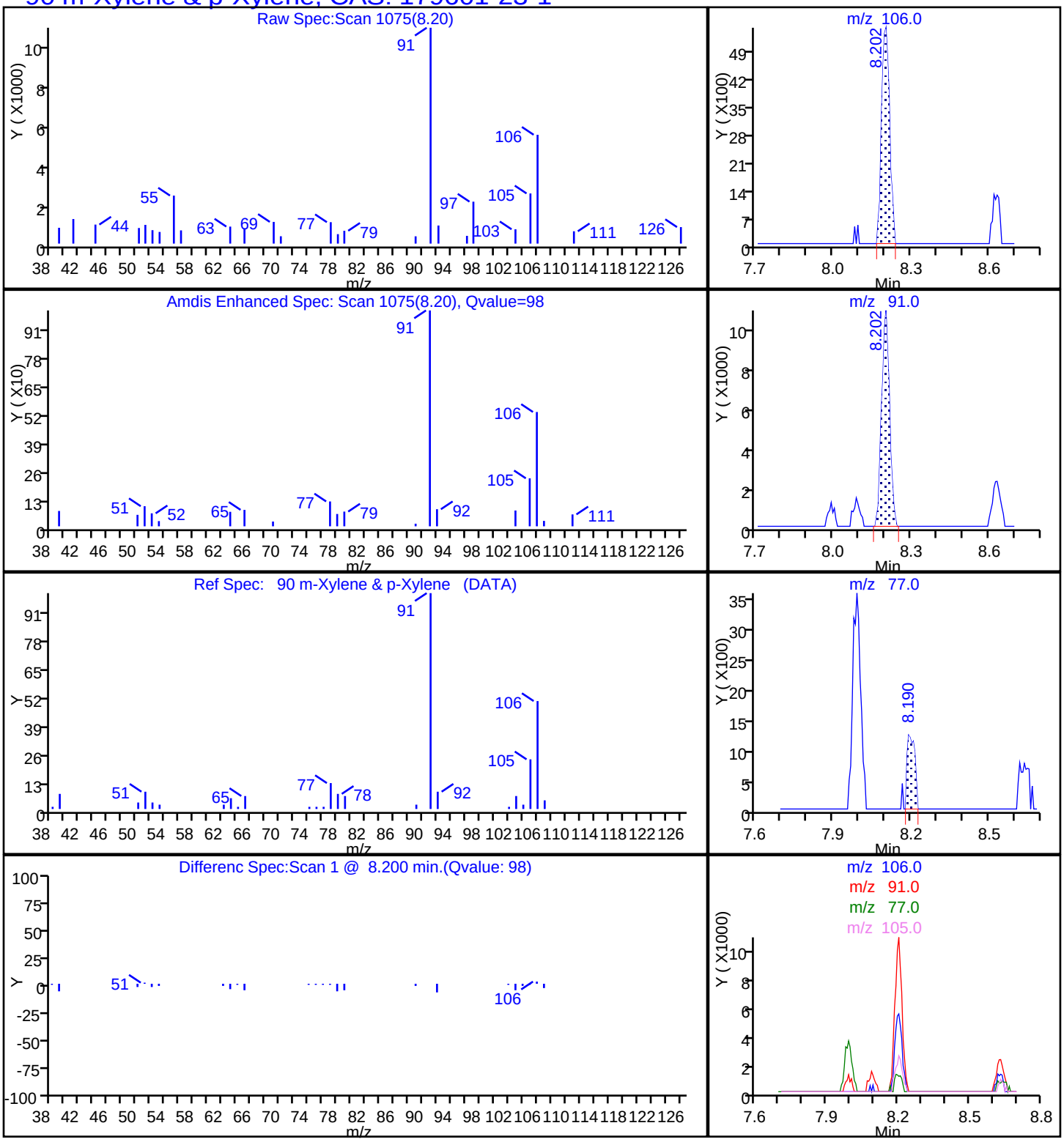
Report Date: 17-Oct-2017 09:00:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8285.D

Injection Date:	16-Oct-2017 18:28:30	Instrument ID:	HP5973F		
Lims ID:	480-125579-B-1-A	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	CDC	ALS Bottle#:	12	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

90 m-Xylene & p-Xylene, CAS: 179601-23-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (13-14) | Lab Sample ID: 480-125579-2

Matrix: Solid | Lab File ID: F8286.D

Analysis Method: 8260C | Date Collected: 10/08/2017 12:00

Sample wt/vol: 6.956(g) | Date Analyzed: 10/16/2017 18:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 18.4 | Level: (low/med) Low

Analysis Batch No.: 381944 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.32
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.4	0.71
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.57
75-34-3	1,1-Dichloroethane	ND		4.4	0.54
75-35-4	1,1-Dichloroethene	ND		4.4	0.54
120-82-1	1,2,4-Trichlorobenzene	ND		4.4	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.4	2.2
106-93-4	1,2-Dibromoethane	ND		4.4	0.57
95-50-1	1,2-Dichlorobenzene	ND		4.4	0.34
107-06-2	1,2-Dichloroethane	ND		4.4	0.22
78-87-5	1,2-Dichloropropane	ND		4.4	2.2
541-73-1	1,3-Dichlorobenzene	ND		4.4	0.23
106-46-7	1,4-Dichlorobenzene	ND		4.4	0.62
78-93-3	2-Butanone (MEK)	ND		22	1.6
591-78-6	2-Hexanone	ND		22	2.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		22	1.4
67-64-1	Acetone	21	J	22	3.7
71-43-2	Benzene	ND		4.4	0.22
75-27-4	Bromodichloromethane	ND		4.4	0.59
75-25-2	Bromoform	ND	*	4.4	2.2
74-83-9	Bromomethane	ND		4.4	0.40
75-15-0	Carbon disulfide	ND		4.4	2.2
56-23-5	Carbon tetrachloride	ND		4.4	0.43
108-90-7	Chlorobenzene	ND		4.4	0.58
75-00-3	Chloroethane	ND		4.4	0.99
67-66-3	Chloroform	ND		4.4	0.27
74-87-3	Chloromethane	ND		4.4	0.27
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.56
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.63
110-82-7	Cyclohexane	ND		4.4	0.62
124-48-1	Dibromochloromethane	ND		4.4	0.56
75-71-8	Dichlorodifluoromethane	ND		4.4	0.36
100-41-4	Ethylbenzene	ND		4.4	0.30
98-82-8	Isopropylbenzene	ND		4.4	0.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (13-14) | Lab Sample ID: 480-125579-2

Matrix: Solid | Lab File ID: F8286.D

Analysis Method: 8260C | Date Collected: 10/08/2017 12:00

Sample wt/vol: 6.956(g) | Date Analyzed: 10/16/2017 18:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 18.4 | Level: (low/med) Low

Analysis Batch No.: 381944 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		22	2.7
1634-04-4	Methyl tert-butyl ether	ND		4.4	0.43
108-87-2	Methylcyclohexane	ND		4.4	0.67
75-09-2	Methylene Chloride	ND		4.4	2.0
100-42-5	Styrene	ND		4.4	0.22
127-18-4	Tetrachloroethene	0.70	J	4.4	0.59
108-88-3	Toluene	ND		4.4	0.33
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.45
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	1.9
79-01-6	Trichloroethene	ND		4.4	0.97
75-69-4	Trichlorofluoromethane	ND		4.4	0.42
75-01-4	Vinyl chloride	ND		4.4	0.54
1330-20-7	Xylenes, Total	ND		8.8	0.74

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		64-126
460-00-4	4-Bromofluorobenzene (Surr)	105		72-126
1868-53-7	Dibromofluoromethane (Surr)	106		60-140
2037-26-5	Toluene-d8 (Surr)	98		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8286.D
Lims ID: 480-125579-B-2-A
Client ID: MW-8 (13-14)
Sample Type: Client
Inject. Date: 16-Oct-2017 18:54:30 ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-125579-B-2-A
Misc. Info.: 480-0066422-021
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 09:01:08 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 09:01:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	250857	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	85	535782	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	95	571765	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	330496	53.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.953	0.001	0	213725	53.5	
$ 5 Toluene-d8 (Surr)	98	6.560	6.559	0.001	93	1295243	49.1	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	94	452884	52.4	
10 Dichlorodifluoromethane	85		1.814				ND	
12 Chloromethane	50		1.997				ND	
13 Vinyl chloride	62		2.088				ND	
14 Bromomethane	94		2.362				ND	
15 Chloroethane	64		2.410				ND	
17 Trichlorofluoromethane	101		2.611				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.958				ND	
22 1,1-Dichloroethene	96		2.976				ND	
23 Acetone	43	3.037	3.025	0.012	97	61478	23.6	
26 Carbon disulfide	76		3.177				ND	
27 Methyl acetate	43		3.238				ND	
30 Methylene Chloride	84		3.353				ND	
32 Methyl tert-butyl ether	73		3.499				ND	
34 trans-1,2-Dichloroethene	96		3.530				ND	
39 1,1-Dichloroethane	63		3.858				ND	
43 2-Butanone (MEK)	43		4.290				ND	
45 cis-1,2-Dichloroethene	96		4.302				ND	
50 Chloroform	83		4.540				ND	
51 1,1,1-Trichloroethane	97		4.680				ND	
52 Cyclohexane	56		4.710				ND	
55 Carbon tetrachloride	117		4.807				ND	
57 Benzene	78		4.978				ND	
58 1,2-Dichloroethane	62		5.014				ND	
62 Trichloroethene	95		5.495				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/kg	Flags
64 Methylcyclohexane	83		5.629				ND	
65 1,2-Dichloropropane	63		5.714				ND	
68 Dichlorobromomethane	83		5.951				ND	
72 cis-1,3-Dichloropropene	75		6.328				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.432				ND	
74 Toluene	92		6.620				ND	
77 trans-1,3-Dichloropropene	75		6.845				ND	
79 1,1,2-Trichloroethane	83		7.040				ND	
81 Tetrachloroethene	166	7.144	7.137	0.007	95	6474	0.7914	
80 2-Hexanone	43		7.223				ND	
83 Chlorodibromomethane	129		7.442				ND	
84 Ethylene Dibromide	107		7.569				ND	
87 Chlorobenzene	112		8.020				ND	
88 Ethylbenzene	91		8.086				ND	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	95	3634	0.2583	
91 o-Xylene	106		8.628				ND	
92 Styrene	104		8.652				ND	
95 Bromoform	173		8.920				ND	
94 Isopropylbenzene	105		8.999				ND	
97 1,1,2,2-Tetrachloroethane	83		9.388				ND	
111 1,3-Dichlorobenzene	146		10.301				ND	
113 1,4-Dichlorobenzene	146		10.380				ND	
116 1,2-Dichlorobenzene	146		10.733				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.414				ND	
119 1,2,4-Trichlorobenzene	180		12.053				ND	
S 124 Xylenes, Total	1				0		0.2583	

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

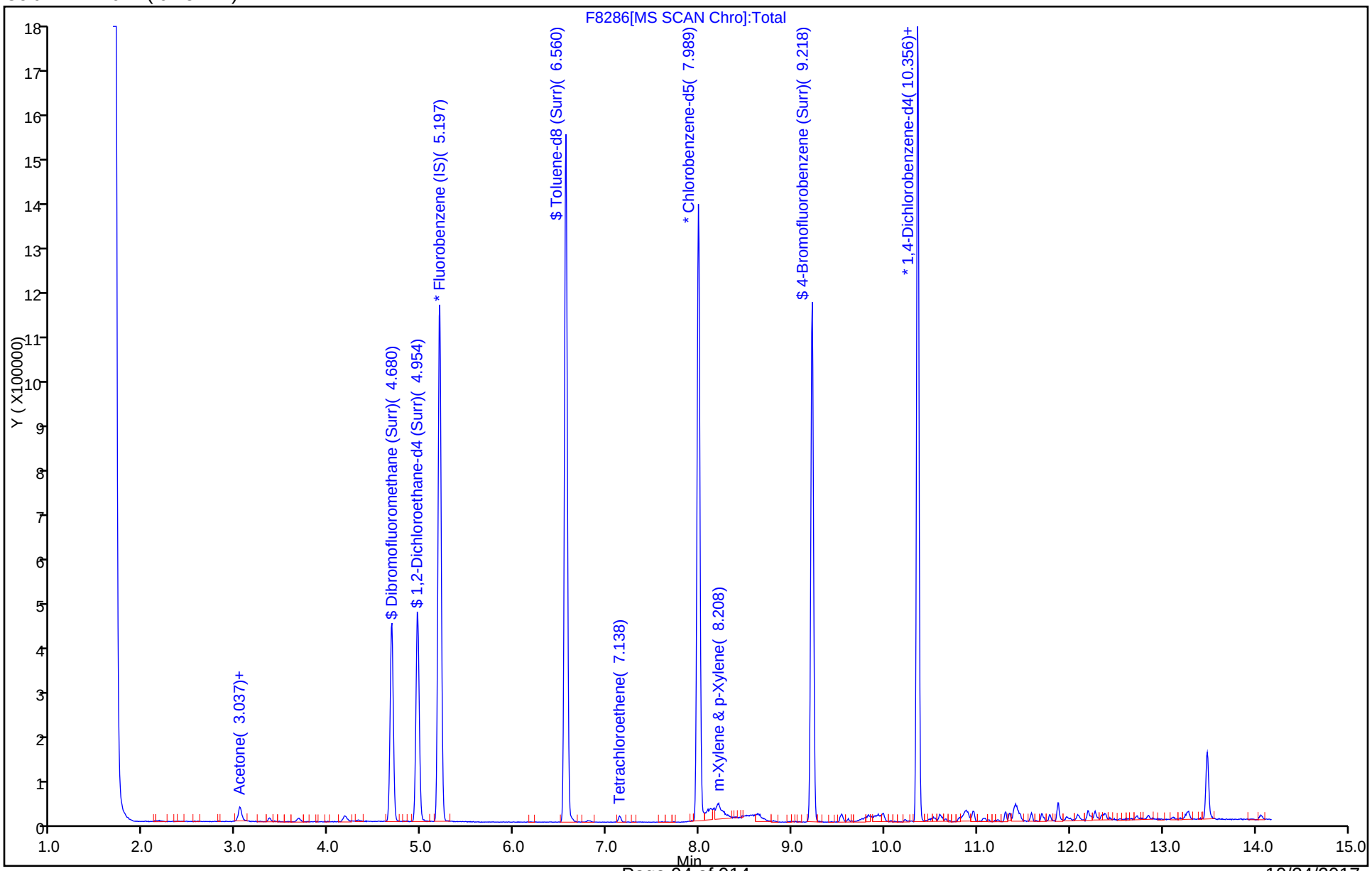
Report Date: 17-Oct-2017 09:01:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8286.D

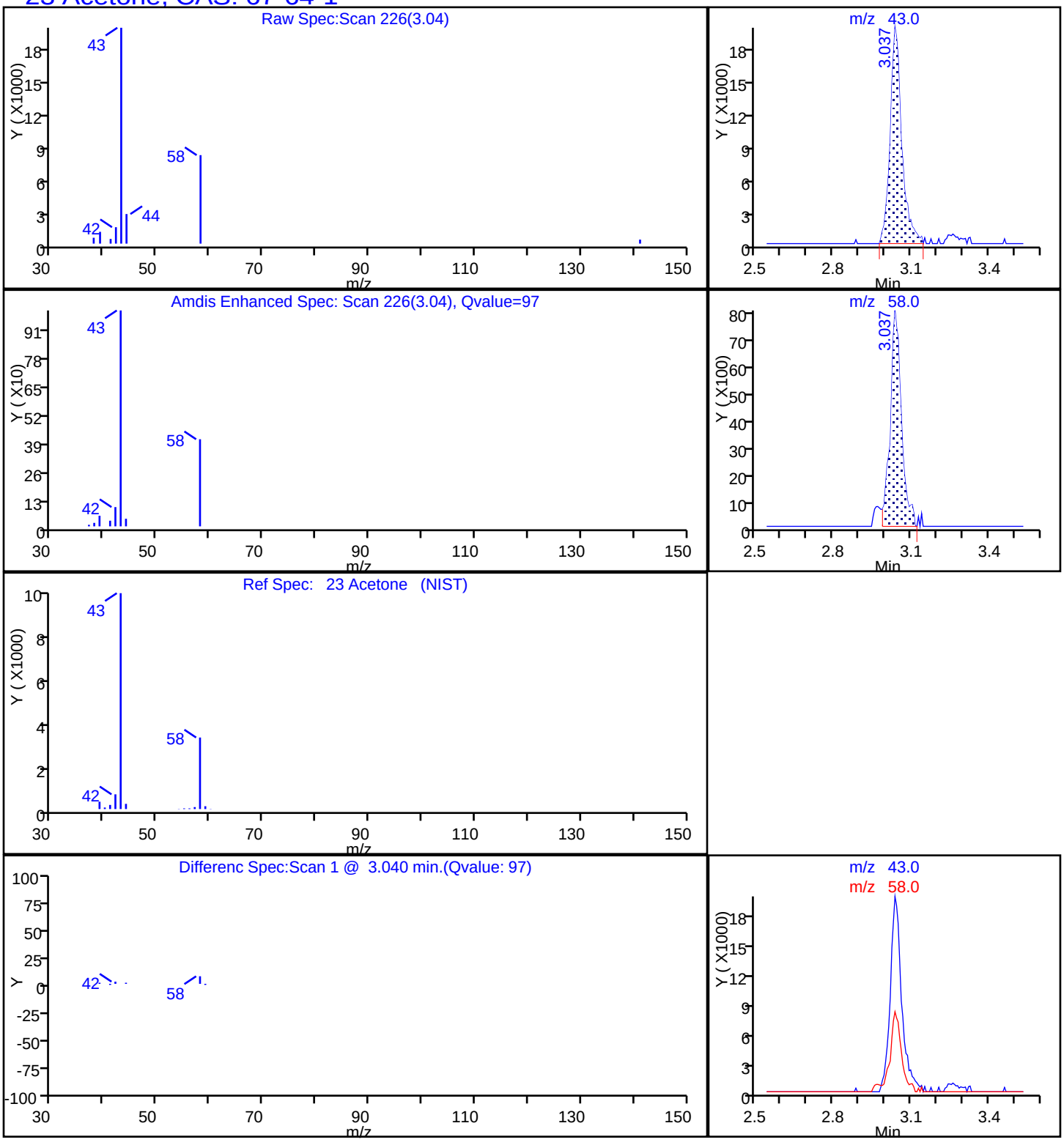
Injection Date:	16-Oct-2017 18:54:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	480-125579-B-2-A	Lab Sample ID:	480-125579-2	Worklist Smp#:	21
Client ID:	MW-8 (13-14)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



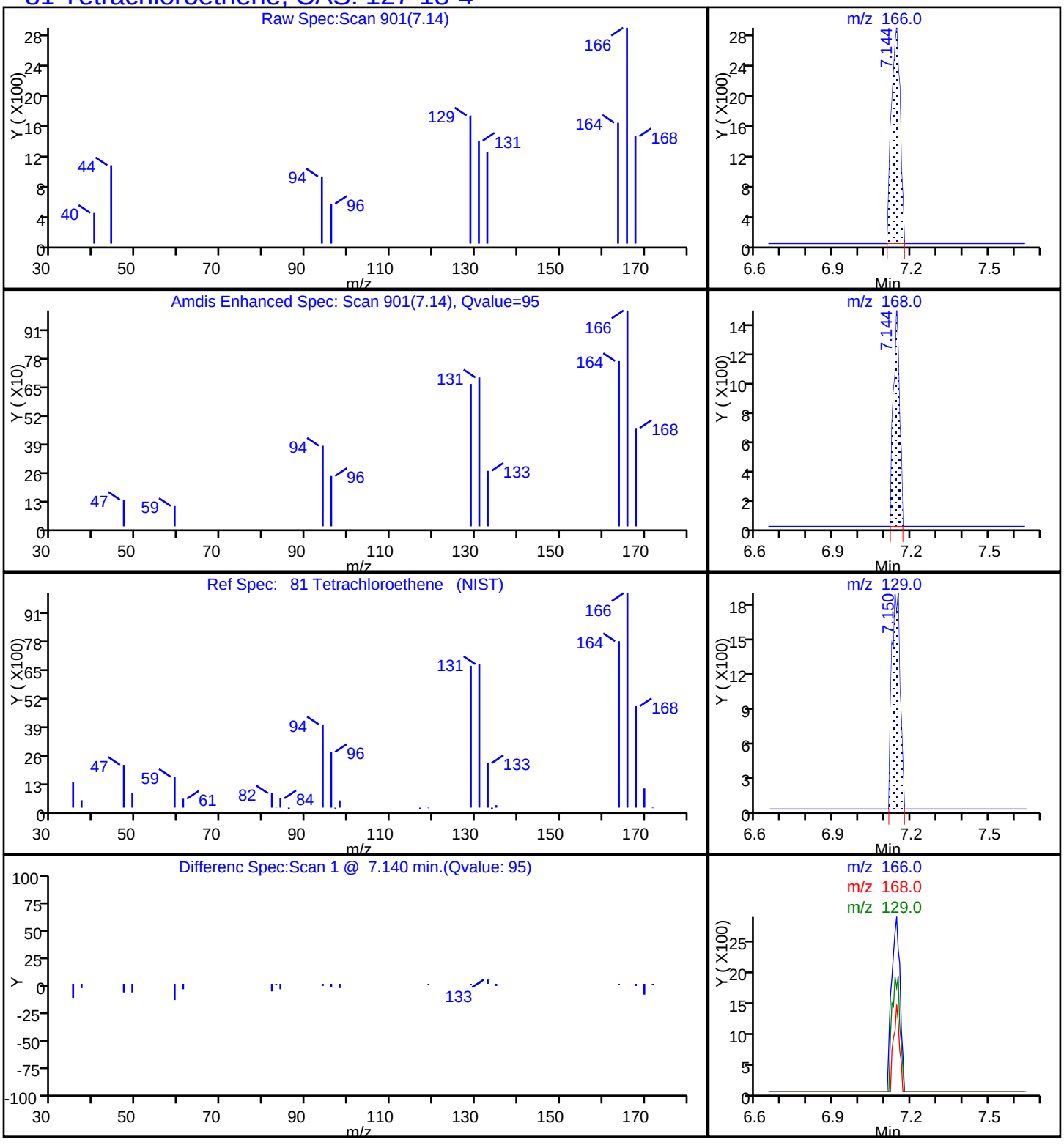
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8286.D
Injection Date: 16-Oct-2017 18:54:30 Instrument ID: HP5973F
Lims ID: 480-125579-B-2-A Lab Sample ID: 480-125579-2
Client ID: MW-8 (13-14)
Operator ID: CDC ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1



Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8286.D
Injection Date: 16-Oct-2017 18:54:30 Instrument ID: HP5973F
Lims ID: 480-125579-B-2-A Lab Sample ID: 480-125579-2
Client ID: MW-8 (13-14)
Operator ID: CDC ALS Bottle#: 13 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

81 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: DUP-100817 | Lab Sample ID: 480-125579-3

Matrix: Solid | Lab File ID: F8305.D

Analysis Method: 8260C | Date Collected: 10/08/2017 00:00

Sample wt/vol: 6.748(g) | Date Analyzed: 10/17/2017 14:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.3 | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.4	0.32
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.4	0.71
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	1.0
79-00-5	1,1,2-Trichloroethane	ND		4.4	0.57
75-34-3	1,1-Dichloroethane	ND		4.4	0.53
75-35-4	1,1-Dichloroethene	ND		4.4	0.54
120-82-1	1,2,4-Trichlorobenzene	ND		4.4	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.4	2.2
106-93-4	1,2-Dibromoethane	ND		4.4	0.56
95-50-1	1,2-Dichlorobenzene	ND		4.4	0.34
107-06-2	1,2-Dichloroethane	ND		4.4	0.22
78-87-5	1,2-Dichloropropane	ND		4.4	2.2
541-73-1	1,3-Dichlorobenzene	ND		4.4	0.22
106-46-7	1,4-Dichlorobenzene	ND		4.4	0.61
78-93-3	2-Butanone (MEK)	2.6	J	22	1.6
591-78-6	2-Hexanone	ND		22	2.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		22	1.4
67-64-1	Acetone	42		22	3.7
71-43-2	Benzene	ND		4.4	0.21
75-27-4	Bromodichloromethane	ND		4.4	0.59
75-25-2	Bromoform	ND		4.4	2.2
74-83-9	Bromomethane	ND		4.4	0.39
75-15-0	Carbon disulfide	ND		4.4	2.2
56-23-5	Carbon tetrachloride	ND		4.4	0.42
108-90-7	Chlorobenzene	ND		4.4	0.58
75-00-3	Chloroethane	ND		4.4	0.99
67-66-3	Chloroform	ND		4.4	0.27
74-87-3	Chloromethane	ND		4.4	0.26
156-59-2	cis-1,2-Dichloroethene	ND		4.4	0.56
10061-01-5	cis-1,3-Dichloropropene	ND		4.4	0.63
110-82-7	Cyclohexane	ND		4.4	0.61
124-48-1	Dibromochloromethane	ND		4.4	0.56
75-71-8	Dichlorodifluoromethane	ND		4.4	0.36
100-41-4	Ethylbenzene	ND		4.4	0.30
98-82-8	Isopropylbenzene	ND		4.4	0.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: DUP-100817 | Lab Sample ID: 480-125579-3

Matrix: Solid | Lab File ID: F8305.D

Analysis Method: 8260C | Date Collected: 10/08/2017 00:00

Sample wt/vol: 6.748(g) | Date Analyzed: 10/17/2017 14:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.3 | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		22	2.6
1634-04-4	Methyl tert-butyl ether	ND		4.4	0.43
108-87-2	Methylcyclohexane	ND		4.4	0.67
75-09-2	Methylene Chloride	ND		4.4	2.0
100-42-5	Styrene	ND		4.4	0.22
127-18-4	Tetrachloroethene	0.62	J	4.4	0.59
108-88-3	Toluene	ND		4.4	0.33
156-60-5	trans-1,2-Dichloroethene	ND		4.4	0.45
10061-02-6	trans-1,3-Dichloropropene	ND		4.4	1.9
79-01-6	Trichloroethene	ND		4.4	0.96
75-69-4	Trichlorofluoromethane	ND		4.4	0.41
75-01-4	Vinyl chloride	ND		4.4	0.53
1330-20-7	Xylenes, Total	ND		8.8	0.74

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		64-126
460-00-4	4-Bromofluorobenzene (Surr)	103		72-126
1868-53-7	Dibromofluoromethane (Surr)	104		60-140
2037-26-5	Toluene-d8 (Surr)	98		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8305.D
Lims ID: 480-125579-C-3-A
Client ID: DUP-100817
Sample Type: Client
Inject. Date: 17-Oct-2017 14:11:30 ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-125579-C-3-A
Misc. Info.: 480-0066449-014
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 14:48:20 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 14:48:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.197	-0.006	99	245420	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	85	514800	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	535008	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.673	4.680	-0.007	94	316876	52.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.953	4.960	-0.007	0	209603	53.7	
$ 5 Toluene-d8 (Surr)	98	6.559	6.560	-0.001	92	1244697	49.1	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	94	427826	51.5	
10 Dichlorodifluoromethane	85		1.820				ND	
12 Chloromethane	50		2.003				ND	
13 Vinyl chloride	62		2.094				ND	
14 Bromomethane	94		2.368				ND	
15 Chloroethane	64		2.417				ND	
17 Trichlorofluoromethane	101		2.617				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.958				ND	
22 1,1-Dichloroethene	96		2.976				ND	
23 Acetone	43	3.037	3.031	0.006	98	121968	47.8	
26 Carbon disulfide	76		3.183				ND	
27 Methyl acetate	43		3.244				ND	
30 Methylene Chloride	84		3.354				ND	
32 Methyl tert-butyl ether	73		3.506				ND	
34 trans-1,2-Dichloroethene	96		3.536				ND	
39 1,1-Dichloroethane	63		3.858				ND	
43 2-Butanone (MEK)	43	4.315	4.315	0.018	99	10863	3.01	M
45 cis-1,2-Dichloroethene	96		4.303				ND	
50 Chloroform	83		4.540				ND	
51 1,1,1-Trichloroethane	97		4.680				ND	
52 Cyclohexane	56		4.710				ND	
55 Carbon tetrachloride	117		4.807				ND	
57 Benzene	78		4.984				ND	
58 1,2-Dichloroethane	62		5.020				ND	
62 Trichloroethene	95		5.495				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/kg	Flags
64 Methylcyclohexane	83		5.635				ND	
65 1,2-Dichloropropane	63		5.714				ND	
68 Dichlorobromomethane	83		5.957				ND	
72 cis-1,3-Dichloropropene	75		6.334				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.438				ND	
74 Toluene	92		6.620				ND	
77 trans-1,3-Dichloropropene	75		6.845				ND	
79 1,1,2-Trichloroethane	83		7.040				ND	
81 Tetrachloroethene	166	7.137	7.137	0.000	93	5604	0.7130	
80 2-Hexanone	43		7.223				ND	
83 Chlorodibromomethane	129		7.442				ND	
84 Ethylene Dibromide	107		7.569				ND	
87 Chlorobenzene	112		8.020				ND	
88 Ethylbenzene	91		8.087				ND	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	91	2711	0.2005	
91 o-Xylene	106		8.634				ND	
92 Styrene	104		8.652				ND	
95 Bromoform	173		8.926				ND	
94 Isopropylbenzene	105		8.999				ND	
97 1,1,2,2-Tetrachloroethane	83		9.388				ND	
111 1,3-Dichlorobenzene	146		10.301				ND	
113 1,4-Dichlorobenzene	146		10.380				ND	
116 1,2-Dichlorobenzene	146		10.733				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.420				ND	
119 1,2,4-Trichlorobenzene	180		12.053				ND	
S 124 Xylenes, Total	1				0		0.2005	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

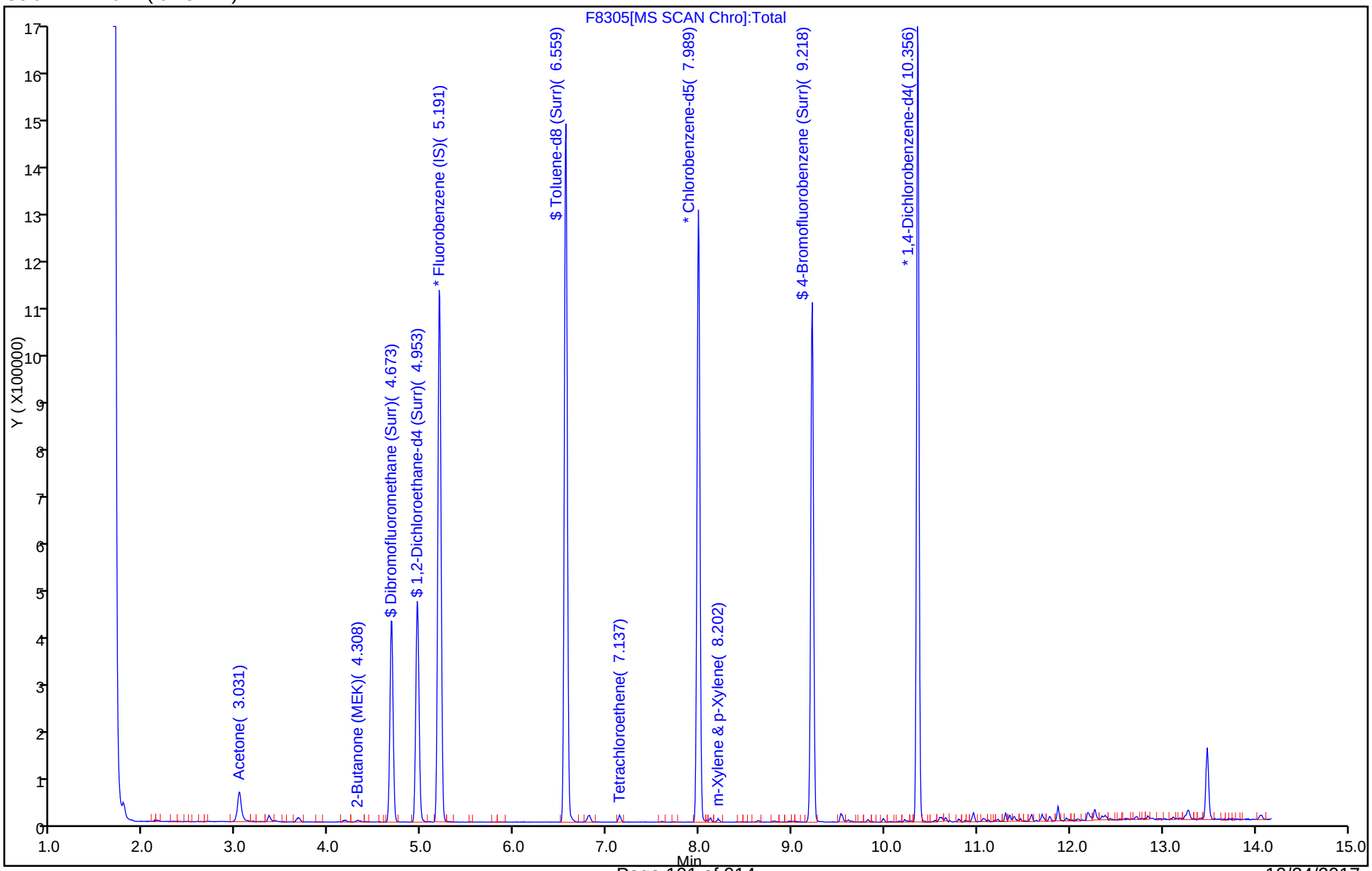
Report Date: 17-Oct-2017 14:48:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8305.D

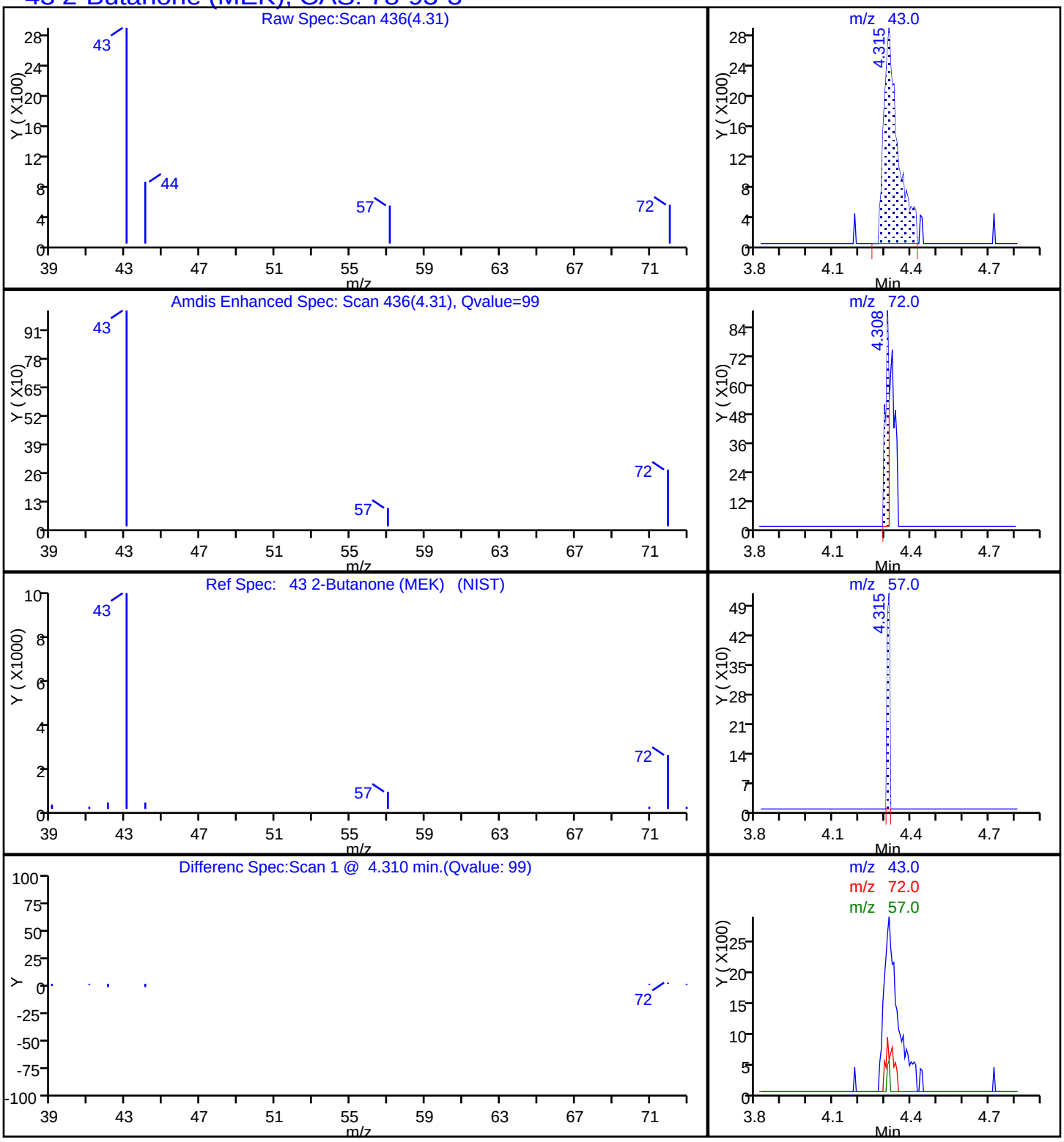
Injection Date:	17-Oct-2017 14:11:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	480-125579-C-3-A	Lab Sample ID:	480-125579-3	Worklist Smp#:	14
Client ID:	DUP-100817				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8305.D
Injection Date: 17-Oct-2017 14:11:30 Instrument ID: HP5973F
Lims ID: 480-125579-C-3-A Lab Sample ID: 480-125579-3
Client ID: DUP-100817
Operator ID: CDC ALS Bottle#: 7 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

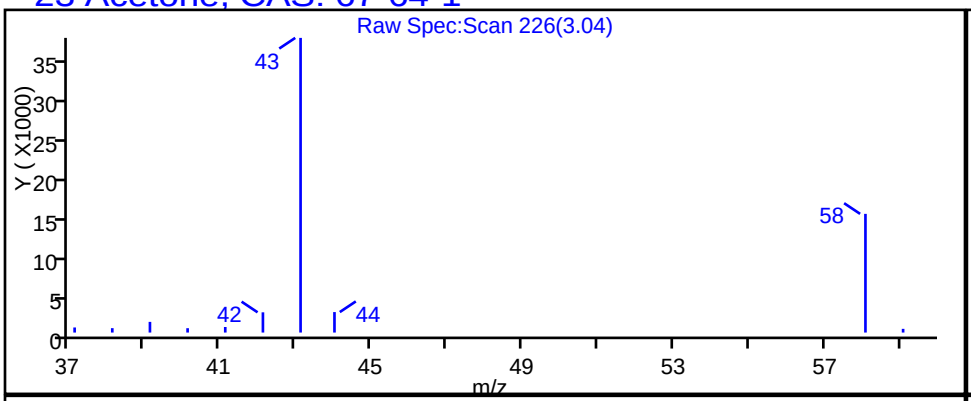
43 2-Butanone (MEK), CAS: 78-93-3

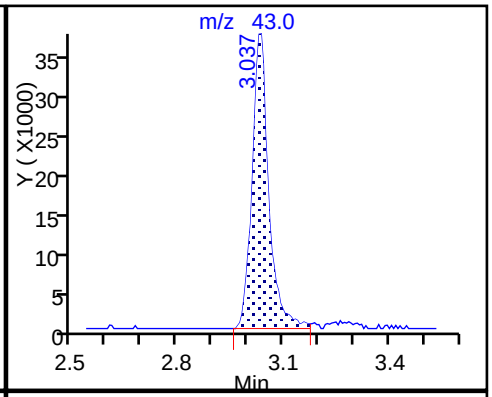


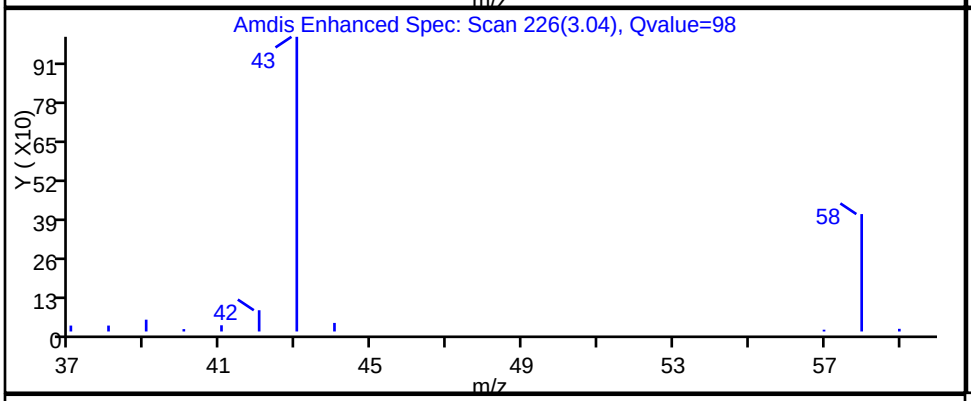
TestAmerica Buffalo

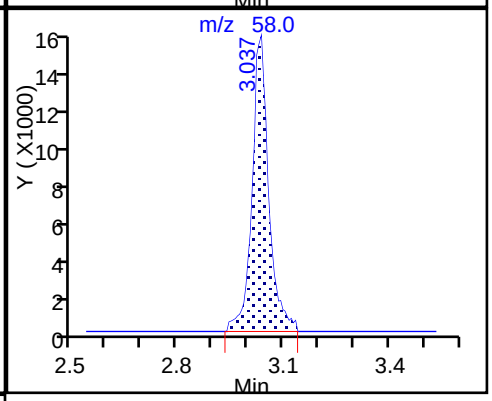
Data File:	\\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8305.D				
Injection Date:	17-Oct-2017 14:11:30	Instrument ID:	HP5973F		
Lims ID:	480-125579-C-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	CDC	ALS Bottle#:	7	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

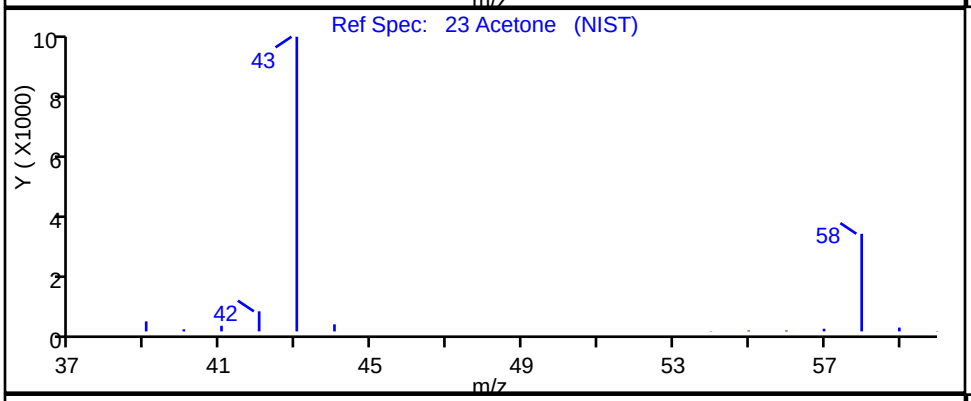
23 Acetone, CAS: 67-64-1

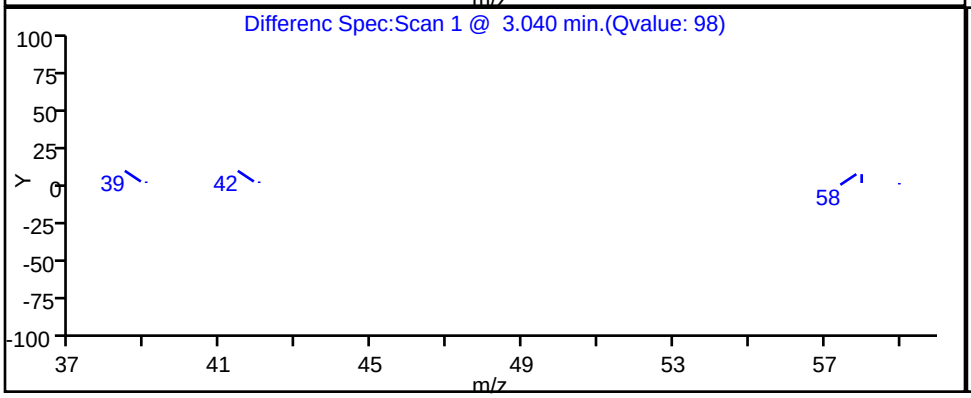


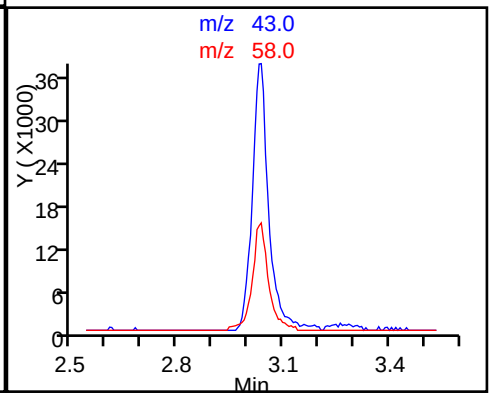










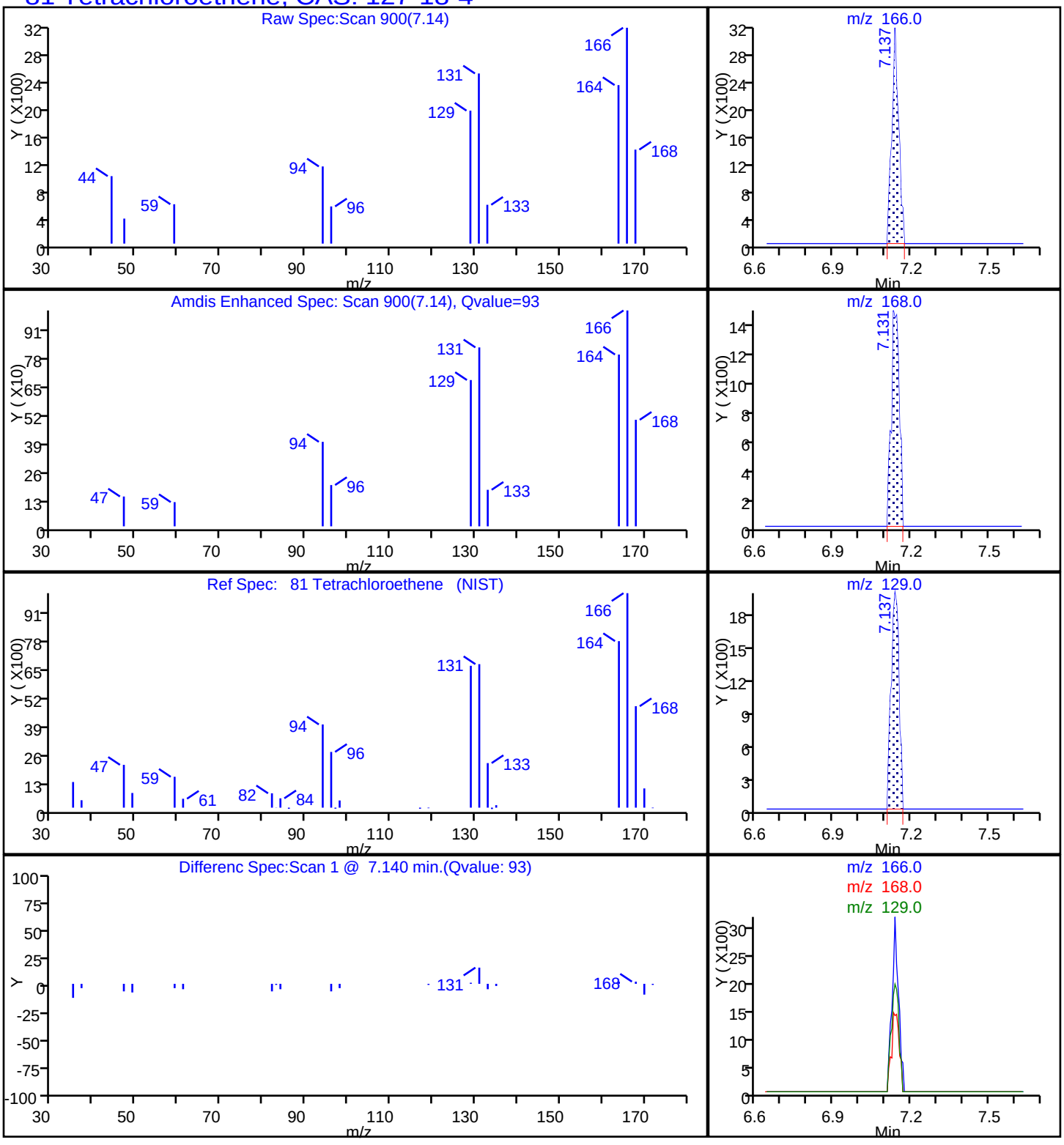


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8305.D

Injection Date:	17-Oct-2017 14:11:30	Instrument ID:	HP5973F
Lims ID:	480-125579-C-3-A	Lab Sample ID:	480-125579-3
Client ID:	DUP-100817		
Operator ID:	CDC	ALS Bottle#:	7 Worklist Smp#: 14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN

81 Tetrachloroethene, CAS: 127-18-4



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

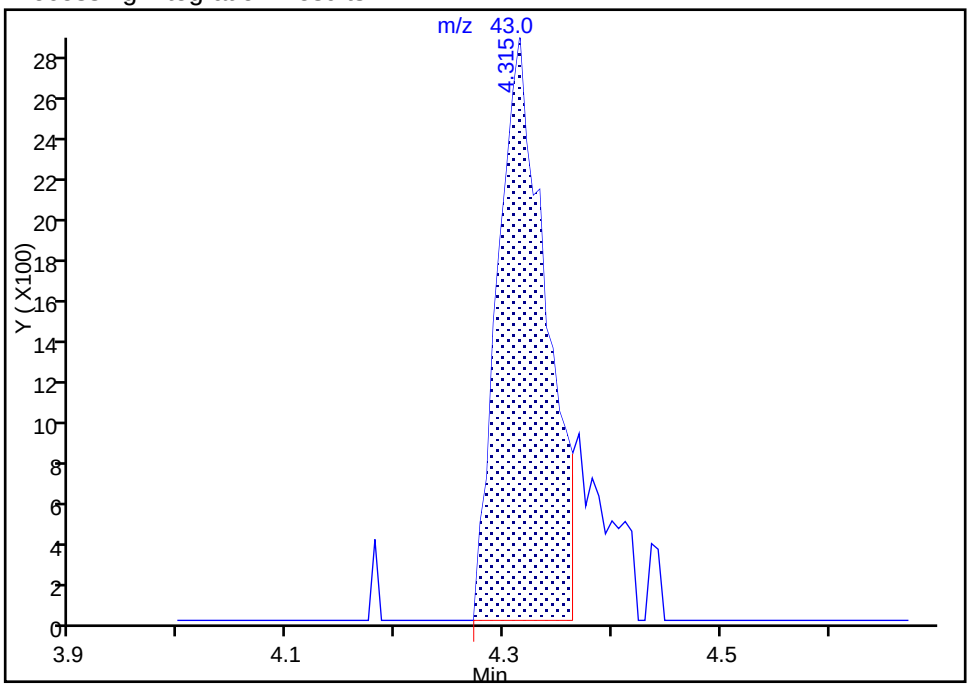
Data File:	\\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8305.D				
Injection Date:	17-Oct-2017 14:11:30	Instrument ID:	HP5973F		
Lims ID:	480-125579-C-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	CDC	ALS Bottle#:	7	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

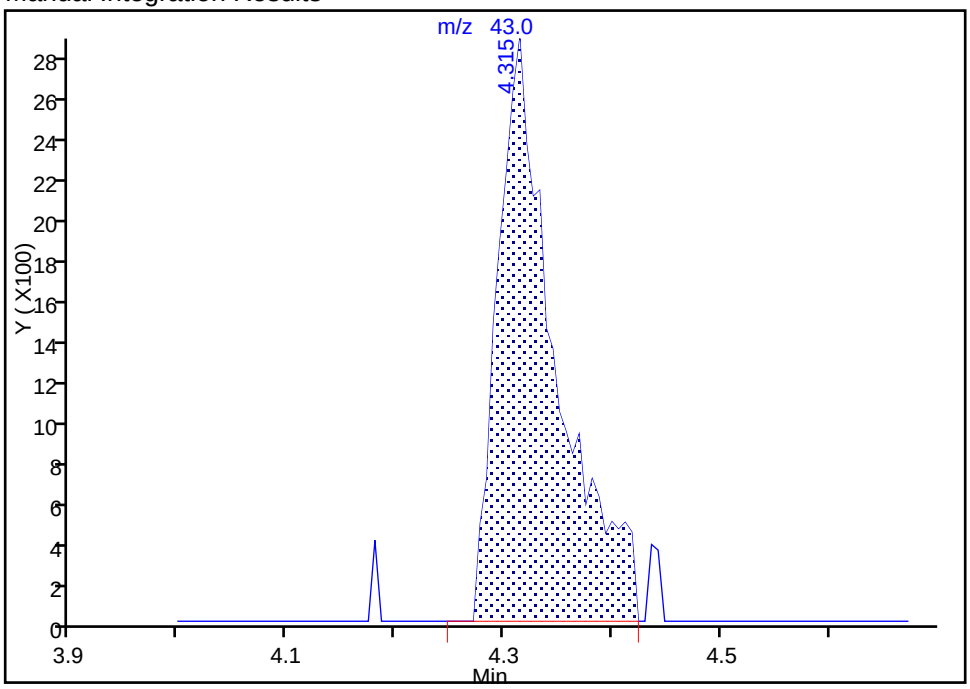
Processing Integration Results

RT: 4.31
Area: 8986
Amount: 2.493420
Amount Units: ug/kg



Manual Integration Results

RT: 4.31
Area: 10863
Amount: 3.014246
Amount Units: ug/kg



Reviewer: cwiklinc, 17-Oct-2017 14:47:59

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 480-125579-4

Matrix: Water | Lab File ID: 93272P.D

Analysis Method: 8260C | Date Collected: 10/08/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2017 18:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382381 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 480-125579-4

Matrix: Water | Lab File ID: 93272P.D

Analysis Method: 8260C | Date Collected: 10/08/2017 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2017 18:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382381 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		77-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
1868-53-7	Dibromofluoromethane (Surr)	102		75-123
2037-26-5	Toluene-d8 (Surr)	100		80-120

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93272P.D
Lims ID: 480-125579-A-4
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 18-Oct-2017 18:32:30 ALS Bottle#: 22 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-125579-a-4
Misc. Info.: 480-0066487-021
Operator ID: RF/RB Instrument ID: HP5973P

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 19-Oct-2017 09:00:27 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: baroner Date: 19-Oct-2017 09:00:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.434	10.434	0.000	97	174601	25.0	
* 2 Chlorobenzene-d5	82	14.382	14.388	-0.006	93	385417	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.345	17.338	0.007	95	405625	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.637	9.637	0.000	92	251558	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.087	10.093	-0.006	0	181616	26.6	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	95	862440	25.1	
$ 6 4-Bromofluorobenzene (Surr	174	15.885	15.878	0.007	93	319053	25.5	
10 Dichlorodifluoromethane	85		4.332				ND	
11 Chloromethane	50		4.764				ND	
17 Vinyl chloride	62		4.964				ND	
12 Bromomethane	94		5.615				ND	
13 Chloroethane	64		5.707				ND	
14 Trichlorofluoromethane	101		6.090				ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.735				ND	
25 1,1-Dichloroethene	96		6.844				ND	
24 Acetone	43	6.881	6.881	-0.006	85	17611	1.99	7M
30 Methyl acetate	43		7.252				ND	
27 Carbon disulfide	76		7.270				ND	
31 Methylene Chloride	84		7.507				ND	
32 Methyl tert-butyl ether	73		7.684				ND	
35 trans-1,2-Dichloroethene	96		7.781				ND	
40 1,1-Dichloroethane	63		8.335				ND	
44 2-Butanone (MEK)	43		9.022				ND	
43 cis-1,2-Dichloroethene	96		9.053				ND	
49 Chloroform	83		9.418				ND	
52 1,1,1-Trichloroethane	97		9.649				ND	
54 Cyclohexane	56		9.691				ND	
55 Carbon tetrachloride	117		9.850				ND	
57 Benzene	78		10.129				ND	
60 1,2-Dichloroethane	62		10.184				ND	
62 Trichloroethene	95		10.884				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
64 Methylcyclohexane	83		11.084				ND	
63 1,2-Dichloropropane	63		11.224				ND	
70 Dichlorobromomethane	83		11.559				ND	
73 cis-1,3-Dichloropropene	75		12.094				ND	
75 4-Methyl-2-pentanone (MIBK	43		12.198				ND	
76 Toluene	92		12.514				ND	
78 trans-1,3-Dichloropropene	75		12.806				ND	
79 1,1,2-Trichloroethane	83		13.092				ND	
80 Tetrachloroethene	166		13.244				ND	
83 2-Hexanone	43		13.287				ND	
81 Chlorodibromomethane	129		13.676				ND	
85 Ethylene Dibromide	107		13.871				ND	
87 Chlorobenzene	112		14.424				ND	
89 Ethylbenzene	91		14.467				ND	
90 m-Xylene & p-Xylene	106		14.601				ND	
93 o-Xylene	106		15.154				ND	
94 Styrene	104		15.179				ND	
92 Bromoform	173		15.568				ND	
95 Isopropylbenzene	105		15.580				ND	
97 1,1,2,2-Tetrachloroethane	83		16.055				ND	
110 1,3-Dichlorobenzene	146		17.265				ND	
111 1,4-Dichlorobenzene	146		17.375				ND	
116 1,2-Dichlorobenzene	146		17.874				ND	
117 1,2-Dibromo-3-Chloropropan	75		18.920				ND	
119 1,2,4-Trichlorobenzene	180		20.027				ND	
S 126 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

P 8260 IS_00248	Amount Added:	1.25	Units: uL	Run Reagent
P 8260 Surr._00243	Amount Added:	1.25	Units: uL	Run Reagent

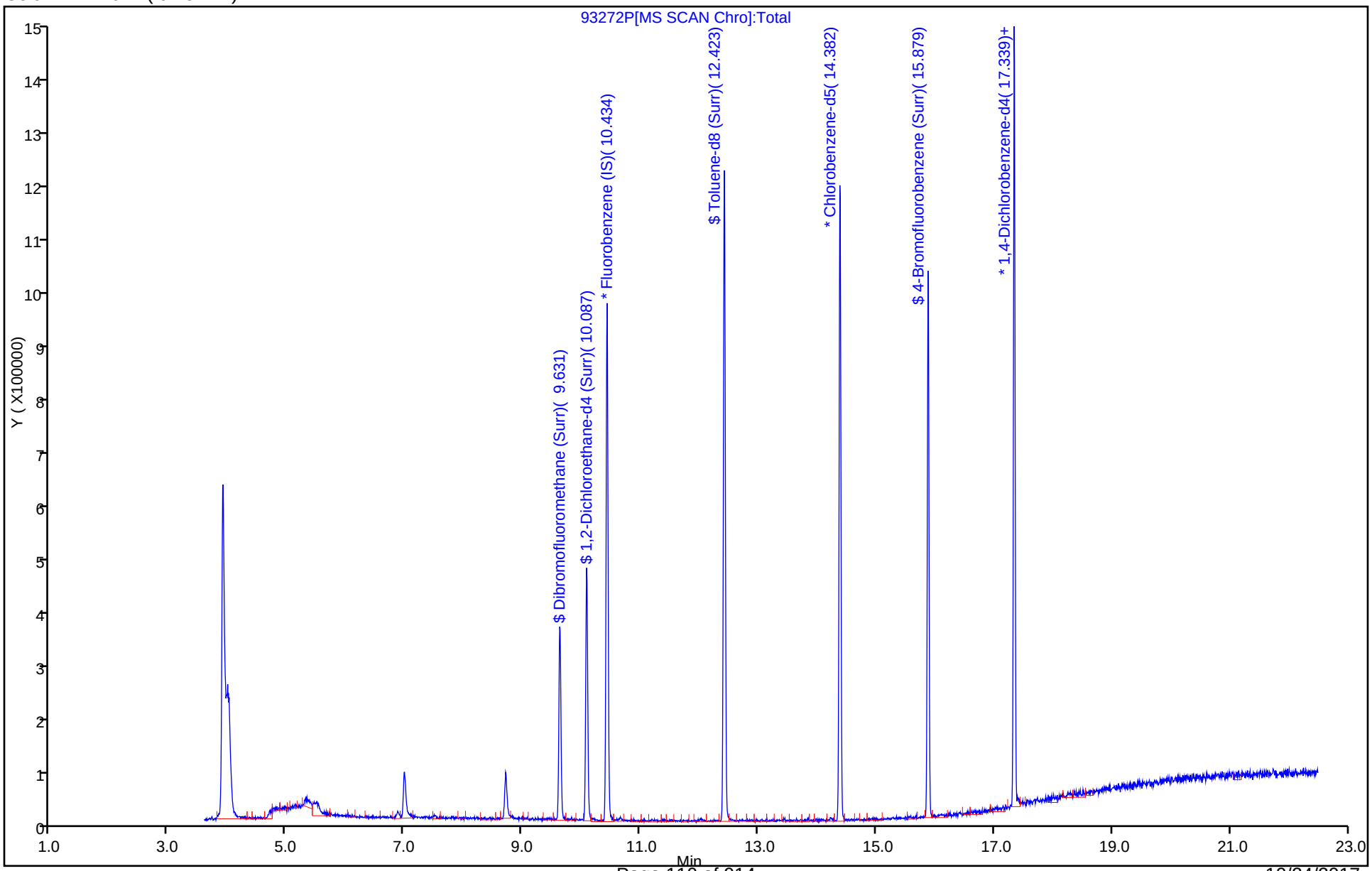
Report Date: 19-Oct-2017 09:00:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93272P.D

Injection Date:	18-Oct-2017 18:32:30	Instrument ID:	HP5973P	Operator ID:	RF/RB
Lims ID:	480-125579-A-4	Lab Sample ID:	480-125579-4	Worklist Smp#:	21
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

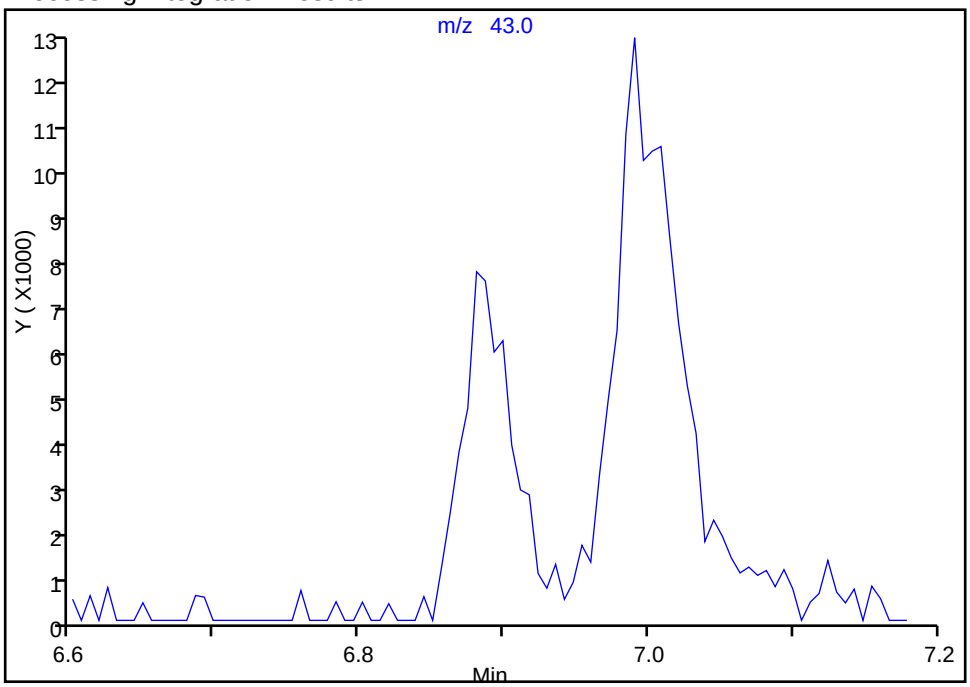
Data File:	\\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93272P.D				
Injection Date:	18-Oct-2017 18:32:30	Instrument ID:	HP5973P		
Lims ID:	480-125579-A-4	Lab Sample ID:	480-125579-4		
Client ID:	TRIP BLANK				
Operator ID:	RF/RB	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

Signal: 1

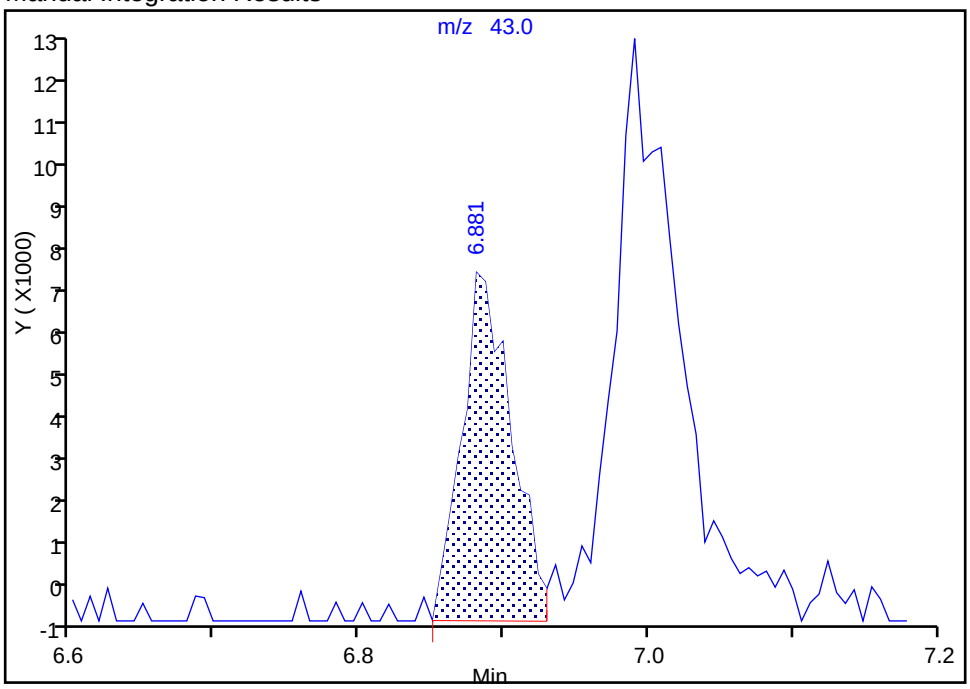
Not Detected
Expected RT: 6.89

Processing Integration Results



Manual Integration Results

RT: 6.88
Area: 17611
Amount: 1.989481
Amount Units: ug/L



Reviewer: baroner, 19-Oct-2017 08:59:20
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

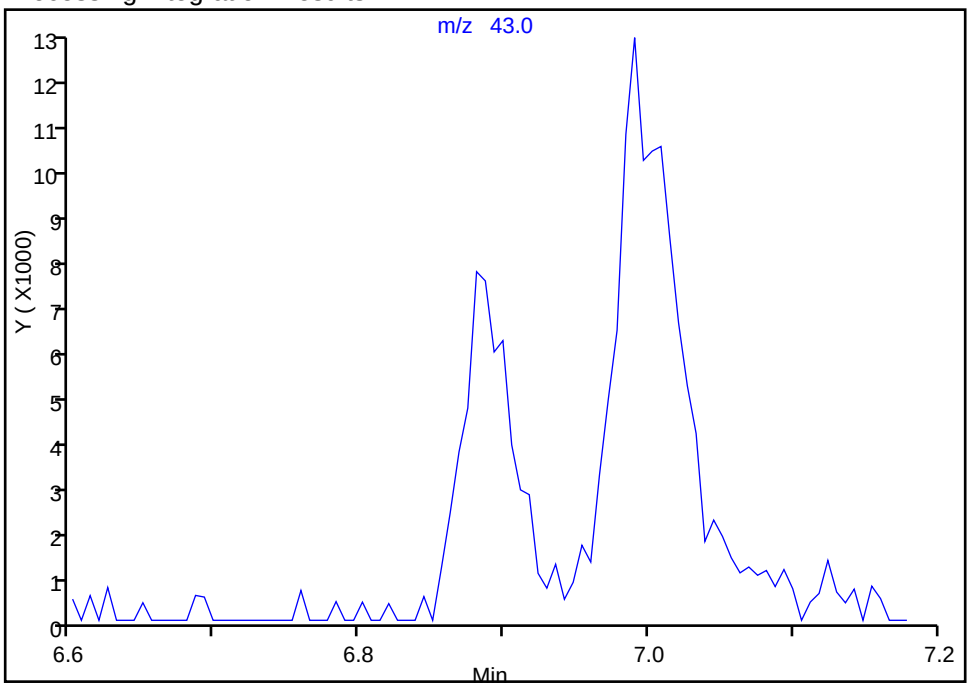
Data File:	\\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93272P.D				
Injection Date:	18-Oct-2017 18:32:30	Instrument ID:	HP5973P		
Lims ID:	480-125579-A-4	Lab Sample ID:	480-125579-4		
Client ID:	TRIP BLANK				
Operator ID:	RF/RB	ALS Bottle#:	22	Worklist Smp#:	21
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.25 mm)	Detector	MS SCAN		

24 Acetone, CAS: 67-64-1

Signal: 1

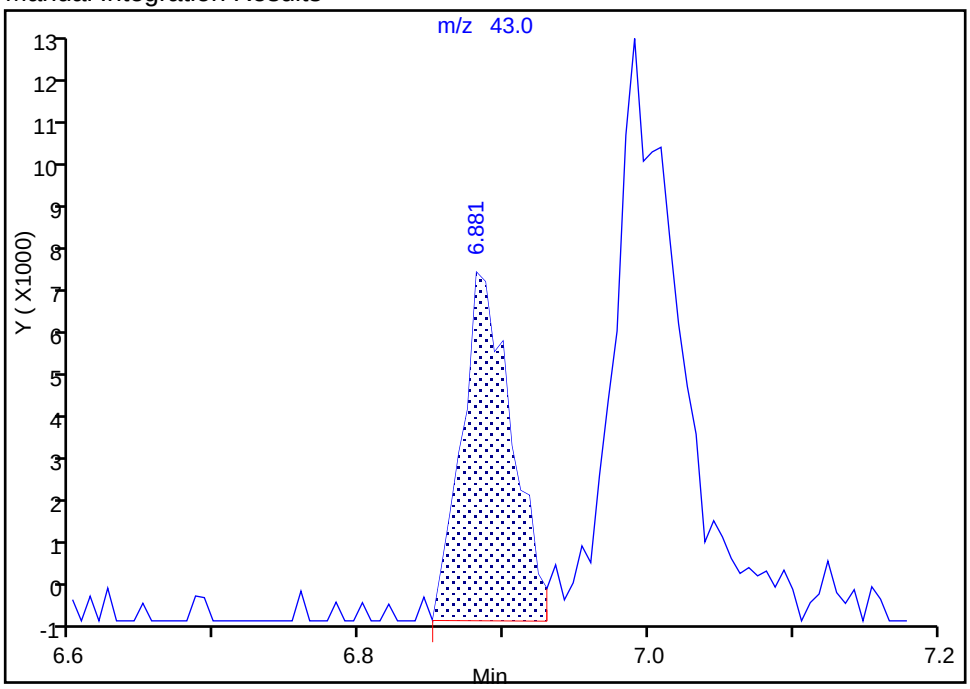
Not Detected
Expected RT: 6.89

Processing Integration Results



Manual Integration Results

RT: 6.88
Area: 17611
Amount: 1.989481
Amount Units: ug/L



Reviewer: baroner, 19-Oct-2017 08:59:45
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-379439/6	F7936.D
Level 2	IC 480-379439/7	F7937.D
Level 3	IC 480-379439/8	F7938.D
Level 4	IC 480-379439/9	F7939.D
Level 5	ICIS 480-379439/10	F7940.D
Level 6	IC 480-379439/11	F7941.D
Level 7	IC 480-379439/12	F7942.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.3306 1.3169	1.3542 1.2386	1.3457	1.3806	1.3078	Ave		1.3249			0.1000	3.4		20.0			
Chloromethane	1.3370 1.1211	1.3424 1.1001	1.2426	1.2610	1.1858	Ave		1.2271			0.1000	7.9		20.0			
Butadiene	1.2608 1.1126	1.3342 1.0849	1.2429	1.2940	1.1948	Ave		1.2178				7.6		20.0			
Vinyl chloride	1.2415 1.1313	1.3076 1.1314	1.2361	1.3062	1.1980	Ave		1.2217			0.1000	6.0		20.0			
Bromomethane	0.6156 0.5200	0.6115 0.5481	0.5477	0.5659	0.5685	Ave		0.5682			0.1000	6.1		20.0			
Chloroethane	0.5488 0.4741	0.5568 0.4897	0.5304	0.5186	0.5003	Ave		0.5170			0.1000	5.9		20.0			
Dichlorofluoromethane	1.6866 1.4888	1.6910 1.4691	1.5962	1.6522	1.5734	Ave		1.5939				5.6		20.0			
Trichlorofluoromethane	1.6750 1.4648	1.5847 1.4617	1.5881	1.5976	1.5191	Ave		1.5559			0.1000	5.0		20.0			
Ethyl ether	0.9789 0.8835	0.9613 0.8469	1.2014	0.9601	0.9433	Ave		0.9679				11.7		20.0			
Acrolein	0.2393 0.2521	0.2359 0.2367	0.2379	0.2573	0.2456	Ave		0.2435				3.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.3617 1.2789	1.3624 1.2197	1.3036	1.3197	1.2847	Ave		1.3044			0.1000	3.8		20.0			
1,1-Dichloroethene	1.2950 1.2186	1.2669 1.1574	1.2610	1.2389	1.2249	Ave		1.2375			0.1000	3.6		20.0			
Acetone	+++++ 0.5169	0.5319 0.4693	0.5381	0.5519	0.5085	Ave		0.5194			0.1000	5.6		20.0			
Iodomethane	2.2954 2.2001	2.1623 2.1079	2.2283	2.1872	2.1973	Ave		2.1969				2.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	3.6996 4.0328	3.6136 3.8165	3.7556	3.8420	3.9839	Ave		3.8206			0.1000	3.9		20.0			
Allyl chloride	2.4426 2.2389	2.3307 2.0267	2.3527	2.2710	2.2652	Ave		2.2754				5.7		20.0			
Methyl acetate	1.1746 1.1650	1.1231 1.0689	1.0837	1.2104	1.1259	Ave		1.1359			0.1000	4.5		20.0			
Methylene Chloride	2.6317 1.4746	2.0516 1.3887	1.7208	1.5542	1.5063	Lin1	3.2038	1.4019			0.1000				0.9990		0.9900
2-Methyl-2-propanol	0.1876 0.2197	0.1685 0.1994	0.1752	0.2052	0.1910	Ave		0.1924				9.1		20.0			
Methyl tert-butyl ether	4.1827 4.2403	4.1291 3.9701	4.1937	4.2431	4.2410	Ave		4.1714			0.1000	2.3		20.0			
trans-1,2-Dichloroethene	1.4700 1.4023	1.4724 1.3155	1.4535	1.4054	1.4160	Ave		1.4193			0.1000	3.8		20.0			
Acrylonitrile	0.6279 0.6135	0.6061 0.5347	0.6026	0.6565	0.6113	Ave		0.6075				6.1		20.0			
Hexane	4.2385 2.7194	3.6035 2.4961	3.1020	2.9084	2.7274	Lin1	4.9701	2.5563							0.9980		0.9900
Vinyl acetate	2.5513 2.7395	2.4996 2.4549	2.5955	2.7334	2.7069	Ave		2.6116				4.5		20.0			
1,1-Dichloroethane	2.9092 2.6780	2.7703 2.4677	2.7795	2.7500	2.7162	Ave		2.7244			0.2000	4.9		20.0			
2-Butanone (MEK)	0.7163 0.7680	0.7138 0.6789	0.7100	0.8110	0.7416	Ave		0.7342			0.1000	6.0		20.0			
2,2-Dichloropropane	2.0004 1.9137	1.8390 1.8147	1.9075	1.9148	1.9077	Ave		1.8997				3.2		20.0			
cis-1,2-Dichloroethene	1.6210 1.6003	1.6061 1.5020	1.6205	1.6010	1.6002	Ave		1.5930			0.1000	2.6		20.0			
Chlorobromomethane	0.6840 0.7553	0.7048 0.7274	0.7352	0.7188	0.7430	Ave		0.7241				3.3		20.0			
Tetrahydrofuran	0.4818 0.4833	0.4466 0.4374	0.4376	0.5123	0.4664	Ave		0.4665				6.0		20.0			
Chloroform	+++++ 2.3548	2.5525 2.2100	2.4365	2.3631	2.3780	Ave		2.3825			0.2000	4.7		20.0			
1,1,1-Trichloroethane	1.9783 1.9974	1.9704 1.9100	1.9328	1.9574	1.9653	Ave		1.9588			0.1000	1.5		20.0			
Cyclohexane	3.4391 2.9645	3.2766 2.7277	3.1557	3.1244	3.0274	Ave		3.1022			0.1000	7.4		20.0			
1,1-Dichloropropene	1.9518 1.8407	1.8986 1.7267	1.8481	1.8480	1.8297	Ave		1.8491				3.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	1.3881 1.6327	1.3637 1.6136	1.3974	1.4308	1.5158	Ave		1.4774			0.1000	7.5		20.0			
Isobutyl alcohol	0.0622 0.0824	0.0558 0.0750	0.0604	0.0712	0.0687	Ave		0.0680				13.5		20.0			
Benzene	5.8920 5.5326	5.6431 5.0314	5.6809	5.6487	5.5677	Ave		5.5709			0.5000	4.7		20.0			
1,2-Dichloroethane	2.3152 2.0665	2.1493 1.9081	2.1545	2.0858	2.0855	Ave		2.1092			0.1000	5.8		20.0			
n-Heptane	2.8604 2.4014	2.7082 2.1266	2.6593	2.5303	2.4420	Ave		2.5326				9.5		20.0			
Trichloroethene	1.4511 1.4477	1.3944 1.3636	1.4242	1.3851	1.4113	Ave		1.4110			0.2000	2.3		20.0			
Methylcyclohexane	2.8554 2.6232	2.7047 2.4772	2.6644	2.6694	2.6210	Ave		2.6593			0.1000	4.2		20.0			
1,2-Dichloropropane	1.5801 1.5445	1.4583 1.4533	1.5533	1.5128	1.5074	Ave		1.5157			0.1000	3.1		20.0			
1,4-Dioxane	+++++ 0.0090	0.0060 0.0079	0.0076	0.0080	0.0082	Ave		0.0078				12.5		20.0			
Dibromomethane	0.7629 0.8345	0.7589 0.7892	0.7686	0.7745	0.7960	Ave		0.7835			0.1000	3.3		20.0			
Bromodichloromethane	1.3444 1.7019	1.3156 1.6718	1.4166	1.4433	1.6005	Ave		1.4992			0.2000	10.5		20.0			
2-Chloroethyl vinyl ether	0.7287 0.9361	0.7659 0.8940	0.8128	0.8543	0.8865	Ave		0.8397				8.9		20.0			
cis-1,3-Dichloropropene	1.6658 2.0917	1.6847 2.0092	1.8084	1.8270	1.9959	Ave		1.8689			0.2000	8.9		20.0			
4-Methyl-2-pentanone (MIBK)	0.7044 0.6949	0.6591 0.5936	0.6982	0.7917	0.7189	Ave		0.6944			0.1000	8.6		20.0			
Toluene	+++++ 1.7394	1.8829 1.6310	1.8532	1.7894	1.7870	Ave		1.7805			0.4000	5.0		20.0			
trans-1,3-Dichloropropene	0.7243 0.9102	0.6941 0.8765	0.7690	0.8109	0.8778	Ave		0.8090			0.1000	10.3		20.0			
Ethyl methacrylate	+++++ 0.8942	0.7054 0.8585	0.7640	0.8396	0.8694	Ave		0.8218				8.8		20.0			
1,1,2-Trichloroethane	0.4723 0.4856	0.4541 0.4643	0.4637	0.4730	0.4774	Ave		0.4701			0.1000	2.2		20.0			
Tetrachloroethene	0.8034 0.7530	0.7673 0.7188	0.7793	0.7545	0.7676	Ave		0.7634			0.2000	3.4		20.0			
1,3-Dichloropropane	0.9724 0.9825	0.9325 0.9156	0.9802	1.0046	0.9850	Ave		0.9676				3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.4928 0.5199	0.4818 0.4430	0.5006	0.5802	0.5239	Ave		0.5060			0.1000	8.4		20.0			
Dibromochloromethane	+++++ 0.6070	0.3785 0.6218	0.4151	0.4619	0.5417	Lin1	-1.778	0.6184			0.1000				0.9970		0.9900
1,2-Dibromoethane	0.5349 0.6169	0.5220 0.5889	0.5578	0.5836	0.5976	Ave		0.5717				6.0		20.0			
Chlorobenzene	2.0599 1.8866	1.8995 1.7574	1.9562	1.9291	1.9282	Ave		1.9167			0.5000	4.7		20.0			
Ethylbenzene	3.4615 3.0952	3.3212 2.7172	3.3429	3.3002	3.2461	Ave		3.2120			0.1000	7.6		20.0			
1,1,1,2-Tetrachloroethane	0.4979 0.6317	0.4971 0.6193	0.5228	0.5579	0.6121	Ave		0.5627				10.4		20.0			
m,p-Xylene	1.3382 1.3052	1.3357 1.2255	1.3176	1.3390	1.3295	Ave		1.3129			0.1000	3.1		20.0			
o-Xylene	1.3009 1.2657	1.2402 1.1777	1.2861	1.2904	1.3014	Ave		1.2661			0.3000	3.5		20.0			
Styrene	2.2401 2.1974	2.1770 1.9965	2.2049	2.2236	2.2547	Ave		2.1849			0.3000	4.0		20.0			
Bromoform	0.1634 0.3690	0.1868 +++++	0.2055	0.2434	0.3012	Qua	-0.330	0.2389	0.0013360		0.1000				1.0000		0.9900
Isopropylbenzene	3.4900 3.0938	3.2493 2.8036	3.3460	3.2830	3.1957	Ave		3.2088			0.1000	6.8		20.0			
Bromobenzene	0.9481 0.8398	0.8407 0.8046	0.8559	0.8355	0.8446	Ave		0.8527				5.3		20.0			
1,1,2,2-Tetrachloroethane	0.6820 0.7547	0.6951 0.7345	0.7158	0.7521	0.7411	Ave		0.7250			0.3000	3.9		20.0			
trans-1,4-Dichloro-2-butene	0.2478 0.2629	0.2371 0.2454	0.2386	0.2581	0.2575	Ave		0.2496				4.0		20.0			
N-Propylbenzene	3.9957 3.4703	3.7918 2.9976	3.8860	3.7674	3.6607	Ave		3.6528				9.1		20.0			
1,2,3-Trichloropropane	0.2495 0.2455	0.2267 0.2346	0.2473	0.2529	0.2397	Ave		0.2423				3.8		20.0			
2-Chlorotoluene	0.8578 0.7710	0.7954 0.7425	0.7884	0.7886	0.7875	Ave		0.7902				4.4		20.0			
1,3,5-Trimethylbenzene	2.8841 2.6257	2.7622 2.3754	2.8187	2.7930	2.7474	Ave		2.7152				6.2		20.0			
4-Chlorotoluene	0.8593 0.7953	0.8237 0.7600	0.8612	0.8152	0.8195	Ave		0.8192				4.3		20.0			
tert-Butylbenzene	0.6550 0.5984	0.5968 0.5821	0.6145	0.6141	0.6062	Ave		0.6096				3.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	3.0342 2.7077	2.8478 2.4210	2.9111	2.8895	2.8328	Ave		2.8063				7.0		20.0			
sec-Butylbenzene	3.6951 3.2929	3.4988 2.8681	3.6127	3.5607	3.4518	Ave		3.4257				8.1		20.0			
4-Isopropyltoluene	3.2312 2.8904	3.1036 2.5366	3.1314	3.1074	3.0233	Ave		3.0034				7.7		20.0			
1,3-Dichlorobenzene	1.7434 1.5758	1.6135 1.4693	1.6561	1.6514	1.6202	Ave		1.6185			0.6000	5.2		20.0			
1,4-Dichlorobenzene	1.8298 1.5894	1.6666 1.4870	1.6958	1.6590	1.6555	Ave		1.6547			0.5000	6.3		20.0			
n-Butylbenzene	2.8641 2.5355	2.7304 2.2383	2.7510	2.7141	2.6715	Ave		2.6436				7.7		20.0			
1,2-Dichlorobenzene	1.6049 1.5298	1.5511 1.4337	1.5732	1.5637	1.5557	Ave		1.5446			0.4000	3.5		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1377	0.0823 0.1417	0.0906	0.1141	0.1240	Lin1	-0.407	0.1412			0.0500				0.9980		0.9900
1,2,4-Trichlorobenzene	1.1297 1.0562	1.0592 1.0164	1.0543	1.0715	1.0803	Ave		1.0668			0.2000	3.2		20.0			
Hexachlorobutadiene	0.6344 0.5989	0.5885 0.5882	0.6005	0.6040	0.6137	Ave		0.6040				2.7		20.0			
Naphthalene	2.6676 2.7232	2.5131 2.4827	2.5338	2.7664	2.7718	Ave		2.6369				4.7		20.0			
1,2,3-Trichlorobenzene	1.0608 1.0033	0.9630 0.9708	0.9787	1.0238	1.0288	Ave		1.0042				3.6		20.0			
Dibromofluoromethane (Surr)	1.2139 1.3053	1.2354 1.2653	1.2207	1.1945	1.2484	Ave		1.2405				3.0		20.0			
1,2-Dichloroethane-d4 (Surr)	0.7891 0.8217	0.7961 0.7919	0.7968	0.7766	0.7978	Ave		0.7957				1.7		20.0			
Toluene-d8 (Surr)	2.4054 2.5394	2.4347 2.4929	2.4447	2.4314	2.4905	Ave		2.4627				1.9		20.0			
4-Bromofluorobenzene (Surr)	0.7843 0.8428	0.7893 0.8186	0.7945	0.7964	0.8212	Ave		0.8068				2.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-379439/6	F7936.D
Level 2	IC 480-379439/7	F7937.D
Level 3	IC 480-379439/8	F7938.D
Level 4	IC 480-379439/9	F7939.D
Level 5	ICIS 480-379439/10	F7940.D
Level 6	IC 480-379439/11	F7941.D
Level 7	IC 480-379439/12	F7942.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/KG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	17777 715324	36338 1381126	74558	149155	359526	2.50 100	5.00 200	10.0	20.0	50.0
Chloromethane	FB	Ave	17863 608992	36021 1226641	68848	136238	325986	2.50 100	5.00 200	10.0	20.0	50.0
Butadiene	FB	Ave	16845 604356	35800 1209747	68863	139802	328485	2.50 100	5.00 200	10.0	20.0	50.0
Vinyl chloride	FB	Ave	16587 614518	35086 1261579	68490	141116	329359	2.50 100	5.00 200	10.0	20.0	50.0
Bromomethane	FB	Ave	8225 282463	16408 611118	30347	61135	156278	2.50 100	5.00 200	10.0	20.0	50.0
Chloroethane	FB	Ave	7332 257535	14941 546018	29390	56028	137537	2.50 100	5.00 200	10.0	20.0	50.0
Dichlorofluoromethane	FB	Ave	22533 808716	45374 1638123	88442	178503	432547	2.50 100	5.00 200	10.0	20.0	50.0
Trichlorofluoromethane	FB	Ave	22378 795681	42521 1629850	87993	172605	417622	2.50 100	5.00 200	10.0	20.0	50.0
Ethyl ether	FB	Ave	13078 479914	25794 944384	66565	103730	259319	2.50 100	5.00 200	10.0	20.0	50.0
Acrolein	FB	Ave	15983 684591	31650 1319601	65908	138966	337623	12.5 500	25.0 1000	50.0	100	250
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	18192 694701	36557 1360001	72227	142582	353196	2.50 100	5.00 200	10.0	20.0	50.0
1,1-Dichloroethene	FB	Ave	17302 661926	33995 1290573	69868	133842	336752	2.50 100	5.00 200	10.0	20.0	50.0
Acetone	FB	Ave	+++++ 1403888	71361 2616680	149065	298138	698963	+++++ 500	25.0 1000	50.0	100	250
Iodomethane	FB	Ave	30667 1195109	58021 2350376	123462	236295	604077	2.50 100	5.00 200	10.0	20.0	50.0
Carbon disulfide	FB	Ave	49428 2190612	96962 4255612	208084	415075	1095257	2.50 100	5.00 200	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/KG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Allyl chloride	FB	Ave	32634 1216196	62539 2259849	130353	245349	622760	2.50 100	5.00 200	10.0	20.0	50.0
Methyl acetate	FB	Ave	31386 1265638	60270 2383791	120092	261528	619045	5.00 200	10.0 400	20.0	40.0	100
Methylene Chloride	FB	Lin1	35160 800995	55050 1548468	95343	167915	414115	2.50 100	5.00 200	10.0	20.0	50.0
2-Methyl-2-propanol	FB	Ave	25066 1193444	45218 2223875	97084	221730	525080	25.0 1000	50.0 2000	100	200	500
Methyl tert-butyl ether	FB	Ave	55882 2303311	110796 4426896	232356	458408	1165929	2.50 100	5.00 200	10.0	20.0	50.0
trans-1,2-Dichloroethene	FB	Ave	19640 761705	39509 1466849	80534	151832	389276	2.50 100	5.00 200	10.0	20.0	50.0
Acrylonitrile	FB	Ave	83886 3332721	162643 5962310	333859	709268	1680514	25.0 1000	50.0 2000	100	200	500
Hexane	FB	Lin1	56627 1477180	96691 2783308	171871	314216	749815	2.50 100	5.00 200	10.0	20.0	50.0
Vinyl acetate	FB	Ave	68173 2976155	134143 5474652	287613	590609	1488357	5.00 200	10.0 400	20.0	40.0	100
1,1-Dichloroethane	FB	Ave	38868 1454698	74334 2751623	154002	297106	746727	2.50 100	5.00 200	10.0	20.0	50.0
2-Butanone (MEK)	FB	Ave	47848 2085932	95762 3784810	196706	438086	1019451	12.5 500	25.0 1000	50.0	100	250
2,2-Dichloropropane	FB	Ave	26726 1039533	49345 2023477	105687	206874	524460	2.50 100	5.00 200	10.0	20.0	50.0
cis-1,2-Dichloroethene	FB	Ave	21657 869268	43097 1674798	89787	172968	439935	2.50 100	5.00 200	10.0	20.0	50.0
Chlorobromomethane	FB	Ave	9139 410262	18913 811093	40735	77654	204266	2.50 100	5.00 200	10.0	20.0	50.0
Tetrahydrofuran	FB	Ave	12875 525074	23969 975465	48489	110699	256433	5.00 200	10.0 400	20.0	40.0	100
Chloroform	FB	Ave	+++++ 1279112	68491 2464202	134997	255304	653746	+++++ 100	5.00 200	10.0	20.0	50.0
1,1,1-Trichloroethane	FB	Ave	26431 1084989	52871 2129785	107090	211474	540307	2.50 100	5.00 200	10.0	20.0	50.0
Cyclohexane	FB	Ave	45947 1610303	87920 3041563	174844	337554	832295	2.50 100	5.00 200	10.0	20.0	50.0
1,1-Dichloropropene	FB	Ave	26076 999878	50946 1925403	102397	199649	503010	2.50 100	5.00 200	10.0	20.0	50.0
Carbon tetrachloride	FB	Ave	18545 886893	36592 1799208	77424	154577	416714	2.50 100	5.00 200	10.0	20.0	50.0
Isobutyl alcohol	FB	Ave	20769 1119308	37450 2090091	83653	192178	472240	62.5 2500	125 5000	250	500	1250

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/KG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	78718 3005300	151421 5610199	314758	610266	1530653	2.50 100	5.00 200	10.0	20.0	50.0
1,2-Dichloroethane	FB	Ave	30931 1122508	57671 2127613	119371	225343	573341	2.50 100	5.00 200	10.0	20.0	50.0
n-Heptane	FB	Ave	38216 1304424	72669 2371312	147341	273371	671352	2.50 100	5.00 200	10.0	20.0	50.0
Trichloroethene	FB	Ave	19387 786394	37415 1520456	78909	149638	387988	2.50 100	5.00 200	10.0	20.0	50.0
Methylcyclohexane	FB	Ave	38149 1424922	72576 2762163	147624	288399	720571	2.50 100	5.00 200	10.0	20.0	50.0
1,2-Dichloropropane	FB	Ave	21110 838977	39131 1620506	86064	163435	414412	2.50 100	5.00 200	10.0	20.0	50.0
1,4-Dioxane	CBNZ d5	Ave	+++++ 199744	6548 355935	17047	34254	89671	+++++ 2000	100 4000	200	400	1000
Dibromomethane	FB	Ave	10193 453308	20364 880008	42584	83674	218832	2.50 100	5.00 200	10.0	20.0	50.0
Bromodichloromethane	FB	Ave	17962 924495	35301 1864083	78491	155933	440017	2.50 100	5.00 200	10.0	20.0	50.0
2-Chloroethyl vinyl ether	FB	Ave	9735 508464	20550 996896	45034	92292	243717	2.50 100	5.00 200	10.0	20.0	50.0
cis-1,3-Dichloropropene	FB	Ave	22256 1136210	45205 2240362	100196	197379	548702	2.50 100	5.00 200	10.0	20.0	50.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	94721 3873181	179311 6716955	390958	851152	1974696	12.5 500	25.0 1000	50.0	100	250
Toluene	CBNZ d5	Ave	+++++ 1939030	102447 3691113	207542	384744	981735	+++++ 100	5.00 200	10.0	20.0	50.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	19478 1014715	37768 1983500	86121	174351	482242	2.50 100	5.00 200	10.0	20.0	50.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 996835	38380 1942731	85564	180521	477615	+++++ 100	5.00 200	10.0	20.0	50.0
1,1,2-Trichloroethane	CBNZ d5	Ave	12702 541355	24710 1050749	51927	101705	262250	2.50 100	5.00 200	10.0	20.0	50.0
Tetrachloroethene	CBNZ d5	Ave	21605 839475	41749 1626660	87271	162228	421721	2.50 100	5.00 200	10.0	20.0	50.0
1,3-Dichloropropane	CBNZ d5	Ave	26152 1095273	50739 2071996	109773	216014	541145	2.50 100	5.00 200	10.0	20.0	50.0
2-Hexanone	CBNZ d5	Ave	66266 2897627	131080 5013063	280311	623735	1438966	12.5 500	25.0 1000	50.0	100	250
Dibromochloromethane	CBNZ d5	Lin1	+++++ 676657	20596 1407231	46491	99322	297615	+++++ 100	5.00 200	10.0	20.0	50.0
1,2-Dibromoethane	CBNZ d5	Ave	14385 687746	28401 1332665	62473	125484	328315	2.50 100	5.00 200	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/KG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	55396 2103132	103353 3977025	219078	414785	1059273	2.50 100	5.00 200	10.0	20.0	50.0
Ethylbenzene	CBNZ d5	Ave	93089 3450523	180709 6149215	374375	709591	1783284	2.50 100	5.00 200	10.0	20.0	50.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	13389 704163	27046 1401529	58554	119961	336245	2.50 100	5.00 200	10.0	20.0	50.0
m,p-Xylene	CBNZ d5	Ave	35989 1454964	72673 2773350	147562	287906	730385	2.50 100	5.00 200	10.0	20.0	50.0
o-Xylene	CBNZ d5	Ave	34986 1410986	67482 2665200	144037	277466	714936	2.50 100	5.00 200	10.0	20.0	50.0
Styrene	CBNZ d5	Ave	60244 2449569	118452 4518222	246932	478101	1238643	2.50 100	5.00 200	10.0	20.0	50.0
Bromoform	CBNZ d5	Qua	4394 411396	10166 +++++	23014	52342	165468	2.50 100	5.00 +++++	10.0	20.0	50.0
Isopropylbenzene	DCBd 4	Ave	91689 3524639	176217 6356209	374212	718530	1809206	2.50 100	5.00 200	10.0	20.0	50.0
Bromobenzene	DCBd 4	Ave	24908 956723	45595 1824091	95723	182867	478168	2.50 100	5.00 200	10.0	20.0	50.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	17916 859855	37699 1665250	80053	164609	419557	2.50 100	5.00 200	10.0	20.0	50.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	6509 299551	12859 556262	26690	56480	145760	2.50 100	5.00 200	10.0	20.0	50.0
N-Propylbenzene	DCBd 4	Ave	104973 3953628	205638 6796208	434610	824541	2072474	2.50 100	5.00 200	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	6556 279683	12292 531962	27661	55343	135728	2.50 100	5.00 200	10.0	20.0	50.0
2-Chlorotoluene	DCBd 4	Ave	22537 878370	43134 1683401	88173	172603	445864	2.50 100	5.00 200	10.0	20.0	50.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	75769 2991313	149801 5385441	315236	611286	1555399	2.50 100	5.00 200	10.0	20.0	50.0
4-Chlorotoluene	DCBd 4	Ave	22576 906102	44673 1723176	96315	178415	463948	2.50 100	5.00 200	10.0	20.0	50.0
tert-Butylbenzene	DCBd 4	Ave	17209 681680	32368 1319836	68730	134411	343173	2.50 100	5.00 200	10.0	20.0	50.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	79713 3084807	154441 5488825	325576	632390	1603783	2.50 100	5.00 200	10.0	20.0	50.0
sec-Butylbenzene	DCBd 4	Ave	97077 3751473	189745 6502541	404040	779296	1954198	2.50 100	5.00 200	10.0	20.0	50.0
4-Isopropyltoluene	DCBd 4	Ave	84889 3292907	168314 5751027	350208	680092	1711634	2.50 100	5.00 200	10.0	20.0	50.0
1,3-Dichlorobenzene	DCBd 4	Ave	45801 1795303	87502 3331087	185213	361420	917286	2.50 100	5.00 200	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379439

SDG No.:

Instrument ID: HP5973F GC Column: ZB-624 (30) ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 09/29/2017 15:58 Calibration End Date: 09/29/2017 18:33 Calibration ID: 31629

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/KG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	48072 1810782	90380 3371249	189660	363097	937232	2.50 100	5.00 200	10.0	20.0	50.0
n-Butylbenzene	DCBd 4	Ave	75245 2888602	148072 5074696	307673	594002	1512447	2.50 100	5.00 200	10.0	20.0	50.0
1,2-Dichlorobenzene	DCBd 4	Ave	42163 1742822	84120 3250482	175944	342227	880773	2.50 100	5.00 200	10.0	20.0	50.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	+++++ 156931	4464 321279	10130	24973	70197	+++++ 100	5.00 200	10.0	20.0	50.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	29678 1203330	57444 2304296	117910	234515	611619	2.50 100	5.00 200	10.0	20.0	50.0
Hexachlorobutadiene	DCBd 4	Ave	16667 682281	31915 1333618	67159	132202	347414	2.50 100	5.00 200	10.0	20.0	50.0
Naphthalene	DCBd 4	Ave	70082 3102404	136288 5628639	283378	605469	1569236	2.50 100	5.00 200	10.0	20.0	50.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	27868 1143051	52223 2200927	109460	224069	582459	2.50 100	5.00 200	10.0	20.0	50.0
Dibromofluoromethane (Surr)	FB	Ave	324352 354533	331493 352712	338160	322631	343198	50.0 50.0	50.0 50.0	50.0	50.0	50.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	210844 223183	213612 220761	220748	209755	219321	50.0 50.0	50.0 50.0	50.0	50.0	50.0
Toluene-d8 (Surr)	CBNZ d5	Ave	1293753 1415411	1324731 1410360	1368921	1306979	1368200	50.0 50.0	50.0 50.0	50.0	50.0	50.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	421858 469781	429483 463160	444875	428115	451166	50.0 50.0	50.0 50.0	50.0	50.0	50.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7936.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 29-Sep-2017 15:58:30 ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0066009-006
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 02-Oct-2017 14:08:49 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: cwiklinc Date: 29-Sep-2017 17:04:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	267204	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	87	537858	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	96	525434	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	324352	50.0	48.9	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.960	-0.006	0	210844	50.0	49.6	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	93	1293753	50.0	48.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	90	421858	50.0	48.6	
10 Dichlorodifluoromethane	85	1.814	1.827	-0.013	98	17777	2.50	2.51	
12 Chloromethane	50	2.003	2.003	0.000	100	17863	2.50	2.72	
151 Butadiene	54	2.082	2.088	-0.006	87	16845	2.50	2.59	
13 Vinyl chloride	62	2.094	2.094	0.000	76	16587	2.50	2.54	
14 Bromomethane	94	2.356	2.362	-0.006	95	8225	2.50	2.71	
15 Chloroethane	64	2.405	2.417	-0.012	97	7332	2.50	2.65	
16 Dichlorofluoromethane	67	2.569	2.569	0.000	97	22533	2.50	2.65	
17 Trichlorofluoromethane	101	2.599	2.617	-0.018	50	22378	2.50	2.69	
18 Ethyl ether	59	2.763	2.770	-0.007	86	13078	2.50	2.53	
20 Acrolein	56	2.916	2.922	-0.006	93	15983	12.5	12.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.952	2.958	-0.006	92	18192	2.50	2.61	
22 1,1-Dichloroethene	96	2.976	2.982	-0.006	94	17302	2.50	2.62	
23 Acetone	43	3.025	3.031	-0.006	99	41616	12.5	15.0	
25 Iodomethane	142	3.129	3.135	-0.007	98	30667	2.50	2.61	
26 Carbon disulfide	76	3.183	3.183	0.000	99	49428	2.50	2.42	
27 Methyl acetate	43	3.250	3.244	0.006	72	31386	5.00	5.17	
28 3-Chloro-1-propene	41	3.244	3.244	0.000	88	32634	2.50	2.68	
30 Methylene Chloride	84	3.354	3.354	0.000	98	35160	2.50	2.41	
31 2-Methyl-2-propanol	59	3.414	3.414	0.000	91	25066	25.0	24.4	
32 Methyl tert-butyl ether	73	3.506	3.500	0.006	96	55882	2.50	2.51	
34 trans-1,2-Dichloroethene	96	3.530	3.536	-0.006	94	19640	2.50	2.59	
33 Acrylonitrile	53	3.554	3.554	0.000	100	83886	25.0	25.8	
35 Hexane	57	3.670	3.670	0.000	87	56627	2.50	2.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.846	3.846	0.000	98	68173	5.00	4.88	
39 1,1-Dichloroethane	63	3.865	3.865	0.000	96	38868	2.50	2.67	
43 2-Butanone (MEK)	43	4.297	4.290	0.007	95	47848	12.5	12.2	
44 2,2-Dichloropropane	77	4.297	4.297	0.000	54	26726	2.50	2.63	
45 cis-1,2-Dichloroethene	96	4.309	4.309	0.000	86	21657	2.50	2.54	
48 Chlorobromomethane	128	4.503	4.509	-0.006	95	9139	2.50	2.36	
49 Tetrahydrofuran	42	4.540	4.528	0.012	47	12875	5.00	5.16	M
50 Chloroform	83	4.546	4.546	0.000	95	37063	2.50	2.91	
51 1,1,1-Trichloroethane	97	4.680	4.686	-0.006	44	26431	2.50	2.52	
52 Cyclohexane	56	4.710	4.710	0.000	91	45947	2.50	2.77	
54 1,1-Dichloropropene	75	4.801	4.801	0.000	92	26076	2.50	2.64	
55 Carbon tetrachloride	117	4.808	4.808	0.000	74	18545	2.50	2.35	
53 Isobutyl alcohol	43	4.881	4.868	0.013	94	20769	62.5	57.2	
57 Benzene	78	4.978	4.984	-0.006	96	78718	2.50	2.64	
58 1,2-Dichloroethane	62	5.020	5.020	0.000	96	30931	2.50	2.74	
59 n-Heptane	43	5.075	5.081	-0.006	92	38216	2.50	2.82	
62 Trichloroethene	95	5.495	5.495	0.000	96	19387	2.50	2.57	
64 Methylcyclohexane	83	5.629	5.629	0.000	95	38149	2.50	2.68	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	95	21110	2.50	2.61	
66 1,4-Dioxane	88	5.830	5.824	0.006	1	2831	50.0	33.9	M
67 Dibromomethane	93	5.842	5.842	0.000	95	10193	2.50	2.43	
68 Dichlorobromomethane	83	5.951	5.957	-0.006	98	17962	2.50	2.24	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	90	9735	2.50	2.17	
72 cis-1,3-Dichloropropene	75	6.335	6.328	0.007	92	22256	2.50	2.23	
73 4-Methyl-2-pentanone (MIBK	43	6.438	6.438	0.000	96	94721	12.5	12.7	
74 Toluene	92	6.620	6.620	0.000	99	56149	2.50	2.93	
77 trans-1,3-Dichloropropene	75	6.846	6.846	0.000	90	19478	2.50	2.24	
75 Ethyl methacrylate	69	6.852	6.852	0.000	82	18598	2.50	2.10	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	94	12702	2.50	2.51	
81 Tetrachloroethene	166	7.144	7.144	0.000	97	21605	2.50	2.63	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	93	26152	2.50	2.51	
80 2-Hexanone	43	7.229	7.223	0.006	95	66266	12.5	12.2	
83 Chlorodibromomethane	129	7.442	7.442	0.000	92	10510	2.50	4.45	
84 Ethylene Dibromide	107	7.563	7.569	-0.006	95	14385	2.50	2.34	
87 Chlorobenzene	112	8.020	8.020	0.000	96	55396	2.50	2.69	
88 Ethylbenzene	91	8.087	8.087	0.000	98	93089	2.50	2.69	
89 1,1,1,2-Tetrachloroethane	131	8.099	8.105	-0.006	89	13389	2.50	2.21	
90 m-Xylene & p-Xylene	106	8.208	8.202	0.006	99	35989	2.50	2.55	
91 o-Xylene	106	8.634	8.634	0.000	97	34986	2.50	2.57	
92 Styrene	104	8.658	8.652	0.006	94	60244	2.50	2.56	
95 Bromoform	173	8.926	8.926	0.000	89	4394	2.50	3.04	
94 Isopropylbenzene	105	9.005	9.005	0.000	96	91689	2.50	2.72	
97 1,1,2,2-Tetrachloroethane	83	9.395	9.388	0.007	72	17916	2.50	2.35	
101 Bromobenzene	156	9.389	9.388	0.000	92	24908	2.50	2.78	
98 trans-1,4-Dichloro-2-buten	53	9.431	9.437	-0.006	40	6509	2.50	2.48	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	104973	2.50	2.73	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	50	6556	2.50	2.57	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	22537	2.50	2.71	
102 1,3,5-Trimethylbenzene	105	9.608	9.607	0.001	94	75769	2.50	2.66	
105 4-Chlorotoluene	126	9.674	9.674	0.000	98	22576	2.50	2.62	
106 tert-Butylbenzene	134	9.930	9.936	-0.006	93	17209	2.50	2.69	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	97	79713	2.50	2.70	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	97077	2.50	2.70	
110 4-Isopropyltoluene	119	10.271	10.271	0.000	97	84889	2.50	2.69	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	97	45801	2.50	2.69	
113 1,4-Dichlorobenzene	146	10.386	10.380	0.006	94	48072	2.50	2.76	
115 n-Butylbenzene	91	10.648	10.648	0.000	98	75245	2.50	2.71	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	98	42163	2.50	2.60	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	79	2088	2.50	4.29	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	29678	2.50	2.65	
120 Hexachlorobutadiene	225	12.144	12.150	-0.006	96	16667	2.50	2.63	
121 Naphthalene	128	12.272	12.272	0.000	97	70082	2.50	2.53	
122 1,2,3-Trichlorobenzene	180	12.479	12.473	0.006	96	27868	2.50	2.64	
S 125 1,2-Dichloroethene, Total	1				0			5.13	
S 126 1,3-Dichloropropene, Total	1				0			4.47	
S 123 Total BTEX	1				0			13.4	
S 124 Xylenes, Total	1				0			5.12	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00111	Amount Added:	2.50	Units: uL	
GAS CORP mix_00243	Amount Added:	2.50	Units: uL	
F 8260 SURR_00259	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00576	Amount Added:	1.00	Units: uL	Run Reagent

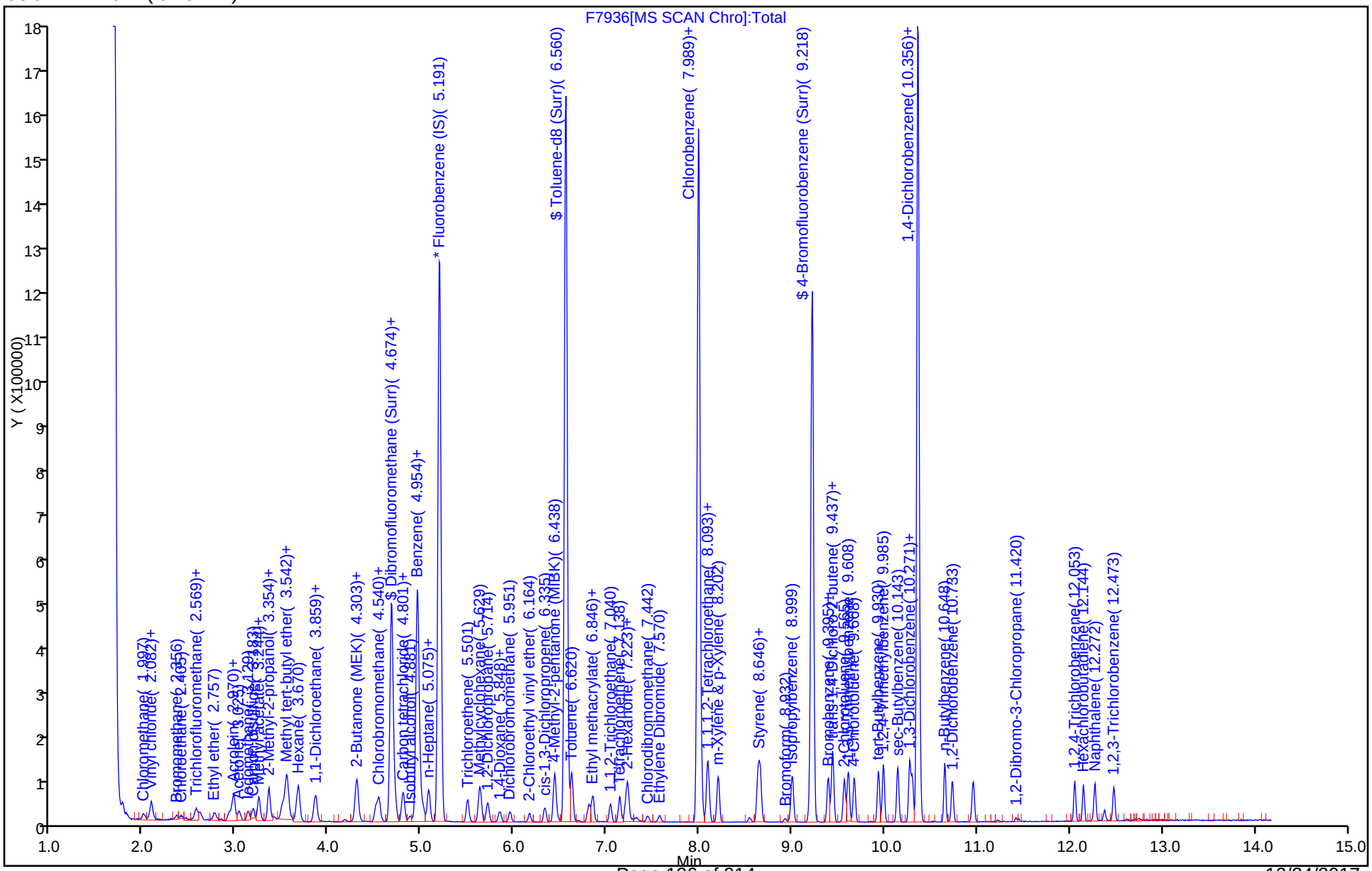
Report Date: 02-Oct-2017 14:08:51 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7936.D

Injection Date:	29-Sep-2017 15:58:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	IC			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

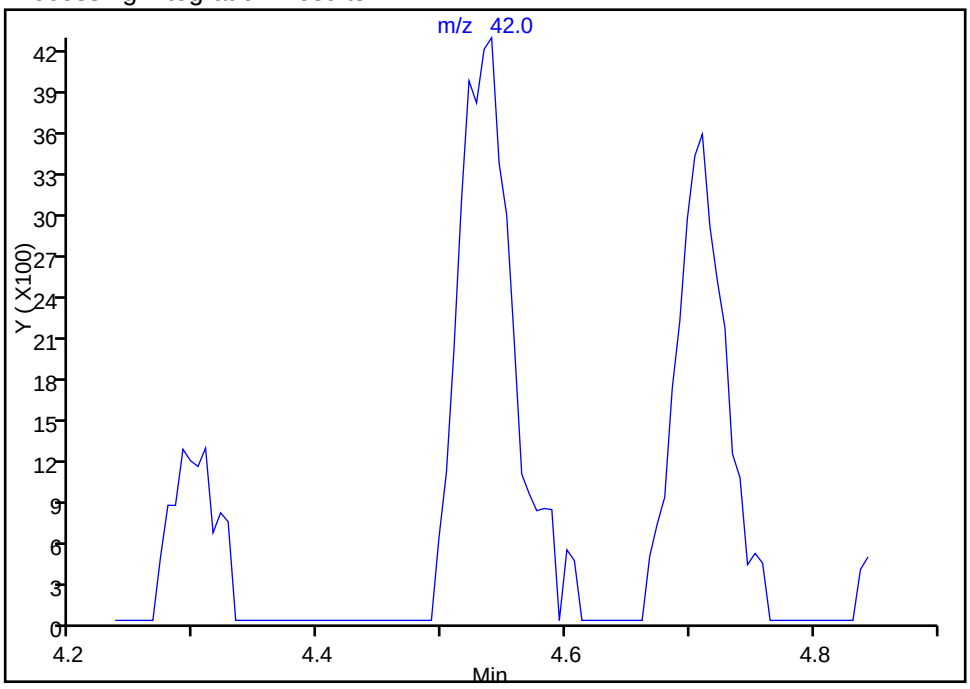
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7936.D
Injection Date: 29-Sep-2017 15:58:30 Instrument ID: HP5973F
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

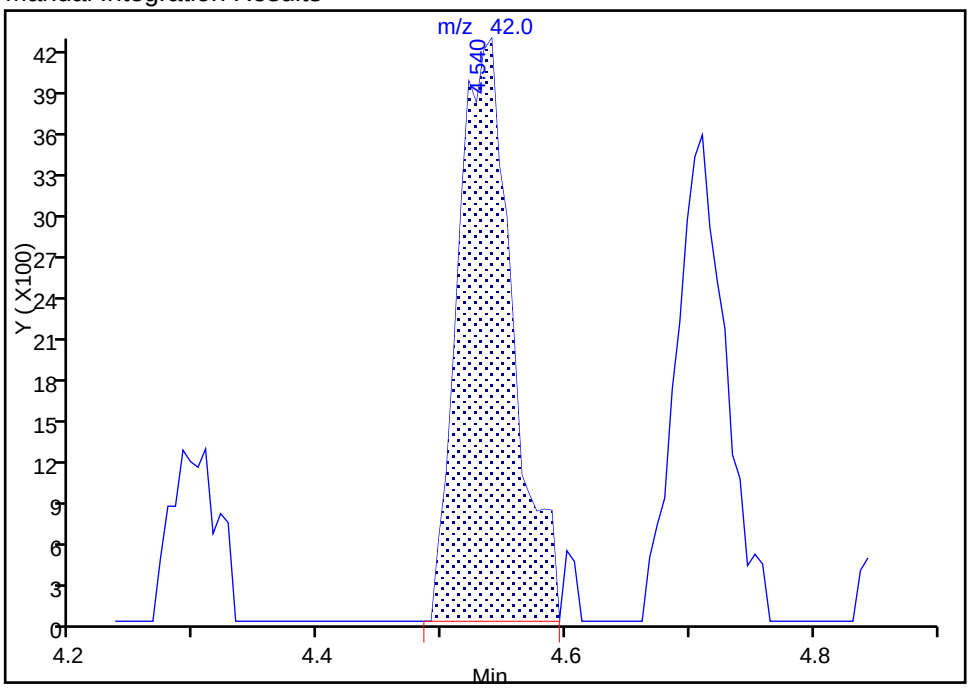
Not Detected
Expected RT: 4.53

Processing Integration Results



Manual Integration Results

RT: 4.54
Area: 12875
Amount: 5.164470
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:36:09
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

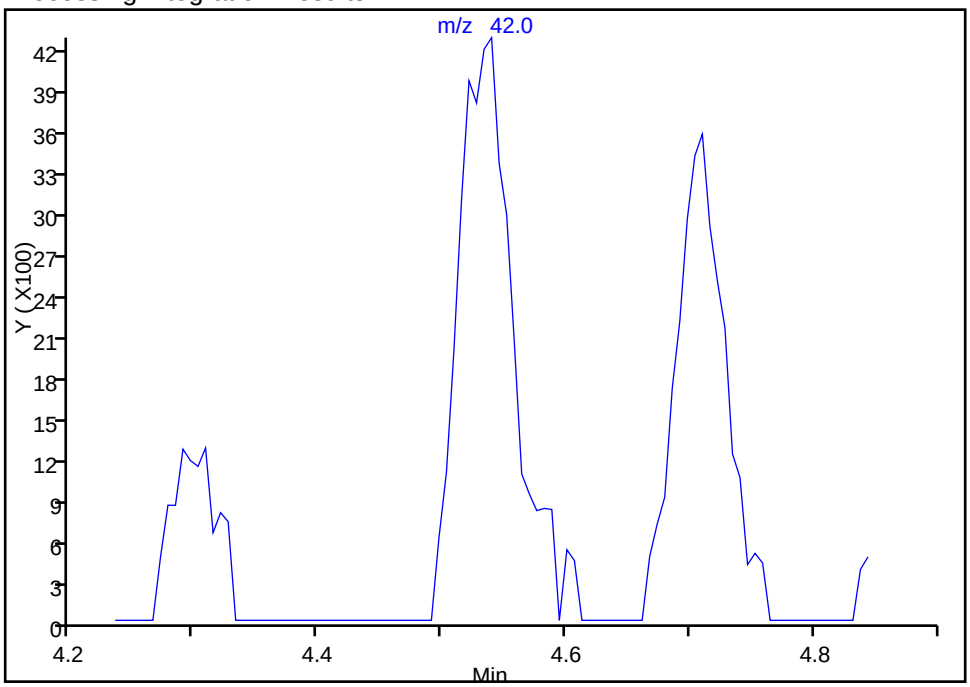
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7936.D
Injection Date: 29-Sep-2017 15:58:30 Instrument ID: HP5973F
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

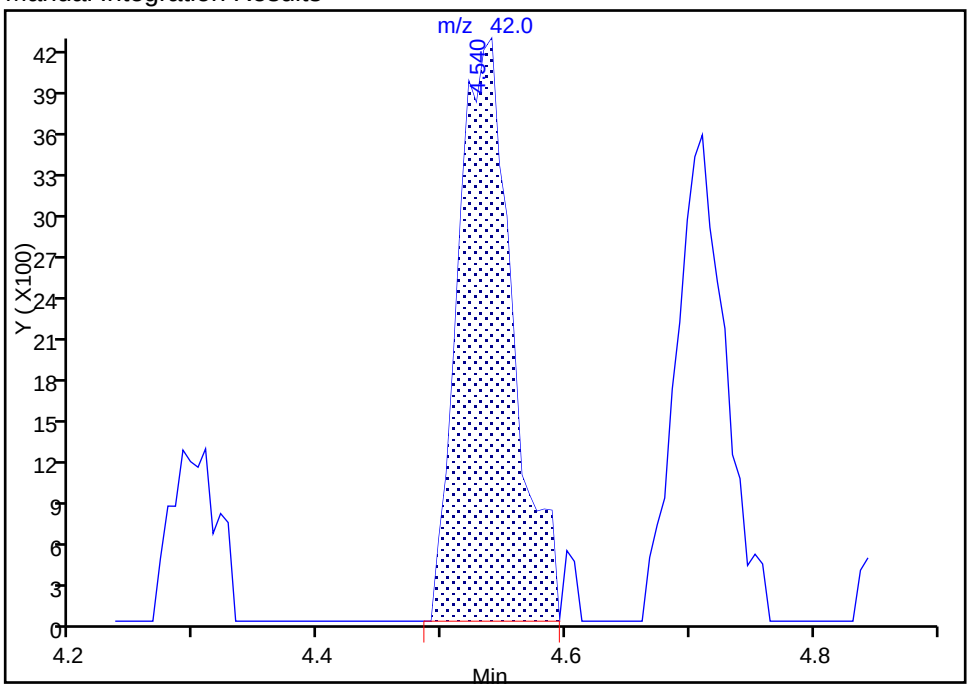
Not Detected
Expected RT: 4.53

Processing Integration Results



Manual Integration Results

RT: 4.54
Area: 12875
Amount: 5.164470
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:36:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

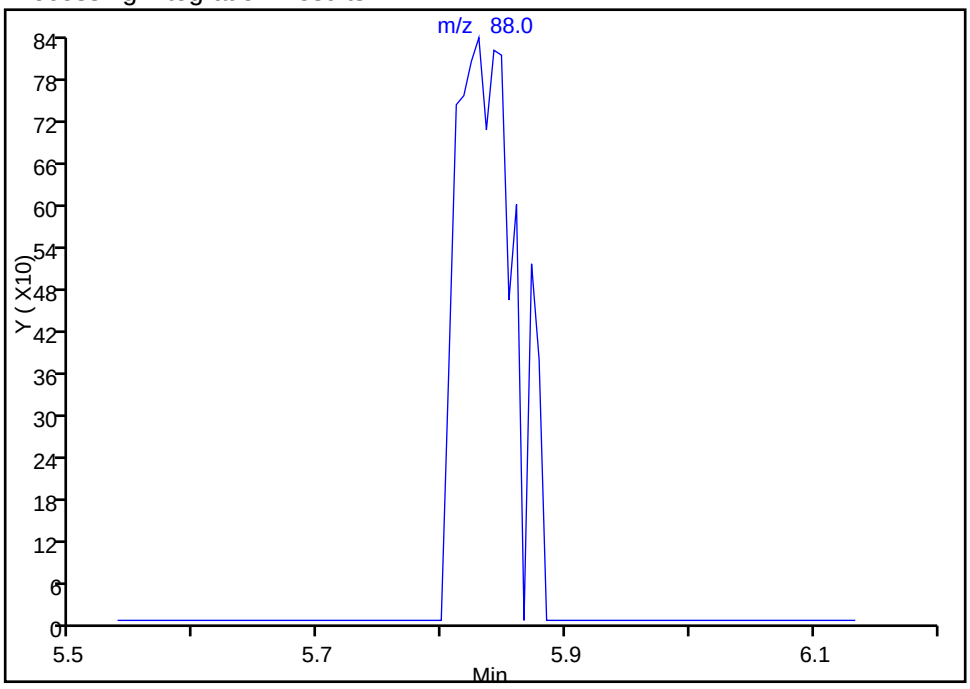
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7936.D
Injection Date: 29-Sep-2017 15:58:30 Instrument ID: HP5973F
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

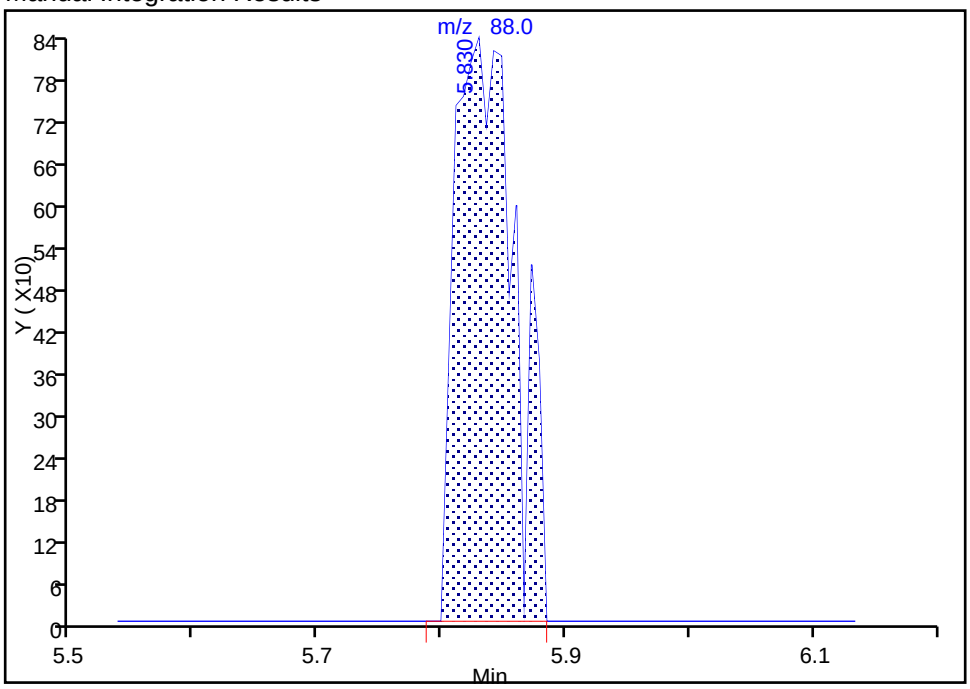
Not Detected
Expected RT: 5.82

Processing Integration Results



Manual Integration Results

RT: 5.83
Area: 2831
Amount: 33.901192
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:36:31
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

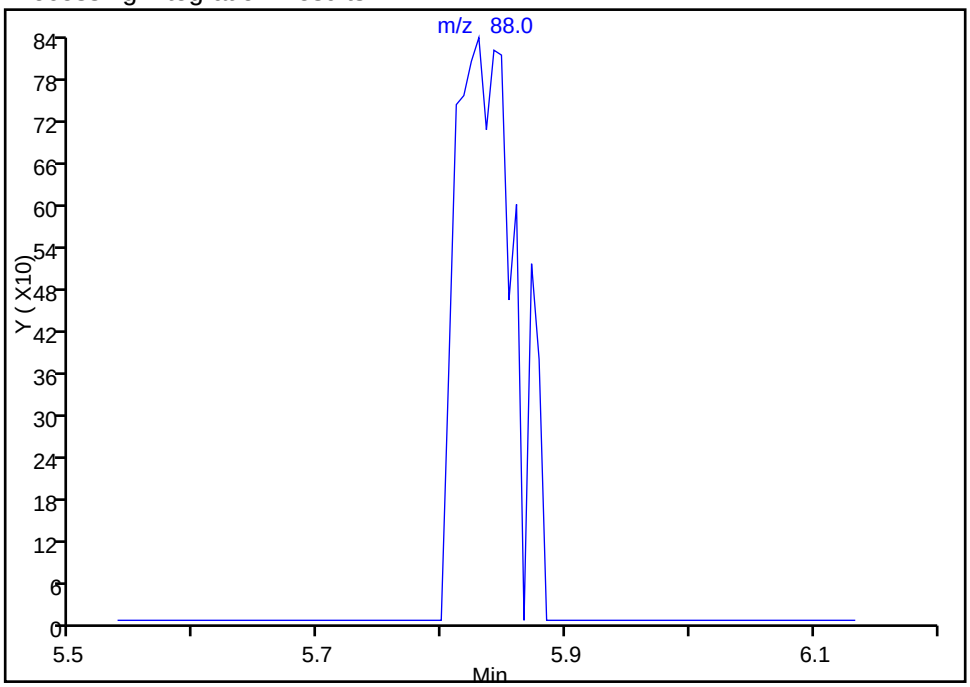
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7936.D
Injection Date: 29-Sep-2017 15:58:30 Instrument ID: HP5973F
Lims ID: IC
Client ID:
Operator ID: CDC ALS Bottle#: 2 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

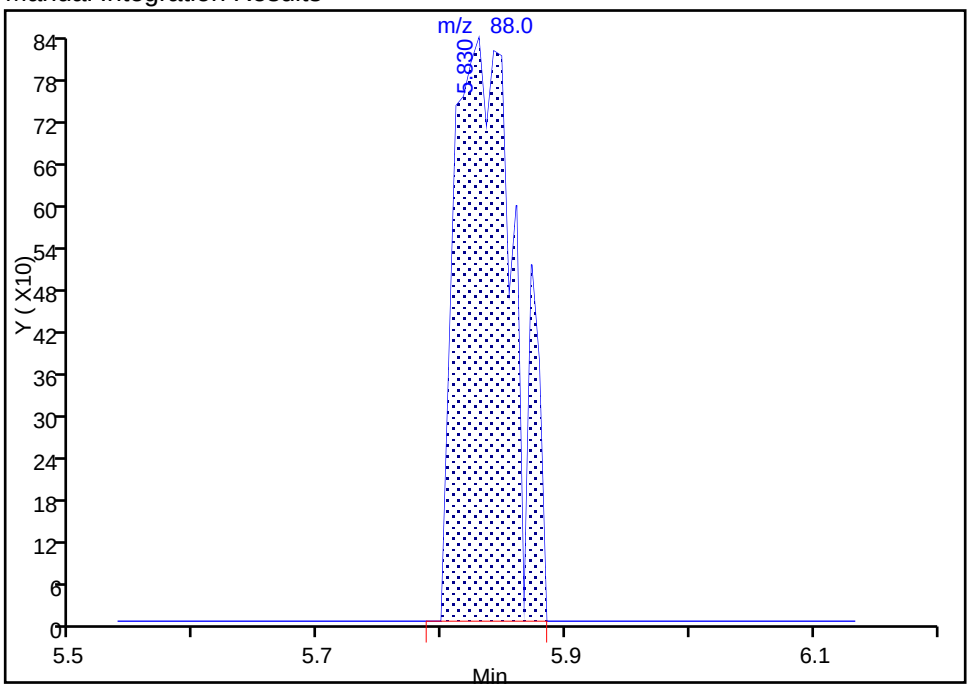
Not Detected
Expected RT: 5.82

Processing Integration Results



Manual Integration Results

RT: 5.83
Area: 2831
Amount: 33.901192
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:36:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7937.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 29-Sep-2017 16:24:30 ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0066009-007
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 02-Oct-2017 14:08:52 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: cwiklinc Date: 02-Oct-2017 10:41:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	268328	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	88	544102	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	95	542316	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.680	4.674	0.006	94	331493	50.0	49.8	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.960	-0.006	0	213612	50.0	50.0	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	94	1324731	50.0	49.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	90	429483	50.0	48.9	
10 Dichlorodifluoromethane	85	1.827	1.827	0.000	96	36338	5.00	5.11	
12 Chloromethane	50	2.003	2.003	0.000	99	36021	5.00	5.47	M
151 Butadiene	54	2.082	2.088	-0.006	84	35800	5.00	5.48	
13 Vinyl chloride	62	2.094	2.094	0.000	92	35086	5.00	5.35	
14 Bromomethane	94	2.362	2.362	0.000	92	16408	5.00	5.38	
15 Chloroethane	64	2.417	2.417	0.000	98	14941	5.00	5.39	
16 Dichlorofluoromethane	67	2.569	2.569	0.000	97	45374	5.00	5.30	
17 Trichlorofluoromethane	101	2.611	2.617	-0.006	98	42521	5.00	5.09	
18 Ethyl ether	59	2.770	2.770	0.000	88	25794	5.00	4.97	
20 Acrolein	56	2.922	2.922	0.000	97	31650	25.0	24.2	
21 1,1,2-Trichloro-1,2,2-trif	101	2.964	2.958	0.006	92	36557	5.00	5.22	
22 1,1-Dichloroethene	96	2.983	2.982	0.001	94	33995	5.00	5.12	
23 Acetone	43	3.037	3.031	0.006	98	71361	25.0	25.6	
25 Iodomethane	142	3.129	3.135	-0.006	99	58021	5.00	4.92	
26 Carbon disulfide	76	3.183	3.183	0.000	99	96962	5.00	4.73	
28 3-Chloro-1-propene	41	3.244	3.244	0.000	90	62539	5.00	5.12	
27 Methyl acetate	43	3.250	3.244	0.006	72	60270	10.0	9.89	
30 Methylene Chloride	84	3.360	3.354	0.006	98	55050	5.00	5.03	
31 2-Methyl-2-propanol	59	3.408	3.414	-0.006	92	45218	50.0	43.8	
32 Methyl tert-butyl ether	73	3.500	3.500	0.000	96	110796	5.00	4.95	
34 trans-1,2-Dichloroethene	96	3.536	3.536	0.000	96	39509	5.00	5.19	
33 Acrylonitrile	53	3.554	3.554	0.000	99	162643	50.0	49.9	
35 Hexane	57	3.670	3.670	0.000	88	96691	5.00	5.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.853	3.846	0.006	97	134143	10.0	9.57	
39 1,1-Dichloroethane	63	3.859	3.865	-0.006	96	74334	5.00	5.08	
43 2-Butanone (MEK)	43	4.297	4.290	0.007	98	95762	25.0	24.3	M
44 2,2-Dichloropropane	77	4.297	4.297	0.000	86	49345	5.00	4.84	
45 cis-1,2-Dichloroethene	96	4.303	4.309	-0.006	85	43097	5.00	5.04	
48 Chlorobromomethane	128	4.510	4.509	0.001	97	18913	5.00	4.87	
49 Tetrahydrofuran	42	4.534	4.528	0.006	56	23969	10.0	9.57	
50 Chloroform	83	4.546	4.546	0.000	96	68491	5.00	5.36	
51 1,1,1-Trichloroethane	97	4.686	4.686	0.000	98	52871	5.00	5.03	
52 Cyclohexane	56	4.710	4.710	0.000	91	87920	5.00	5.28	
54 1,1-Dichloropropene	75	4.802	4.801	0.001	95	50946	5.00	5.13	
55 Carbon tetrachloride	117	4.814	4.808	0.006	80	36592	5.00	4.62	
53 Isobutyl alcohol	43	4.881	4.868	0.013	95	37450	125.0	102.7	
57 Benzene	78	4.978	4.984	-0.006	97	151421	5.00	5.06	
58 1,2-Dichloroethane	62	5.021	5.020	0.001	94	57671	5.00	5.09	
59 n-Heptane	43	5.075	5.081	-0.006	93	72669	5.00	5.35	
62 Trichloroethene	95	5.495	5.495	0.000	97	37415	5.00	4.94	
64 Methylcyclohexane	83	5.629	5.629	0.000	94	72576	5.00	5.09	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	96	39131	5.00	4.81	
66 1,4-Dioxane	88	5.836	5.824	0.012	30	6548	100.0	77.5	
67 Dibromomethane	93	5.848	5.842	0.006	95	20364	5.00	4.84	
68 Dichlorobromomethane	83	5.957	5.957	0.000	98	35301	5.00	4.39	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	91	20550	5.00	4.56	
72 cis-1,3-Dichloropropene	75	6.329	6.328	0.001	94	45205	5.00	4.51	
73 4-Methyl-2-pentanone (MIBK	43	6.432	6.438	-0.006	95	179311	25.0	23.7	
74 Toluene	92	6.621	6.620	0.001	98	102447	5.00	5.29	
77 trans-1,3-Dichloropropene	75	6.846	6.846	0.000	96	37768	5.00	4.29	
75 Ethyl methacrylate	69	6.852	6.852	0.000	91	38380	5.00	4.29	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	94	24710	5.00	4.83	
81 Tetrachloroethene	166	7.144	7.144	0.000	98	41749	5.00	5.03	
82 1,3-Dichloropropane	76	7.205	7.204	0.001	95	50739	5.00	4.82	
80 2-Hexanone	43	7.223	7.223	0.000	93	131080	25.0	23.8	
83 Chlorodibromomethane	129	7.442	7.442	0.000	89	20596	5.00	5.94	
84 Ethylene Dibromide	107	7.563	7.569	-0.006	99	28401	5.00	4.57	
87 Chlorobenzene	112	8.020	8.020	0.000	95	103353	5.00	4.96	
88 Ethylbenzene	91	8.087	8.087	0.000	98	180709	5.00	5.17	
89 1,1,1,2-Tetrachloroethane	131	8.099	8.105	-0.006	90	27046	5.00	4.42	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	72673	5.00	5.09	
91 o-Xylene	106	8.628	8.634	-0.006	97	67482	5.00	4.90	
92 Styrene	104	8.659	8.652	0.007	96	118452	5.00	4.98	
95 Bromoform	173	8.926	8.926	0.000	96	10166	5.00	5.14	
94 Isopropylbenzene	105	9.005	9.005	0.000	96	176217	5.00	5.06	
101 Bromobenzene	156	9.389	9.388	0.001	93	45595	5.00	4.93	
97 1,1,2,2-Tetrachloroethane	83	9.395	9.388	0.007	77	37699	5.00	4.79	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	205638	5.00	5.19	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	42	12859	5.00	4.75	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	52	12292	5.00	4.68	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	43134	5.00	5.03	
102 1,3,5-Trimethylbenzene	105	9.608	9.607	0.001	94	149801	5.00	5.09	
105 4-Chlorotoluene	126	9.674	9.674	0.000	98	44673	5.00	5.03	
106 tert-Butylbenzene	134	9.936	9.936	0.000	93	32368	5.00	4.90	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	97	154441	5.00	5.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	189745	5.00	5.11	
110 4-Isopropyltoluene	119	10.271	10.271	0.000	97	168314	5.00	5.17	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	87502	5.00	4.98	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	94	90380	5.00	5.04	
115 n-Butylbenzene	91	10.648	10.648	0.000	98	148072	5.00	5.16	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	97	84120	5.00	5.02	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	79	4464	5.00	5.80	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	57444	5.00	4.96	
120 Hexachlorobutadiene	225	12.144	12.150	-0.006	97	31915	5.00	4.87	
121 Naphthalene	128	12.272	12.272	0.000	97	136288	5.00	4.77	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	96	52223	5.00	4.79	
S 123 Total BTEX	1				0			25.5	
S 124 Xylenes, Total	1				0			9.98	
S 125 1,2-Dichloroethene, Total	1				0			10.2	
S 126 1,3-Dichloropropene, Total	1				0			8.80	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00111	Amount Added:	5.00	Units: uL	
GAS CORP mix_00243	Amount Added:	5.00	Units: uL	
F 8260 SURR_00259	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00576	Amount Added:	1.00	Units: uL	Run Reagent

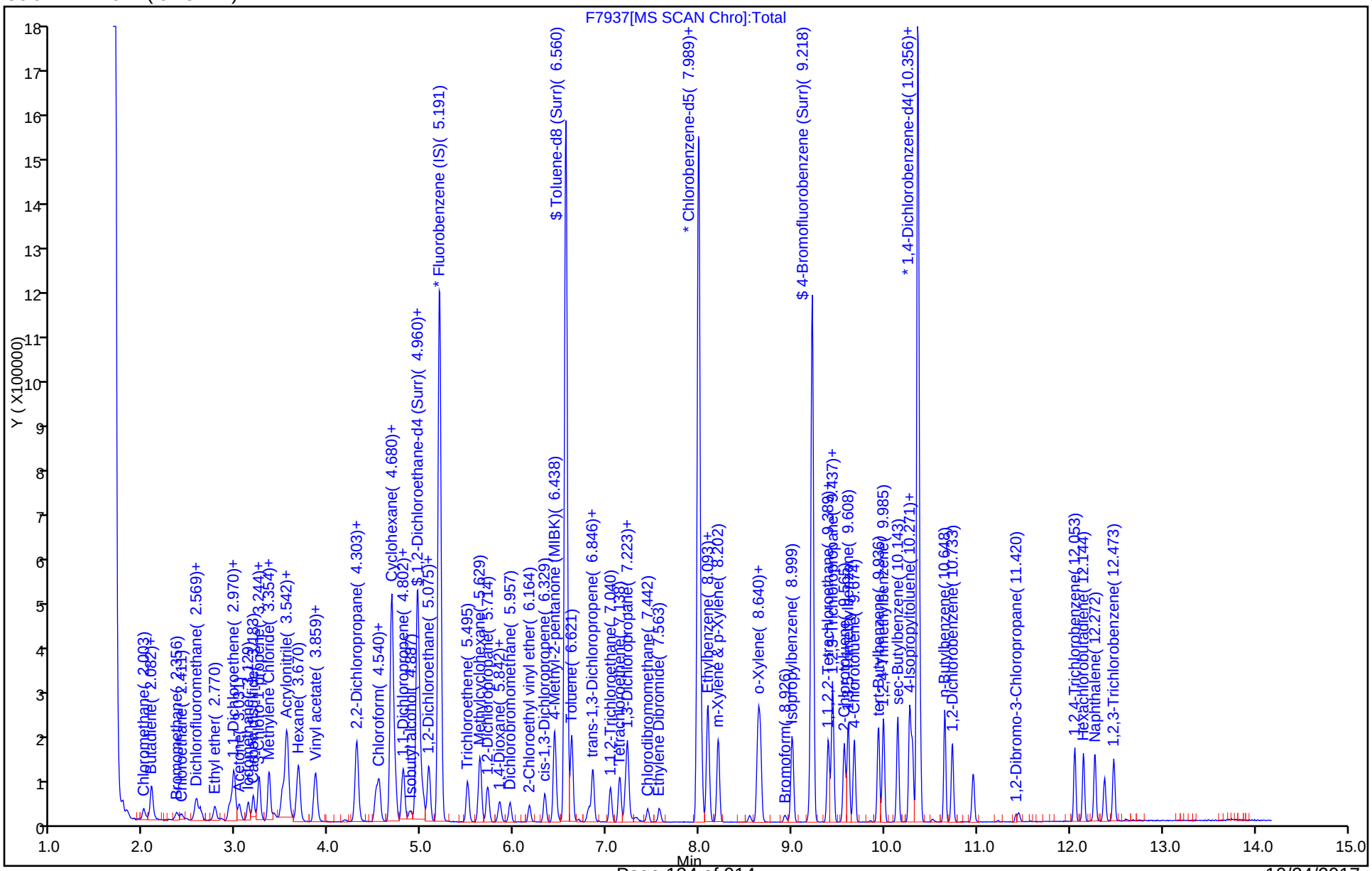
Report Date: 02-Oct-2017 14:08:53 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7937.D

Injection Date:	29-Sep-2017 16:24:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	IC 2			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

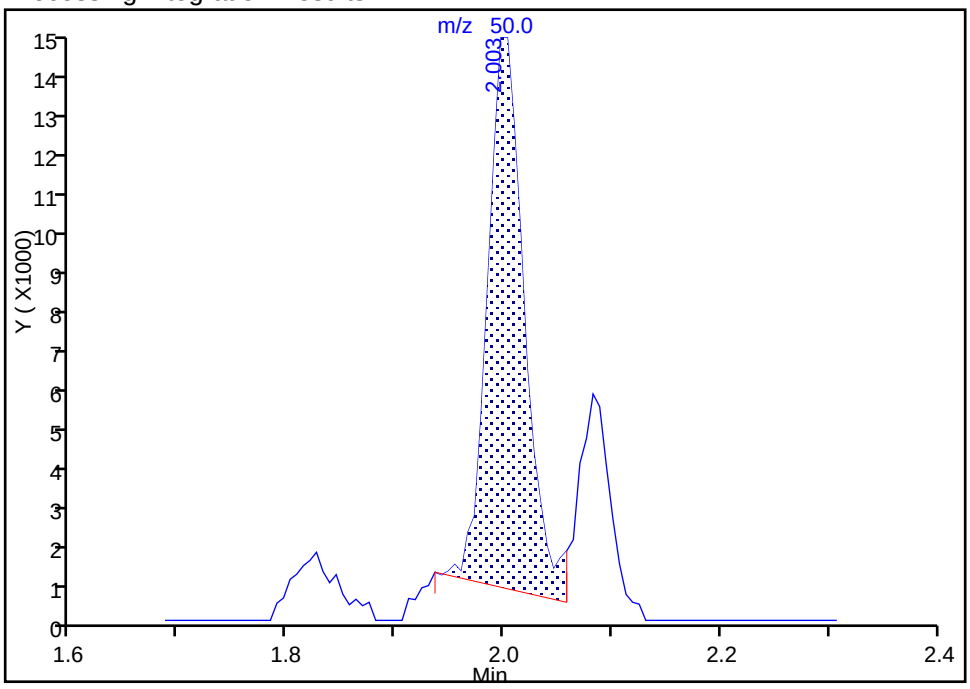
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7937.D
Injection Date: 29-Sep-2017 16:24:30 Instrument ID: HP5973F
Lims ID: IC 2
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

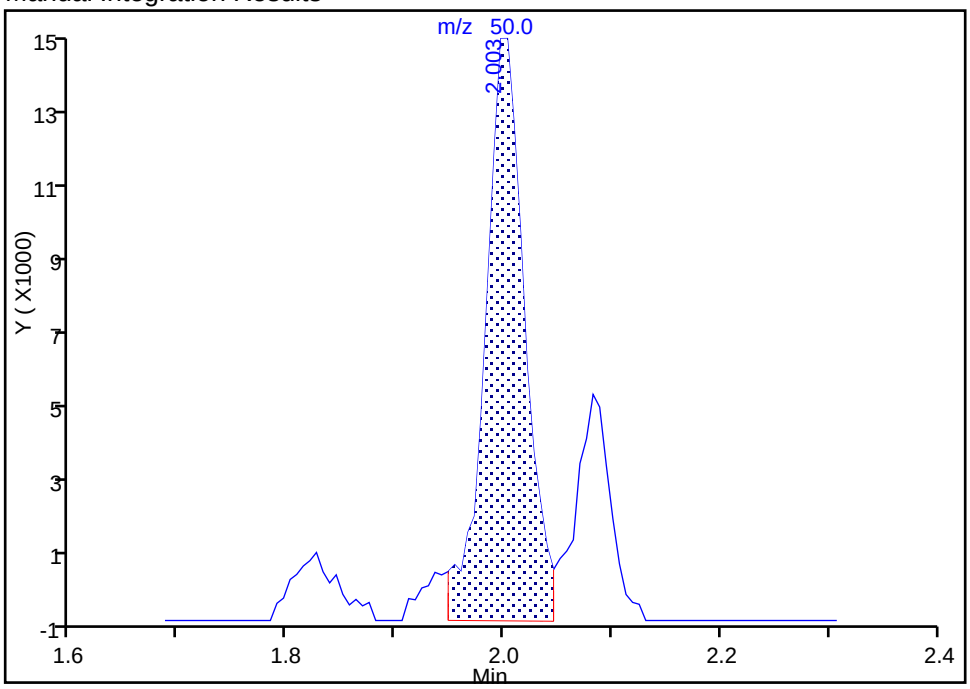
Processing Integration Results

RT: 2.00
Area: 31819
Amount: 4.900903
Amount Units: ug/kg



Manual Integration Results

RT: 2.00
Area: 36021
Amount: 5.469692
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:41:09
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

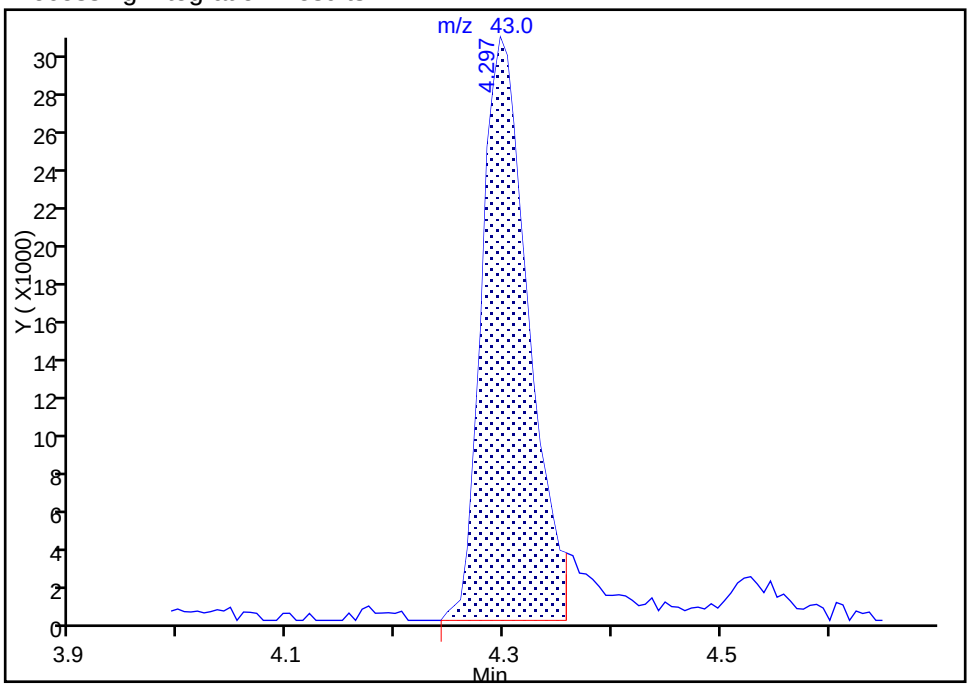
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7937.D
Injection Date: 29-Sep-2017 16:24:30 Instrument ID: HP5973F
Lims ID: IC 2
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

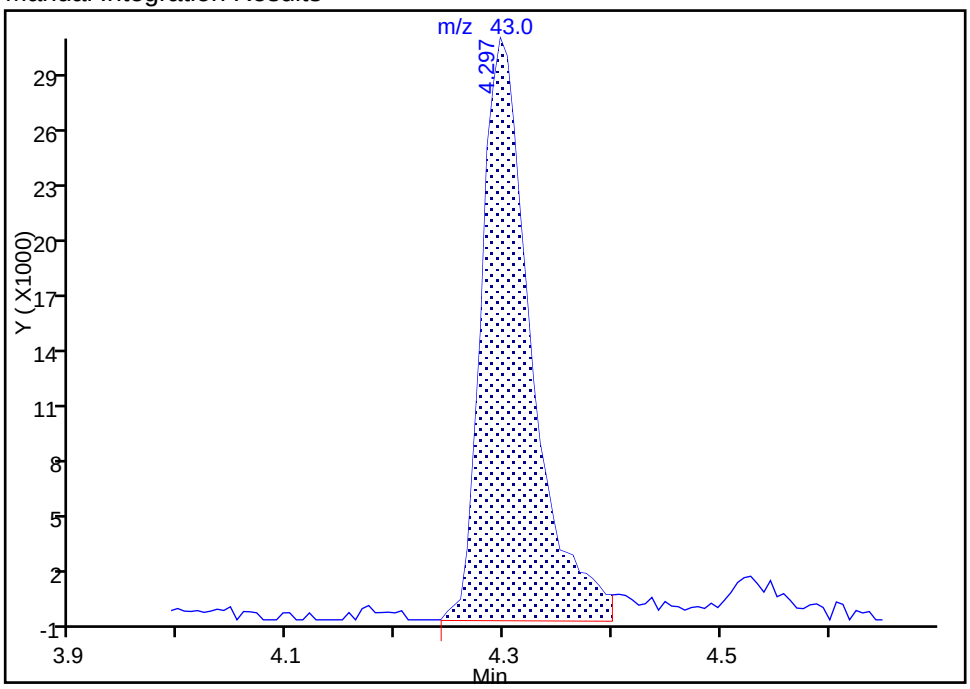
Processing Integration Results

RT: 4.30
Area: 89910
Amount: 23.013484
Amount Units: ug/kg



Manual Integration Results

RT: 4.30
Area: 95762
Amount: 24.303349
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:42:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7938.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 29-Sep-2017 16:50:30 ALS Bottle#: 4 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0066009-008
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 02-Oct-2017 14:08:54 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: cwiklinc Date: 29-Sep-2017 17:03:50

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	277032	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	87	559961	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.362	10.356	0.006	95	559194	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	93	338160	50.0	49.2	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.960	-0.006	0	220748	50.0	50.1	
$ 5 Toluene-d8 (Surr)	98	6.554	6.560	-0.006	93	1368921	50.0	49.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	90	444875	50.0	49.2	
10 Dichlorodifluoromethane	85	1.808	1.827	-0.019	99	74558	10.0	10.2	
12 Chloromethane	50	1.997	2.003	-0.006	99	68848	10.0	10.1	M
151 Butadiene	54	2.076	2.088	-0.012	85	68863	10.0	10.2	
13 Vinyl chloride	62	2.088	2.094	-0.006	98	68490	10.0	10.1	
14 Bromomethane	94	2.356	2.362	-0.006	91	30347	10.0	9.64	
15 Chloroethane	64	2.405	2.417	-0.012	98	29390	10.0	10.3	
16 Dichlorofluoromethane	67	2.569	2.569	0.000	97	88442	10.0	10.0	
17 Trichlorofluoromethane	101	2.611	2.617	-0.006	97	87993	10.0	10.2	
18 Ethyl ether	59	2.764	2.770	-0.006	91	66565	10.0	12.4	
20 Acrolein	56	2.916	2.922	-0.006	100	65908	50.0	48.8	
21 1,1,2-Trichloro-1,2,2-trif	101	2.958	2.958	0.000	92	72227	10.0	10.0	
22 1,1-Dichloroethene	96	2.977	2.982	-0.006	95	69868	10.0	10.2	
23 Acetone	43	3.025	3.031	-0.006	100	149065	50.0	51.8	
25 Iodomethane	142	3.129	3.135	-0.006	99	123462	10.0	10.1	
26 Carbon disulfide	76	3.183	3.183	0.000	100	208084	10.0	9.83	
27 Methyl acetate	43	3.238	3.244	-0.006	77	120092	20.0	19.1	
28 3-Chloro-1-propene	41	3.238	3.244	-0.006	88	130353	10.0	10.3	
30 Methylene Chloride	84	3.348	3.354	-0.006	97	95343	10.0	9.99	
31 2-Methyl-2-propanol	59	3.408	3.414	-0.006	99	97084	100.0	91.1	
32 Methyl tert-butyl ether	73	3.500	3.500	0.000	96	232356	10.0	10.1	
34 trans-1,2-Dichloroethene	96	3.530	3.536	-0.006	94	80534	10.0	10.2	
33 Acrylonitrile	53	3.548	3.554	-0.006	99	333859	100.0	99.2	
35 Hexane	57	3.664	3.670	-0.006	88	171871	10.0	10.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.846	3.846	0.000	97	287613	20.0	19.9	
39 1,1-Dichloroethane	63	3.859	3.865	-0.006	96	154002	10.0	10.2	
43 2-Butanone (MEK)	43	4.291	4.290	0.001	99	196706	50.0	48.4	
44 2,2-Dichloropropane	77	4.291	4.297	-0.006	65	105687	10.0	10.0	
45 cis-1,2-Dichloroethene	96	4.303	4.309	-0.006	86	89787	10.0	10.2	
48 Chlorobromomethane	128	4.503	4.509	-0.006	97	40735	10.0	10.2	
49 Tetrahydrofuran	42	4.522	4.528	-0.006	90	48489	20.0	18.8	
50 Chloroform	83	4.540	4.546	-0.006	96	134997	10.0	10.2	
51 1,1,1-Trichloroethane	97	4.680	4.686	-0.006	55	107090	10.0	9.87	
52 Cyclohexane	56	4.710	4.710	0.000	92	174844	10.0	10.2	
54 1,1-Dichloropropene	75	4.795	4.801	-0.006	93	102397	10.0	10.0	
55 Carbon tetrachloride	117	4.808	4.808	0.000	98	77424	10.0	9.46	
53 Isobutyl alcohol	43	4.875	4.868	0.007	95	83653	250.0	222.2	
57 Benzene	78	4.978	4.984	-0.006	97	314758	10.0	10.2	
58 1,2-Dichloroethane	62	5.015	5.020	-0.006	96	119371	10.0	10.2	
59 n-Heptane	43	5.075	5.081	-0.006	92	147341	10.0	10.5	
62 Trichloroethene	95	5.495	5.495	0.000	98	78909	10.0	10.1	
64 Methylcyclohexane	83	5.629	5.629	0.000	94	147624	10.0	10.0	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	86064	10.0	10.2	
66 1,4-Dioxane	88	5.830	5.824	0.006	96	17047	200.0	196.1	
67 Dibromomethane	93	5.848	5.842	0.006	95	42584	10.0	9.81	
68 Dichlorobromomethane	83	5.957	5.957	0.000	99	78491	10.0	9.45	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	90	45034	10.0	9.68	
72 cis-1,3-Dichloropropene	75	6.329	6.328	0.001	95	100196	10.0	9.68	
73 4-Methyl-2-pentanone (MIBK	43	6.432	6.438	-0.006	94	390958	50.0	50.3	
74 Toluene	92	6.621	6.620	0.001	98	207542	10.0	10.4	
77 trans-1,3-Dichloropropene	75	6.846	6.846	0.000	97	86121	10.0	9.51	
75 Ethyl methacrylate	69	6.852	6.852	0.000	88	85564	10.0	9.30	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	92	51927	10.0	9.86	
81 Tetrachloroethene	166	7.144	7.144	0.000	98	87271	10.0	10.2	
82 1,3-Dichloropropane	76	7.205	7.204	0.001	95	109773	10.0	10.1	
80 2-Hexanone	43	7.223	7.223	0.000	94	280311	50.0	49.5	
83 Chlorodibromomethane	129	7.448	7.442	0.006	90	46491	10.0	9.59	
84 Ethylene Dibromide	107	7.570	7.569	0.001	98	62473	10.0	9.76	
87 Chlorobenzene	112	8.020	8.020	0.000	95	219078	10.0	10.2	
88 Ethylbenzene	91	8.087	8.087	0.000	98	374375	10.0	10.4	
89 1,1,1,2-Tetrachloroethane	131	8.105	8.105	0.000	92	58554	10.0	9.29	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	100	147562	10.0	10.0	
91 o-Xylene	106	8.628	8.634	-0.006	97	144037	10.0	10.2	
92 Styrene	104	8.652	8.652	0.000	95	246932	10.0	10.1	
95 Bromoform	173	8.926	8.926	0.000	97	23014	10.0	9.48	
94 Isopropylbenzene	105	8.999	9.005	-0.006	96	374212	10.0	10.4	
97 1,1,2,2-Tetrachloroethane	83	9.395	9.388	0.007	84	80053	10.0	9.87	
101 Bromobenzene	156	9.395	9.388	0.007	92	95723	10.0	10.0	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	41	26690	10.0	9.56	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	434610	10.0	10.6	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	52	27661	10.0	10.2	
103 2-Chlorotoluene	126	9.565	9.565	0.000	96	88173	10.0	9.98	
102 1,3,5-Trimethylbenzene	105	9.608	9.607	0.001	94	315236	10.0	10.4	
105 4-Chlorotoluene	126	9.675	9.674	0.001	98	96315	10.0	10.5	
106 tert-Butylbenzene	134	9.930	9.936	-0.006	93	68730	10.0	10.1	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	96	325576	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	404040	10.0	10.5	
110 4-Isopropyltoluene	119	10.271	10.271	0.000	97	350208	10.0	10.4	
111 1,3-Dichlorobenzene	146	10.295	10.301	-0.006	98	185213	10.0	10.2	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	96	189660	10.0	10.2	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	307673	10.0	10.4	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	97	175944	10.0	10.2	
117 1,2-Dibromo-3-Chloropropan	75	11.421	11.420	0.000	81	10130	10.0	9.30	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	117910	10.0	9.88	
120 Hexachlorobutadiene	225	12.144	12.150	-0.006	97	67159	10.0	9.94	
121 Naphthalene	128	12.272	12.272	0.000	96	283378	10.0	9.61	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	96	109460	10.0	9.75	
S 125 1,2-Dichloroethene, Total	1				0			20.4	
S 126 1,3-Dichloropropene, Total	1				0			19.2	
S 123 Total BTEX	1				0			51.2	
S 124 Xylenes, Total	1				0			20.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00111	Amount Added:	10.00	Units: uL	
GAS CORP mix_00243	Amount Added:	10.00	Units: uL	
F 8260 SURR_00259	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00576	Amount Added:	1.00	Units: uL	Run Reagent

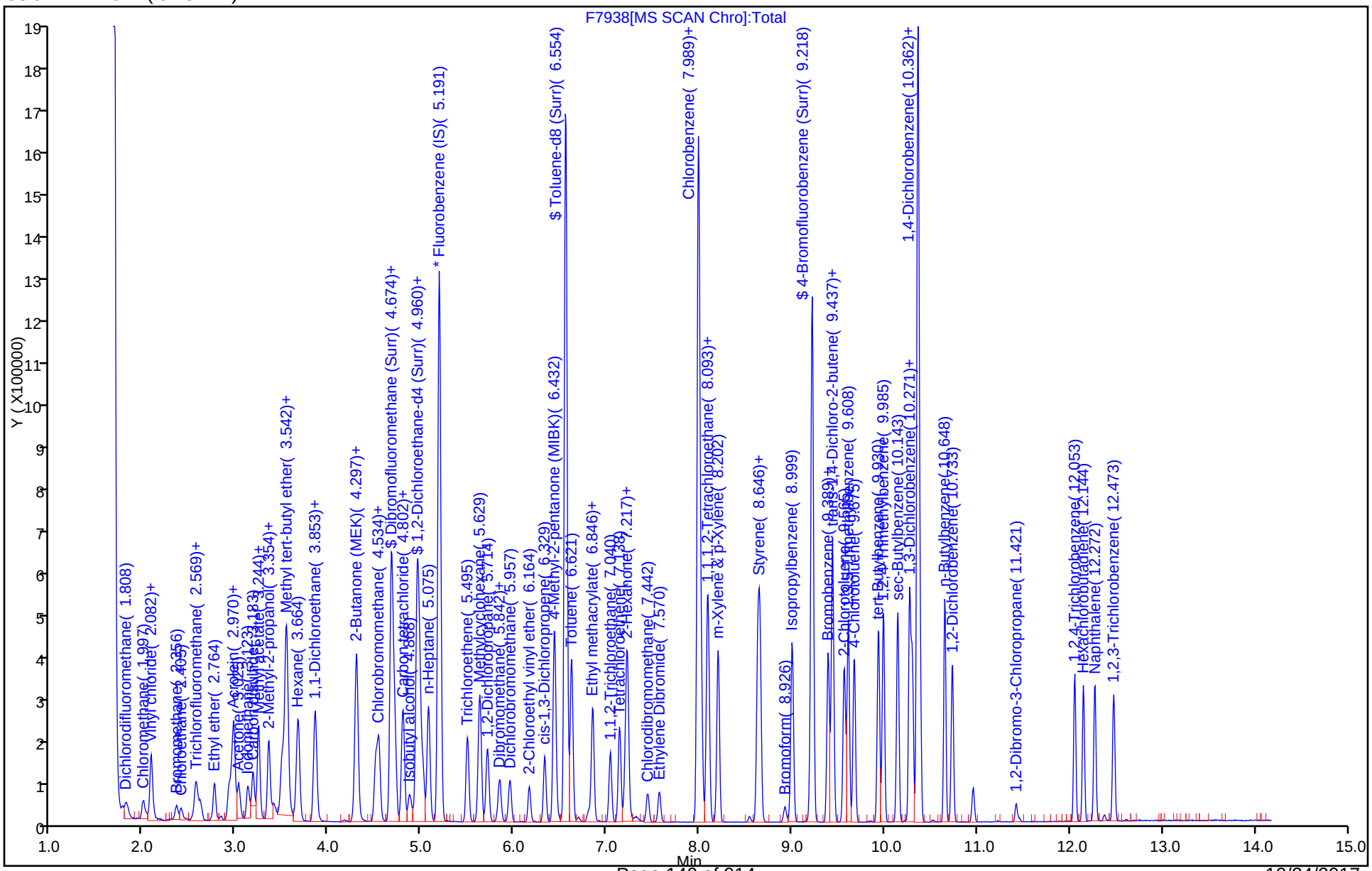
Report Date: 02-Oct-2017 14:08:56 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7938.D

Injection Date:	29-Sep-2017 16:50:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	IC 3			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

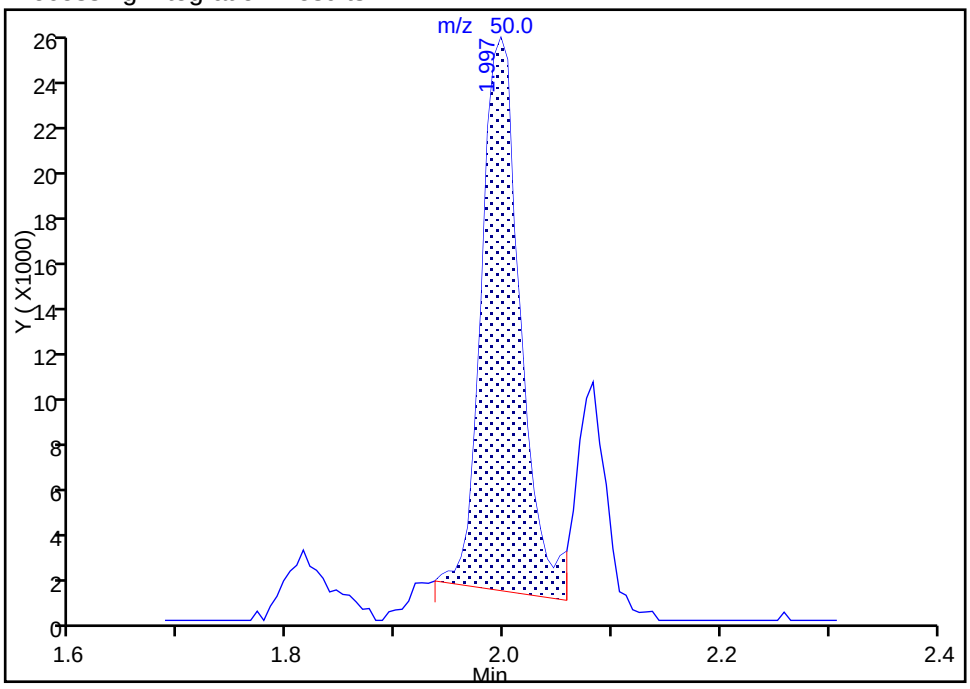
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7938.D
Injection Date: 29-Sep-2017 16:50:30 Instrument ID: HP5973F
Lims ID: IC 3
Client ID:
Operator ID: CDC ALS Bottle#: 4 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

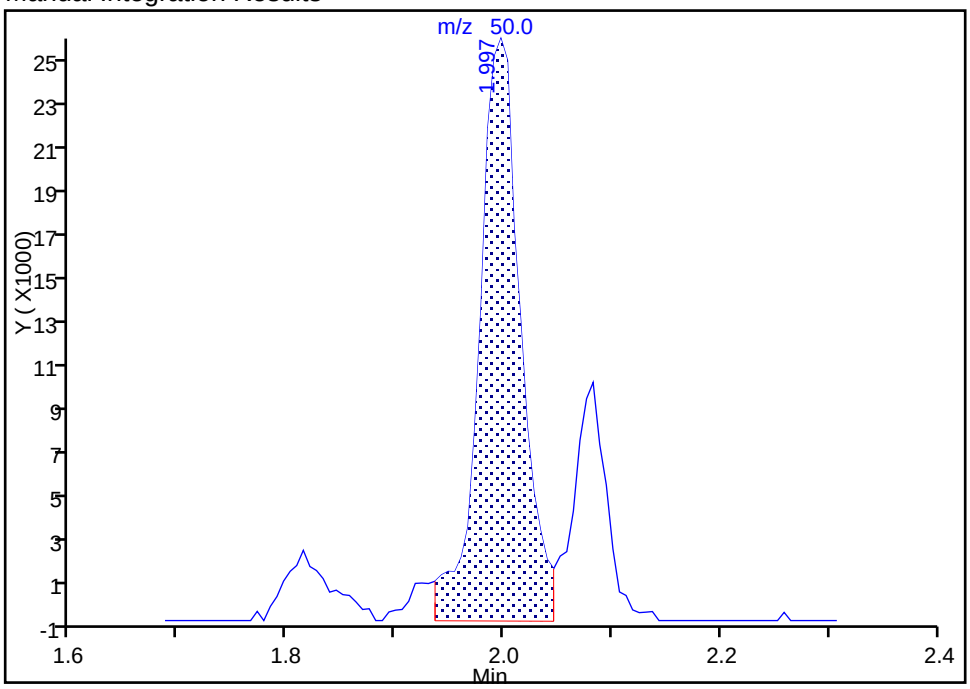
Processing Integration Results

RT: 2.00
Area: 60813
Amount: 8.907680
Amount Units: ug/kg



Manual Integration Results

RT: 2.00
Area: 68848
Amount: 10.125920
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:43:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7939.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Sep-2017 17:16:30 ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0066009-009
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 02-Oct-2017 14:08:57 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: cwiklinc Date: 02-Oct-2017 10:41:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	270093	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	537539	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.362	10.356	0.006	95	547154	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	322631	50.0	48.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.960	-0.006	0	209755	50.0	48.8	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	93	1306979	50.0	49.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	90	428115	50.0	49.4	
10 Dichlorodifluoromethane	85	1.815	1.827	-0.013	99	149155	20.0	20.8	
12 Chloromethane	50	1.997	2.003	-0.006	99	136238	20.0	20.6	M
151 Butadiene	54	2.082	2.088	-0.006	85	139802	20.0	21.3	
13 Vinyl chloride	62	2.088	2.094	-0.006	98	141116	20.0	21.4	
14 Bromomethane	94	2.356	2.362	-0.006	91	61135	20.0	19.9	
15 Chloroethane	64	2.405	2.417	-0.012	100	56028	20.0	20.1	
16 Dichlorofluoromethane	67	2.563	2.569	-0.006	98	178503	20.0	20.7	
17 Trichlorofluoromethane	101	2.611	2.617	-0.006	99	172605	20.0	20.5	
18 Ethyl ether	59	2.764	2.770	-0.006	89	103730	20.0	19.8	
20 Acrolein	56	2.922	2.922	0.000	100	138966	100.0	105.6	
21 1,1,2-Trichloro-1,2,2-trif	101	2.952	2.958	-0.006	93	142582	20.0	20.2	
22 1,1-Dichloroethene	96	2.976	2.982	-0.006	95	133842	20.0	20.0	
23 Acetone	43	3.025	3.031	-0.006	99	298138	100.0	106.3	
25 Iodomethane	142	3.129	3.135	-0.006	98	236295	20.0	19.9	
26 Carbon disulfide	76	3.183	3.183	0.000	99	415075	20.0	20.1	
28 3-Chloro-1-propene	41	3.244	3.244	0.000	89	245349	20.0	20.0	
27 Methyl acetate	43	3.238	3.244	-0.006	80	261528	40.0	42.6	
30 Methylene Chloride	84	3.354	3.354	0.000	98	167915	20.0	19.9	
31 2-Methyl-2-propanol	59	3.408	3.414	-0.006	99	221730	200.0	213.4	
32 Methyl tert-butyl ether	73	3.506	3.500	0.006	96	458408	20.0	20.3	
34 trans-1,2-Dichloroethene	96	3.536	3.536	0.000	94	151832	20.0	19.8	
33 Acrylonitrile	53	3.548	3.554	-0.006	99	709268	200.0	216.1	
35 Hexane	57	3.670	3.670	0.000	88	314216	20.0	20.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.846	3.846	0.000	97	590609	40.0	41.9	
39 1,1-Dichloroethane	63	3.859	3.865	-0.006	97	297106	20.0	20.2	
43 2-Butanone (MEK)	43	4.291	4.290	0.001	99	438086	100.0	110.5	
44 2,2-Dichloropropane	77	4.291	4.297	-0.006	62	206874	20.0	20.2	
45 cis-1,2-Dichloroethene	96	4.303	4.309	-0.006	85	172968	20.0	20.1	
48 Chlorobromomethane	128	4.510	4.509	0.001	97	77654	20.0	19.9	
49 Tetrahydrofuran	42	4.528	4.528	0.000	89	110699	40.0	43.9	
50 Chloroform	83	4.540	4.546	-0.006	96	255304	20.0	19.8	
51 1,1,1-Trichloroethane	97	4.680	4.686	-0.006	97	211474	20.0	20.0	
52 Cyclohexane	56	4.710	4.710	0.000	91	337554	20.0	20.1	
54 1,1-Dichloropropene	75	4.802	4.801	0.001	95	199649	20.0	20.0	
55 Carbon tetrachloride	117	4.808	4.808	0.000	98	154577	20.0	19.4	
53 Isobutyl alcohol	43	4.875	4.868	0.007	93	192178	500.0	523.5	
57 Benzene	78	4.984	4.984	0.000	96	610266	20.0	20.3	
58 1,2-Dichloroethane	62	5.014	5.020	-0.006	96	225343	20.0	19.8	
59 n-Heptane	43	5.075	5.081	-0.006	92	273371	20.0	20.0	
62 Trichloroethene	95	5.495	5.495	0.000	97	149638	20.0	19.6	
64 Methylcyclohexane	83	5.629	5.629	0.000	94	288399	20.0	20.1	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	163435	20.0	20.0	
66 1,4-Dioxane	88	5.824	5.824	0.000	97	34254	400.0	410.4	
67 Dibromomethane	93	5.842	5.842	0.000	95	83674	20.0	19.8	
68 Dichlorobromomethane	83	5.957	5.957	0.000	99	155933	20.0	19.3	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	91	92292	20.0	20.3	
72 cis-1,3-Dichloropropene	75	6.329	6.328	0.001	95	197379	20.0	19.6	
73 4-Methyl-2-pentanone (MIBK	43	6.438	6.438	0.000	94	851152	100.0	114.0	
74 Toluene	92	6.621	6.620	0.001	98	384744	20.0	20.1	
77 trans-1,3-Dichloropropene	75	6.846	6.846	0.000	97	174351	20.0	20.0	
75 Ethyl methacrylate	69	6.852	6.852	0.000	91	180521	20.0	20.4	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	92	101705	20.0	20.1	
81 Tetrachloroethene	166	7.138	7.144	-0.006	97	162228	20.0	19.8	
82 1,3-Dichloropropane	76	7.198	7.204	-0.006	96	216014	20.0	20.8	
80 2-Hexanone	43	7.223	7.223	0.000	95	623735	100.0	114.7	
83 Chlorodibromomethane	129	7.442	7.442	0.000	91	99322	20.0	17.8	
84 Ethylene Dibromide	107	7.570	7.569	0.001	99	125484	20.0	20.4	
87 Chlorobenzene	112	8.020	8.020	0.000	95	414785	20.0	20.1	
88 Ethylbenzene	91	8.087	8.087	0.000	98	709591	20.0	20.5	
89 1,1,1,2-Tetrachloroethane	131	8.105	8.105	0.000	92	119961	20.0	19.8	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	287906	20.0	20.4	
91 o-Xylene	106	8.634	8.634	0.000	96	277466	20.0	20.4	
92 Styrene	104	8.652	8.652	0.000	95	478101	20.0	20.4	
95 Bromoform	173	8.920	8.926	-0.006	97	52342	20.0	19.6	
94 Isopropylbenzene	105	8.999	9.005	-0.006	95	718530	20.0	20.5	
101 Bromobenzene	156	9.389	9.388	0.001	94	182867	20.0	19.6	
97 1,1,2,2-Tetrachloroethane	83	9.389	9.388	0.001	78	164609	20.0	20.7	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	824541	20.0	20.6	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	59	56480	20.0	20.7	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	83	55343	20.0	20.9	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	172603	20.0	20.0	
102 1,3,5-Trimethylbenzene	105	9.608	9.607	0.001	94	611286	20.0	20.6	
105 4-Chlorotoluene	126	9.668	9.674	-0.006	98	178415	20.0	19.9	
106 tert-Butylbenzene	134	9.936	9.936	0.000	93	134411	20.0	20.1	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	96	632390	20.0	20.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	779296	20.0	20.8	
110 4-Isopropyltoluene	119	10.271	10.271	0.000	97	680092	20.0	20.7	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	361420	20.0	20.4	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	95	363097	20.0	20.1	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	594002	20.0	20.5	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	98	342227	20.0	20.2	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	83	24973	20.0	19.0	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	234515	20.0	20.1	
120 Hexachlorobutadiene	225	12.144	12.150	-0.006	97	132202	20.0	20.0	
121 Naphthalene	128	12.272	12.272	0.000	97	605469	20.0	21.0	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	97	224069	20.0	20.4	
S 123 Total BTEX	1				0			101.7	
S 124 Xylenes, Total	1				0			40.8	
S 125 1,2-Dichloroethene, Total	1				0			39.9	
S 126 1,3-Dichloropropene, Total	1				0			39.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00111	Amount Added: 10.00	Units: uL		
GAS CORP mix_00243	Amount Added: 10.00	Units: uL		
F 8260 SURR_00259	Amount Added: 1.00	Units: uL	Run Reagent	
F 8260 IS_00576	Amount Added: 1.00	Units: uL	Run Reagent	

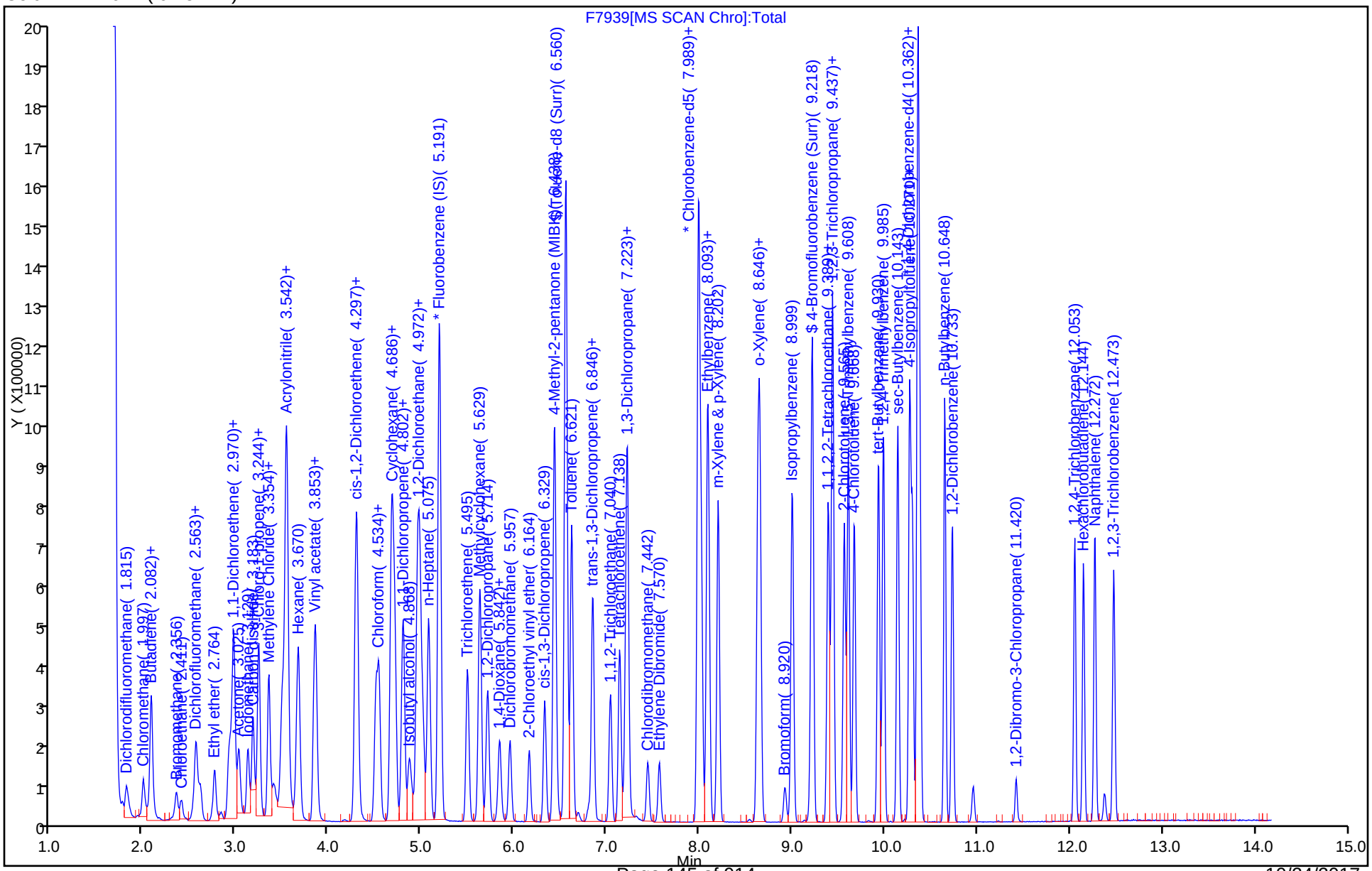
Report Date: 02-Oct-2017 14:08:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7939.D

Injection Date:	29-Sep-2017 17:16:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	IC 4			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

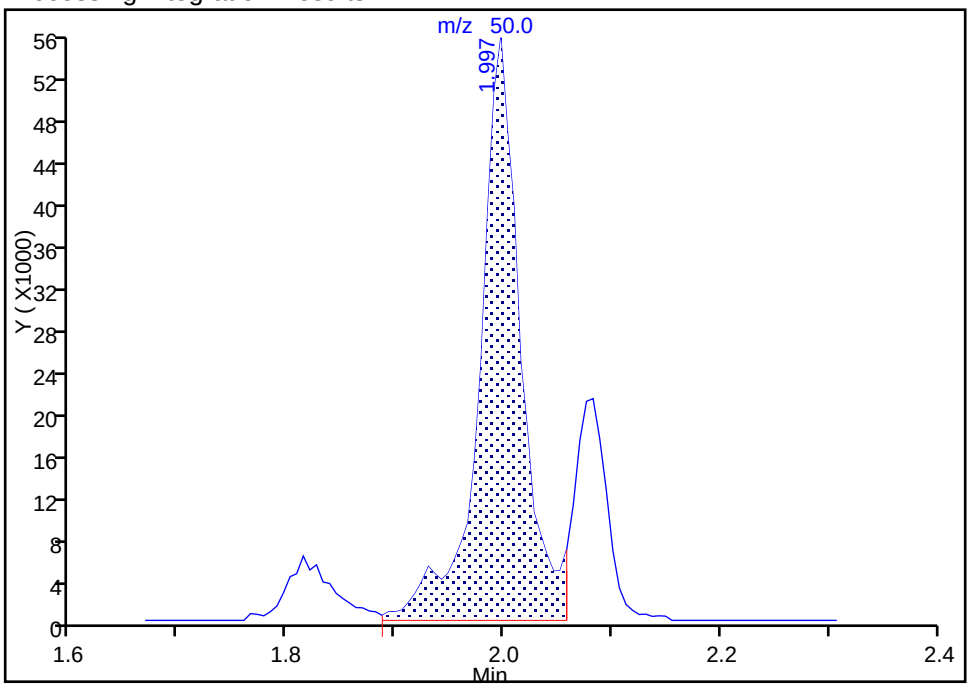
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7939.D
Injection Date: 29-Sep-2017 17:16:30 Instrument ID: HP5973F
Lims ID: IC 4
Client ID:
Operator ID: CDC ALS Bottle#: 5 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

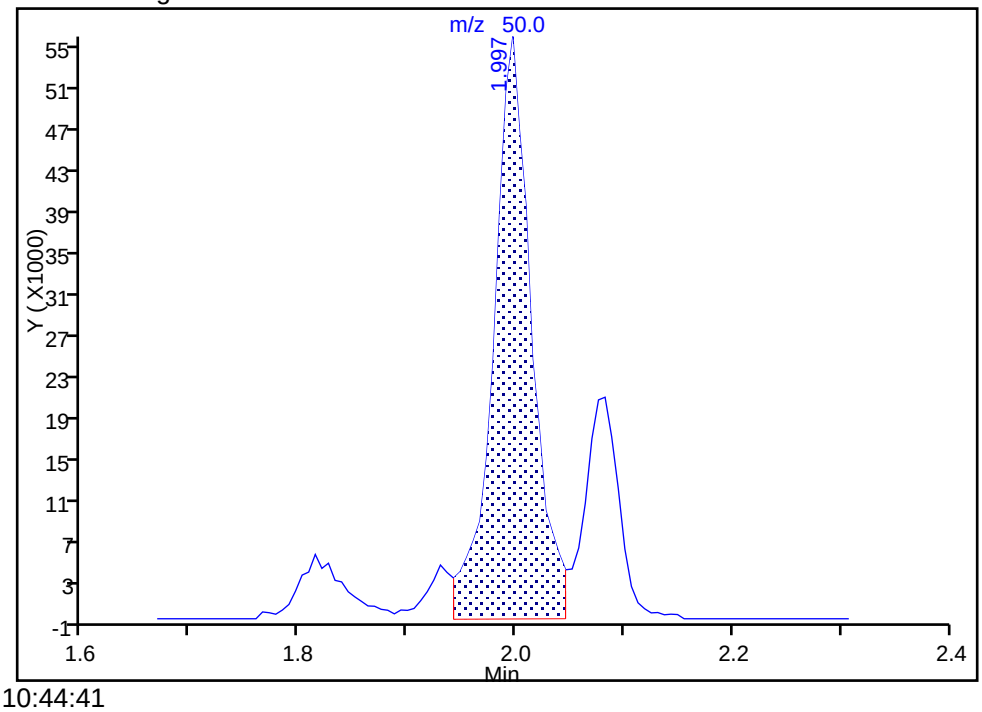
Processing Integration Results

RT: 2.00
Area: 147779
Amount: 21.835152
Amount Units: ug/kg



Manual Integration Results

RT: 2.00
Area: 136238
Amount: 20.552187
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:44:41
Audit Action: Manually Integrated Audit Reason: Other

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7940.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 29-Sep-2017 17:41:30 ALS Bottle#: 6 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0066009-010
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 02-Oct-2017 14:09:00 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: cwiklinc Date: 02-Oct-2017 10:35:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.197	5.197	0.000	99	274919	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	87	549368	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	566141	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	343198	50.0	50.3	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.960	4.960	0.000	0	219321	50.0	50.1	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	93	1368200	50.0	50.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	91	451166	50.0	50.9	
10 Dichlorodifluoromethane	85	1.827	1.827	0.000	100	359526	50.0	49.4	
12 Chloromethane	50	2.003	2.003	0.000	99	325986	50.0	48.3	
151 Butadiene	54	2.088	2.088	0.000	86	328485	50.0	49.1	
13 Vinyl chloride	62	2.094	2.094	0.000	98	329359	50.0	49.0	
14 Bromomethane	94	2.362	2.362	0.000	91	156278	50.0	50.0	
15 Chloroethane	64	2.417	2.417	0.000	100	137537	50.0	48.4	
16 Dichlorofluoromethane	67	2.569	2.569	0.000	98	432547	50.0	49.4	
17 Trichlorofluoromethane	101	2.617	2.617	0.000	96	417622	50.0	48.8	
18 Ethyl ether	59	2.770	2.770	0.000	88	259319	50.0	48.7	
20 Acrolein	56	2.922	2.922	0.000	99	337623	250.0	252.1	
21 1,1,2-Trichloro-1,2,2-trif	101	2.958	2.958	0.000	93	353196	50.0	49.2	
22 1,1-Dichloroethene	96	2.982	2.982	0.000	95	336752	50.0	49.5	
23 Acetone	43	3.031	3.031	0.000	99	698963	250.0	244.7	
25 Iodomethane	142	3.135	3.135	0.000	98	604077	50.0	50.0	
26 Carbon disulfide	76	3.183	3.183	0.000	99	1095257	50.0	52.1	
27 Methyl acetate	43	3.244	3.244	0.000	76	619045	100.0	99.1	
28 3-Chloro-1-propene	41	3.244	3.244	0.000	89	622760	50.0	49.8	
30 Methylene Chloride	84	3.354	3.354	0.000	97	414115	50.0	51.4	
31 2-Methyl-2-propanol	59	3.414	3.414	0.000	99	525080	500.0	496.4	
32 Methyl tert-butyl ether	73	3.500	3.500	0.000	96	1165929	50.0	50.8	
34 trans-1,2-Dichloroethene	96	3.536	3.536	0.000	95	389276	50.0	49.9	
33 Acrylonitrile	53	3.554	3.554	0.000	99	1680514	500.0	503.1	
35 Hexane	57	3.670	3.670	0.000	87	749815	50.0	51.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.846	3.846	0.000	97	1488357	100.0	103.6	
39 1,1-Dichloroethane	63	3.865	3.865	0.000	96	746727	50.0	49.8	
43 2-Butanone (MEK)	43	4.290	4.290	0.000	99	1019451	250.0	252.5	
44 2,2-Dichloropropane	77	4.297	4.297	0.000	61	524460	50.0	50.2	
45 cis-1,2-Dichloroethene	96	4.309	4.309	0.000	85	439935	50.0	50.2	
48 Chlorobromomethane	128	4.509	4.509	0.000	97	204266	50.0	51.3	
49 Tetrahydrofuran	42	4.528	4.528	0.000	91	256433	100.0	100.0	
50 Chloroform	83	4.546	4.546	0.000	96	653746	50.0	49.9	
51 1,1,1-Trichloroethane	97	4.686	4.686	0.000	98	540307	50.0	50.2	
52 Cyclohexane	56	4.710	4.710	0.000	91	832295	50.0	48.8	
54 1,1-Dichloropropene	75	4.801	4.801	0.000	95	503010	50.0	49.5	
55 Carbon tetrachloride	117	4.808	4.808	0.000	98	416714	50.0	51.3	
53 Isobutyl alcohol	43	4.868	4.868	0.000	94	472240	1250.0	1263.9	
57 Benzene	78	4.984	4.984	0.000	98	1530653	50.0	50.0	
58 1,2-Dichloroethane	62	5.020	5.020	0.000	97	573341	50.0	49.4	
59 n-Heptane	43	5.081	5.081	0.000	91	671352	50.0	48.2	
62 Trichloroethene	95	5.495	5.495	0.000	98	387988	50.0	50.0	
64 Methylcyclohexane	83	5.629	5.629	0.000	94	720571	50.0	49.3	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	414412	50.0	49.7	
66 1,4-Dioxane	88	5.824	5.824	0.000	97	89671	1000.0	1051.3	
67 Dibromomethane	93	5.842	5.842	0.000	95	218832	50.0	50.8	
68 Dichlorobromomethane	83	5.957	5.957	0.000	99	440017	50.0	53.4	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	91	243717	50.0	52.8	
72 cis-1,3-Dichloropropene	75	6.328	6.328	0.000	95	548702	50.0	53.4	
73 4-Methyl-2-pentanone (MIBK	43	6.438	6.438	0.000	93	1974696	250.0	258.8	
74 Toluene	92	6.620	6.620	0.000	99	981735	50.0	50.2	
77 trans-1,3-Dichloropropene	75	6.846	6.846	0.000	95	482242	50.0	54.3	
75 Ethyl methacrylate	69	6.852	6.852	0.000	89	477615	50.0	52.9	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	93	262250	50.0	50.8	
81 Tetrachloroethene	166	7.144	7.144	0.000	99	421721	50.0	50.3	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	96	541145	50.0	50.9	
80 2-Hexanone	43	7.223	7.223	0.000	92	1438966	250.0	258.8	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	297615	50.0	46.7	
84 Ethylene Dibromide	107	7.569	7.569	0.000	98	328315	50.0	52.3	
87 Chlorobenzene	112	8.020	8.020	0.000	95	1059273	50.0	50.3	
88 Ethylbenzene	91	8.087	8.087	0.000	98	1783284	50.0	50.5	
89 1,1,1,2-Tetrachloroethane	131	8.105	8.105	0.000	94	336245	50.0	54.4	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	730385	50.0	50.6	
91 o-Xylene	106	8.634	8.634	0.000	96	714936	50.0	51.4	
92 Styrene	104	8.652	8.652	0.000	95	1238643	50.0	51.6	
95 Bromoform	173	8.926	8.926	0.000	97	165468	50.0	50.3	
94 Isopropylbenzene	105	9.005	9.005	0.000	96	1809206	50.0	49.8	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	92	419557	50.0	51.1	
101 Bromobenzene	156	9.388	9.388	0.000	93	478168	50.0	49.5	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	59	145760	50.0	51.6	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	2072474	50.0	50.1	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	82	135728	50.0	49.5	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	445864	50.0	49.8	
102 1,3,5-Trimethylbenzene	105	9.607	9.607	0.000	94	1555399	50.0	50.6	
105 4-Chlorotoluene	126	9.674	9.674	0.000	97	463948	50.0	50.0	
106 tert-Butylbenzene	134	9.936	9.936	0.000	93	343173	50.0	49.7	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	96	1603783	50.0	50.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	1954198	50.0	50.4	
110 4-Isopropyltoluene	119	10.271	10.271	0.000	97	1711634	50.0	50.3	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	917286	50.0	50.1	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	95	937232	50.0	50.0	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	1512447	50.0	50.5	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	98	880773	50.0	50.4	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	86	70197	50.0	46.8	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	611619	50.0	50.6	
120 Hexachlorobutadiene	225	12.150	12.150	0.000	97	347414	50.0	50.8	
121 Naphthalene	128	12.272	12.272	0.000	97	1569236	50.0	52.6	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	96	582459	50.0	51.2	

Reagents:

8260 CORP mix_00111	Amount Added: 25.00	Units: uL	
GAS CORP mix_00243	Amount Added: 25.00	Units: uL	
F 8260 SURR_00259	Amount Added: 1.00	Units: uL	Run Reagent
F 8260 IS_00576	Amount Added: 1.00	Units: uL	Run Reagent

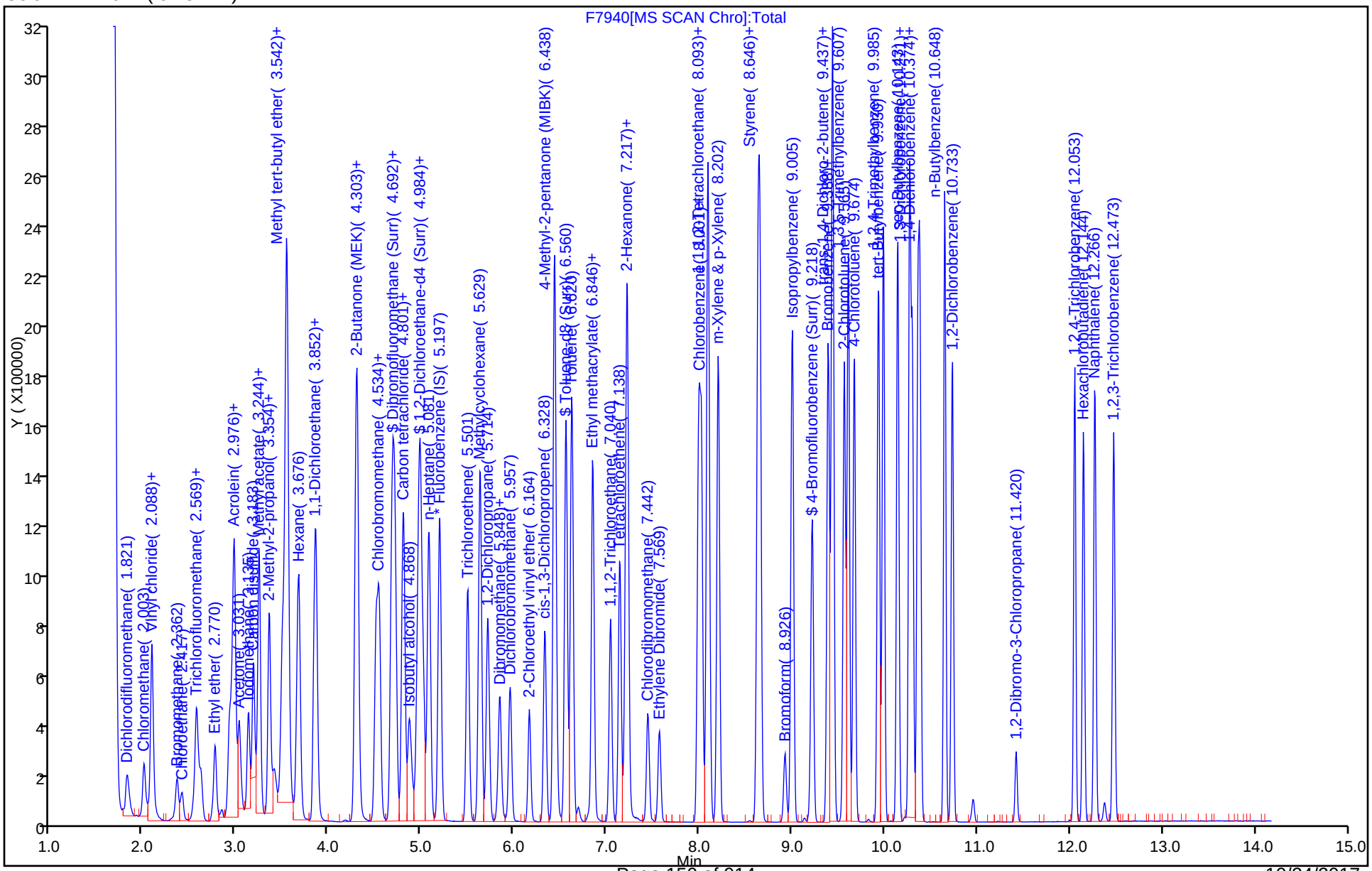
Report Date: 02-Oct-2017 14:09:02 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7940.D

Injection Date:	29-Sep-2017 17:41:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	ICIS 5			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7941.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Sep-2017 18:07:30 ALS Bottle#: 7 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0066009-011
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 02-Oct-2017 14:09:03 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: cwiklinc Date: 02-Oct-2017 10:46:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.197	-0.006	99	271600	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	557391	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	569632	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	93	354533	50.0	52.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.960	-0.006	0	223183	50.0	51.6	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	93	1415411	50.0	51.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	91	469781	50.0	52.2	
10 Dichlorodifluoromethane	85	1.814	1.827	-0.013	100	715324	100.0	99.4	
12 Chloromethane	50	1.997	2.003	-0.006	99	608992	100.0	91.4	
151 Butadiene	54	2.082	2.088	-0.006	86	604356	100.0	91.4	
13 Vinyl chloride	62	2.088	2.094	-0.006	99	614518	100.0	92.6	
14 Bromomethane	94	2.356	2.362	-0.006	90	282463	100.0	91.5	
15 Chloroethane	64	2.405	2.417	-0.012	99	257535	100.0	91.7	
16 Dichlorofluoromethane	67	2.563	2.569	-0.006	98	808716	100.0	93.4	
17 Trichlorofluoromethane	101	2.611	2.617	-0.006	98	795681	100.0	94.1	
18 Ethyl ether	59	2.763	2.770	-0.007	88	479914	100.0	91.3	
20 Acrolein	56	2.916	2.922	-0.006	100	684591	500.0	517.5	
21 1,1,2-Trichloro-1,2,2-trif	101	2.952	2.958	-0.006	93	694701	100.0	98.0	
22 1,1-Dichloroethene	96	2.970	2.982	-0.012	96	661926	100.0	98.5	
23 Acetone	43	3.025	3.031	-0.006	98	1403888	500.0	497.6	
25 Iodomethane	142	3.128	3.135	-0.007	98	1195109	100.0	100.1	
26 Carbon disulfide	76	3.177	3.183	-0.006	99	2190612	100.0	105.6	
28 3-Chloro-1-propene	41	3.238	3.244	-0.006	89	1216196	100.0	98.4	
27 Methyl acetate	43	3.238	3.244	-0.006	97	1265638	200.0	205.1	
30 Methylene Chloride	84	3.354	3.354	0.000	96	800995	100.0	102.9	
31 2-Methyl-2-propanol	59	3.402	3.414	-0.012	99	1193444	1000.0	1142.0	
32 Methyl tert-butyl ether	73	3.500	3.500	0.000	96	2303311	100.0	101.7	
34 trans-1,2-Dichloroethene	96	3.530	3.536	-0.006	96	761705	100.0	98.8	
33 Acrylonitrile	53	3.542	3.554	-0.012	98	3332721	1000.0	1009.9	
35 Hexane	57	3.664	3.670	-0.006	87	1477180	100.0	104.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.846	3.846	0.000	97	2976155	200.0	209.8	
39 1,1-Dichloroethane	63	3.859	3.865	-0.007	96	1454698	100.0	98.3	
43 2-Butanone (MEK)	43	4.290	4.290	0.000	99	2085932	500.0	523.0	
44 2,2-Dichloropropane	77	4.290	4.297	-0.007	58	1039533	100.0	100.7	
45 cis-1,2-Dichloroethene	96	4.303	4.309	-0.006	84	869268	100.0	100.5	
48 Chlorobromomethane	128	4.503	4.509	-0.006	98	410262	100.0	104.3	
49 Tetrahydrofuran	42	4.522	4.528	-0.006	89	525074	200.0	207.2	
50 Chloroform	83	4.540	4.546	-0.006	94	1279112	100.0	98.8	
51 1,1,1-Trichloroethane	97	4.680	4.686	-0.006	99	1084989	100.0	102.0	
52 Cyclohexane	56	4.710	4.710	0.000	90	1610303	100.0	95.6	
54 1,1-Dichloropropene	75	4.795	4.801	-0.006	97	999878	100.0	99.5	
55 Carbon tetrachloride	117	4.808	4.808	0.000	98	886893	100.0	110.5	
53 Isobutyl alcohol	43	4.862	4.868	-0.006	94	1119308	2500.0	3032.4	
57 Benzene	78	4.978	4.984	-0.006	98	3005300	100.0	99.3	
58 1,2-Dichloroethane	62	5.014	5.020	-0.006	97	1122508	100.0	98.0	
59 n-Heptane	43	5.075	5.081	-0.006	90	1304424	100.0	94.8	
62 Trichloroethene	95	5.495	5.495	0.000	98	786394	100.0	102.6	
64 Methylcyclohexane	83	5.629	5.629	0.000	93	1424922	100.0	98.6	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	98	838977	100.0	101.9	
66 1,4-Dioxane	88	5.817	5.824	-0.007	98	199744	2000.0	2308.1	
67 Dibromomethane	93	5.842	5.842	0.000	95	453308	100.0	106.5	
68 Dichlorobromomethane	83	5.957	5.957	0.000	99	924495	100.0	113.5	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	92	508464	100.0	111.5	
72 cis-1,3-Dichloropropene	75	6.328	6.328	0.000	96	1136210	100.0	111.9	
73 4-Methyl-2-pentanone (MIBK	43	6.432	6.438	-0.006	93	3873181	500.0	500.3	
74 Toluene	92	6.620	6.620	0.000	99	1939030	100.0	97.7	
77 trans-1,3-Dichloropropene	75	6.846	6.846	0.000	94	1014715	100.0	112.5	
75 Ethyl methacrylate	69	6.852	6.852	0.000	89	996835	100.0	108.8	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	92	541355	100.0	103.3	
81 Tetrachloroethene	166	7.138	7.144	-0.006	99	839475	100.0	98.6	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	99	1095273	100.0	101.5	
80 2-Hexanone	43	7.223	7.223	0.000	91	2897627	500.0	513.7	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	676657	100.0	101.0	
84 Ethylene Dibromide	107	7.569	7.569	0.000	98	687746	100.0	107.9	
87 Chlorobenzene	112	8.020	8.020	0.000	95	2103132	100.0	98.4	
88 Ethylbenzene	91	8.087	8.087	0.000	98	3450523	100.0	96.4	
89 1,1,1,2-Tetrachloroethane	131	8.099	8.105	-0.006	95	704163	100.0	112.3	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	1454964	100.0	99.4	
91 o-Xylene	106	8.634	8.634	0.000	96	1410986	100.0	100.0	
92 Styrene	104	8.652	8.652	0.000	95	2449569	100.0	100.6	
95 Bromoform	173	8.926	8.926	0.000	97	411396	100.0	100.0	
94 Isopropylbenzene	105	8.999	9.005	-0.006	96	3524639	100.0	96.4	
101 Bromobenzene	156	9.388	9.388	0.000	91	956723	100.0	98.5	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	78	859855	100.0	104.1	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	3953628	100.0	95.0	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	60	299551	100.0	105.3	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	82	279683	100.0	101.3	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	878370	100.0	97.6	
102 1,3,5-Trimethylbenzene	105	9.607	9.607	0.000	95	2991313	100.0	96.7	
105 4-Chlorotoluene	126	9.674	9.674	0.000	97	906102	100.0	97.1	
106 tert-Butylbenzene	134	9.936	9.936	0.000	93	681680	100.0	98.2	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	96	3084807	100.0	96.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	3751473	100.0	96.1	
110 4-Isopropyltoluene	119	10.271	10.271	0.000	97	3292907	100.0	96.2	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	1795303	100.0	97.4	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	96	1810782	100.0	96.1	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	2888602	100.0	95.9	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	98	1742822	100.0	99.0	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	88	156931	100.0	100.4	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	1203330	100.0	99.0	
120 Hexachlorobutadiene	225	12.144	12.150	-0.006	96	682281	100.0	99.1	
121 Naphthalene	128	12.272	12.272	0.000	97	3102404	100.0	103.3	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	96	1143051	100.0	99.9	
S 123 Total BTEX	1				0			492.7	
S 124 Xylenes, Total	1				0			199.4	
S 125 1,2-Dichloroethene, Total	1				0			199.3	
S 126 1,3-Dichloropropene, Total	1				0			224.4	

Reagents:

8260 CORP mix_00111	Amount Added: 50.00	Units: uL	
GAS CORP mix_00243	Amount Added: 50.00	Units: uL	
F 8260 SURR_00259	Amount Added: 1.00	Units: uL	Run Reagent
F 8260 IS_00576	Amount Added: 1.00	Units: uL	Run Reagent

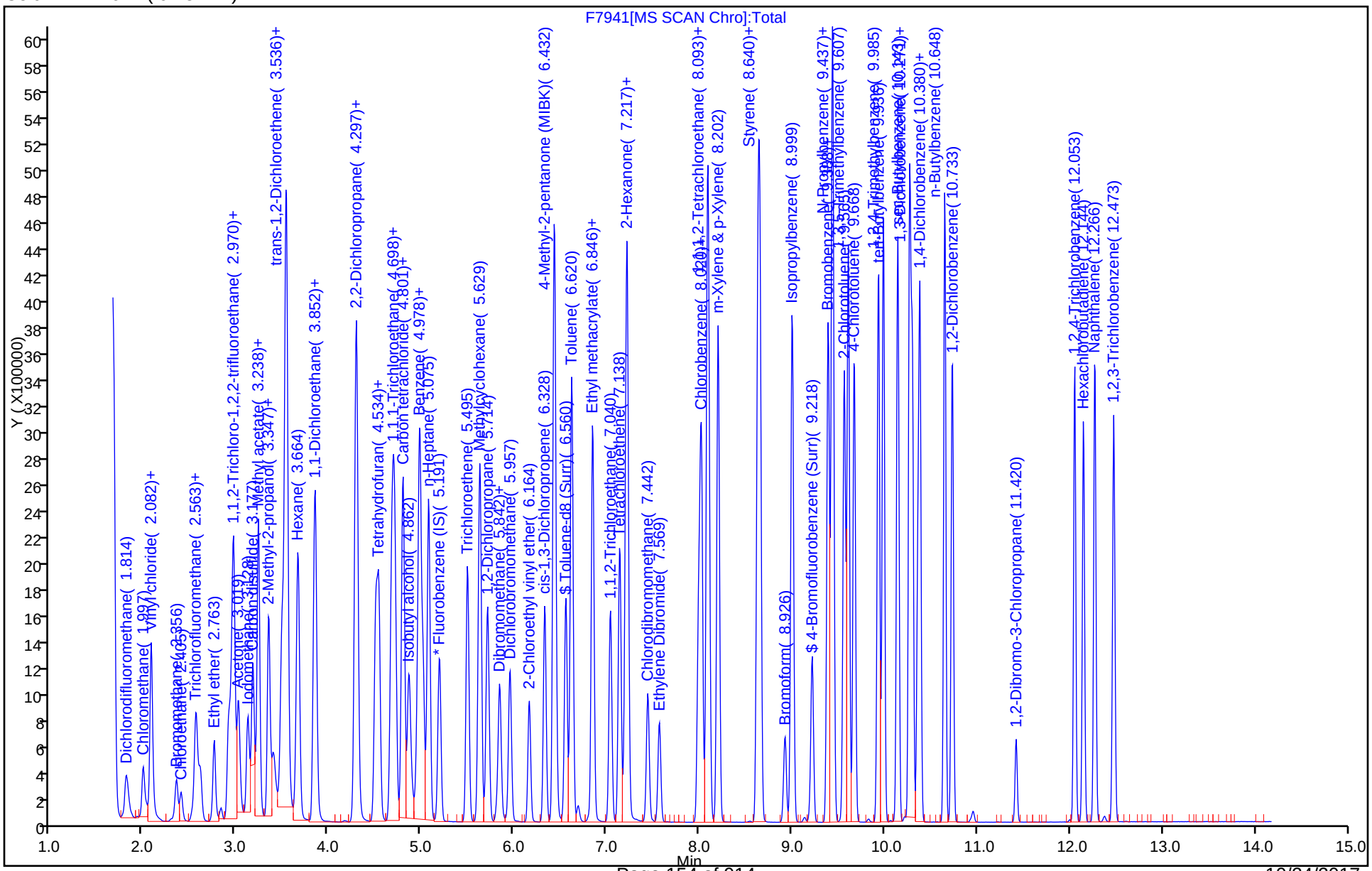
Report Date: 02-Oct-2017 14:09:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7941.D

Injection Date:	29-Sep-2017 18:07:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	IC 6			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7942.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 29-Sep-2017 18:33:30 ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0066009-012
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 02-Oct-2017 14:09:05 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK030

First Level Reviewer: cwiklinc Date: 02-Oct-2017 10:47:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.197	5.197	0.000	99	278762	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	565762	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.362	10.356	0.006	94	566797	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.673	4.674	-0.001	93	352712	50.0	51.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.959	4.960	-0.001	0	220761	50.0	49.8	
$ 5 Toluene-d8 (Surr)	98	6.559	6.560	-0.001	93	1410360	50.0	50.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	91	463160	50.0	50.7	
10 Dichlorodifluoromethane	85	1.820	1.827	-0.007	100	1381126	200.0	187.0	
12 Chloromethane	50	1.997	2.003	-0.006	99	1226641	200.0	179.3	M
151 Butadiene	54	2.082	2.088	-0.006	86	1209747	200.0	178.2	
13 Vinyl chloride	62	2.094	2.094	0.000	99	1261579	200.0	185.2	
14 Bromomethane	94	2.356	2.362	-0.006	90	611118	200.0	192.9	
15 Chloroethane	64	2.410	2.417	-0.007	99	546018	200.0	189.4	
16 Dichlorofluoromethane	67	2.568	2.569	-0.001	98	1638123	200.0	184.3	
17 Trichlorofluoromethane	101	2.611	2.617	-0.006	99	1629850	200.0	187.9	
18 Ethyl ether	59	2.763	2.770	-0.007	88	944384	200.0	175.0	
20 Acrolein	56	2.921	2.922	-0.001	100	1319601	1000.0	971.9	
21 1,1,2-Trichloro-1,2,2-trif	101	2.958	2.958	0.000	93	1360001	200.0	187.0	
22 1,1-Dichloroethene	96	2.976	2.982	-0.006	99	1290573	200.0	187.1	
23 Acetone	43	3.025	3.031	-0.006	98	2616680	1000.0	903.6	
25 Iodomethane	142	3.128	3.135	-0.007	99	2350376	200.0	191.9	
26 Carbon disulfide	76	3.183	3.183	0.000	99	4255612	200.0	199.8	
27 Methyl acetate	43	3.238	3.244	-0.006	96	2383791	400.0	376.4	
28 3-Chloro-1-propene	41	3.244	3.244	0.000	91	2259849	200.0	178.1	
30 Methylene Chloride	84	3.353	3.354	-0.001	95	1548468	200.0	195.8	
31 2-Methyl-2-propanol	59	3.402	3.414	-0.012	99	2223875	2000.0	2073.3	
32 Methyl tert-butyl ether	73	3.499	3.500	-0.001	96	4426896	200.0	190.3	
34 trans-1,2-Dichloroethene	96	3.536	3.536	0.000	97	1466849	200.0	185.4	
33 Acrylonitrile	53	3.548	3.554	-0.006	97	5962310	2000.0	1760.3	
35 Hexane	57	3.670	3.670	0.000	86	2783308	200.0	193.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.846	3.846	0.000	97	5474652	400.0	376.0	
39 1,1-Dichloroethane	63	3.858	3.865	-0.007	96	2751623	200.0	181.2	
43 2-Butanone (MEK)	43	4.290	4.290	0.000	99	3784810	1000.0	924.6	
44 2,2-Dichloropropane	77	4.290	4.297	-0.007	93	2023477	200.0	191.1	
45 cis-1,2-Dichloroethene	96	4.302	4.309	-0.007	84	1674798	200.0	188.6	
48 Chlorobromomethane	128	4.503	4.509	-0.006	98	811093	200.0	200.9	
49 Tetrahydrofuran	42	4.521	4.528	-0.007	88	975465	400.0	375.1	
50 Chloroform	83	4.540	4.546	-0.006	95	2464202	200.0	185.5	
51 1,1,1-Trichloroethane	97	4.686	4.686	0.000	99	2129785	200.0	195.0	
52 Cyclohexane	56	4.710	4.710	0.000	90	3041563	200.0	175.9	
54 1,1-Dichloropropene	75	4.801	4.801	0.000	97	1925403	200.0	186.8	
55 Carbon tetrachloride	117	4.807	4.808	-0.001	97	1799208	200.0	218.4	
53 Isobutyl alcohol	43	4.862	4.868	-0.006	94	2090091	5000.0	5517.0	
57 Benzene	78	4.984	4.984	0.000	97	5610199	200.0	180.6	
58 1,2-Dichloroethane	62	5.020	5.020	0.000	97	2127613	200.0	180.9	
59 n-Heptane	43	5.081	5.081	0.000	89	2371312	200.0	167.9	
62 Trichloroethene	95	5.501	5.495	0.006	98	1520456	200.0	193.3	
64 Methylcyclohexane	83	5.629	5.629	0.000	92	2762163	200.0	186.3	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	1620506	200.0	191.8	
66 1,4-Dioxane	88	5.817	5.824	-0.007	97	355935	4000.0	4052.1	
67 Dibromomethane	93	5.841	5.842	-0.001	94	880008	200.0	201.5	
68 Dichlorobromomethane	83	5.957	5.957	0.000	100	1864083	200.0	223.0	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	91	996896	200.0	212.9	
72 cis-1,3-Dichloropropene	75	6.334	6.328	0.006	96	2240362	200.0	215.0	
73 4-Methyl-2-pentanone (MIBK	43	6.432	6.438	-0.006	90	6716955	1000.0	854.9	
74 Toluene	92	6.620	6.620	0.000	97	3691113	200.0	183.2	
77 trans-1,3-Dichloropropene	75	6.845	6.846	-0.001	95	1983500	200.0	216.7	
75 Ethyl methacrylate	69	6.851	6.852	-0.001	87	1942731	200.0	208.9	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	92	1050749	200.0	197.6	
81 Tetrachloroethene	166	7.143	7.144	-0.001	98	1626660	200.0	188.3	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	98	2071996	200.0	189.3	
80 2-Hexanone	43	7.222	7.223	-0.001	88	5013063	1000.0	875.5	
83 Chlorodibromomethane	129	7.448	7.442	0.006	90	1407231	200.0	204.0	
84 Ethylene Dibromide	107	7.569	7.569	0.000	98	1332665	200.0	206.0	
87 Chlorobenzene	112	8.019	8.020	-0.001	94	3977025	200.0	183.4	
88 Ethylbenzene	91	8.086	8.087	-0.001	97	6149215	200.0	169.2	
89 1,1,1,2-Tetrachloroethane	131	8.105	8.105	0.000	95	1401529	200.0	220.1	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	97	2773350	200.0	186.7	
91 o-Xylene	106	8.634	8.634	0.000	95	2665200	200.0	186.0	
92 Styrene	104	8.652	8.652	0.000	94	4518222	200.0	182.8	
95 Bromoform	173	8.926	8.926	0.000	98	917770	200.0	173.2	
94 Isopropylbenzene	105	9.005	9.005	0.000	96	6356209	200.0	174.7	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	80	1665250	200.0	202.6	
101 Bromobenzene	156	9.394	9.388	0.006	89	1824091	200.0	188.7	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	56	556262	200.0	196.6	
99 N-Propylbenzene	91	9.437	9.437	0.000	96	6796208	200.0	164.1	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	76	531962	200.0	193.7	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	1683401	200.0	187.9	
102 1,3,5-Trimethylbenzene	105	9.607	9.607	0.000	96	5385441	200.0	175.0	
105 4-Chlorotoluene	126	9.674	9.674	0.000	97	1723176	200.0	185.6	
106 tert-Butylbenzene	134	9.936	9.936	0.000	92	1319836	200.0	191.0	
107 1,2,4-Trimethylbenzene	105	9.984	9.985	-0.001	95	5488825	200.0	172.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	95	6502541	200.0	167.4	
110 4-Isopropyltoluene	119	10.270	10.271	-0.001	95	5751027	200.0	168.9	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	3331087	200.0	181.6	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	95	3371249	200.0	179.7	
115 n-Butylbenzene	91	10.647	10.648	-0.001	94	5074696	200.0	169.3	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	97	3250482	200.0	185.6	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	90	321279	200.0	203.6	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	2304296	200.0	190.5	
120 Hexachlorobutadiene	225	12.144	12.150	-0.006	96	1333618	200.0	194.8	
121 Naphthalene	128	12.266	12.272	-0.006	98	5628639	200.0	188.3	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	96	2200927	200.0	193.3	
S 125 1,2-Dichloroethene, Total	1				0			373.9	
S 126 1,3-Dichloropropene, Total	1				0			431.7	
S 123 Total BTEX	1				0			905.8	
S 124 Xylenes, Total	1				0			372.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00111	Amount Added: 100.00	Units: uL	
GAS CORP mix_00243	Amount Added: 100.00	Units: uL	
F 8260 SURR_00259	Amount Added: 1.00	Units: uL	Run Reagent
F 8260 IS_00576	Amount Added: 1.00	Units: uL	Run Reagent

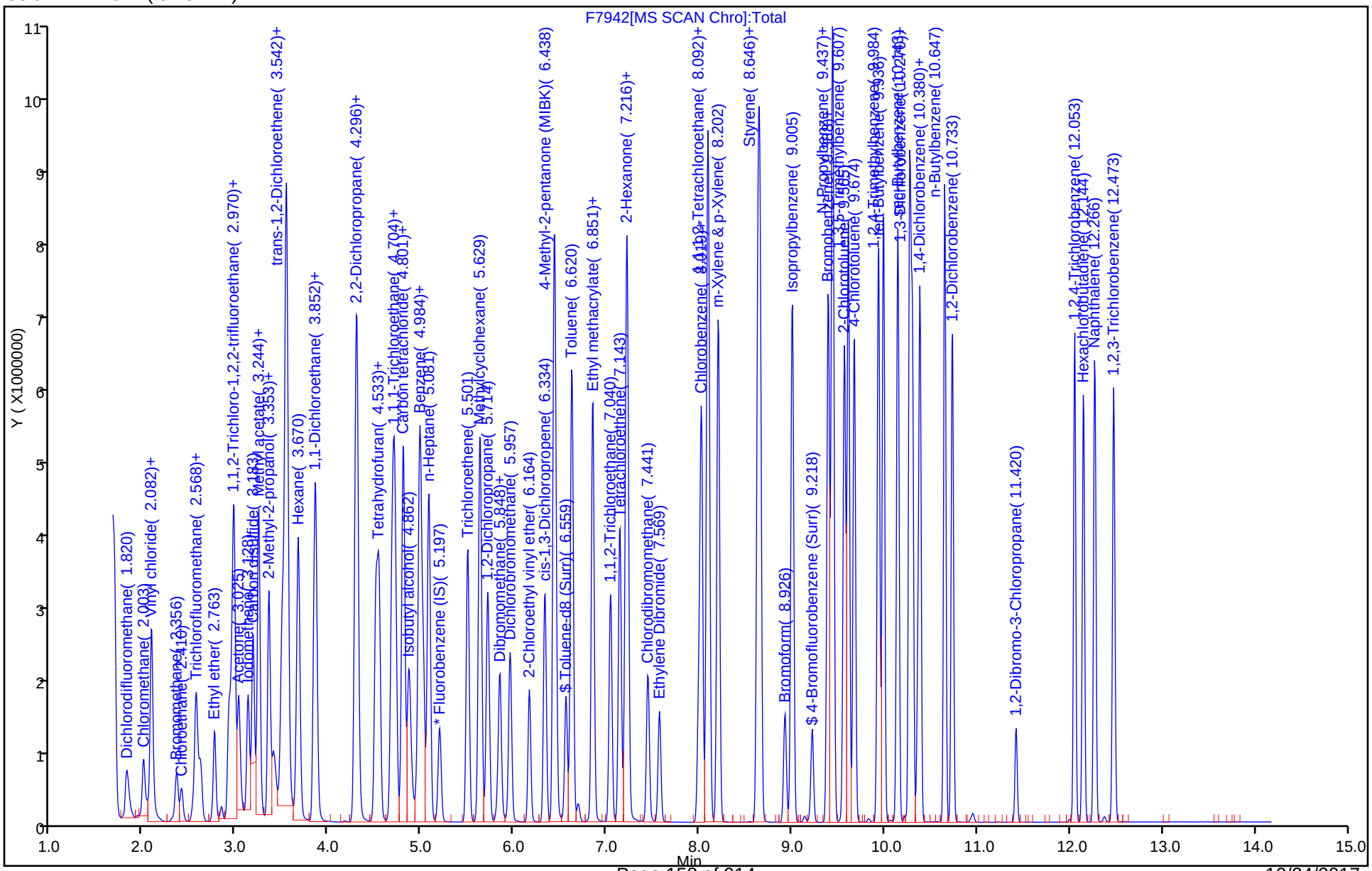
Report Date: 02-Oct-2017 14:09:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7942.D

Injection Date:	29-Sep-2017 18:33:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	IC 7			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

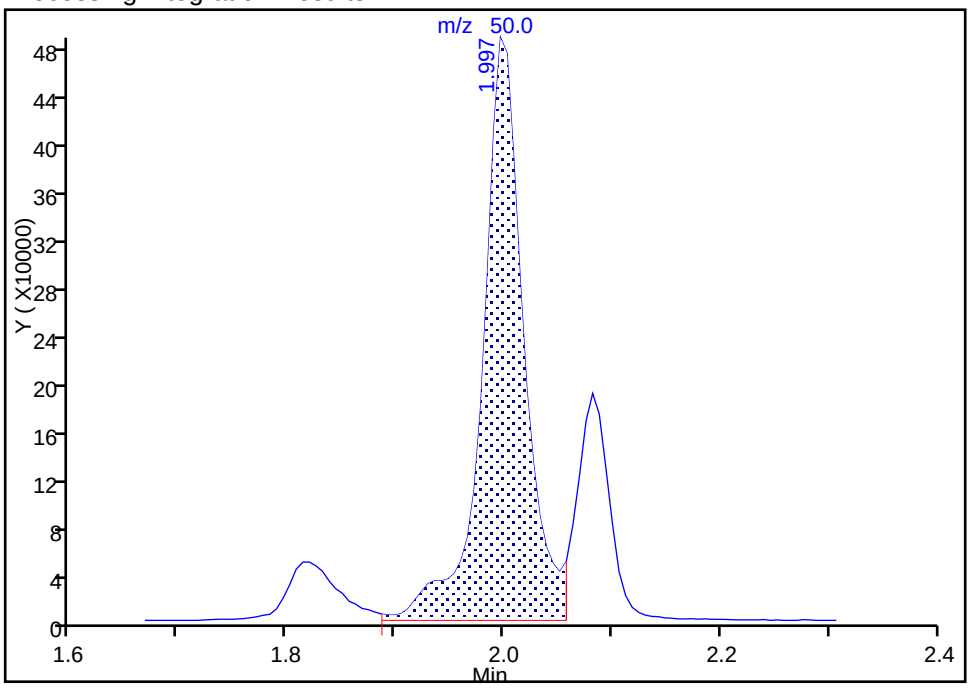
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7942.D
Injection Date: 29-Sep-2017 18:33:30 Instrument ID: HP5973F
Lims ID: IC 7
Client ID:
Operator ID: CDC ALS Bottle#: 8 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

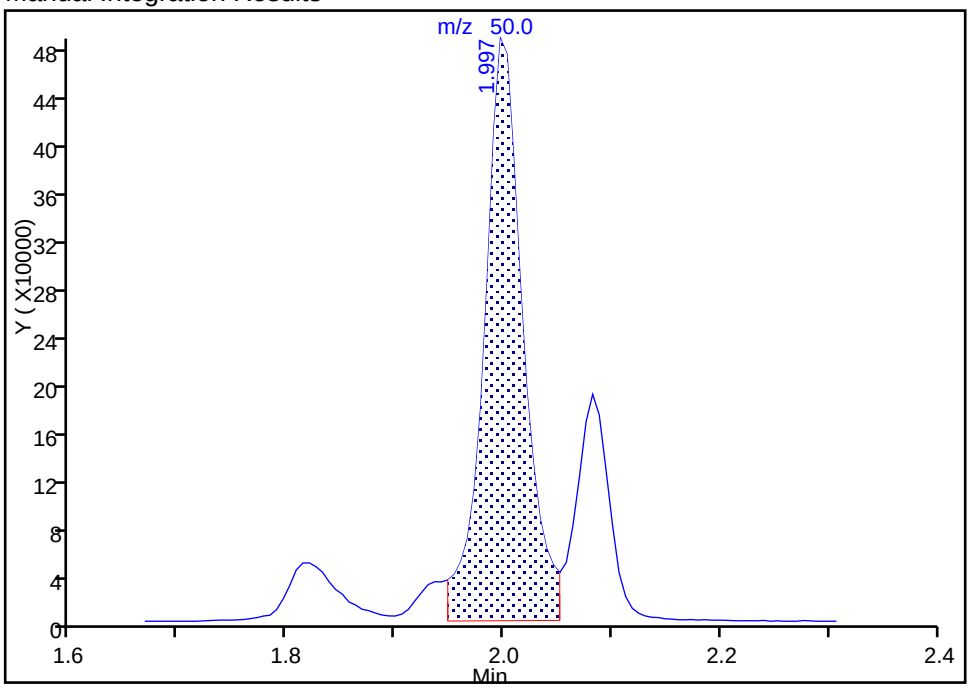
Processing Integration Results

RT: 2.00
Area: 1308458
Amount: 189.6293
Amount Units: ug/kg



Manual Integration Results

RT: 2.00
Area: 1226641
Amount: 179.2904
Amount Units: ug/kg



Reviewer: cwiklinc, 02-Oct-2017 10:46:55
Audit Action: Manually Integrated Audit Reason: Other

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-381079/5	P3042P.D
Level 2	IC 480-381079/6	P3043P.D
Level 3	IC 480-381079/7	P3044P.D
Level 4	IC 480-381079/8	P3045P.D
Level 5	ICIS 480-381079/9	P3046P.D
Level 6	IC 480-381079/10	P3047P.D
Level 7	IC 480-381079/11	P3048P.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	1.7810 2.4437	1.8339 1.9323	2.1802	2.4340	1.9617	Ave		2.0810			0.1000	13.2		20.0			
Chloromethane	+++++ 4.8406	4.8563 4.0029	4.3771	5.0119	4.2218	Ave		4.5518			0.1000	8.9		20.0			
Vinyl chloride	+++++ 3.2088	2.4397 2.7152	2.7293	3.1112	2.6904	Ave		2.8157			0.1000	10.3		20.0			
Butadiene	3.4363 3.7126	3.2079 3.1804	3.2493	3.6964	3.1770	Ave		3.3800				7.1		20.0			
Bromomethane	1.4238 1.7047	1.3382 1.4424	1.5637	1.7245	1.5203	Ave		1.5311			0.1000	9.4		20.0			
Chloroethane	1.7028 1.7959	1.4068 1.4856	1.5285	1.8397	1.5617	Ave		1.6173			0.1000	10.1		20.0			
Dichlorofluoromethane	+++++ 4.0485	3.0726 3.4164	3.6198	4.2261	3.5385	Ave		3.6536				11.6		20.0			
Trichlorofluoromethane	+++++ 3.6886	2.1668 2.9990	2.9277	3.2346	2.9308	Ave		2.9913			0.1000	16.6		20.0			
Ethyl ether	1.9429 2.3053	1.8450 1.9596	1.9095	2.2972	2.0349	Ave		2.0421				9.1		20.0			
Acrolein	+++++ 0.3435	0.2874 0.3513	0.3154	0.3452	0.3618	Ave		0.3341				8.3		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.6636 2.0183	1.4605 1.6672	1.9053	1.9829	1.7561	Ave		1.7791			0.1000	11.3		20.0			
1,1-Dichloroethene	+++++ 1.9275	2.0523 1.6437	1.8548	1.8578	1.6960	Ave		1.8387			0.1000	8.2		20.0			
Acetone	+++++ 1.3124	1.3310 1.2470	1.1150	1.2694	1.3300	Ave		1.2675			0.1000	6.5		20.0			
Iodomethane	2.9703 3.6266	2.7987 3.1407	3.1981	3.6520	3.2448	Ave		3.2330				9.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl acetate	2.4809 3.2325	2.8673 2.9668	2.6165	3.2252	3.2542	Ave		2.9490			0.1000	10.6		20.0			
Carbon disulfide	5.9197 7.2400	5.2815 6.2297	6.4125	7.1950	6.4025	Ave		6.3830			0.1000	10.8		20.0			
Allyl chloride	+++++ 5.7677	4.7162 4.9375	5.1354	5.6559	5.0328	Ave		5.2076				8.0		20.0			
2-Methyl-2-propanol	0.3599 0.4232	0.3208 0.3968	0.3192	0.3789	0.4211	Ave		0.3743				11.6		20.0			
Methylene Chloride	+++++ 2.2795	4.3597 +++++	2.3319	2.6531	2.0266	Lin1	2.0887	2.1620			0.1000				0.9920		0.9900
Methyl tert-butyl ether	5.3976 6.1702	4.9144 5.5784	5.2900	6.2011	5.5813	Ave		5.5904			0.1000	8.3		20.0			
trans-1,2-Dichloroethene	+++++ 1.9814	1.9905 1.6750	1.8007	2.0674	1.7221	Ave		1.8729			0.1000	8.6		20.0			
Acrylonitrile	1.2111 1.2999	1.1191 1.2507	1.0933	1.2617	1.3436	Ave		1.2256				7.5		20.0			
Hexane	+++++ 3.5076	2.7822 2.8079	3.1339	3.5315	2.9655	Ave		3.1214				10.7		20.0			
Vinyl acetate	+++++ 7.1659	6.3311 6.7159	6.4007	7.5447	7.4794	Ave		6.9396				7.7		20.0			
1,1-Dichloroethane	3.6114 4.2843	3.3950 3.7506	3.8468	4.3401	3.8154	Ave		3.8634			0.2000	8.9		20.0			
2-Butanone (MEK)	1.9173 1.9737	1.6285 1.9164	1.5692	1.9141	2.0757	Ave		1.8564			0.1000	10.0		20.0			
2,2-Dichloropropane	1.6754 1.4926	1.5113 1.3773	1.7932	1.9260	1.6474	Ave		1.6319				11.6		20.0			
cis-1,2-Dichloroethene	+++++ 2.1111	1.9801 1.8185	1.9202	2.1857	1.8517	Ave		1.9779			0.1000	7.3		20.0			
Chlorobromomethane	1.0070 1.0773	0.8140 0.9396	1.0112	1.1335	0.9605	Ave		0.9919				10.4		20.0			
Tetrahydrofuran	+++++ 1.2346	1.1279 1.1901	1.0257	1.2060	1.2756	Ave		1.1766				7.5		20.0			
Chloroform	3.0333 3.6477	2.9845 3.1472	3.2683	3.7946	3.2875	Ave		3.3090			0.2000	9.2		20.0			
1,1,1-Trichloroethane	2.7414 3.1138	2.4092 2.7075	2.8484	3.1844	2.7412	Ave		2.8208			0.1000	9.3		20.0			
Cyclohexane	+++++ 4.7303	3.4806 4.0259	4.1340	4.6858	4.0864	Ave		4.1905			0.1000	11.1		20.0			
1,1-Dichloropropene	2.2941 2.5389	2.0822 2.2603	2.3499	2.6544	2.3520	Ave		2.3617				7.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbon tetrachloride	+++++ 2.6745	1.6763 2.1314	1.9267	2.2076	2.0085	Ave		2.1042			0.1000	15.9		20.0			
Isobutyl alcohol	+++++ 0.2169	0.1661 0.2101	0.1539	0.1949	0.2181	Ave		0.1933				14.2		20.0			
Benzene	6.2691 7.2554	5.6430 6.3386	6.5317	7.4486	6.4720	Ave		6.5655			0.5000	9.3		20.0			
n-Heptane	3.5539 3.7372	3.3885 2.8513	2.9126	3.6715	3.1058	Ave		3.3173				10.9		20.0			
1,2-Dichloroethane	3.7671 3.9691	3.1547 3.4710	3.5203	4.1416	3.6238	Ave		3.6639			0.1000	9.0		20.0			
Trichloroethene	1.7968 2.0358	1.7224 1.7678	1.8568	2.0590	1.7822	Ave		1.8601			0.2000	7.2		20.0			
Methylcyclohexane	+++++ 2.7896	2.2656 2.3067	2.3736	2.8117	2.4070	Ave		2.4924			0.1000	9.8		20.0			
1,2-Dichloropropane	2.1399 2.2963	1.8877 2.0090	2.0581	2.3725	2.0352	Ave		2.1141			0.1000	8.0		20.0			
1,4-Dioxane	+++++ 0.0111	+++++ 0.0101	0.0072	0.0104	0.0101	Ave		0.0098				15.4		20.0			
Dibromomethane	+++++ 1.3134	1.2791 1.1874	1.1788	1.3706	1.2517	Ave		1.2635			0.1000	5.8		20.0			
Bromodichloromethane	+++++ 2.8619	1.8411 2.4735	2.3411	2.8342	2.4840	Ave		2.4726			0.2000	15.1		20.0			
2-Chloroethyl vinyl ether	+++++ 1.6319	1.2375 1.5589	1.2930	1.6076	1.5749	Ave		1.4840				11.6		20.0			
cis-1,3-Dichloropropene	+++++ 3.0636	2.4307 2.7472	2.6769	3.1529	2.8124	Ave		2.8139			0.2000	9.4		20.0			
4-Methyl-2-pentanone (MIBK)	+++++ 1.8139	1.5995 1.7239	1.5334	1.8499	1.9091	Ave		1.7383			0.1000	8.5		20.0			
Toluene	1.7097 2.0008	1.6577 1.8149	1.8043	2.0434	1.8155	Ave		1.8352			0.4000	7.7		20.0			
Ethyl methacrylate	+++++ 1.1379	0.7951 1.1294	0.9027	1.1052	1.0901	Ave		1.0267				13.9		20.0			
trans-1,3-Dichloropropene	+++++ 1.3905	1.1108 1.2733	1.1727	1.4238	1.2640	Ave		1.2725			0.1000	9.5		20.0			
1,1,2-Trichloroethane	0.6396 0.6582	0.5997 0.6142	0.6286	0.6707	0.6289	Ave		0.6343			0.1000	3.9		20.0			
Tetrachloroethene	0.8984 0.9432	0.8854 0.8296	0.8861	0.9750	0.8548	Ave		0.8961			0.2000	5.5		20.0			
2-Hexanone	+++++ 1.3008	1.1405 1.2872	1.0866	1.2903	1.3773	Ave		1.2471			0.1000	8.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,3-Dichloropropane	1.2166 1.3289	1.0535 1.2297	1.1617	1.4022	1.2331	Ave		1.2323				9.1		20.0			
Dibromochloromethane	+++++ 1.0010	0.7574 0.9263	0.7884	0.9596	0.8860	Ave		0.8865			0.1000	10.9		20.0			
1,2-Dibromoethane	+++++ 0.8600	0.7764 0.8080	0.7441	0.8805	0.8217	Ave		0.8151				6.2		20.0			
Chlorobenzene	+++++ 2.3940	1.9212 2.1516	2.1606	2.5431	2.2059	Ave		2.2294			0.5000	9.7		20.0			
Ethylbenzene	+++++ 3.8074	3.2493 3.4395	3.4443	3.8704	3.4196	Ave		3.5384			0.1000	6.9		20.0			
1,1,1,2-Tetrachloroethane	0.8422 0.9352	0.6576 0.8492	0.7603	0.9182	0.8226	Ave		0.8265				11.5		20.0			
m,p-Xylene	1.2782 1.5018	1.1636 1.3925	1.3452	1.5641	1.3635	Ave		1.3727			0.1000	9.7		20.0			
o-Xylene	1.2755 1.4983	1.2469 1.3747	1.2738	1.5165	1.3581	Ave		1.3634			0.3000	8.0		20.0			
Styrene	+++++ 2.5542	1.7990 2.3705	2.0417	2.4983	2.2344	Ave		2.2497			0.3000	12.8		20.0			
Bromoform	+++++ 0.7617	0.5231 0.7412	0.5900	0.6974	0.7012	Ave		0.6691			0.1000	13.9		20.0			
Isopropylbenzene	2.8517 3.4097	2.6659 2.9827	2.9865	3.5093	3.0169	Ave		3.0604			0.1000	9.8		20.0			
1,1,2,2-Tetrachloroethane	0.9162 0.9769	0.9254 0.9168	0.8703	1.0414	0.9735	Ave		0.9458			0.3000	5.9		20.0			
trans-1,4-Dichloro-2-butene	0.5548 0.5840	0.5131 0.5646	0.4776	0.5896	0.5760	Ave		0.5514				7.5		20.0			
N-Propylbenzene	3.7126 4.0396	3.3922 3.5160	3.6887	4.2586	3.6172	Ave		3.7464				8.1		20.0			
Bromobenzene	1.0593 1.0563	0.8531 0.9288	0.9744	1.0990	0.9744	Ave		0.9922				8.6		20.0			
1,2,3-Trichloropropane	0.3167 0.3117	0.2954 0.3045	0.2768	0.3366	0.3166	Ave		0.3083				6.1		20.0			
1,3,5-Trimethylbenzene	+++++ 2.9596	2.4083 2.5802	2.5397	2.9889	2.5947	Ave		2.6786				8.9		20.0			
2-Chlorotoluene	0.7950 0.9224	0.6832 0.8018	0.8264	0.9648	0.8165	Ave		0.8300				11.0		20.0			
4-Chlorotoluene	+++++ 0.9492	0.7930 0.8387	0.8326	0.9750	0.8461	Ave		0.8724				8.3		20.0			
tert-Butylbenzene	+++++ 0.6685	0.5752 0.5590	0.5758	0.6766	0.5693	Ave		0.6041				8.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.5604 3.1234	2.4729 2.7333	2.6858	3.2153	2.7318	Ave		2.7890				10.0		20.0			
sec-Butylbenzene	3.0150 3.6423	2.8679 2.9942	3.0455	3.6851	3.0537	Ave		3.1862				10.4		20.0			
4-Isopropyltoluene	+++++ 3.3832	2.7091 2.8814	2.7875	3.3992	2.8616	Ave		3.0037				10.2		20.0			
1,3-Dichlorobenzene	+++++ 1.9651	1.7143 1.7293	1.7732	2.0772	1.7639	Ave		1.8372			0.6000	8.1		20.0			
1,4-Dichlorobenzene	1.8860 2.0563	1.7951 1.7955	1.8691	2.1320	1.8176	Ave		1.9074			0.5000	7.0		20.0			
n-Butylbenzene	2.7460 2.8114	2.3291 2.3275	2.3939	2.9483	2.3758	Ave		2.5617				10.3		20.0			
1,2-Dichlorobenzene	1.6724 1.9499	1.6005 1.7096	1.7504	2.0315	1.7578	Ave		1.7818			0.4000	8.6		20.0			
1,2-Dibromo-3-Chloropropane	0.5304 0.2505	0.4481 0.2384	0.2572	0.2464	0.2455	Lin1	0.1604	0.2394			0.0500				0.9990		0.9900
1,2,4-Trichlorobenzene	+++++ 1.4723	1.1748 1.2210	1.2385	1.4953	1.2487	Ave		1.3084			0.2000	10.6		20.0			
Hexachlorobutadiene	0.5617 0.5834	0.6462 0.4803	0.4994	0.6277	0.4901	Ave		0.5555				12.2		20.0			
Naphthalene	3.2024 3.8198	3.0744 3.5241	3.0489	3.7927	3.5640	Ave		3.4323				9.5		20.0			
1,2,3-Trichlorobenzene	+++++ 1.4387	1.2559 1.2001	1.1801	1.4730	1.2067	Ave		1.2924				10.0		20.0			
Dibromofluoromethane (Surr)	1.4169 1.4083	1.3802 1.3964	1.3916	1.4404	1.4374	Ave		1.4102				1.6		20.0			
1,2-Dichloroethane-d4 (Surr)	1.0014 0.9802	0.9369 0.9576	0.9679	0.9885	1.0010	Ave		0.9762				2.4		20.0			
Toluene-d8 (Surr)	2.2043 2.2317	2.2530 2.2371	2.2095	2.2468	2.2143	Ave		2.2281				0.9		20.0			
4-Bromofluorobenzene (Surr)	0.7904 0.8160	0.8301 0.8308	0.7820	0.8241	0.8148	Ave		0.8126				2.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-381079/5	P3042P.D
Level 2	IC 480-381079/6	P3043P.D
Level 3	IC 480-381079/7	P3044P.D
Level 4	IC 480-381079/8	P3045P.D
Level 5	ICIS 480-381079/9	P3046P.D
Level 6	IC 480-381079/10	P3047P.D
Level 7	IC 480-381079/11	P3048P.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	6192 918506	13221 1506370	76925	173023	352250	0.500 50.0	1.00 100	5.00	10.0	25.0
Chloromethane	FB	Ave	+++++ 1819431	35010 3120558	154436	356273	758092	+++++ 50.0	1.00 100	5.00	10.0	25.0
Vinyl chloride	FB	Ave	+++++ 1206067	17588 2116698	96297	221163	483104	+++++ 50.0	1.00 100	5.00	10.0	25.0
Butadiene	FB	Ave	11947 1395456	23126 2479388	114644	262764	570491	0.500 50.0	1.00 100	5.00	10.0	25.0
Bromomethane	FB	Ave	4950 640743	9647 1124468	55173	122590	273000	0.500 50.0	1.00 100	5.00	10.0	25.0
Chloroethane	FB	Ave	5920 675006	10142 1158173	53930	130777	280432	0.500 50.0	1.00 100	5.00	10.0	25.0
Dichlorofluoromethane	FB	Ave	+++++ 1521707	22151 2663320	127717	300416	635395	+++++ 50.0	1.00 100	5.00	10.0	25.0
Trichlorofluoromethane	FB	Ave	+++++ 1386411	15621 2337946	103299	229935	526285	+++++ 50.0	1.00 100	5.00	10.0	25.0
Ethyl ether	FB	Ave	6755 866475	13301 1527694	67373	163301	365394	0.500 50.0	1.00 100	5.00	10.0	25.0
Acrolein	FB	Ave	+++++ 645611	10361 1369306	55639	122699	324883	+++++ 250	5.00 500	25.0	50.0	125
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	5784 758601	10529 1299676	67223	140959	315331	0.500 50.0	1.00 100	5.00	10.0	25.0
1,1-Dichloroethene	FB	Ave	+++++ 724483	14795 1281396	65444	132066	304549	+++++ 50.0	1.00 100	5.00	10.0	25.0
Acetone	FB	Ave	+++++ 2466416	47977 4860760	196695	451181	1194169	+++++ 250	5.00 500	25.0	50.0	125
Iodomethane	FB	Ave	10327 1363124	20176 2448447	112839	259609	582668	0.500 50.0	1.00 100	5.00	10.0	25.0
Methyl acetate	FB	Ave	17251 2429979	41341 4625698	184633	458527	1168710	1.00 100	2.00 200	10.0	20.0	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Carbon disulfide	FB	Ave	20581 2721274	38075 4856548	226252	511466	1149690	0.500 50.0	1.00 100	5.00	10.0	25.0
Allyl chloride	FB	Ave	+++++ 2167875	34000 3849160	181192	402052	903732	+++++ 50.0	1.00 100	5.00	10.0	25.0
2-Methyl-2-propanol	FB	Ave	12513 1590692	23126 3093103	112615	269368	756154	5.00 500	10.0 1000	50.0	100	250
Methylene Chloride	FB	Lin1	+++++ 856769	31430 +++++	82276	188595	363906	+++++ 50.0	1.00 +++++	5.00	10.0	25.0
Methyl tert-butyl ether	FB	Ave	18766 2319151	35429 4348816	186646	440808	1002226	0.500 50.0	1.00 100	5.00	10.0	25.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 744733	14350 1305820	63533	146961	309242	+++++ 50.0	1.00 100	5.00	10.0	25.0
Acrylonitrile	FB	Ave	42107 4885868	80675 9750085	385737	896885	2412765	5.00 500	10.0 1000	50.0	100	250
Hexane	FB	Ave	+++++ 1318373	20057 2188958	110574	251039	532505	+++++ 50.0	1.00 100	5.00	10.0	25.0
Vinyl acetate	FB	Ave	+++++ 5386868	91284 10471043	451674	1072652	2686123	+++++ 100	2.00 200	10.0	20.0	50.0
1,1-Dichloroethane	FB	Ave	12556 1610304	24475 2923890	135725	308519	685120	0.500 50.0	1.00 100	5.00	10.0	25.0
2-Butanone (MEK)	FB	Ave	33329 3709233	58700 7470045	276828	680320	1863634	2.50 250	5.00 500	25.0	50.0	125
2,2-Dichloropropane	FB	Ave	5825 561024	10895 1073748	63269	136915	295827	0.500 50.0	1.00 100	5.00	10.0	25.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 793491	14275 1417643	67751	155372	332507	+++++ 50.0	1.00 100	5.00	10.0	25.0
Chlorobromomethane	FB	Ave	3501 404932	5868 732468	35677	80576	172471	0.500 50.0	1.00 100	5.00	10.0	25.0
Tetrahydrofuran	FB	Ave	+++++ 928086	16263 1855505	72382	171456	458102	+++++ 100	2.00 200	10.0	20.0	50.0
Chloroform	FB	Ave	10546 1371063	21516 2453445	115317	269740	590322	0.500 50.0	1.00 100	5.00	10.0	25.0
1,1,1-Trichloroethane	FB	Ave	9531 1170383	17368 2110676	100501	226364	492237	0.500 50.0	1.00 100	5.00	10.0	25.0
Cyclohexane	FB	Ave	+++++ 1777953	25092 3138520	145859	333098	733781	+++++ 50.0	1.00 100	5.00	10.0	25.0
1,1-Dichloropropene	FB	Ave	7976 954295	15011 1762096	82913	188689	422340	0.500 50.0	1.00 100	5.00	10.0	25.0
Carbon tetrachloride	FB	Ave	+++++ 1005256	12085 1661571	67979	156933	360654	+++++ 50.0	1.00 100	5.00	10.0	25.0
Isobutyl alcohol	FB	Ave	+++++ 2037808	29931 4093827	135746	346375	979227	+++++ 1250	25.0 2500	125	250	625

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Benzene	FB	Ave	21796 2727047	40681 4941436	230457	529491	1162159	0.500 50.0	1.00 100	5.00	10.0	25.0
n-Heptane	FB	Ave	12356 1404689	24428 2222772	102766	260991	557706	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2-Dichloroethane	FB	Ave	13097 1491848	22743 2705944	124207	294408	650724	0.500 50.0	1.00 100	5.00	10.0	25.0
Trichloroethene	FB	Ave	6247 765203	12417 1378147	65512	146363	320023	0.500 50.0	1.00 100	5.00	10.0	25.0
Methylcyclohexane	FB	Ave	+++++ 1048534	16333 1798265	83746	199875	432229	+++++ 50.0	1.00 100	5.00	10.0	25.0
1,2-Dichloropropane	FB	Ave	7440 863093	13609 1566199	72617	168649	365450	0.500 50.0	1.00 100	5.00	10.0	25.0
1,4-Dioxane	CBNZ d5	Ave	+++++ 185191	+++++ 344874	11298	32760	81432	+++++ 1000	+++++ 2000	100	200	500
Dibromomethane	FB	Ave	+++++ 493667	9221 925691	41592	97427	224759	+++++ 50.0	1.00 100	5.00	10.0	25.0
Bromodichloromethane	FB	Ave	+++++ 1075676	13273 1928316	82600	201472	446039	+++++ 50.0	1.00 100	5.00	10.0	25.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 613393	8921 1215256	45621	114280	282799	+++++ 50.0	1.00 100	5.00	10.0	25.0
cis-1,3-Dichloropropene	FB	Ave	+++++ 1151508	17523 2141619	94449	224128	505015	+++++ 50.0	1.00 100	5.00	10.0	25.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	+++++ 7560549	119972 14678897	602724	1457243	3836099	+++++ 250	5.00 500	25.0	50.0	125
Toluene	CBNZ d5	Ave	13324 1667836	24868 3090757	141840	321944	729601	0.500 50.0	1.00 100	5.00	10.0	25.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 948552	11927 1923333	70960	174128	438095	+++++ 50.0	1.00 100	5.00	10.0	25.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	+++++ 1159133	16664 2168452	92184	224317	507946	+++++ 50.0	1.00 100	5.00	10.0	25.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4984 548661	8996 1046069	49412	105674	252742	0.500 50.0	1.00 100	5.00	10.0	25.0
Tetrachloroethene	CBNZ d5	Ave	7001 786243	13282 1412801	69656	153615	343526	0.500 50.0	1.00 100	5.00	10.0	25.0
2-Hexanone	CBNZ d5	Ave	+++++ 5421607	85543 10960565	427075	1016410	2767473	+++++ 250	5.00 500	25.0	50.0	125
1,3-Dichloropropane	CBNZ d5	Ave	9481 1107782	15804 2094245	91324	220913	495554	0.500 50.0	1.00 100	5.00	10.0	25.0
Dibromochloromethane	CBNZ d5	Ave	+++++ 834420	11362 1577516	61979	151194	356036	+++++ 50.0	1.00 100	5.00	10.0	25.0
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 716925	11647 1375996	58492	138725	330223	+++++ 50.0	1.00 100	5.00	10.0	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	+++++ 1995674	28820 3664293	169850	400675	886492	+++++ 50.0	1.00 100	5.00	10.0	25.0
Ethylbenzene	CBNZ d5	Ave	+++++ 3173847	48743 5857536	270764	609781	1374233	+++++ 50.0	1.00 100	5.00	10.0	25.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	6563 779565	9865 1446251	59768	144668	330559	0.500 50.0	1.00 100	5.00	10.0	25.0
m,p-Xylene	CBNZ d5	Ave	9961 1251865	17455 2371464	105745	246433	547960	0.500 50.0	1.00 100	5.00	10.0	25.0
o-Xylene	CBNZ d5	Ave	9940 1248964	18705 2341113	100133	238920	545790	0.500 50.0	1.00 100	5.00	10.0	25.0
Styrene	CBNZ d5	Ave	+++++ 2129175	26987 4036982	160504	393613	897953	+++++ 50.0	1.00 100	5.00	10.0	25.0
Bromoform	CBNZ d5	Ave	+++++ 634943	7847 1262274	46381	109870	281781	+++++ 50.0	1.00 100	5.00	10.0	25.0
Isopropylbenzene	DCBd 4	Ave	23054 3100485	43504 5726024	251051	598219	1326529	0.500 50.0	1.00 100	5.00	10.0	25.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	7407 888284	15102 1759968	73162	177519	428065	0.500 50.0	1.00 100	5.00	10.0	25.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	4485 531024	8374 1083841	40150	100509	253255	0.500 50.0	1.00 100	5.00	10.0	25.0
N-Propylbenzene	DCBd 4	Ave	30014 3673269	55356 6749775	310086	725957	1590484	0.500 50.0	1.00 100	5.00	10.0	25.0
Bromobenzene	DCBd 4	Ave	8564 960525	13921 1783067	81907	187348	428420	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2,3-Trichloropropane	DCBd 4	Ave	2560 283394	4821 584485	23269	57372	139228	0.500 50.0	1.00 100	5.00	10.0	25.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	+++++ 2691214	39300 4953366	213491	509518	1140863	+++++ 50.0	1.00 100	5.00	10.0	25.0
2-Chlorotoluene	DCBd 4	Ave	6427 838716	11149 1539264	69469	164462	359026	0.500 50.0	1.00 100	5.00	10.0	25.0
4-Chlorotoluene	DCBd 4	Ave	+++++ 863120	12941 1610013	69987	166200	372016	+++++ 50.0	1.00 100	5.00	10.0	25.0
tert-Butylbenzene	DCBd 4	Ave	+++++ 607878	9387 1073113	48405	115330	250341	+++++ 50.0	1.00 100	5.00	10.0	25.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	20699 2840153	40355 5247304	225777	548109	1201157	0.500 50.0	1.00 100	5.00	10.0	25.0
sec-Butylbenzene	DCBd 4	Ave	24374 3311933	46801 5748163	256011	628195	1342703	0.500 50.0	1.00 100	5.00	10.0	25.0
4-Isopropyltoluene	DCBd 4	Ave	+++++ 3076325	44210 5531617	234322	579456	1258243	+++++ 50.0	1.00 100	5.00	10.0	25.0
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 1786843	27976 3319784	149063	354095	775605	+++++ 50.0	1.00 100	5.00	10.0	25.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 381079

SDG No.:

Instrument ID: HP5973P GC Column: ZB-624 (60) ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/10/2017 16:02 Calibration End Date: 10/10/2017 20:22 Calibration ID: 31704

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	15247 1869766	29294 3446992	157122	363441	799185	0.500 50.0	1.00 100	5.00	10.0	25.0
n-Butylbenzene	DCBd 4	Ave	22200 2556462	38008 4468247	201239	502587	1044618	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2-Dichlorobenzene	DCBd 4	Ave	13520 1773101	26119 3282012	147145	346311	772922	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	4288 227760	7312 457726	21618	42010	107964	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	+++++ 1338784	19171 2344041	104110	254898	549071	+++++ 50.0	1.00 100	5.00	10.0	25.0
Hexachlorobutadiene	DCBd 4	Ave	4541 530503	10546 922117	41977	106994	215500	0.500 50.0	1.00 100	5.00	10.0	25.0
Naphthalene	DCBd 4	Ave	25889 3473370	50170 6765359	256299	646535	1567096	0.500 50.0	1.00 100	5.00	10.0	25.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 1308210	20495 2303868	99206	251101	530605	+++++ 50.0	1.00 100	5.00	10.0	25.0
Dibromofluoromethane (Surr)	FB	Ave	246309 264657	248745 272147	245504	255973	258120	25.0 25.0	25.0 25.0	25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	174074 184210	168857 186635	170749	175676	179745	25.0 25.0	25.0 25.0	25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	858904 930160	844935 952474	868443	884953	889851	25.0 25.0	25.0 25.0	25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	307976 340116	311328 353734	307388	324602	327459	25.0 25.0	25.0 25.0	25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3042P.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Oct-2017 16:02:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0066269-005
Operator ID: RF Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Oct-2017 12:02:07 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: farrellr Date: 11-Oct-2017 08:44:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.433	10.434	-0.001	97	173836	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.388	14.382	0.006	92	389648	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.344	17.345	-0.001	95	404218	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.636	9.637	-0.001	92	246309	25.0	25.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.086	10.093	-0.007	0	174074	25.0	25.6	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	858904	25.0	24.7	
$ 6 4-Bromofluorobenzene (Surr	174	15.884	15.878	0.006	88	307976	25.0	24.3	
10 Dichlorodifluoromethane	85	4.344	4.338	0.006	1	6192	0.5000	0.4279	M
11 Chloromethane	50	4.788	4.770	0.018	41	20220	0.5000	0.6389	
17 Vinyl chloride	62	4.964	4.971	-0.007	38	8026	0.5000	0.4099	M
144 Butadiene	54	5.007	5.001	0.006	94	11947	0.5000	0.5083	
12 Bromomethane	94	5.633	5.609	0.024	10	4950	0.5000	0.4649	M
13 Chloroethane	64	5.700	5.695	0.006	46	5920	0.5000	0.5264	
19 Dichlorofluoromethane	67	6.017	6.023	-0.006	13	10909	0.5000	0.4294	
14 Trichlorofluoromethane	101	6.132	6.090	0.042	1	4985	0.5000	0.2397	
20 Ethyl ether	59	6.388	6.388	0.000	92	6755	0.5000	0.4757	
22 Acrolein	56	6.692	6.698	-0.006	47	4952	2.50	2.13	
16 1,1,2-Trichloro-1,2,2-trif	101	6.734	6.735	-0.001	27	5784	0.5000	0.4675	
25 1,1-Dichloroethene	96	6.844	6.832	0.012	80	8738	0.5000	0.6834	
24 Acetone	43	6.886	6.887	-0.001	96	27671	2.50	3.14	
18 Iodomethane	142	7.124	7.124	0.000	49	10327	0.5000	0.4594	
30 Methyl acetate	43	7.245	7.252	-0.007	96	17251	1.00	0.8413	
27 Carbon disulfide	76	7.270	7.270	0.000	66	20581	0.5000	0.4637	M
28 3-Chloro-1-propene	41	7.282	7.276	0.006	88	24370	0.5000	0.6730	
31 Methylene Chloride	84	7.507	7.501	0.006	86	24333	0.5000	0.6525	
33 2-Methyl-2-propanol	59	7.495	7.501	-0.006	35	12513	5.00	4.81	
32 Methyl tert-butyl ether	73	7.677	7.690	-0.013	83	18766	0.5000	0.4828	
35 trans-1,2-Dichloroethene	96	7.787	7.781	0.006	71	4543	0.5000	0.3489	
34 Acrylonitrile	53	7.817	7.812	0.005	94	42107	5.00	4.94	
36 Hexane	57	7.988	7.976	0.012	86	9385	0.5000	0.4324	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	43414	1.00	0.8997	
40 1,1-Dichloroethane	63	8.334	8.335	-0.001	44	12556	0.5000	0.4674	
44 2-Butanone (MEK)	43	9.028	9.022	0.006	95	33329	2.50	2.58	
45 2,2-Dichloropropane	77	9.040	9.034	0.006	51	5825	0.5000	0.5133	
43 cis-1,2-Dichloroethene	96	9.046	9.053	-0.007	61	8801	0.5000	0.6399	
50 Chlorobromomethane	128	9.381	9.387	-0.006	67	3501	0.5000	0.5076	
51 Tetrahydrofuran	42	9.399	9.399	0.000	90	9714	1.00	1.19	
49 Chloroform	83	9.417	9.418	-0.001	91	10546	0.5000	0.4583	
52 1,1,1-Trichloroethane	97	9.655	9.655	-0.001	39	9531	0.5000	0.4859	
54 Cyclohexane	56	9.691	9.698	-0.007	62	11753	0.5000	0.4034	
56 1,1-Dichloropropene	75	9.837	9.831	0.006	76	7976	0.5000	0.4857	
55 Carbon tetrachloride	117	9.849	9.837	0.012	65	5103	0.5000	0.3488	
53 Isobutyl alcohol	43	9.849	9.844	0.005	83	13372	12.5	9.95	
57 Benzene	78	10.123	10.129	-0.006	83	21796	0.5000	0.4774	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	92	13097	0.5000	0.5141	
59 n-Heptane	43	10.184	10.184	0.000	76	12356	0.5000	0.5357	
62 Trichloroethene	95	10.883	10.884	-0.001	90	6247	0.5000	0.4830	
64 Methylcyclohexane	83	11.084	11.078	0.006	90	7708	0.5000	0.4448	
63 1,2-Dichloropropane	63	11.236	11.224	0.012	45	7440	0.5000	0.5061	
68 1,4-Dioxane	88		11.352				ND	ND	
69 Dibromomethane	93	11.431	11.431	0.000	90	3592	0.5000	0.4089	
70 Dichlorobromomethane	83	11.565	11.565	0.000	90	7035	0.5000	0.4092	
71 2-Chloroethyl vinyl ether	63	11.814	11.815	-0.001	29	4158	0.5000	0.4030	
73 cis-1,3-Dichloropropene	75	12.100	12.094	0.006	77	8642	0.5000	0.4417	
75 4-Methyl-2-pentanone (MIBK	43	12.197	12.198	-0.001	97	60326	2.50	2.23	
76 Toluene	92	12.520	12.520	0.000	96	13324	0.5000	0.4658	
77 Ethyl methacrylate	69	12.733	12.739	-0.006	86	6373	0.5000	0.3983	
78 trans-1,3-Dichloropropene	75	12.806	12.812	-0.006	89	8778	0.5000	0.4426	
79 1,1,2-Trichloroethane	83	13.098	13.098	0.000	92	4984	0.5000	0.5042	
80 Tetrachloroethene	166	13.244	13.238	0.006	90	7001	0.5000	0.5013	
83 2-Hexanone	43	13.286	13.287	-0.001	96	43545	2.50	2.24	
82 1,3-Dichloropropane	76	13.323	13.329	-0.006	59	9481	0.5000	0.4937	
81 Chlorodibromomethane	129	13.676	13.670	0.006	62	5848	0.5000	0.4233	
85 Ethylene Dibromide	107	13.877	13.871	0.005	77	5157	0.5000	0.4059	
87 Chlorobenzene	112	14.424	14.424	0.000	38	15042	0.5000	0.4329	
89 Ethylbenzene	91	14.473	14.467	0.006	96	24951	0.5000	0.4524	
88 1,1,1,2-Tetrachloroethane	131	14.503	14.510	-0.007	36	6563	0.5000	0.5095	
90 m-Xylene & p-Xylene	106	14.600	14.607	-0.007	0	9961	0.5000	0.4656	
93 o-Xylene	106	15.166	15.154	0.012	82	9940	0.5000	0.4678	
94 Styrene	104	15.184	15.179	0.005	82	14991	0.5000	0.4275	
92 Bromoform	173	15.574	15.568	0.006	43	3994	0.5000	0.3830	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	23054	0.5000	0.4659	
97 1,1,2,2-Tetrachloroethane	83	16.054	16.055	-0.001	82	7407	0.5000	0.4844	
98 trans-1,4-Dichloro-2-buten	53	16.103	16.104	-0.001	48	4485	0.5000	0.5031	
99 N-Propylbenzene	91	16.109	16.110	-0.001	96	30014	0.5000	0.4955	
100 Bromobenzene	156	16.134	16.128	0.006	79	8564	0.5000	0.5338	
101 1,2,3-Trichloropropane	110	16.158	16.152	0.006	39	2560	0.5000	0.5135	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	94	17511	0.5000	0.4043	
103 2-Chlorotoluene	126	16.310	16.316	-0.006	93	6427	0.5000	0.4789	
105 4-Chlorotoluene	126	16.444	16.444	0.000	96	6006	0.5000	0.4258	
106 tert-Butylbenzene	134	16.736	16.736	0.000	95	3577	0.5000	0.3662	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	97	20699	0.5000	0.4590	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	16.997	17.004	-0.007	95	24374	0.5000	0.4731	
112 4-Isopropyltoluene	119	17.156	17.150	0.006	97	20778	0.5000	0.4278	
110 1,3-Dichlorobenzene	146	17.271	17.272	-0.001	96	13478	0.5000	0.4537	
111 1,4-Dichlorobenzene	146	17.375	17.375	0.000	38	15247	0.5000	0.4944	
115 n-Butylbenzene	91	17.667	17.661	0.006	96	22200	0.5000	0.5360	
116 1,2-Dichlorobenzene	146	17.873	17.874	-0.001	89	13520	0.5000	0.4693	
117 1,2-Dibromo-3-Chloropropan	75	18.914	18.920	-0.006	1	4288	0.5000	0.4376	
119 1,2,4-Trichlorobenzene	180	20.027	20.027	0.000	89	8537	0.5000	0.4035	
120 Hexachlorobutadiene	225	20.155	20.143	0.012	1	4541	0.5000	0.5055	
121 Naphthalene	128	20.471	20.472	-0.001	95	25889	0.5000	0.4665	
122 1,2,3-Trichlorobenzene	180	20.848	20.849	-0.001	88	8700	0.5000	0.4163	
S 123 1,2-Dichloroethene, Total	1				0			0.9888	
S 124 1,3-Dichloropropene, Total	1				0			0.8843	
S 125 Total BTEX	1				0			2.33	
S 126 Xylenes, Total	1				0			0.9334	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00112	Amount Added:	0.50	Units: uL	
GAS CORP mix_00245	Amount Added:	0.50	Units: uL	
P 8260 IS_00247	Amount Added:	1.25	Units: uL	Run Reagent
P 8260 Surr._00242	Amount Added:	1.25	Units: uL	Run Reagent

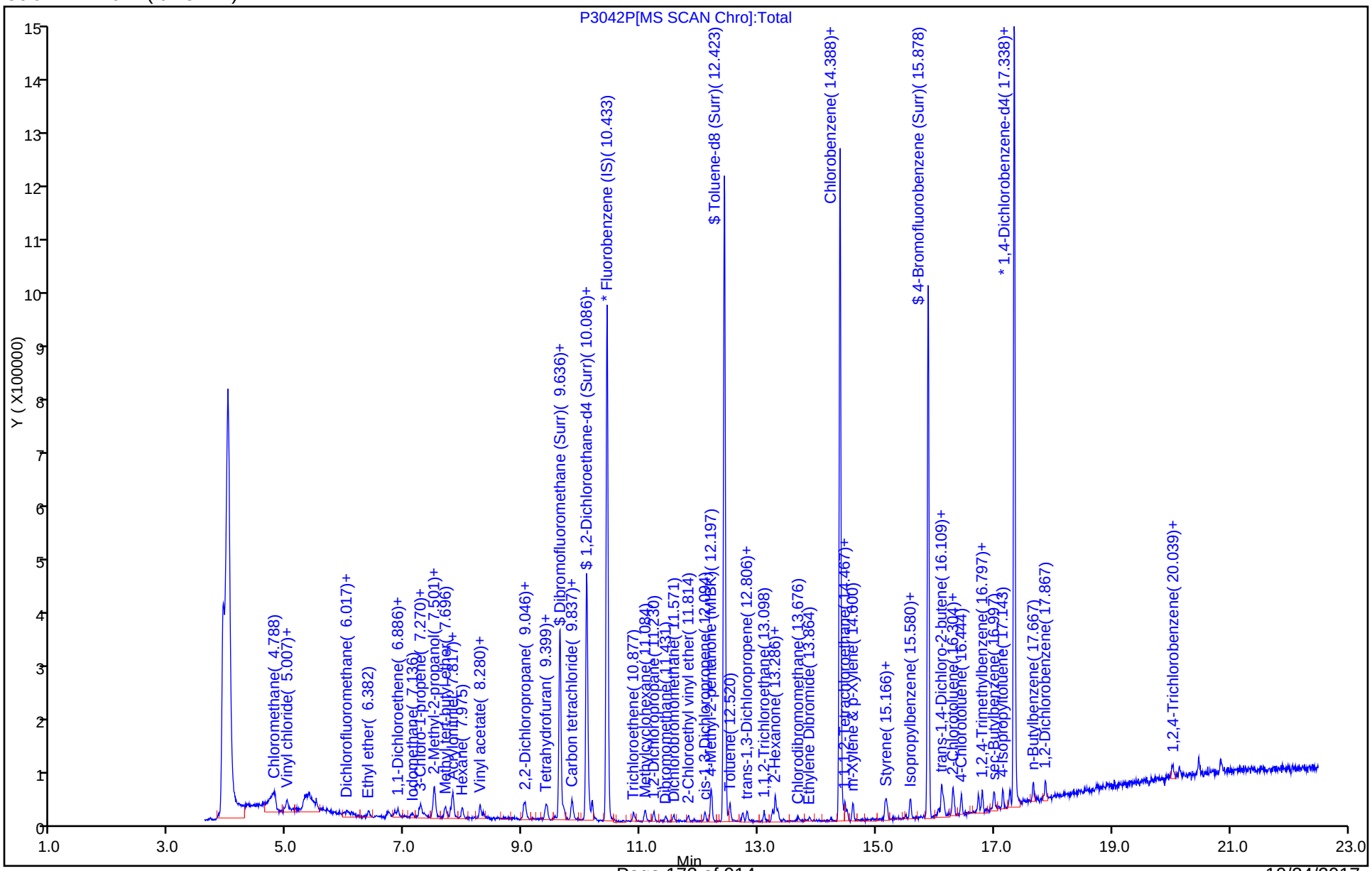
Report Date: 11-Oct-2017 12:02:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3042P.D

Injection Date:	10-Oct-2017 16:02:30	Instrument ID:	HP5973P	Operator ID:	RF
Lims ID:	IC			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

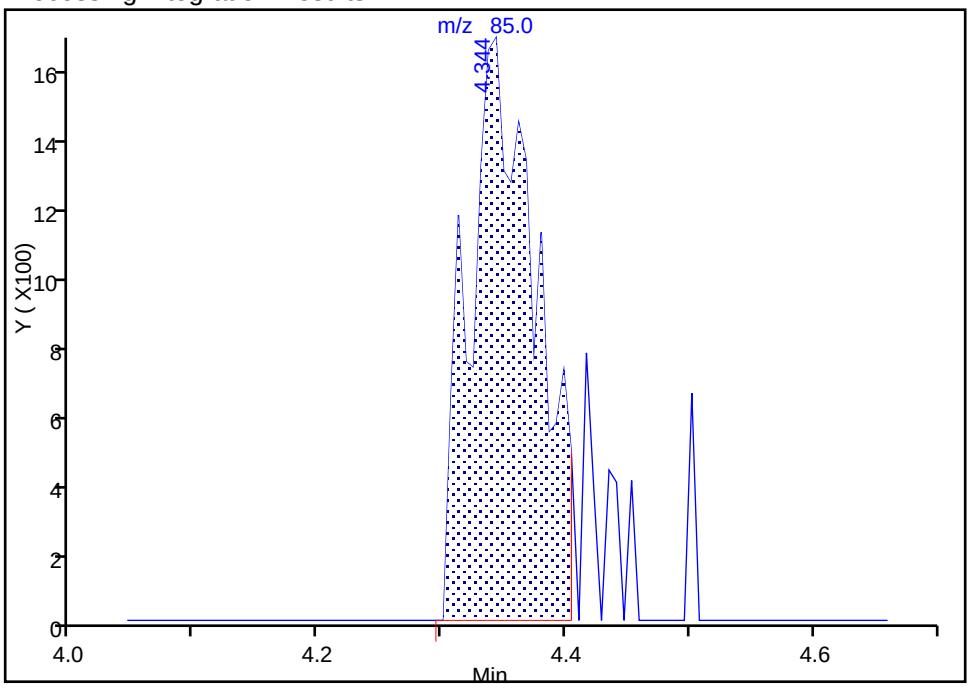
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3042P.D
Injection Date: 10-Oct-2017 16:02:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

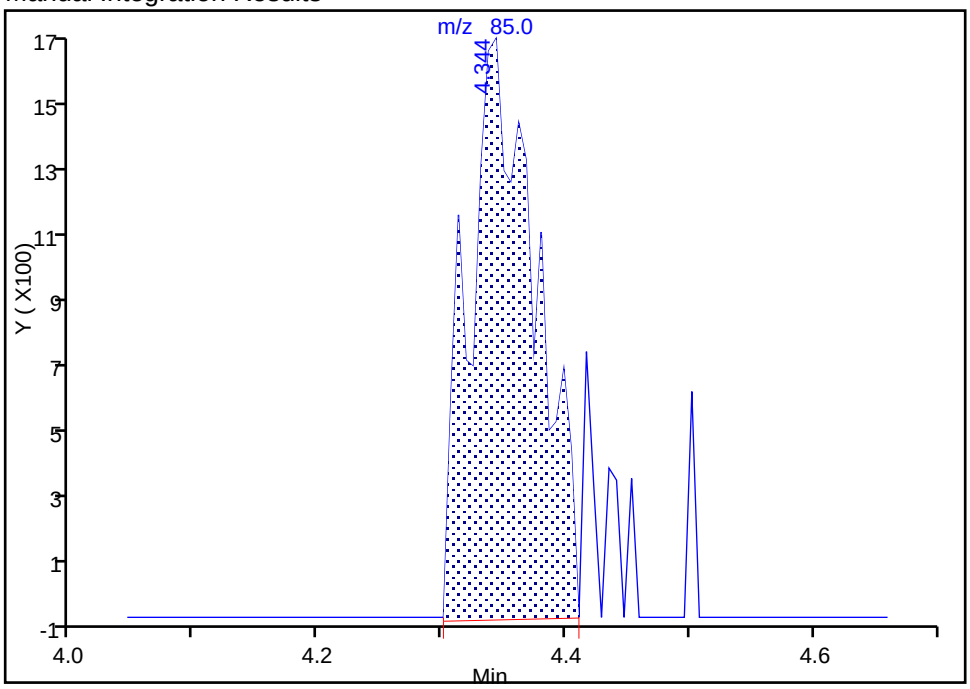
Processing Integration Results

RT: 4.34
Area: 6147
Amount: 0.449218
Amount Units: ug/L



Manual Integration Results

RT: 4.34
Area: 6192
Amount: 0.427923
Amount Units: ug/L



Reviewer: HillL, 11-Oct-2017 11:05:26
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

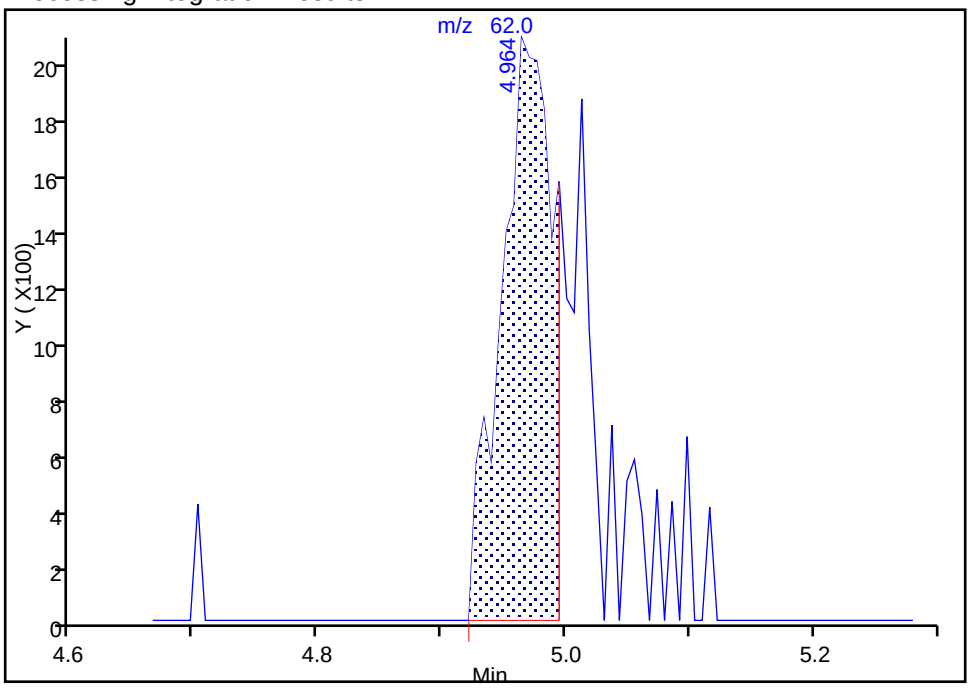
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3042P.D
Injection Date: 10-Oct-2017 16:02:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

17 Vinyl chloride, CAS: 75-01-4

Signal: 1

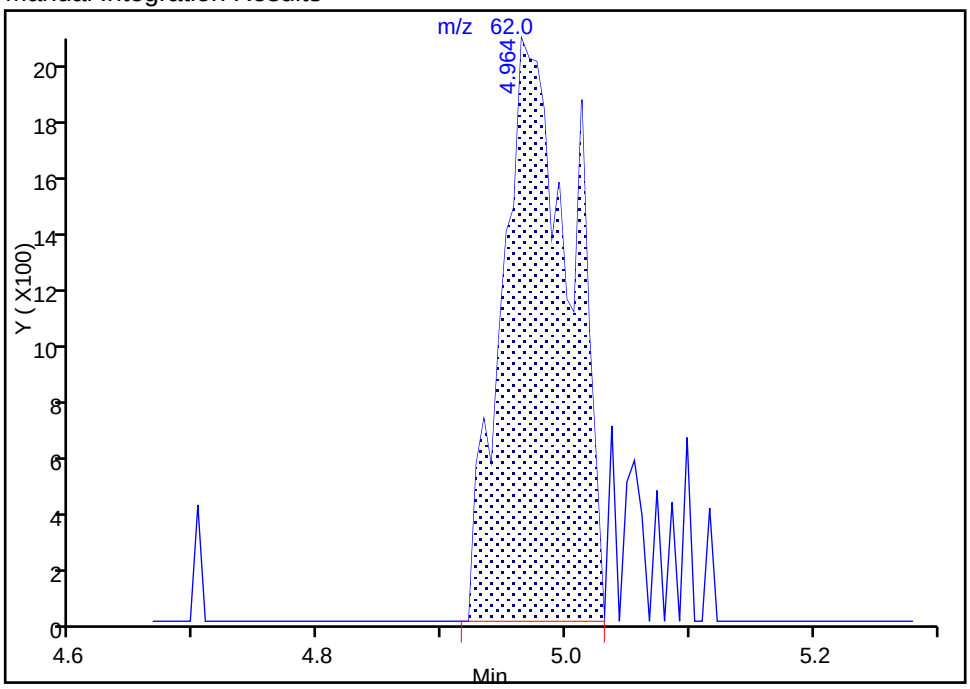
Processing Integration Results

RT: 4.96
Area: 5975
Amount: 0.454463
Amount Units: ug/L



Manual Integration Results

RT: 4.96
Area: 8026
Amount: 0.409926
Amount Units: ug/L



Reviewer: farrellr, 11-Oct-2017 08:41:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

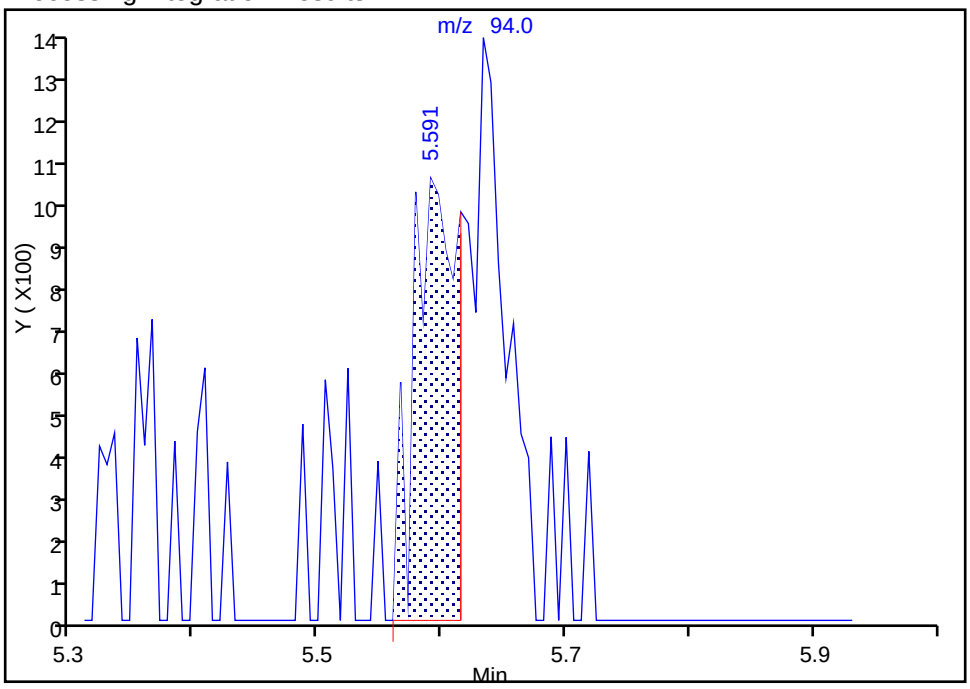
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3042P.D
Injection Date: 10-Oct-2017 16:02:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Bromomethane, CAS: 74-83-9

Signal: 1

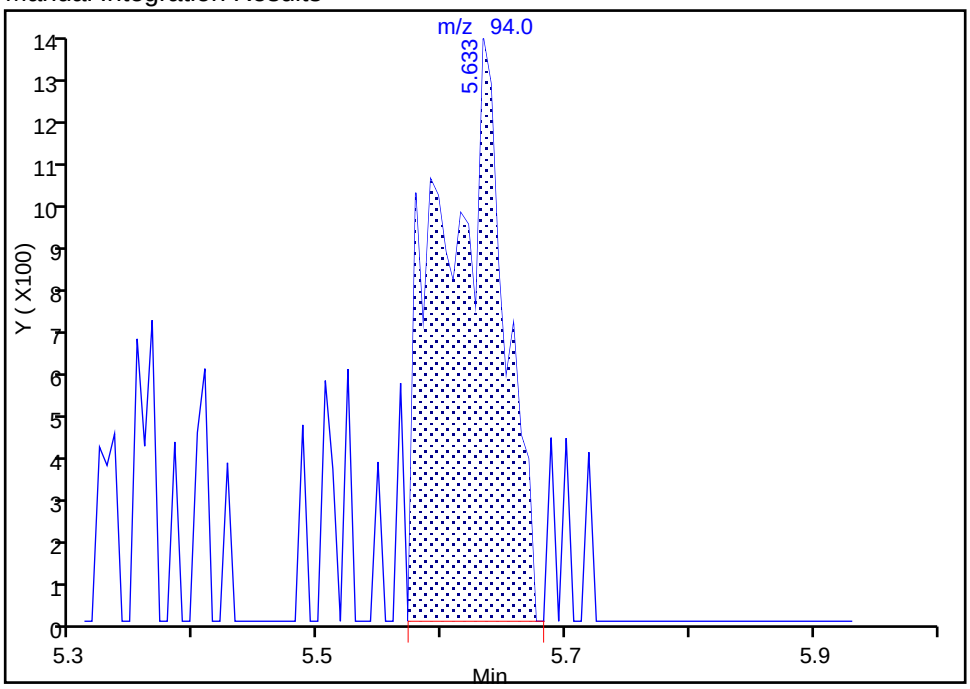
Processing Integration Results

RT: 5.59
Area: 2522
Amount: 0.387803
Amount Units: ug/L



Manual Integration Results

RT: 5.63
Area: 4950
Amount: 0.464949
Amount Units: ug/L



Reviewer: farrellr, 11-Oct-2017 08:41:38
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

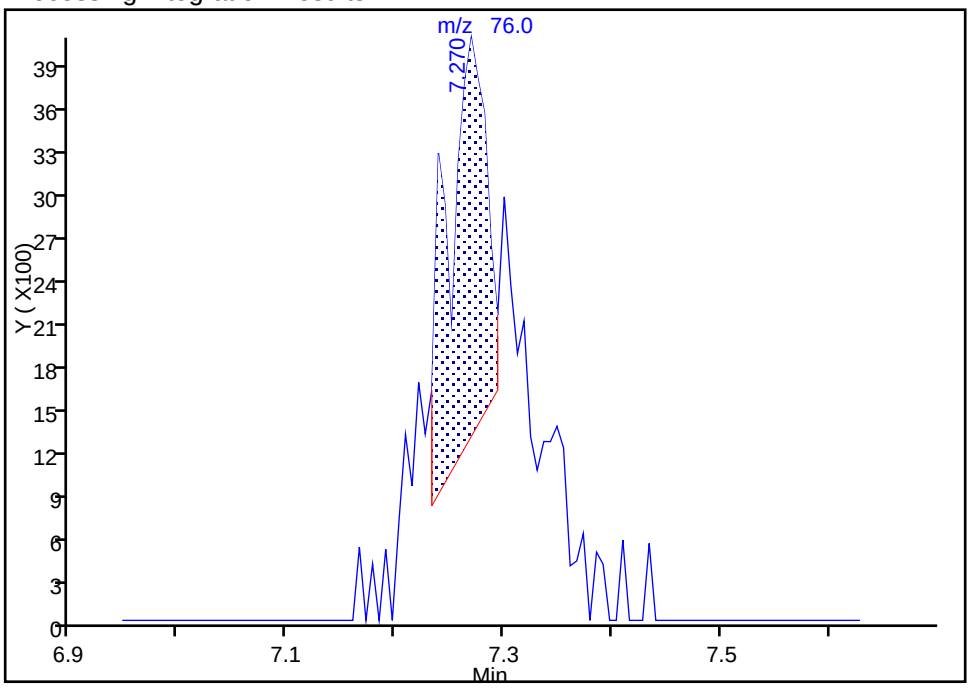
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3042P.D
Injection Date: 10-Oct-2017 16:02:30 Instrument ID: HP5973P
Lims ID: IC
Client ID:
Operator ID: RF ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

27 Carbon disulfide, CAS: 75-15-0

Signal: 1

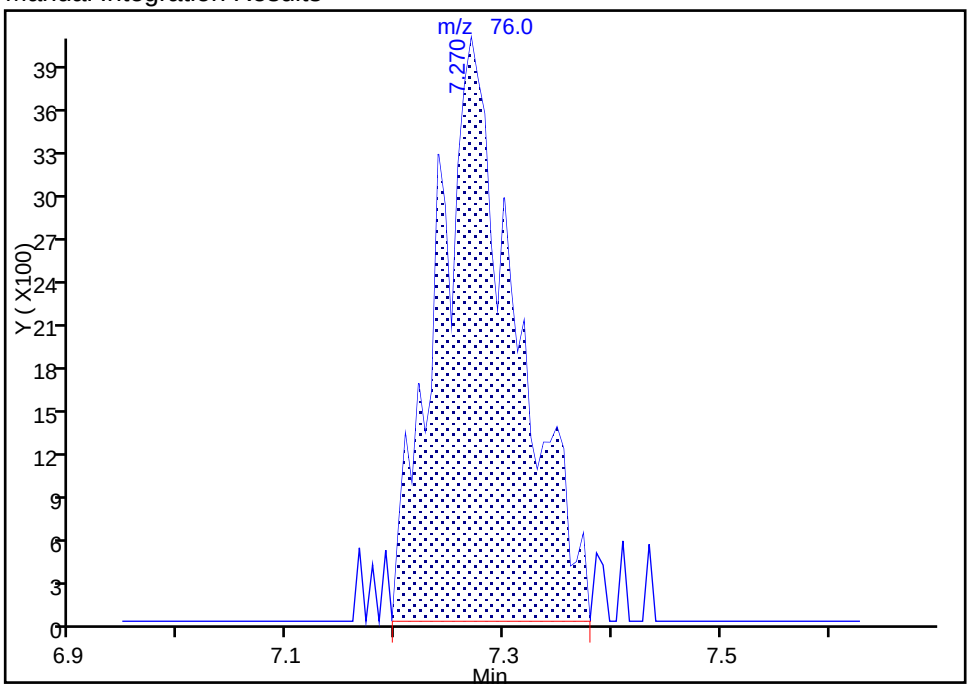
Processing Integration Results

RT: 7.27
Area: 7111
Amount: 0.401537
Amount Units: ug/L



Manual Integration Results

RT: 7.27
Area: 20581
Amount: 0.463706
Amount Units: ug/L



Reviewer: farrellr, 11-Oct-2017 08:42:39
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3043P.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Oct-2017 16:29:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0066269-006
Operator ID: RF Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Oct-2017 12:02:12 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: farrellr Date: 11-Oct-2017 08:46:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.434	10.434	0.000	97	180229	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.388	14.382	0.006	92	375029	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.344	17.345	-0.001	95	407971	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.637	9.637	0.000	92	248745	25.0	24.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.087	10.093	-0.006	0	168857	25.0	24.0	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	844935	25.0	25.3	
$ 6 4-Bromofluorobenzene (Surr	174	15.884	15.878	0.006	91	311328	25.0	25.5	
10 Dichlorodifluoromethane	85	4.362	4.338	0.024	52	13221	1.00	0.8813	M
11 Chloromethane	50	4.788	4.770	0.018	79	35010	1.00	1.07	
17 Vinyl chloride	62	4.989	4.971	0.018	36	17588	1.00	0.8664	
144 Butadiene	54	5.001	5.001	0.000	96	23126	1.00	0.9491	
12 Bromomethane	94	5.634	5.609	0.025	42	9647	1.00	0.8740	
13 Chloroethane	64	5.707	5.695	0.013	69	10142	1.00	0.8699	
19 Dichlorofluoromethane	67	6.023	6.023	0.000	34	22151	1.00	0.8410	
14 Trichlorofluoromethane	101	6.090	6.090	0.000	30	15621	1.00	0.7244	M
20 Ethyl ether	59	6.388	6.388	0.000	89	13301	1.00	0.9035	
22 Acrolein	56	6.698	6.698	0.000	94	10361	5.00	4.30	
16 1,1,2-Trichloro-1,2,2-trif	101	6.735	6.735	0.000	87	10529	1.00	0.8209	
25 1,1-Dichloroethene	96	6.832	6.832	0.000	59	14795	1.00	1.12	
24 Acetone	43	6.887	6.887	0.000	96	47977	5.00	5.25	
18 Iodomethane	142	7.136	7.124	0.012	95	20176	1.00	0.8656	
30 Methyl acetate	43	7.258	7.252	0.006	99	41341	2.00	1.94	
27 Carbon disulfide	76	7.270	7.270	0.000	88	38075	1.00	0.8274	
28 3-Chloro-1-propene	41	7.276	7.276	0.000	88	34000	1.00	0.9056	
33 2-Methyl-2-propanol	59	7.495	7.501	-0.006	55	23126	10.0	8.57	
31 Methylene Chloride	84	7.513	7.501	0.012	88	31430	1.00	1.05	
32 Methyl tert-butyl ether	73	7.690	7.690	0.000	89	35429	1.00	0.8791	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	88	14350	1.00	1.06	
34 Acrylonitrile	53	7.812	7.812	0.000	99	80675	10.0	9.13	
36 Hexane	57	7.970	7.976	-0.006	92	20057	1.00	0.8913	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	91284	2.00	1.82	
40 1,1-Dichloroethane	63	8.329	8.335	-0.006	96	24475	1.00	0.8788	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	95	58700	5.00	4.39	
45 2,2-Dichloropropane	77	9.022	9.034	-0.012	54	10895	1.00	0.9261	
43 cis-1,2-Dichloroethene	96	9.046	9.053	-0.007	87	14275	1.00	1.00	
50 Chlorobromomethane	128	9.387	9.387	0.000	83	5868	1.00	0.8206	
51 Tetrahydrofuran	42	9.399	9.399	0.000	89	16263	2.00	1.92	
49 Chloroform	83	9.418	9.418	0.000	93	21516	1.00	0.9019	
52 1,1,1-Trichloroethane	97	9.655	9.655	0.000	19	17368	1.00	0.8541	
54 Cyclohexane	56	9.704	9.698	0.006	88	25092	1.00	0.8306	
56 1,1-Dichloropropene	75	9.825	9.831	-0.006	65	15011	1.00	0.8817	
55 Carbon tetrachloride	117	9.843	9.837	0.006	61	12085	1.00	0.7967	
53 Isobutyl alcohol	43	9.843	9.844	-0.001	77	29931	25.0	21.5	
57 Benzene	78	10.129	10.129	0.000	94	40681	1.00	0.8595	
59 n-Heptane	43	10.184	10.184	0.000	92	24428	1.00	1.02	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	94	22743	1.00	0.8610	
62 Trichloroethene	95	10.884	10.884	0.000	91	12417	1.00	0.9260	
64 Methylcyclohexane	83	11.084	11.078	0.006	90	16333	1.00	0.9090	
63 1,2-Dichloropropane	63	11.224	11.224	0.000	87	13609	1.00	0.8929	
68 1,4-Dioxane	88	11.346	11.352	-0.006	14	2164	20.0	14.7	
69 Dibromomethane	93	11.431	11.431	0.000	94	9221	1.00	1.01	
70 Dichlorobromomethane	83	11.559	11.565	-0.006	91	13273	1.00	0.7446	
71 2-Chloroethyl vinyl ether	63	11.815	11.815	0.000	58	8921	1.00	0.8339	
73 cis-1,3-Dichloropropene	75	12.100	12.094	0.006	83	17523	1.00	0.8638	
75 4-Methyl-2-pentanone (MIBK	43	12.198	12.198	0.000	96	119972	5.00	4.60	
76 Toluene	92	12.520	12.520	0.000	95	24868	1.00	0.9033	
77 Ethyl methacrylate	69	12.733	12.739	-0.006	82	11927	1.00	0.7744	
78 trans-1,3-Dichloropropene	75	12.806	12.812	-0.006	83	16664	1.00	0.8730	
79 1,1,2-Trichloroethane	83	13.098	13.098	0.000	89	8996	1.00	0.9455	
80 Tetrachloroethene	166	13.238	13.238	0.000	91	13282	1.00	0.9881	
83 2-Hexanone	43	13.287	13.287	0.000	97	85543	5.00	4.57	
82 1,3-Dichloropropane	76	13.329	13.329	0.000	91	15804	1.00	0.8550	
81 Chlorodibromomethane	129	13.676	13.670	0.006	86	11362	1.00	0.8544	
85 Ethylene Dibromide	107	13.871	13.871	0.000	92	11647	1.00	0.9525	
87 Chlorobenzene	112	14.424	14.424	0.000	95	28820	1.00	0.8617	
89 Ethylbenzene	91	14.473	14.467	0.006	96	48743	1.00	0.9183	
88 1,1,1,2-Tetrachloroethane	131	14.510	14.510	0.000	90	9865	1.00	0.7957	
90 m-Xylene & p-Xylene	106	14.601	14.607	-0.006	0	17455	1.00	0.8477	
93 o-Xylene	106	15.154	15.154	0.000	98	18705	1.00	0.9146	
94 Styrene	104	15.179	15.179	0.000	92	26987	1.00	0.7997	
92 Bromoform	173	15.568	15.568	0.000	88	7847	1.00	0.7818	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	43504	1.00	0.8711	
97 1,1,2,2-Tetrachloroethane	83	16.055	16.055	0.000	93	15102	1.00	0.9785	
98 trans-1,4-Dichloro-2-buten	53	16.103	16.104	-0.001	45	8374	1.00	0.9307	
99 N-Propylbenzene	91	16.110	16.110	0.000	98	55356	1.00	0.9054	
100 Bromobenzene	156	16.134	16.128	0.006	92	13921	1.00	0.8598	
101 1,2,3-Trichloropropane	110	16.152	16.152	0.000	89	4821	1.00	0.9582	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	96	39300	1.00	0.8991	
103 2-Chlorotoluene	126	16.316	16.316	0.000	93	11149	1.00	0.8231	
105 4-Chlorotoluene	126	16.450	16.444	0.006	96	12941	1.00	0.9090	
106 tert-Butylbenzene	134	16.736	16.736	0.000	96	9387	1.00	0.9522	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	97	40355	1.00	0.8867	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	17.004	17.004	0.000	95	46801	1.00	0.9001	
112 4-Isopropyltoluene	119	17.150	17.150	0.000	97	44210	1.00	0.9019	
110 1,3-Dichlorobenzene	146	17.265	17.272	-0.007	96	27976	1.00	0.9331	
111 1,4-Dichlorobenzene	146	17.369	17.375	-0.006	93	29294	1.00	0.9411	
115 n-Butylbenzene	91	17.667	17.661	0.006	97	38008	1.00	0.9092	
116 1,2-Dichlorobenzene	146	17.874	17.874	0.000	93	26119	1.00	0.8983	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	25	7312	1.00	1.20	
119 1,2,4-Trichlorobenzene	180	20.033	20.027	0.006	93	19171	1.00	0.8978	
120 Hexachlorobutadiene	225	20.137	20.143	-0.006	92	10546	1.00	1.16	
121 Naphthalene	128	20.478	20.472	0.006	97	50170	1.00	0.8957	
122 1,2,3-Trichlorobenzene	180	20.849	20.849	0.000	78	20495	1.00	0.9717	
S 125 Total BTEX	1				0			4.44	
S 126 Xylenes, Total	1				0			1.76	
S 123 1,2-Dichloroethene, Total	1				0			2.06	
S 124 1,3-Dichloropropene, Total	1				0			1.74	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00112	Amount Added:	1.00	Units: uL	
GAS CORP mix_00245	Amount Added:	1.00	Units: uL	
P 8260 IS_00247	Amount Added:	1.25	Units: uL	Run Reagent
P 8260 Surr._00242	Amount Added:	1.25	Units: uL	Run Reagent

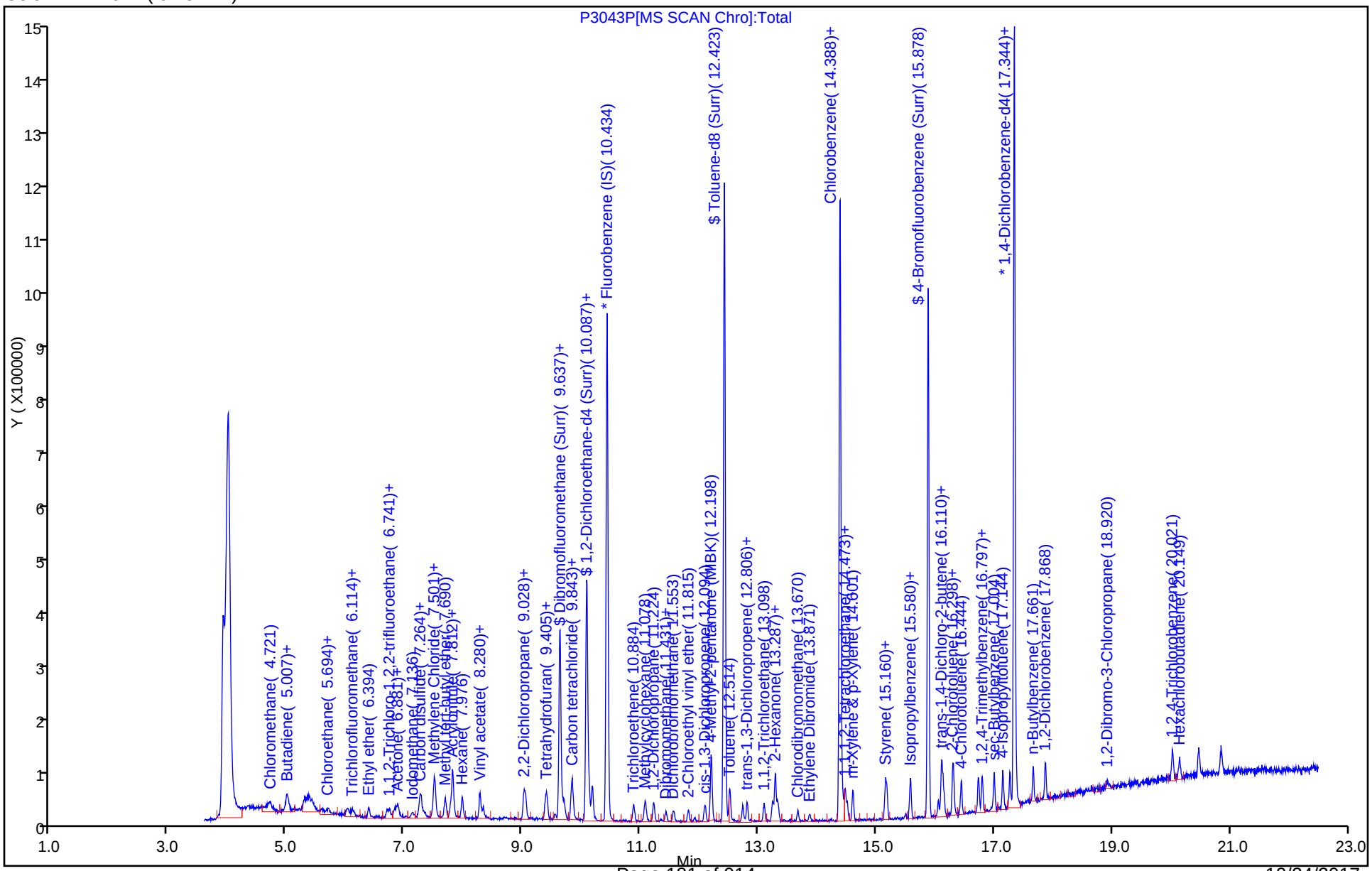
Report Date: 11-Oct-2017 12:02:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3043P.D

Injection Date:	10-Oct-2017 16:29:30	Instrument ID:	HP5973P	Operator ID:	RF
Lims ID:	IC 2			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

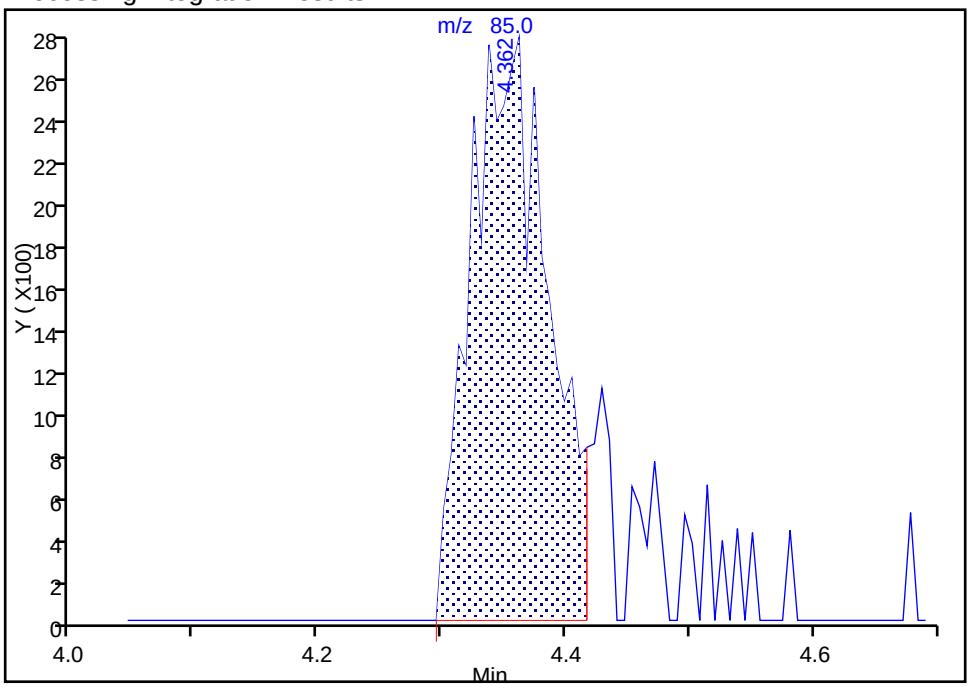
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3043P.D
Injection Date: 10-Oct-2017 16:29:30 Instrument ID: HP5973P
Lims ID: IC 2
Client ID:
Operator ID: RF ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

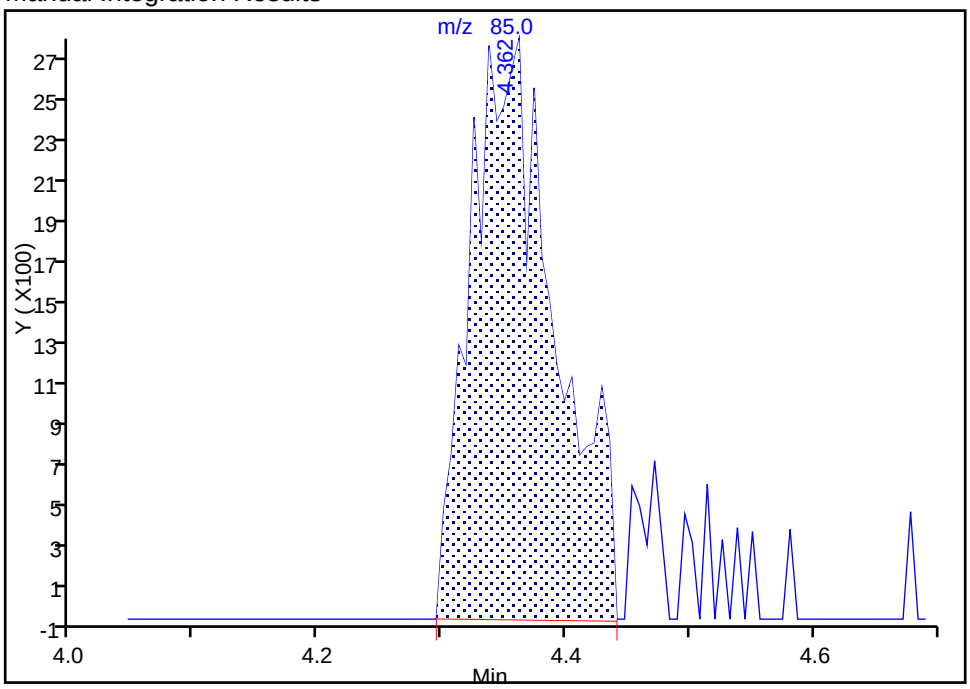
Processing Integration Results

RT: 4.36
Area: 12159
Amount: 0.856248
Amount Units: ug/L



Manual Integration Results

RT: 4.36
Area: 13221
Amount: 0.881280
Amount Units: ug/L



Reviewer: HillL, 11-Oct-2017 11:05:51
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

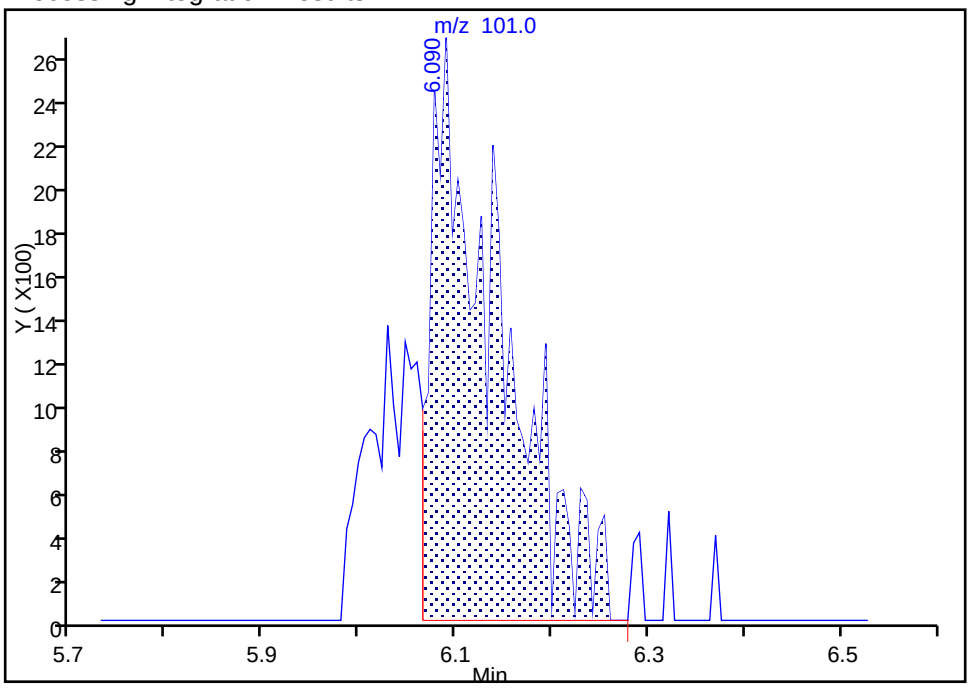
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3043P.D
Injection Date: 10-Oct-2017 16:29:30 Instrument ID: HP5973P
Lims ID: IC 2
Client ID:
Operator ID: RF ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

14 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

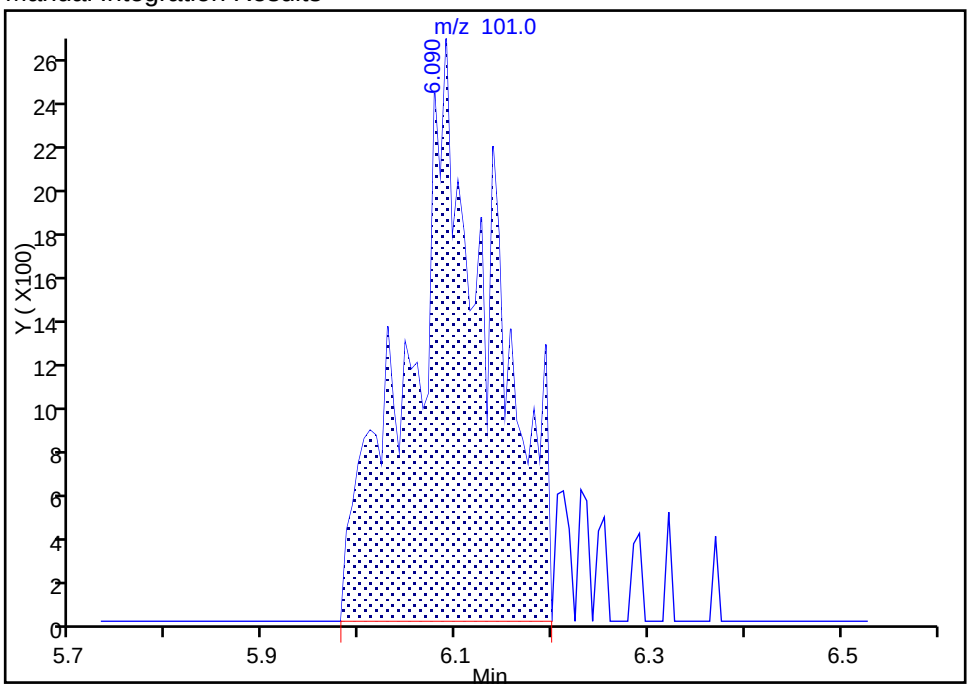
Processing Integration Results

RT: 6.09
Area: 12747
Amount: 0.872218
Amount Units: ug/L



Manual Integration Results

RT: 6.09
Area: 15621
Amount: 0.724385
Amount Units: ug/L



Reviewer: farrellr, 11-Oct-2017 08:45:41
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3044P.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Oct-2017 16:56:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0066269-007
Operator ID: RF Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Oct-2017 12:02:17 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: farrellr Date: 11-Oct-2017 08:50:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.433	10.434	-0.001	97	176415	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.388	14.382	0.006	92	393056	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.344	17.345	-0.001	95	420314	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.636	9.637	-0.001	92	245504	25.0	24.7	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.093	10.093	0.000	0	170749	25.0	24.8	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	868443	25.0	24.8	
$ 6 4-Bromofluorobenzene (Surr	174	15.884	15.878	0.006	89	307388	25.0	24.1	
10 Dichlorodifluoromethane	85	4.338	4.338	0.000	98	76925	5.00	5.24	M
11 Chloromethane	50	4.776	4.770	0.006	99	154436	5.00	4.81	
17 Vinyl chloride	62	4.976	4.971	0.005	97	96297	5.00	4.85	
144 Butadiene	54	5.007	5.001	0.006	99	114644	5.00	4.81	
12 Bromomethane	94	5.609	5.609	0.000	90	55173	5.00	5.11	
13 Chloroethane	64	5.712	5.695	0.018	94	53930	5.00	4.73	
19 Dichlorofluoromethane	67	6.029	6.023	0.006	96	127717	5.00	4.95	
14 Trichlorofluoromethane	101	6.102	6.090	0.012	78	103299	5.00	4.89	
20 Ethyl ether	59	6.394	6.388	0.006	91	67373	5.00	4.68	
22 Acrolein	56	6.698	6.698	0.000	97	55639	25.0	23.6	
16 1,1,2-Trichloro-1,2,2-trif	101	6.722	6.735	-0.013	91	67223	5.00	5.35	
25 1,1-Dichloroethene	96	6.832	6.832	0.000	90	65444	5.00	5.04	
24 Acetone	43	6.887	6.887	0.000	97	196695	25.0	22.0	
18 Iodomethane	142	7.124	7.124	0.000	100	112839	5.00	4.95	
30 Methyl acetate	43	7.252	7.252	0.000	99	184633	10.0	8.87	
27 Carbon disulfide	76	7.270	7.270	0.000	83	226252	5.00	5.02	
28 3-Chloro-1-propene	41	7.282	7.276	0.006	88	181192	5.00	4.93	
31 Methylene Chloride	84	7.501	7.501	0.000	87	82276	5.00	4.43	
33 2-Methyl-2-propanol	59	7.501	7.501	0.000	76	112615	50.0	42.6	
32 Methyl tert-butyl ether	73	7.690	7.690	0.000	91	186646	5.00	4.73	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	90	63533	5.00	4.81	
34 Acrylonitrile	53	7.811	7.812	-0.001	98	385737	50.0	44.6	
36 Hexane	57	7.975	7.976	-0.001	94	110574	5.00	5.02	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	451674	10.0	9.22	
40 1,1-Dichloroethane	63	8.341	8.335	0.005	97	135725	5.00	4.98	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	95	276828	25.0	21.1	
45 2,2-Dichloropropane	77	9.028	9.034	-0.006	54	63269	5.00	5.49	
43 cis-1,2-Dichloroethene	96	9.052	9.053	-0.001	89	67751	5.00	4.85	
50 Chlorobromomethane	128	9.387	9.387	0.000	85	35677	5.00	5.10	
51 Tetrahydrofuran	42	9.399	9.399	0.000	86	72382	10.0	8.72	
49 Chloroform	83	9.417	9.418	-0.001	91	115317	5.00	4.94	
52 1,1,1-Trichloroethane	97	9.655	9.655	0.000	73	100501	5.00	5.05	
54 Cyclohexane	56	9.697	9.698	-0.001	96	145859	5.00	4.93	
56 1,1-Dichloropropene	75	9.831	9.831	0.000	76	82913	5.00	4.98	
55 Carbon tetrachloride	117	9.849	9.837	0.012	63	67979	5.00	4.58	
53 Isobutyl alcohol	43	9.843	9.844	-0.001	88	135746	125.0	99.5	
57 Benzene	78	10.129	10.129	0.000	94	230457	5.00	4.97	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	94	124207	5.00	4.80	
59 n-Heptane	43	10.184	10.184	0.000	92	102766	5.00	4.39	
62 Trichloroethene	95	10.877	10.884	-0.007	92	65512	5.00	4.99	
64 Methylcyclohexane	83	11.084	11.078	0.006	90	83746	5.00	4.76	
63 1,2-Dichloropropane	63	11.230	11.224	0.006	81	72617	5.00	4.87	
68 1,4-Dioxane	88	11.358	11.352	0.006	90	11298	100.0	73.4	
69 Dibromomethane	93	11.437	11.431	0.006	96	41592	5.00	4.66	
70 Dichlorobromomethane	83	11.559	11.565	-0.006	93	82600	5.00	4.73	
71 2-Chloroethyl vinyl ether	63	11.814	11.815	-0.001	83	45621	5.00	4.36	
73 cis-1,3-Dichloropropene	75	12.094	12.094	0.000	79	94449	5.00	4.76	
75 4-Methyl-2-pentanone (MIBK	43	12.204	12.198	0.006	97	602724	25.0	22.1	
76 Toluene	92	12.520	12.520	0.000	96	141840	5.00	4.92	
77 Ethyl methacrylate	69	12.739	12.739	0.000	84	70960	5.00	4.40	
78 trans-1,3-Dichloropropene	75	12.806	12.812	-0.006	85	92184	5.00	4.61	
79 1,1,2-Trichloroethane	83	13.098	13.098	0.000	93	49412	5.00	4.96	
80 Tetrachloroethene	166	13.250	13.238	0.012	92	69656	5.00	4.94	
83 2-Hexanone	43	13.286	13.287	-0.001	95	427075	25.0	21.8	
82 1,3-Dichloropropane	76	13.329	13.329	0.000	88	91324	5.00	4.71	
81 Chlorodibromomethane	129	13.676	13.670	0.006	88	61979	5.00	4.45	
85 Ethylene Dibromide	107	13.870	13.871	-0.001	96	58492	5.00	4.56	
87 Chlorobenzene	112	14.424	14.424	0.000	97	169850	5.00	4.85	
89 Ethylbenzene	91	14.467	14.467	0.000	97	270764	5.00	4.87	
88 1,1,1,2-Tetrachloroethane	131	14.509	14.510	-0.001	92	59768	5.00	4.60	
90 m-Xylene & p-Xylene	106	14.607	14.607	0.000	0	105745	5.00	4.90	
93 o-Xylene	106	15.154	15.154	0.000	98	100133	5.00	4.67	
94 Styrene	104	15.178	15.179	-0.001	90	160504	5.00	4.54	
92 Bromoform	173	15.568	15.568	0.000	89	46381	5.00	4.41	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	251051	5.00	4.88	
97 1,1,2,2-Tetrachloroethane	83	16.054	16.055	-0.001	96	73162	5.00	4.60	
98 trans-1,4-Dichloro-2-buten	53	16.109	16.104	0.005	46	40150	5.00	4.33	
99 N-Propylbenzene	91	16.109	16.110	-0.001	98	310086	5.00	4.92	
100 Bromobenzene	156	16.134	16.128	0.006	87	81907	5.00	4.91	
101 1,2,3-Trichloropropane	110	16.146	16.152	-0.006	86	23269	5.00	4.49	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	94	213491	5.00	4.74	
103 2-Chlorotoluene	126	16.316	16.316	0.000	93	69469	5.00	4.98	
105 4-Chlorotoluene	126	16.444	16.444	0.000	97	69987	5.00	4.77	
106 tert-Butylbenzene	134	16.736	16.736	0.000	96	48405	5.00	4.77	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	98	225777	5.00	4.82	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	17.004	17.004	0.000	97	256011	5.00	4.78	
112 4-Isopropyltoluene	119	17.150	17.150	0.000	98	234322	5.00	4.64	
110 1,3-Dichlorobenzene	146	17.265	17.272	-0.007	96	149063	5.00	4.83	
111 1,4-Dichlorobenzene	146	17.375	17.375	0.000	95	157122	5.00	4.90	
115 n-Butylbenzene	91	17.661	17.661	0.000	97	201239	5.00	4.67	
116 1,2-Dichlorobenzene	146	17.873	17.874	-0.001	95	147145	5.00	4.91	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	73	21618	5.00	4.70	
119 1,2,4-Trichlorobenzene	180	20.027	20.027	0.000	93	104110	5.00	4.73	
120 Hexachlorobutadiene	225	20.155	20.143	0.012	95	41977	5.00	4.49	
121 Naphthalene	128	20.477	20.472	0.005	97	256299	5.00	4.44	
122 1,2,3-Trichlorobenzene	180	20.854	20.849	0.005	93	99206	5.00	4.57	
S 123 1,2-Dichloroethene, Total	1				0			9.66	
S 124 1,3-Dichloropropene, Total	1				0			9.36	
S 125 Total BTEX	1				0			24.3	
S 126 Xylenes, Total	1				0			9.57	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00112	Amount Added:	5.00	Units: uL	
GAS CORP mix_00245	Amount Added:	5.00	Units: uL	
P 8260 IS_00247	Amount Added:	1.25	Units: uL	Run Reagent
P 8260 Surr._00242	Amount Added:	1.25	Units: uL	Run Reagent

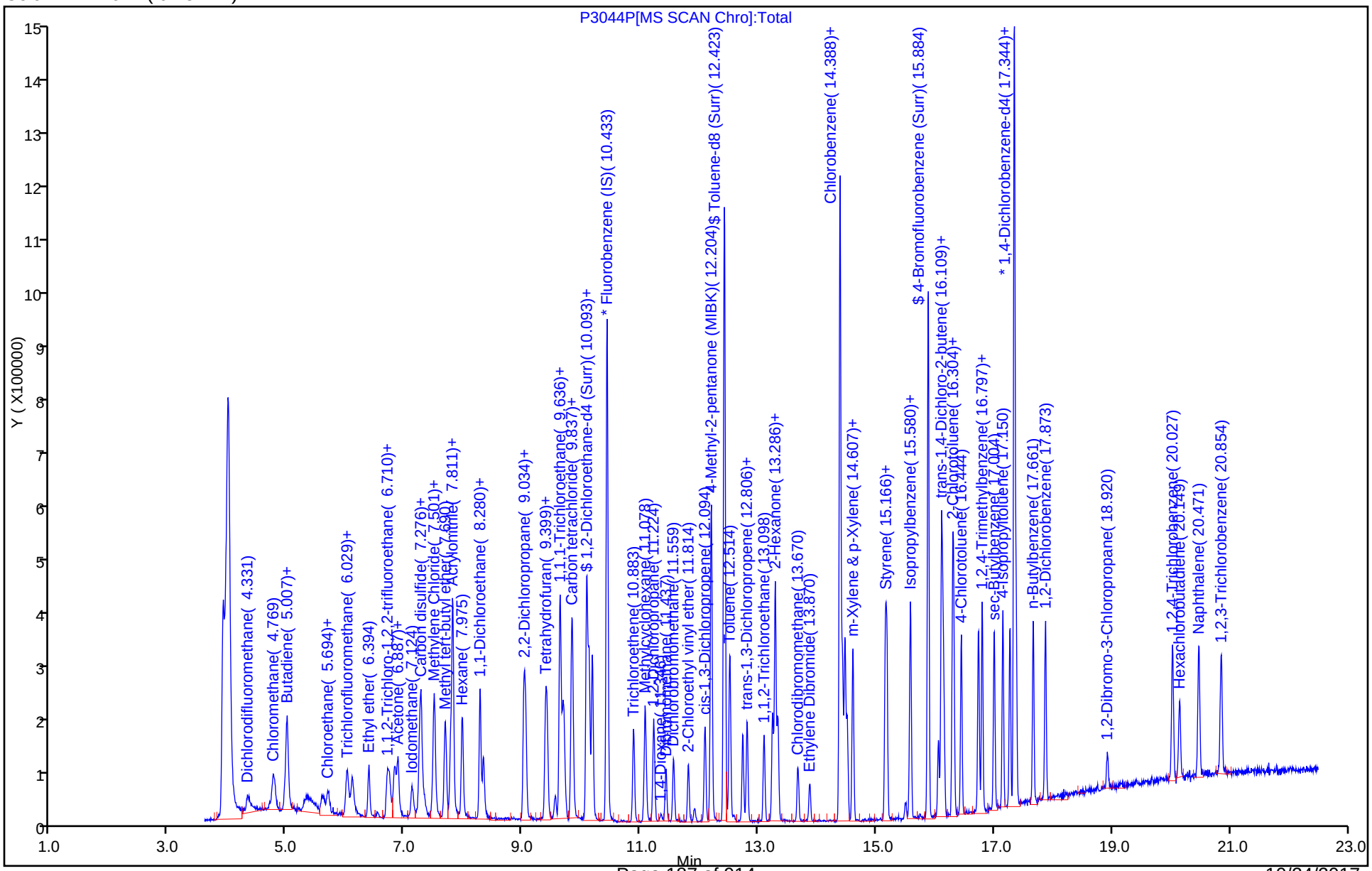
Report Date: 11-Oct-2017 12:02:19 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3044P.D

Injection Date:	10-Oct-2017 16:56:30	Instrument ID:	HP5973P	Operator ID:	RF
Lims ID:	IC 3			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

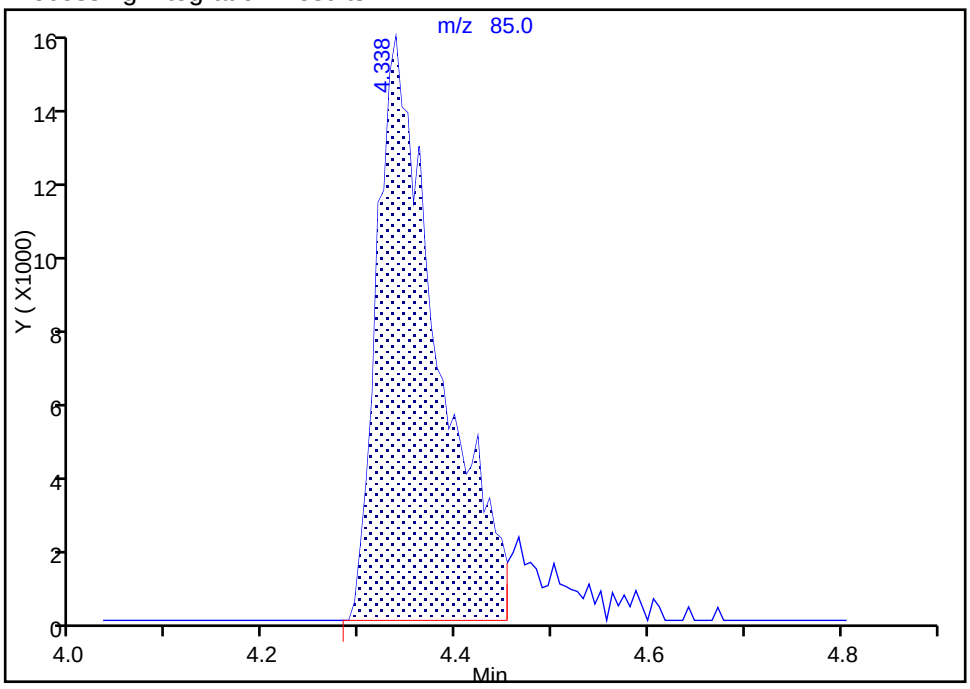
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3044P.D
Injection Date: 10-Oct-2017 16:56:30 Instrument ID: HP5973P
Lims ID: IC 3
Client ID:
Operator ID: RF ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

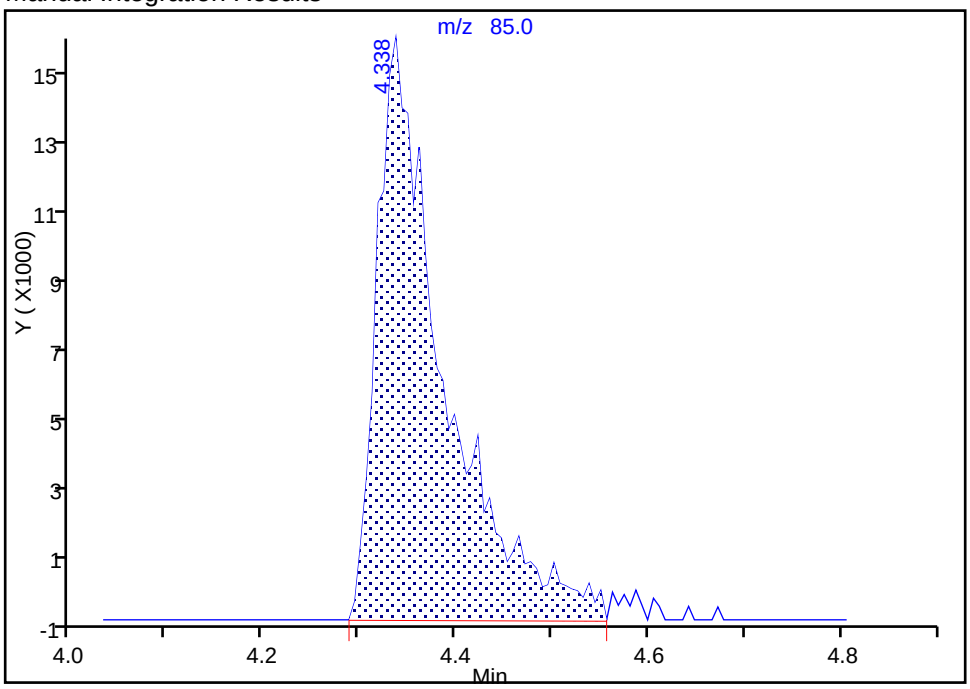
Processing Integration Results

RT: 4.34
Area: 69794
Amount: 4.968135
Amount Units: ug/L



Manual Integration Results

RT: 4.34
Area: 76925
Amount: 5.238494
Amount Units: ug/L



Reviewer: HillL, 11-Oct-2017 11:06:18
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3045P.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Oct-2017 17:24:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0066269-008
Operator ID: RF Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Oct-2017 12:02:21 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: farrellr Date: 11-Oct-2017 08:52:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.434	10.434	0.000	97	177715	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.388	14.388	0.000	91	393879	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.345	17.345	0.000	95	426169	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.637	9.637	0.000	92	255973	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.093	10.093	0.000	0	175676	25.0	25.3	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	884953	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr	174	15.884	15.884	0.000	89	324602	25.0	25.4	
10 Dichlorodifluoromethane	85	4.332	4.332	0.000	97	173023	10.0	11.7	M
11 Chloromethane	50	4.764	4.764	0.000	99	356273	10.0	11.0	
17 Vinyl chloride	62	4.971	4.971	0.000	96	221163	10.0	11.0	
144 Butadiene	54	5.001	5.001	0.000	99	262764	10.0	10.9	
12 Bromomethane	94	5.609	5.609	0.000	91	122590	10.0	11.3	
13 Chloroethane	64	5.701	5.701	0.000	94	130777	10.0	11.4	
19 Dichlorofluoromethane	67	6.023	6.023	0.000	96	300416	10.0	11.6	
14 Trichlorofluoromethane	101	6.102	6.102	0.000	95	229935	10.0	10.8	
20 Ethyl ether	59	6.388	6.388	0.000	88	163301	10.0	11.2	
22 Acrolein	56	6.698	6.698	0.000	97	122699	50.0	51.7	
16 1,1,2-Trichloro-1,2,2-trif	101	6.729	6.729	0.000	94	140959	10.0	11.1	
25 1,1-Dichloroethene	96	6.826	6.826	0.000	91	132066	10.0	10.1	
24 Acetone	43	6.881	6.881	0.000	96	451181	50.0	50.1	
18 Iodomethane	142	7.124	7.124	0.000	98	259609	10.0	11.3	
30 Methyl acetate	43	7.252	7.252	0.000	99	458527	20.0	21.9	
27 Carbon disulfide	76	7.276	7.276	0.000	74	511466	10.0	11.3	
28 3-Chloro-1-propene	41	7.276	7.276	0.000	86	402052	10.0	10.9	
33 2-Methyl-2-propanol	59	7.501	7.501	0.000	78	269368	100.0	101.2	
31 Methylene Chloride	84	7.507	7.507	0.000	87	188595	10.0	11.3	
32 Methyl tert-butyl ether	73	7.690	7.690	0.000	91	440808	10.0	11.1	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	89	146961	10.0	11.0	
34 Acrylonitrile	53	7.818	7.818	0.000	96	896885	100.0	102.9	
36 Hexane	57	7.976	7.976	0.000	94	251039	10.0	11.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	1072652	20.0	21.7	
40 1,1-Dichloroethane	63	8.341	8.341	0.000	97	308519	10.0	11.2	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	95	680320	50.0	51.6	
45 2,2-Dichloropropane	77	9.028	9.028	0.000	51	136915	10.0	11.8	
43 cis-1,2-Dichloroethene	96	9.053	9.053	0.000	88	155372	10.0	11.1	
50 Chlorobromomethane	128	9.381	9.381	0.000	85	80576	10.0	11.4	
51 Tetrahydrofuran	42	9.399	9.399	0.000	86	171456	20.0	20.5	
49 Chloroform	83	9.412	9.412	0.000	94	269740	10.0	11.5	
52 1,1,1-Trichloroethane	97	9.655	9.655	0.000	96	226364	10.0	11.3	
54 Cyclohexane	56	9.697	9.697	0.000	96	333098	10.0	11.2	
56 1,1-Dichloropropene	75	9.831	9.831	0.000	75	188689	10.0	11.2	
55 Carbon tetrachloride	117	9.843	9.843	0.000	61	156933	10.0	10.5	
53 Isobutyl alcohol	43	9.850	9.850	0.000	87	346375	250.0	252.0	
57 Benzene	78	10.129	10.129	0.000	94	529491	10.0	11.3	
59 n-Heptane	43	10.184	10.184	0.000	93	260991	10.0	11.1	
60 1,2-Dichloroethane	62	10.190	10.190	0.000	94	294408	10.0	11.3	
62 Trichloroethene	95	10.884	10.884	0.000	91	146363	10.0	11.1	
64 Methylcyclohexane	83	11.078	11.078	0.000	91	199875	10.0	11.3	
63 1,2-Dichloropropane	63	11.224	11.224	0.000	80	168649	10.0	11.2	
68 1,4-Dioxane	88	11.346	11.346	0.000	94	32760	200.0	212.4	M
69 Dibromomethane	93	11.431	11.431	0.000	95	97427	10.0	10.8	
70 Dichlorobromomethane	83	11.565	11.565	0.000	94	201472	10.0	11.5	
71 2-Chloroethyl vinyl ether	63	11.815	11.815	0.000	84	114280	10.0	10.8	
73 cis-1,3-Dichloropropene	75	12.094	12.094	0.000	80	224128	10.0	11.2	
75 4-Methyl-2-pentanone (MIBK	43	12.198	12.198	0.000	97	1457243	50.0	53.2	
76 Toluene	92	12.514	12.514	0.000	95	321944	10.0	11.1	
77 Ethyl methacrylate	69	12.733	12.733	0.000	84	174128	10.0	10.8	
78 trans-1,3-Dichloropropene	75	12.812	12.812	0.000	88	224317	10.0	11.2	
79 1,1,2-Trichloroethane	83	13.092	13.092	0.000	94	105674	10.0	10.6	
80 Tetrachloroethene	166	13.244	13.244	0.000	91	153615	10.0	10.9	
83 2-Hexanone	43	13.287	13.287	0.000	96	1016410	50.0	51.7	
82 1,3-Dichloropropane	76	13.335	13.335	0.000	90	220913	10.0	11.4	
81 Chlorodibromomethane	129	13.676	13.676	0.000	89	151194	10.0	10.8	
85 Ethylene Dibromide	107	13.865	13.865	0.000	98	138725	10.0	10.8	
87 Chlorobenzene	112	14.424	14.424	0.000	96	400675	10.0	11.4	
89 Ethylbenzene	91	14.467	14.467	0.000	96	609781	10.0	10.9	
88 1,1,1,2-Tetrachloroethane	131	14.510	14.510	0.000	91	144668	10.0	11.1	
90 m-Xylene & p-Xylene	106	14.607	14.607	0.000	0	246433	10.0	11.4	
93 o-Xylene	106	15.154	15.154	0.000	97	238920	10.0	11.1	
94 Styrene	104	15.179	15.179	0.000	91	393613	10.0	11.1	
92 Bromoform	173	15.568	15.568	0.000	89	109870	10.0	10.4	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	598219	10.0	11.5	
97 1,1,2,2-Tetrachloroethane	83	16.055	16.055	0.000	97	177519	10.0	11.0	
98 trans-1,4-Dichloro-2-buten	53	16.103	16.103	0.000	57	100509	10.0	10.7	
99 N-Propylbenzene	91	16.110	16.110	0.000	98	725957	10.0	11.4	
100 Bromobenzene	156	16.134	16.134	0.000	87	187348	10.0	11.1	
101 1,2,3-Trichloropropane	110	16.146	16.146	0.000	88	57372	10.0	10.9	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	95	509518	10.0	11.2	
103 2-Chlorotoluene	126	16.316	16.316	0.000	94	164462	10.0	11.6	
105 4-Chlorotoluene	126	16.444	16.444	0.000	97	166200	10.0	11.2	
106 tert-Butylbenzene	134	16.736	16.736	0.000	96	115330	10.0	11.2	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	98	548109	10.0	11.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	17.004	17.004	0.000	96	628195	10.0	11.6	
112 4-Isopropyltoluene	119	17.150	17.150	0.000	97	579456	10.0	11.3	
110 1,3-Dichlorobenzene	146	17.272	17.272	0.000	97	354095	10.0	11.3	
111 1,4-Dichlorobenzene	146	17.375	17.375	0.000	92	363441	10.0	11.2	
115 n-Butylbenzene	91	17.667	17.667	0.000	97	502587	10.0	11.5	
116 1,2-Dichlorobenzene	146	17.874	17.874	0.000	96	346311	10.0	11.4	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	75	42010	10.0	9.62	
119 1,2,4-Trichlorobenzene	180	20.027	20.027	0.000	93	254898	10.0	11.4	
120 Hexachlorobutadiene	225	20.149	20.149	0.000	94	106994	10.0	11.3	
121 Naphthalene	128	20.471	20.471	0.000	97	646535	10.0	11.1	
122 1,2,3-Trichlorobenzene	180	20.849	20.849	0.000	93	251101	10.0	11.4	
S 125 Total BTEX	1				0			55.9	
S 126 Xylenes, Total	1				0			22.5	
S 123 1,2-Dichloroethene, Total	1				0			22.1	
S 124 1,3-Dichloropropene, Total	1				0			22.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00112	Amount Added:	5.00	Units: uL	
GAS CORP mix_00245	Amount Added:	5.00	Units: uL	
P 8260 IS_00247	Amount Added:	1.25	Units: uL	Run Reagent
P 8260 Surr._00242	Amount Added:	1.25	Units: uL	Run Reagent

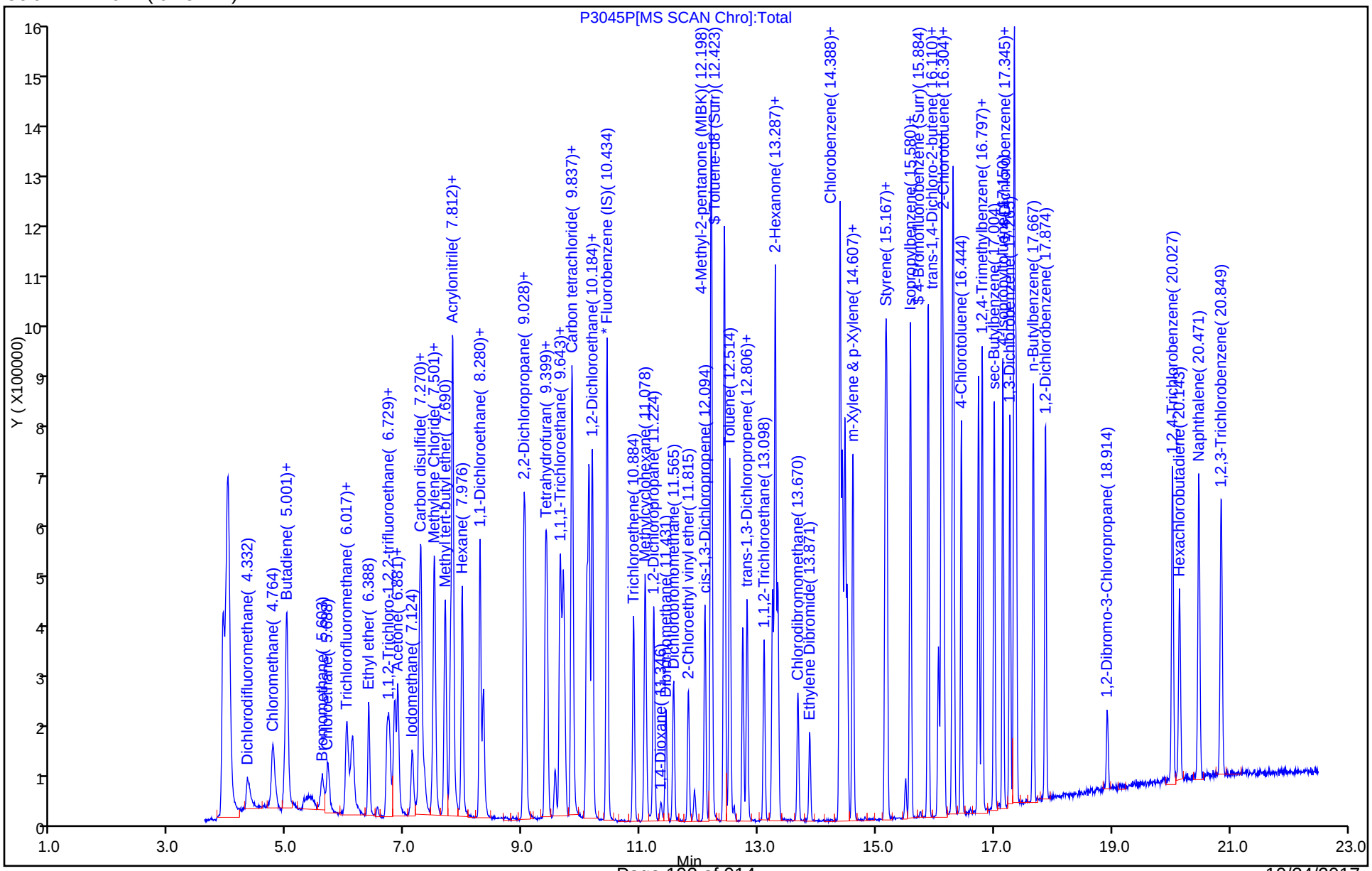
Report Date: 11-Oct-2017 12:02:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3045P.D

Injection Date:	10-Oct-2017 17:24:30	Instrument ID:	HP5973P	Operator ID:	RF
Lims ID:	IC 4			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo

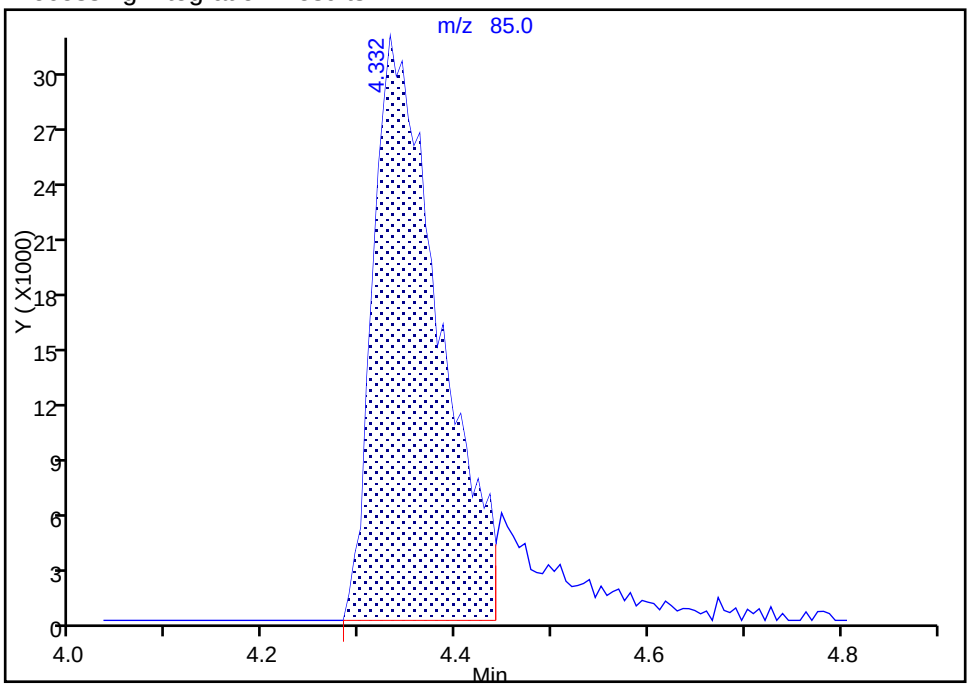
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3045P.D
Injection Date: 10-Oct-2017 17:24:30 Instrument ID: HP5973P
Lims ID: IC 4
Client ID:
Operator ID: RF ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

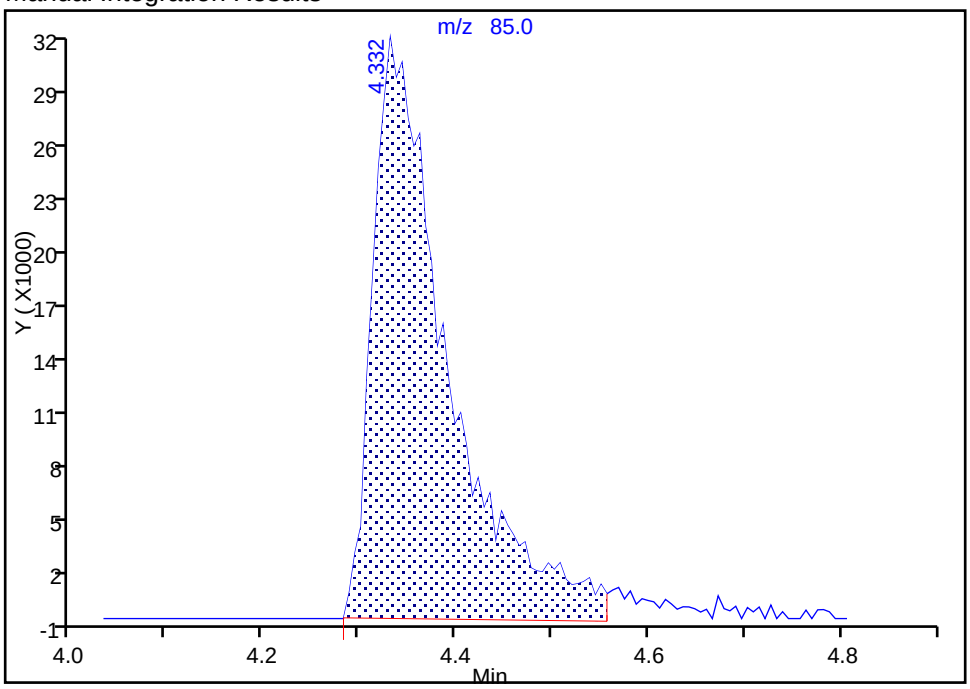
Processing Integration Results

RT: 4.33
Area: 151967
Amount: 10.584801
Amount Units: ug/L



Manual Integration Results

RT: 4.33
Area: 173023
Amount: 11.696453
Amount Units: ug/L



Reviewer: HillL, 11-Oct-2017 11:06:43
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

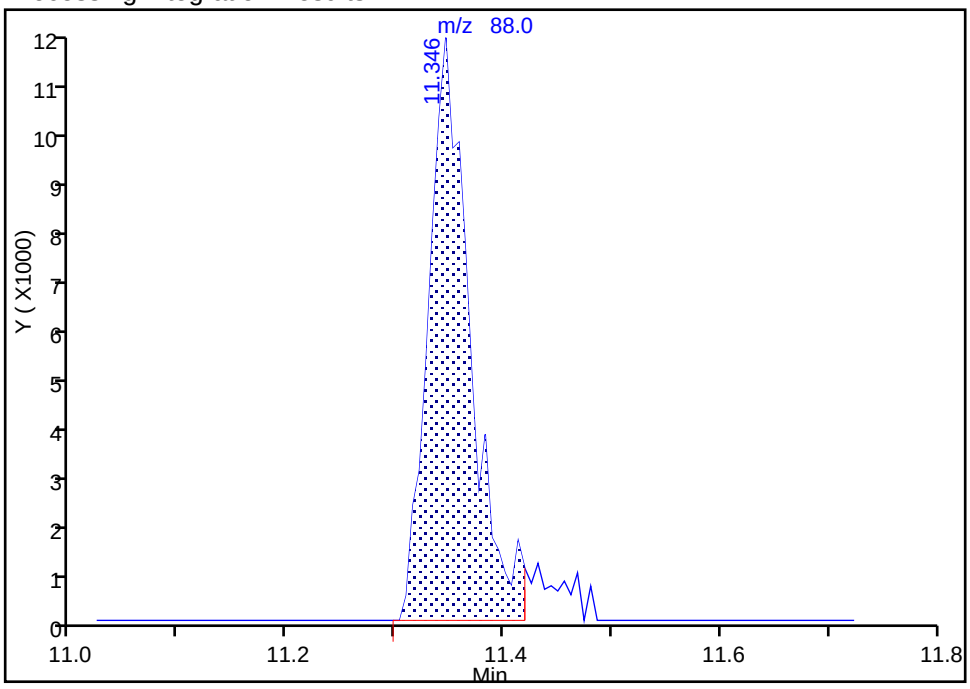
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3045P.D
Injection Date: 10-Oct-2017 17:24:30 Instrument ID: HP5973P
Lims ID: IC 4
Client ID:
Operator ID: RF ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

68 1,4-Dioxane, CAS: 123-91-1

Signal: 1

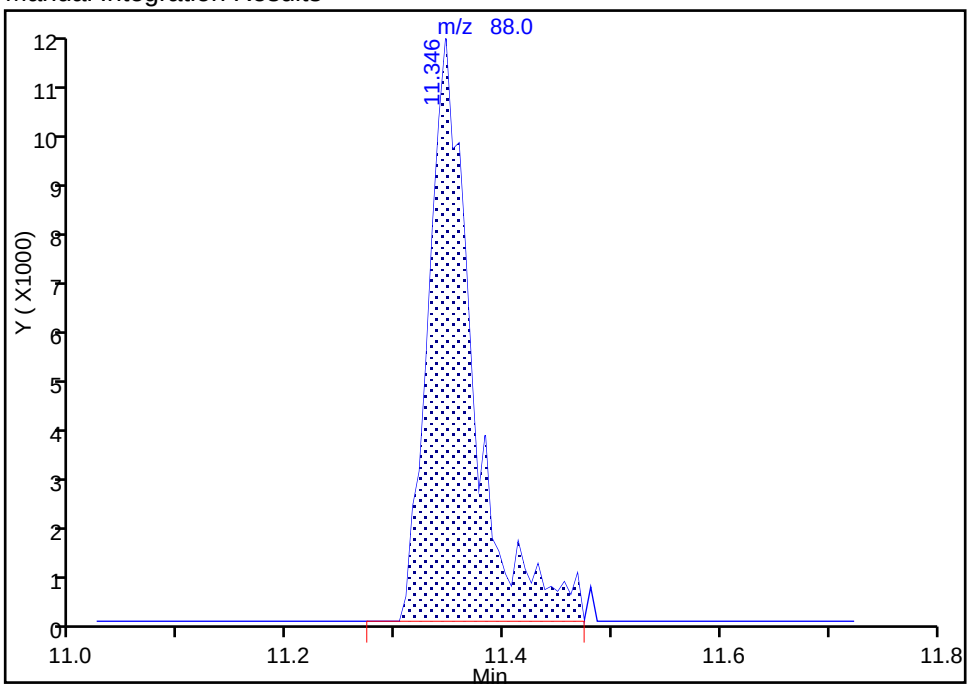
Processing Integration Results

RT: 11.35
Area: 30593
Amount: 210.0488
Amount Units: ug/L



Manual Integration Results

RT: 11.35
Area: 32760
Amount: 212.4032
Amount Units: ug/L



Reviewer: farrellr, 11-Oct-2017 08:51:32
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3046P.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 10-Oct-2017 17:51:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0066269-009
Operator ID: RF Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Oct-2017 12:02:26 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: farrellr Date: 11-Oct-2017 08:40:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.434	10.434	0.000	97	179568	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.388	14.388	0.000	91	401868	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.345	17.345	0.000	94	439698	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.637	9.637	0.000	92	258120	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.093	10.093	0.000	0	179745	25.0	25.6	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	889851	25.0	24.8	
$ 6 4-Bromofluorobenzene (Surr	174	15.878	15.878	0.000	90	327459	25.0	25.1	
10 Dichlorodifluoromethane	85	4.338	4.338	0.000	97	352250	25.0	23.6	
11 Chloromethane	50	4.770	4.770	0.000	99	758092	25.0	23.2	
17 Vinyl chloride	62	4.971	4.971	0.000	97	483104	25.0	23.9	
144 Butadiene	54	5.001	5.001	0.000	99	570491	25.0	23.5	
12 Bromomethane	94	5.609	5.609	0.000	92	273000	25.0	24.8	
13 Chloroethane	64	5.695	5.695	0.000	94	280432	25.0	24.1	
19 Dichlorofluoromethane	67	6.023	6.023	0.000	97	635395	25.0	24.2	
14 Trichlorofluoromethane	101	6.090	6.090	0.000	97	526285	25.0	24.5	
20 Ethyl ether	59	6.388	6.388	0.000	90	365394	25.0	24.9	
22 Acrolein	56	6.698	6.698	0.000	98	324883	125.0	135.4	
16 1,1,2-Trichloro-1,2,2-trif	101	6.735	6.735	0.000	93	315331	25.0	24.7	
25 1,1-Dichloroethene	96	6.832	6.832	0.000	90	304549	25.0	23.1	
24 Acetone	43	6.887	6.887	0.000	96	1194169	125.0	131.2	
18 Iodomethane	142	7.124	7.124	0.000	99	582668	25.0	25.1	
30 Methyl acetate	43	7.252	7.252	0.000	99	1168710	50.0	55.2	
27 Carbon disulfide	76	7.270	7.270	0.000	81	1149690	25.0	25.1	
28 3-Chloro-1-propene	41	7.276	7.276	0.000	89	903732	25.0	24.2	
31 Methylene Chloride	84	7.501	7.501	0.000	87	363906	25.0	22.5	
33 2-Methyl-2-propanol	59	7.501	7.501	0.000	89	756154	250.0	281.3	
32 Methyl tert-butyl ether	73	7.690	7.690	0.000	91	1002226	25.0	25.0	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	88	309242	25.0	23.0	
34 Acrylonitrile	53	7.812	7.812	0.000	96	2412765	250.0	274.1	
36 Hexane	57	7.976	7.976	0.000	92	532505	25.0	23.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	2686123	50.0	53.9	
40 1,1-Dichloroethane	63	8.335	8.335	0.000	97	685120	25.0	24.7	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	95	1863634	125.0	139.8	
45 2,2-Dichloropropane	77	9.034	9.034	0.000	81	295827	25.0	25.2	
43 cis-1,2-Dichloroethene	96	9.053	9.053	0.000	90	332507	25.0	23.4	
50 Chlorobromomethane	128	9.387	9.387	0.000	85	172471	25.0	24.2	
51 Tetrahydrofuran	42	9.399	9.399	0.000	90	458102	50.0	54.2	
49 Chloroform	83	9.418	9.418	0.000	94	590322	25.0	24.8	
52 1,1,1-Trichloroethane	97	9.655	9.655	0.000	95	492237	25.0	24.3	
54 Cyclohexane	56	9.698	9.698	0.000	96	733781	25.0	24.4	
56 1,1-Dichloropropene	75	9.831	9.831	0.000	89	422340	25.0	24.9	
55 Carbon tetrachloride	117	9.837	9.837	0.000	56	360654	25.0	23.9	
53 Isobutyl alcohol	43	9.844	9.844	0.000	90	979227	625.0	705.2	
57 Benzene	78	10.129	10.129	0.000	94	1162159	25.0	24.6	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	94	650724	25.0	24.7	
59 n-Heptane	43	10.184	10.184	0.000	88	557706	25.0	23.4	
62 Trichloroethene	95	10.884	10.884	0.000	92	320023	25.0	24.0	
64 Methylcyclohexane	83	11.078	11.078	0.000	92	432229	25.0	24.1	
63 1,2-Dichloropropane	63	11.224	11.224	0.000	81	365450	25.0	24.1	
68 1,4-Dioxane	88	11.352	11.352	0.000	89	81432	500.0	517.5	
69 Dibromomethane	93	11.431	11.431	0.000	95	224759	25.0	24.8	
70 Dichlorobromomethane	83	11.565	11.565	0.000	94	446039	25.0	25.1	
71 2-Chloroethyl vinyl ether	63	11.815	11.815	0.000	85	282799	25.0	26.5	
73 cis-1,3-Dichloropropene	75	12.094	12.094	0.000	79	505015	25.0	25.0	
75 4-Methyl-2-pentanone (MIBK	43	12.198	12.198	0.000	97	3836099	125.0	137.3	
76 Toluene	92	12.520	12.520	0.000	96	729601	25.0	24.7	
77 Ethyl methacrylate	69	12.739	12.739	0.000	84	438095	25.0	26.5	
78 trans-1,3-Dichloropropene	75	12.812	12.812	0.000	87	507946	25.0	24.8	
79 1,1,2-Trichloroethane	83	13.098	13.098	0.000	94	252742	25.0	24.8	
80 Tetrachloroethene	166	13.238	13.238	0.000	94	343526	25.0	23.8	
83 2-Hexanone	43	13.287	13.287	0.000	97	2767473	125.0	138.1	
82 1,3-Dichloropropane	76	13.329	13.329	0.000	95	495554	25.0	25.0	
81 Chlorodibromomethane	129	13.670	13.670	0.000	89	356036	25.0	25.0	
85 Ethylene Dibromide	107	13.871	13.871	0.000	98	330223	25.0	25.2	
87 Chlorobenzene	112	14.424	14.424	0.000	95	886492	25.0	24.7	
89 Ethylbenzene	91	14.467	14.467	0.000	97	1374233	25.0	24.2	
88 1,1,1,2-Tetrachloroethane	131	14.510	14.510	0.000	93	330559	25.0	24.9	
90 m-Xylene & p-Xylene	106	14.607	14.607	0.000	0	547960	25.0	24.8	
93 o-Xylene	106	15.154	15.154	0.000	97	545790	25.0	24.9	
94 Styrene	104	15.179	15.179	0.000	92	897953	25.0	24.8	
92 Bromoform	173	15.568	15.568	0.000	91	281781	25.0	26.2	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	1326529	25.0	24.6	
97 1,1,2,2-Tetrachloroethane	83	16.055	16.055	0.000	97	428065	25.0	25.7	
98 trans-1,4-Dichloro-2-buten	53	16.104	16.104	0.000	46	253255	25.0	26.1	
99 N-Propylbenzene	91	16.110	16.110	0.000	97	1590484	25.0	24.1	
100 Bromobenzene	156	16.128	16.128	0.000	87	428420	25.0	24.6	
101 1,2,3-Trichloropropane	110	16.152	16.152	0.000	88	139228	25.0	25.7	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	96	1140863	25.0	24.2	
103 2-Chlorotoluene	126	16.316	16.316	0.000	94	359026	25.0	24.6	
105 4-Chlorotoluene	126	16.444	16.444	0.000	97	372016	25.0	24.2	
106 tert-Butylbenzene	134	16.736	16.736	0.000	96	250341	25.0	23.6	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	97	1201157	25.0	24.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	17.004	17.004	0.000	96	1342703	25.0	24.0	
112 4-Isopropyltoluene	119	17.150	17.150	0.000	97	1258243	25.0	23.8	
110 1,3-Dichlorobenzene	146	17.272	17.272	0.000	97	775605	25.0	24.0	
111 1,4-Dichlorobenzene	146	17.375	17.375	0.000	92	799185	25.0	23.8	
115 n-Butylbenzene	91	17.661	17.661	0.000	97	1044618	25.0	23.2	
116 1,2-Dichlorobenzene	146	17.874	17.874	0.000	96	772922	25.0	24.7	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	76	107964	25.0	25.0	
119 1,2,4-Trichlorobenzene	180	20.027	20.027	0.000	94	549071	25.0	23.9	
120 Hexachlorobutadiene	225	20.143	20.143	0.000	94	215500	25.0	22.1	
121 Naphthalene	128	20.472	20.472	0.000	97	1567096	25.0	26.0	
122 1,2,3-Trichlorobenzene	180	20.849	20.849	0.000	93	530605	25.0	23.3	

Reagents:

8260 CORP mix_00112	Amount Added: 12.50	Units: uL	
GAS CORP mix_00245	Amount Added: 12.50	Units: uL	
P 8260 IS_00247	Amount Added: 1.25	Units: uL	Run Reagent
P 8260 Surr._00242	Amount Added: 1.25	Units: uL	Run Reagent

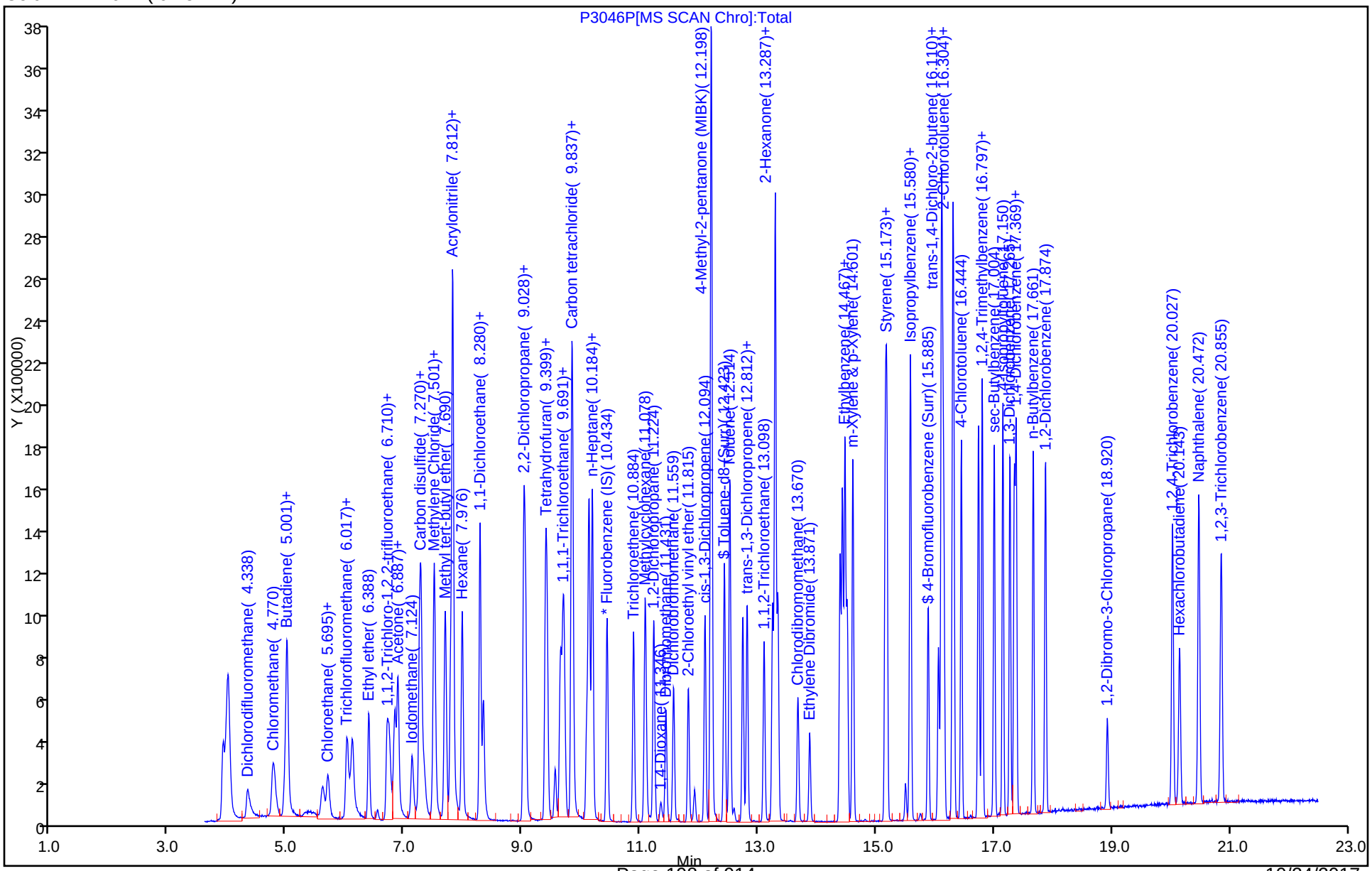
Report Date: 11-Oct-2017 12:02:28 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3046P.D

Injection Date:	10-Oct-2017 17:51:30	Instrument ID:	HP5973P	Operator ID:	RF
Lims ID:	ICIS 5			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3047P.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Oct-2017 19:55:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0066269-010
Operator ID: RF Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Oct-2017 12:02:29 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: farrellr Date: 11-Oct-2017 08:53:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.434	10.434	0.000	97	187933	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.382	14.388	-0.006	93	416802	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.345	17.345	0.000	95	454653	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.637	9.637	0.000	92	264657	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.093	10.093	0.000	0	184210	25.0	25.1	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	930160	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr	174	15.885	15.878	0.007	89	340116	25.0	25.1	
10 Dichlorodifluoromethane	85	4.332	4.338	-0.006	96	918506	50.0	58.7	M
11 Chloromethane	50	4.770	4.770	0.000	99	1819431	50.0	53.2	
17 Vinyl chloride	62	4.977	4.971	0.006	97	1206067	50.0	57.0	
144 Butadiene	54	5.013	5.001	0.012	98	1395456	50.0	54.9	
12 Bromomethane	94	5.615	5.609	0.006	92	640743	50.0	55.7	
13 Chloroethane	64	5.713	5.695	0.019	94	675006	50.0	55.5	
19 Dichlorofluoromethane	67	6.035	6.023	0.012	97	1521707	50.0	55.4	
14 Trichlorofluoromethane	101	6.102	6.090	0.012	97	1386411	50.0	61.7	
20 Ethyl ether	59	6.394	6.388	0.006	92	866475	50.0	56.4	
22 Acrolein	56	6.698	6.698	0.000	99	645611	250.0	257.0	
16 1,1,2-Trichloro-1,2,2-trif	101	6.747	6.735	0.012	93	758601	50.0	56.7	
25 1,1-Dichloroethene	96	6.850	6.832	0.018	90	724483	50.0	52.4	
24 Acetone	43	6.887	6.887	0.000	96	2466416	250.0	258.9	
18 Iodomethane	142	7.136	7.124	0.012	99	1363124	50.0	56.1	
30 Methyl acetate	43	7.252	7.252	0.000	99	2429979	100.0	109.6	
27 Carbon disulfide	76	7.270	7.270	0.000	85	2721274	50.0	56.7	
28 3-Chloro-1-propene	41	7.282	7.276	0.006	81	2167875	50.0	55.4	M
33 2-Methyl-2-propanol	59	7.501	7.501	0.000	95	1590692	500.0	565.4	
31 Methylene Chloride	84	7.507	7.501	0.006	88	856769	50.0	51.7	
32 Methyl tert-butyl ether	73	7.690	7.690	0.000	91	2319151	50.0	55.2	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	89	744733	50.0	52.9	
34 Acrylonitrile	53	7.818	7.812	0.006	96	4885868	500.0	530.3	
36 Hexane	57	7.976	7.976	0.000	94	1318373	50.0	56.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	5386868	100.0	103.3	
40 1,1-Dichloroethane	63	8.335	8.335	0.000	97	1610304	50.0	55.4	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	95	3709233	250.0	265.8	
45 2,2-Dichloropropane	77	9.028	9.034	-0.006	81	561024	50.0	45.7	
43 cis-1,2-Dichloroethene	96	9.053	9.053	0.000	90	793491	50.0	53.4	
50 Chlorobromomethane	128	9.387	9.387	0.000	86	404932	50.0	54.3	
51 Tetrahydrofuran	42	9.399	9.399	0.000	89	928086	100.0	104.9	
49 Chloroform	83	9.418	9.418	0.000	94	1371063	50.0	55.1	
52 1,1,1-Trichloroethane	97	9.649	9.655	-0.006	96	1170383	50.0	55.2	
54 Cyclohexane	56	9.698	9.698	0.000	96	1777953	50.0	56.4	
56 1,1-Dichloropropene	75	9.825	9.831	-0.006	89	954295	50.0	53.8	
55 Carbon tetrachloride	117	9.844	9.837	0.007	58	1005256	50.0	63.6	
53 Isobutyl alcohol	43	9.844	9.844	0.000	89	2037808	1250.0	1402.2	
57 Benzene	78	10.129	10.129	0.000	94	2727047	50.0	55.3	
59 n-Heptane	43	10.184	10.184	0.000	93	1404689	50.0	56.3	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	94	1491848	50.0	54.2	
62 Trichloroethene	95	10.884	10.884	0.000	93	765203	50.0	54.7	
64 Methylcyclohexane	83	11.078	11.078	0.000	91	1048534	50.0	56.0	
63 1,2-Dichloropropane	63	11.225	11.224	0.000	84	863093	50.0	54.3	
68 1,4-Dioxane	88	11.346	11.352	-0.006	90	185191	1000.0	1134.7	
69 Dibromomethane	93	11.431	11.431	0.000	94	493667	50.0	52.0	
70 Dichlorobromomethane	83	11.559	11.565	-0.006	94	1075676	50.0	57.9	
71 2-Chloroethyl vinyl ether	63	11.815	11.815	0.000	85	613393	50.0	55.0	
73 cis-1,3-Dichloropropene	75	12.094	12.094	0.000	78	1151508	50.0	54.4	
75 4-Methyl-2-pentanone (MIBK	43	12.204	12.198	0.006	98	7560549	250.0	260.9	
76 Toluene	92	12.520	12.520	0.000	97	1667836	50.0	54.5	
77 Ethyl methacrylate	69	12.739	12.739	0.000	85	948552	50.0	55.4	
78 trans-1,3-Dichloropropene	75	12.812	12.812	0.000	88	1159133	50.0	54.6	
79 1,1,2-Trichloroethane	83	13.098	13.098	0.000	94	548661	50.0	51.9	
80 Tetrachloroethene	166	13.244	13.238	0.006	95	786243	50.0	52.6	
83 2-Hexanone	43	13.287	13.287	0.000	96	5421607	250.0	260.8	
82 1,3-Dichloropropane	76	13.329	13.329	0.000	91	1107782	50.0	53.9	
81 Chlorodibromomethane	129	13.670	13.670	0.000	88	834420	50.0	56.5	
85 Ethylene Dibromide	107	13.871	13.871	0.000	99	716925	50.0	52.8	
87 Chlorobenzene	112	14.424	14.424	0.000	92	1995674	50.0	53.7	
89 Ethylbenzene	91	14.467	14.467	0.000	97	3173847	50.0	53.8	
88 1,1,1,2-Tetrachloroethane	131	14.510	14.510	0.000	92	779565	50.0	56.6	
90 m-Xylene & p-Xylene	106	14.607	14.607	0.000	0	1251865	50.0	54.7	
93 o-Xylene	106	15.154	15.154	0.000	97	1248964	50.0	54.9	
94 Styrene	104	15.179	15.179	0.000	92	2129175	50.0	56.8	
92 Bromoform	173	15.568	15.568	0.000	91	634943	50.0	56.9	
95 Isopropylbenzene	105	15.586	15.580	0.006	97	3100485	50.0	55.7	
97 1,1,2,2-Tetrachloroethane	83	16.055	16.055	0.000	97	888284	50.0	51.6	
98 trans-1,4-Dichloro-2-buten	53	16.104	16.104	0.000	62	531024	50.0	53.0	
99 N-Propylbenzene	91	16.110	16.110	0.000	98	3673269	50.0	53.9	
100 Bromobenzene	156	16.134	16.128	0.006	90	960525	50.0	53.2	
101 1,2,3-Trichloropropane	110	16.152	16.152	0.000	86	283394	50.0	50.5	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	95	2691214	50.0	55.2	
103 2-Chlorotoluene	126	16.316	16.316	0.000	95	838716	50.0	55.6	
105 4-Chlorotoluene	126	16.444	16.444	0.000	97	863120	50.0	54.4	
106 tert-Butylbenzene	134	16.736	16.736	0.000	96	607878	50.0	55.3	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	97	2840153	50.0	56.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	17.004	17.004	0.000	96	3311933	50.0	57.2	
112 4-Isopropyltoluene	119	17.150	17.150	0.000	97	3076325	50.0	56.3	
110 1,3-Dichlorobenzene	146	17.272	17.272	0.000	97	1786843	50.0	53.5	
111 1,4-Dichlorobenzene	146	17.375	17.375	0.000	92	1869766	50.0	53.9	
115 n-Butylbenzene	91	17.661	17.661	0.000	97	2556462	50.0	54.9	
116 1,2-Dichlorobenzene	146	17.874	17.874	0.000	96	1773101	50.0	54.7	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	77	227760	50.0	51.6	
119 1,2,4-Trichlorobenzene	180	20.027	20.027	0.000	94	1338784	50.0	56.3	
120 Hexachlorobutadiene	225	20.143	20.143	0.000	95	530503	50.0	52.5	
121 Naphthalene	128	20.472	20.472	0.000	97	3473370	50.0	55.6	
122 1,2,3-Trichlorobenzene	180	20.849	20.849	0.000	93	1308210	50.0	55.7	
S 125 Total BTEX	1				0			273.2	
S 126 Xylenes, Total	1				0			109.6	
S 123 1,2-Dichloroethene, Total	1				0			106.3	
S 124 1,3-Dichloropropene, Total	1				0			109.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00112	Amount Added:	25.00	Units: uL	
GAS CORP mix_00245	Amount Added:	25.00	Units: uL	
P 8260 IS_00247	Amount Added:	1.25	Units: uL	Run Reagent
P 8260 Surr._00242	Amount Added:	1.25	Units: uL	Run Reagent

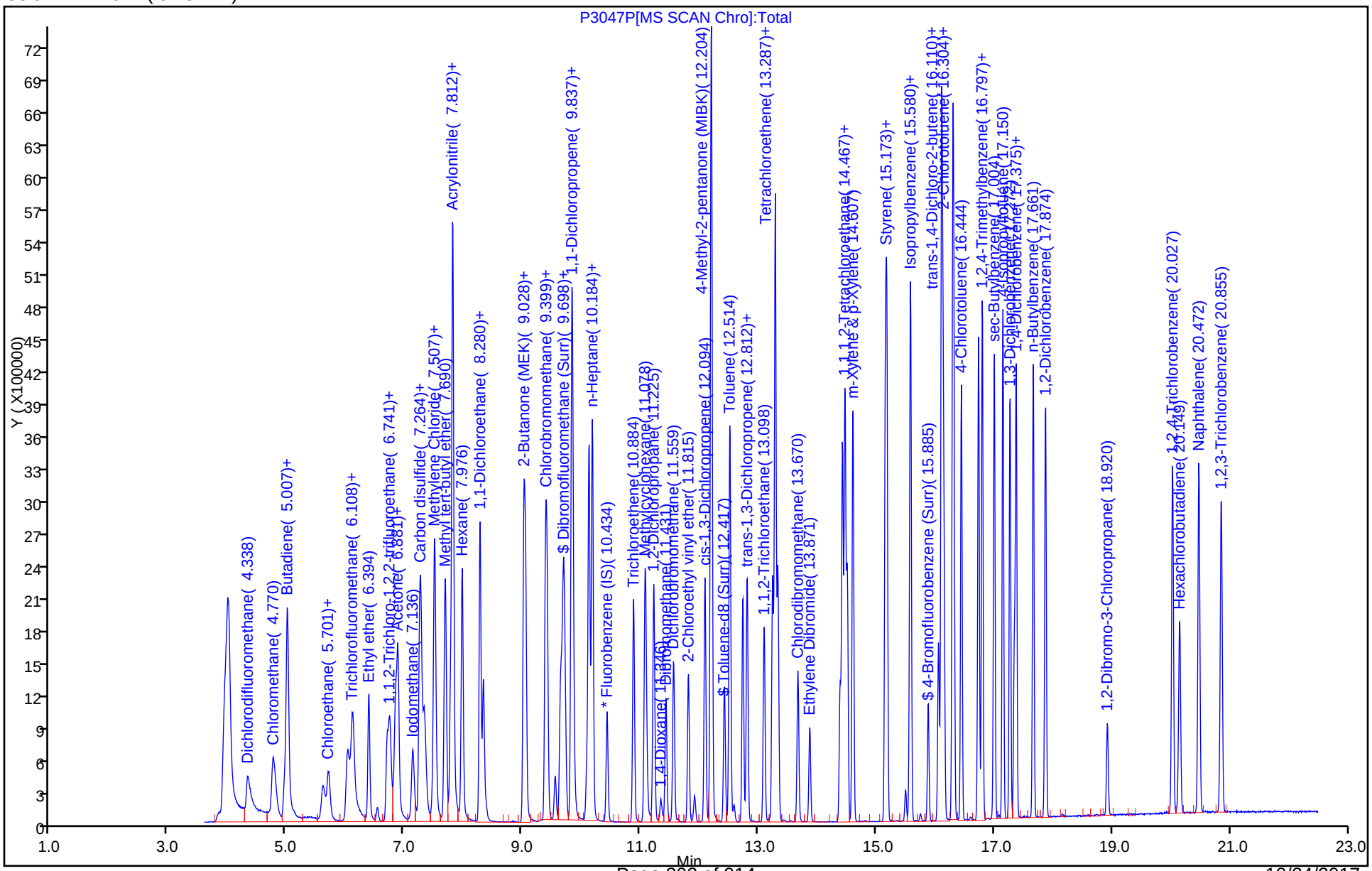
Report Date: 11-Oct-2017 12:02:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3047P.D

Injection Date:	10-Oct-2017 19:55:30	Instrument ID:	HP5973P	Operator ID:	RF
Lims ID:	IC 6			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

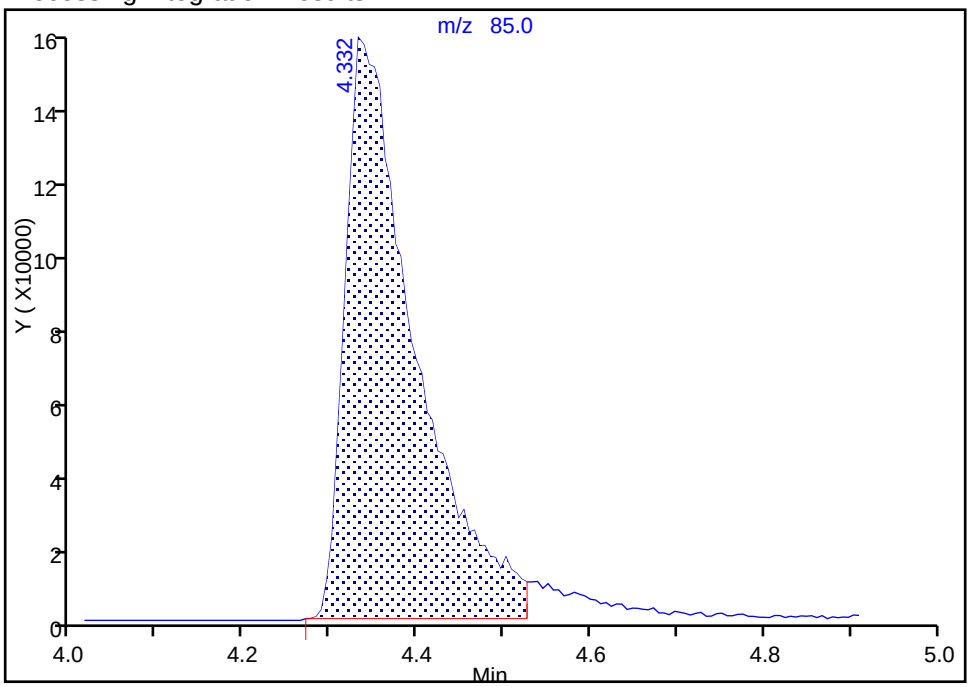
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3047P.D
Injection Date: 10-Oct-2017 19:55:30 Instrument ID: HP5973P
Lims ID: IC 6
Client ID:
Operator ID: RF ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

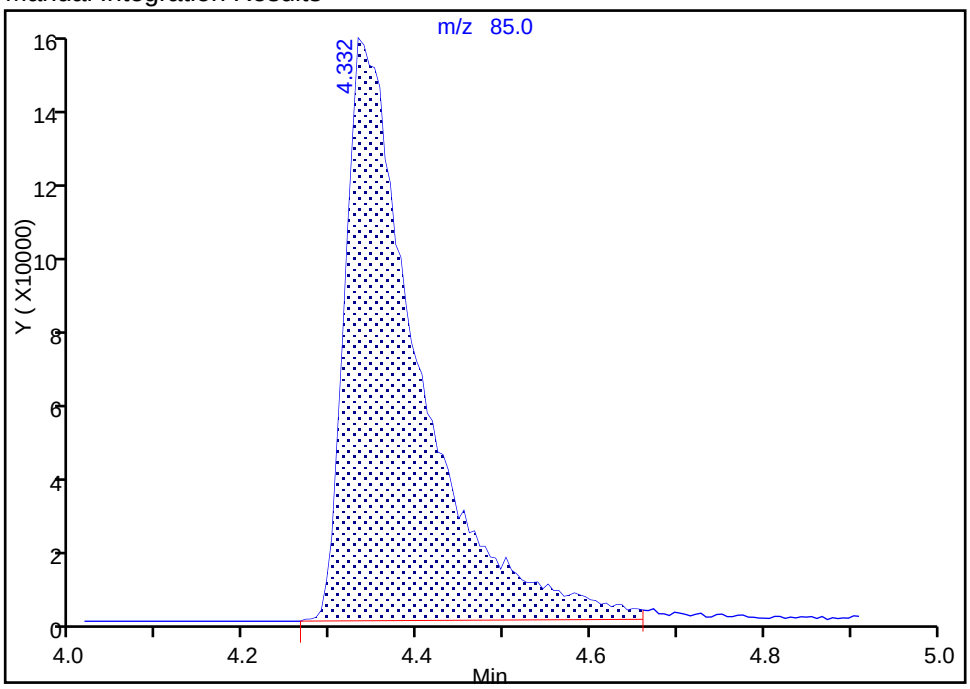
Processing Integration Results

RT: 4.33
Area: 868584
Amount: 56.035239
Amount Units: ug/L



Manual Integration Results

RT: 4.33
Area: 918506
Amount: 58.715583
Amount Units: ug/L



Reviewer: HillL, 11-Oct-2017 11:07:12
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

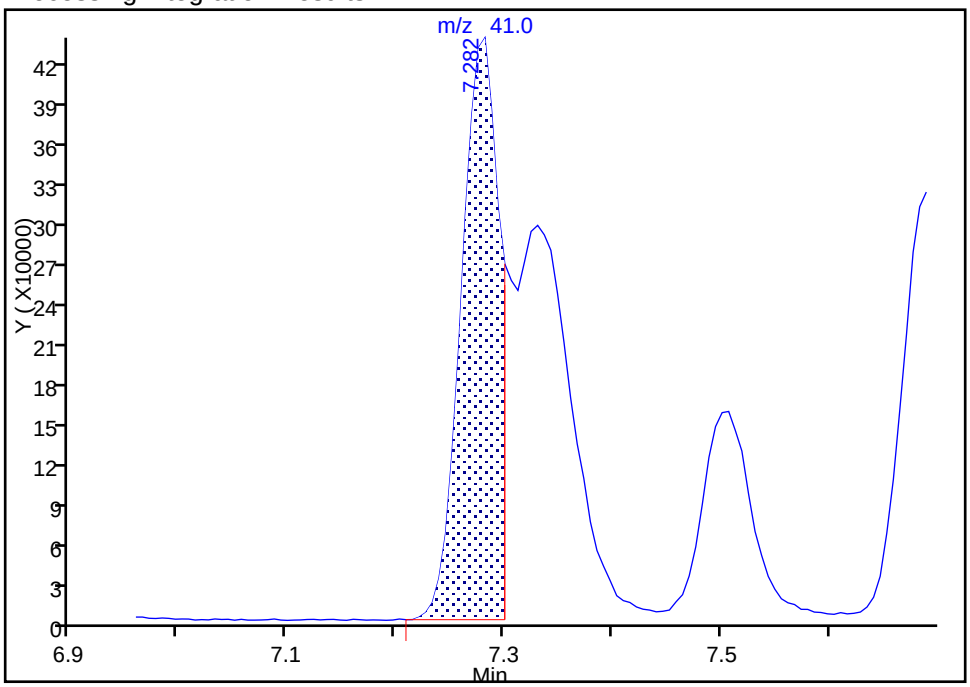
Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3047P.D
Injection Date: 10-Oct-2017 19:55:30 Instrument ID: HP5973P
Lims ID: IC 6
Client ID:
Operator ID: RF ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

28 3-Chloro-1-propene, CAS: 107-05-1

Signal: 1

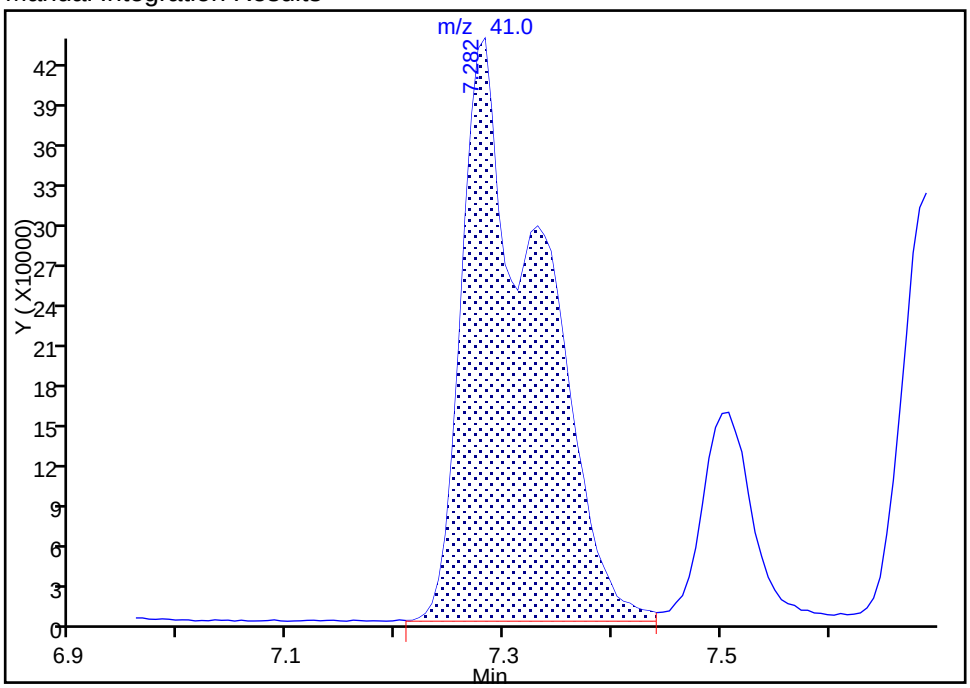
Processing Integration Results

RT: 7.28
Area: 1062726
Amount: 28.022131
Amount Units: ug/L



Manual Integration Results

RT: 7.28
Area: 2167875
Amount: 55.377772
Amount Units: ug/L



Reviewer: farrellr, 11-Oct-2017 08:56:14
Audit Action: Manually Integrated Audit Reason: Poor chromatography

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3048P.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 10-Oct-2017 20:22:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0066269-011
Operator ID: RF Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 11-Oct-2017 12:02:33 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: farrellr Date: 11-Oct-2017 08:58:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.433	10.434	-0.001	97	194894	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.388	14.388	0.000	91	425757	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.344	17.345	-0.001	95	479939	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.630	9.637	-0.007	92	272147	25.0	24.8	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.093	10.093	0.000	0	186635	25.0	24.5	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	95	952474	25.0	25.1	
$ 6 4-Bromofluorobenzene (Surr	174	15.884	15.878	0.006	88	353734	25.0	25.6	
10 Dichlorodifluoromethane	85	4.338	4.338	0.000	97	1506370	100.0	92.9	
11 Chloromethane	50	4.770	4.770	0.000	99	3120558	100.0	87.9	
17 Vinyl chloride	62	4.970	4.971	-0.001	97	2116698	100.0	96.4	
144 Butadiene	54	5.007	5.001	0.006	99	2479388	100.0	94.1	
12 Bromomethane	94	5.609	5.609	0.000	92	1124468	100.0	94.2	
13 Chloroethane	64	5.706	5.695	0.012	94	1158173	100.0	91.9	
19 Dichlorofluoromethane	67	6.029	6.023	0.006	97	2663320	100.0	93.5	
14 Trichlorofluoromethane	101	6.096	6.090	0.006	97	2337946	100.0	100.3	
20 Ethyl ether	59	6.394	6.388	0.006	91	1527694	100.0	96.0	
22 Acrolein	56	6.698	6.698	0.000	99	1369306	500.0	525.7	
16 1,1,2-Trichloro-1,2,2-trif	101	6.741	6.735	0.006	93	1299676	100.0	93.7	
25 1,1-Dichloroethene	96	6.838	6.832	0.006	89	1281396	100.0	89.4	
24 Acetone	43	6.887	6.887	0.000	96	4860760	500.0	491.9	
18 Iodomethane	142	7.130	7.124	0.006	98	2448447	100.0	97.1	
30 Methyl acetate	43	7.252	7.252	0.000	99	4625698	200.0	201.2	
27 Carbon disulfide	76	7.270	7.270	0.000	97	4856548	100.0	97.6	
28 3-Chloro-1-propene	41	7.276	7.276	0.000	86	3849160	100.0	94.8	
31 Methylene Chloride	84	7.507	7.501	0.006	88	1436954	100.0	84.3	
33 2-Methyl-2-propanol	59	7.501	7.501	0.000	96	3093103	1000.0	1060.1	
32 Methyl tert-butyl ether	73	7.690	7.690	0.000	92	4348816	100.0	99.8	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	88	1305820	100.0	89.4	
34 Acrylonitrile	53	7.817	7.812	0.005	96	9750085	1000.0	1020.5	
36 Hexane	57	7.976	7.976	0.000	93	2188958	100.0	90.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	10471043	200.0	193.6	
40 1,1-Dichloroethane	63	8.335	8.335	0.000	97	2923890	100.0	97.1	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	96	7470045	500.0	516.2	
45 2,2-Dichloropropane	77	9.034	9.034	0.000	84	1073748	100.0	84.4	
43 cis-1,2-Dichloroethene	96	9.052	9.053	-0.001	90	1417643	100.0	91.9	
50 Chlorobromomethane	128	9.387	9.387	0.000	86	732468	100.0	94.7	
51 Tetrahydrofuran	42	9.399	9.399	0.000	90	1855505	200.0	202.3	
49 Chloroform	83	9.417	9.418	-0.001	94	2453445	100.0	95.1	
52 1,1,1-Trichloroethane	97	9.655	9.655	0.000	95	2110676	100.0	96.0	
54 Cyclohexane	56	9.697	9.698	-0.001	96	3138520	100.0	96.1	
56 1,1-Dichloropropene	75	9.831	9.831	0.000	90	1762096	100.0	95.7	
55 Carbon tetrachloride	117	9.843	9.837	0.006	94	1661571	100.0	101.3	
53 Isobutyl alcohol	43	9.843	9.844	-0.001	91	4093827	2500.0	2716.4	
57 Benzene	78	10.129	10.129	0.000	93	4941436	100.0	96.5	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	94	2705944	100.0	94.7	
59 n-Heptane	43	10.184	10.184	0.000	87	2222772	100.0	86.0	
62 Trichloroethene	95	10.884	10.884	0.000	93	1378147	100.0	95.0	
64 Methylcyclohexane	83	11.078	11.078	0.000	91	1798265	100.0	92.6	
63 1,2-Dichloropropane	63	11.230	11.224	0.006	82	1566199	100.0	95.0	
68 1,4-Dioxane	88	11.346	11.352	-0.006	88	344874	2000.0	2068.6	
69 Dibromomethane	93	11.431	11.431	0.000	94	925691	100.0	94.0	
70 Dichlorobromomethane	83	11.559	11.565	-0.006	95	1928316	100.0	100.0	
71 2-Chloroethyl vinyl ether	63	11.814	11.815	-0.001	85	1215256	100.0	105.0	
73 cis-1,3-Dichloropropene	75	12.094	12.094	0.000	80	2141619	100.0	97.6	
75 4-Methyl-2-pentanone (MIBK	43	12.198	12.198	0.000	98	14678897	500.0	495.8	
76 Toluene	92	12.520	12.520	0.000	98	3090757	100.0	98.9	
77 Ethyl methacrylate	69	12.733	12.739	-0.006	85	1923333	100.0	110.0	
78 trans-1,3-Dichloropropene	75	12.812	12.812	0.000	88	2168452	100.0	100.1	
79 1,1,2-Trichloroethane	83	13.098	13.098	0.000	93	1046069	100.0	96.8	
80 Tetrachloroethene	166	13.244	13.238	0.006	93	1412801	100.0	92.6	
83 2-Hexanone	43	13.287	13.287	0.000	98	10960565	500.0	516.1	
82 1,3-Dichloropropane	76	13.329	13.329	0.000	92	2094245	100.0	99.8	
81 Chlorodibromomethane	129	13.670	13.670	0.000	89	1577516	100.0	104.5	
85 Ethylene Dibromide	107	13.871	13.871	0.000	98	1375996	100.0	99.1	
87 Chlorobenzene	112	14.424	14.424	0.000	94	3664293	100.0	96.5	
89 Ethylbenzene	91	14.467	14.467	0.000	97	5857536	100.0	97.2	
88 1,1,1,2-Tetrachloroethane	131	14.509	14.510	-0.001	93	1446251	100.0	102.8	
90 m-Xylene & p-Xylene	106	14.607	14.607	0.000	0	2371464	100.0	101.4	
93 o-Xylene	106	15.154	15.154	0.000	95	2341113	100.0	100.8	
94 Styrene	104	15.179	15.179	0.000	92	4036982	100.0	105.4	
92 Bromoform	173	15.568	15.568	0.000	91	1262274	100.0	110.8	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	5726024	100.0	97.5	
97 1,1,2,2-Tetrachloroethane	83	16.055	16.055	0.000	96	1759968	100.0	96.9	
98 trans-1,4-Dichloro-2-buten	53	16.103	16.104	-0.001	56	1083841	100.0	102.4	
99 N-Propylbenzene	91	16.109	16.110	-0.001	98	6749775	100.0	93.8	
100 Bromobenzene	156	16.128	16.128	0.000	87	1783067	100.0	93.6	
101 1,2,3-Trichloropropane	110	16.152	16.152	0.000	90	584485	100.0	98.7	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	95	4953366	100.0	96.3	
103 2-Chlorotoluene	126	16.316	16.316	0.000	95	1539264	100.0	96.6	
105 4-Chlorotoluene	126	16.444	16.444	0.000	97	1610013	100.0	96.1	
106 tert-Butylbenzene	134	16.736	16.736	0.000	96	1073113	100.0	92.5	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	97	5247304	100.0	98.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	17.004	17.004	0.000	96	5748163	100.0	94.0	
112 4-Isopropyltoluene	119	17.150	17.150	0.000	98	5531617	100.0	95.9	
110 1,3-Dichlorobenzene	146	17.271	17.272	-0.001	97	3319784	100.0	94.1	
111 1,4-Dichlorobenzene	146	17.375	17.375	0.000	95	3446992	100.0	94.1	
115 n-Butylbenzene	91	17.661	17.661	0.000	97	4468247	100.0	90.9	
116 1,2-Dichlorobenzene	146	17.874	17.874	0.000	96	3282012	100.0	96.0	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	89	457726	100.0	98.9	
119 1,2,4-Trichlorobenzene	180	20.027	20.027	0.000	94	2344041	100.0	93.3	
120 Hexachlorobutadiene	225	20.149	20.143	0.006	95	922117	100.0	86.5	
121 Naphthalene	128	20.471	20.472	-0.001	97	6765359	100.0	102.7	
122 1,2,3-Trichlorobenzene	180	20.855	20.849	0.006	93	2303868	100.0	92.9	
S 123 1,2-Dichloroethene, Total	1				0			181.4	
S 124 1,3-Dichloropropene, Total	1				0			197.7	
S 125 Total BTEX	1				0			494.9	
S 126 Xylenes, Total	1				0			202.3	

Reagents:

8260 CORP mix_00112	Amount Added: 50.00	Units: uL		
GAS CORP mix_00245	Amount Added: 50.00	Units: uL		
P 8260 IS_00247	Amount Added: 1.25	Units: uL	Run Reagent	
P 8260 Surr._00242	Amount Added: 1.25	Units: uL	Run Reagent	

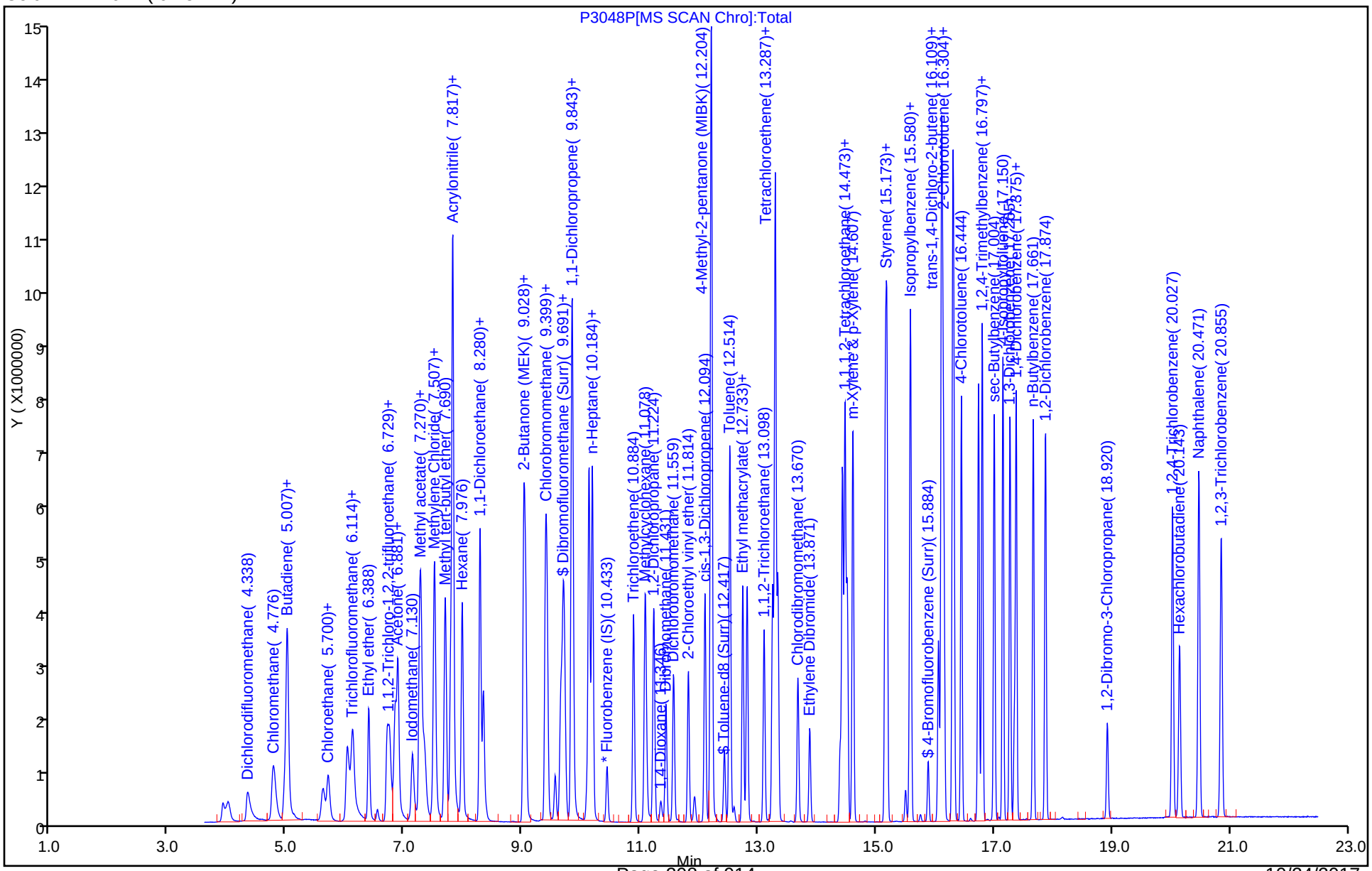
Report Date: 11-Oct-2017 12:02:34 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3048P.D

Injection Date:	10-Oct-2017 20:22:30	Instrument ID:	HP5973P	Operator ID:	RF
Lims ID:	IC 7			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-381944/4 Calibration Date: 10/16/2017 10:53

Instrument ID: HP5973F Calib Start Date: 09/29/2017 15:58

GC Column: ZB-624 (30) ID: 0.25(mm) Calib End Date: 09/29/2017 18:33

Lab File ID: F8269.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.325	1.667	0.1000	62.9	50.0	25.8	50.0
Chloromethane	Ave	1.227	0.9912	0.1000	40.4	50.0	-19.2	20.0
Butadiene	Ave	1.218	1.125		46.2	50.0	-7.6	20.0
Vinyl chloride	Ave	1.222	1.210	0.1000	49.5	50.0	-1.0	20.0
Bromomethane	Ave	0.5682	0.5860	0.1000	51.6	50.0	3.1	50.0
Chloroethane	Ave	0.5170	0.5271	0.1000	51.0	50.0	2.0	50.0
Dichlorofluoromethane	Ave	1.594	1.642		51.5	50.0	3.0	20.0
Trichlorofluoromethane	Ave	1.556	1.768	0.1000	56.8	50.0	13.6	20.0
Ethyl ether	Ave	0.9679	1.033		53.4	50.0	6.8	20.0
Acrolein	Ave	0.2435	0.2390		245	250	-1.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.304	1.427	0.1000	54.7	50.0	9.4	20.0
1,1-Dichloroethene	Ave	1.238	1.338	0.1000	54.1	50.0	8.1	20.0
Acetone	Ave	0.5194	0.5691	0.1000	274	250	9.6	50.0
Iodomethane	Ave	2.197	2.465		56.1	50.0	12.2	20.0
Carbon disulfide	Ave	3.821	4.620	0.1000	60.5	50.0	20.9*	20.0
Allyl chloride	Ave	2.275	2.452		53.9	50.0	7.8	20.0
Methyl acetate	Ave	1.136	1.120	0.1000	98.6	100	-1.4	50.0
Methylene Chloride	Lin1		1.566	0.1000	53.6	50.0	7.2	20.0
2-Methyl-2-propanol	Ave	0.1924	0.2026		527	500	5.3	50.0
Methyl tert-butyl ether	Ave	4.171	4.199	0.1000	50.3	50.0	0.7	20.0
trans-1,2-Dichloroethene	Ave	1.419	1.549	0.1000	54.6	50.0	9.1	20.0
Acrylonitrile	Ave	0.6075	0.6328		521	500	4.2	20.0
Hexane	Lin1		3.143		59.5	50.0	19.0	20.0
Vinyl acetate	Ave	2.612	2.783		107	100	6.6	20.0
1,1-Dichloroethane	Ave	2.724	2.942	0.2000	54.0	50.0	8.0	20.0
2,2-Dichloropropane	Ave	1.900	2.061		54.3	50.0	8.5	20.0
2-Butanone (MEK)	Ave	0.7342	0.7778	0.1000	265	250	5.9	20.0
cis-1,2-Dichloroethene	Ave	1.593	1.700	0.1000	53.4	50.0	6.7	20.0
Chlorobromomethane	Ave	0.7241	0.8259		57.0	50.0	14.1	20.0
Tetrahydrofuran	Ave	0.4665	0.4846		104	100	3.9	20.0
Chloroform	Ave	2.382	2.514	0.2000	52.8	50.0	5.5	20.0
1,1,1-Trichloroethane	Ave	1.959	2.277	0.1000	58.1	50.0	16.3	20.0
Cyclohexane	Ave	3.102	3.334	0.1000	53.7	50.0	7.5	20.0
1,1-Dichloropropene	Ave	1.849	2.090		56.5	50.0	13.0	20.0
Carbon tetrachloride	Ave	1.477	2.091	0.1000	70.8	50.0	41.5*	20.0
Isobutyl alcohol	Ave	0.0680	0.0772		1420	1250	13.6	50.0
Benzene	Ave	5.571	5.895	0.5000	52.9	50.0	5.8	20.0
1,2-Dichloroethane	Ave	2.109	2.192	0.1000	52.0	50.0	3.9	20.0
n-Heptane	Ave	2.533	2.654		52.4	50.0	4.8	20.0
Trichloroethene	Ave	1.411	1.558	0.2000	55.2	50.0	10.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-381944/4 Calibration Date: 10/16/2017 10:53

Instrument ID: HP5973F Calib Start Date: 09/29/2017 15:58

GC Column: ZB-624 (30) ID: 0.25(mm) Calib End Date: 09/29/2017 18:33

Lab File ID: F8269.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.659	2.914	0.1000	54.8	50.0	9.6	20.0
1,2-Dichloropropane	Ave	1.516	1.646	0.1000	54.3	50.0	8.6	20.0
1,4-Dioxane	Ave	0.0078	0.0090		1160	1000	16.4	50.0
Dibromomethane	Ave	0.7835	0.8564	0.1000	54.6	50.0	9.3	20.0
Bromodichloromethane	Ave	1.499	1.934	0.2000	64.5	50.0	29.0*	20.0
2-Chloroethyl vinyl ether	Ave	0.8397	0.9685		57.7	50.0	15.3	20.0
cis-1,3-Dichloropropene	Ave	1.869	2.272	0.2000	60.8	50.0	21.5*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6944	0.6851	0.1000	247	250	-1.3	20.0
Toluene	Ave	1.780	1.827	0.4000	51.3	50.0	2.6	20.0
Ethyl methacrylate	Ave	0.8218	0.8267		50.3	50.0	0.6	20.0
trans-1,3-Dichloropropene	Ave	0.8090	0.9516	0.1000	58.8	50.0	17.6	20.0
1,1,2-Trichloroethane	Ave	0.4701	0.4743	0.1000	50.5	50.0	0.9	20.0
Tetrachloroethene	Ave	0.7634	0.8623	0.2000	56.5	50.0	12.9	20.0
1,3-Dichloropropane	Ave	0.9676	0.9929		51.3	50.0	2.6	20.0
2-Hexanone	Ave	0.5060	0.5176	0.1000	256	250	2.3	20.0
Dibromochloromethane	Lin1		0.7256	0.1000	61.5	50.0	23.1*	20.0
1,2-Dibromoethane	Ave	0.5717	0.6213		54.3	50.0	8.7	20.0
Chlorobenzene	Ave	1.917	2.036	0.5000	53.1	50.0	6.2	20.0
Ethylbenzene	Ave	3.212	3.336	0.1000	51.9	50.0	3.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5627	0.7203		64.0	50.0	28.0*	20.0
m,p-Xylene	Ave	1.313	1.399	0.1000	53.3	50.0	6.5	20.0
o-Xylene	Ave	1.266	1.324	0.3000	52.3	50.0	4.6	20.0
Styrene	Ave	2.185	2.285	0.3000	52.3	50.0	4.6	20.0
Bromoform	Qua		0.5047	0.1000	75.3	50.0	50.6*	50.0
Isopropylbenzene	Ave	3.209	3.216	0.1000	50.1	50.0	0.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7250	0.7182	0.3000	49.5	50.0	-1.0	20.0
Bromobenzene	Ave	0.8527	0.8403		49.3	50.0	-1.5	20.0
N-Propylbenzene	Ave	3.653	3.652		50.0	50.0	-0.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2496	0.2639		52.9	50.0	5.7	50.0
1,2,3-Trichloropropane	Ave	0.2423	0.2379		49.1	50.0	-1.8	20.0
2-Chlorotoluene	Ave	0.7902	0.8027		50.8	50.0	1.6	20.0
1,3,5-Trimethylbenzene	Ave	2.715	2.760		50.8	50.0	1.7	20.0
4-Chlorotoluene	Ave	0.8192	0.8371		51.1	50.0	2.2	20.0
tert-Butylbenzene	Ave	0.6096	0.6286		51.6	50.0	3.1	20.0
1,2,4-Trimethylbenzene	Ave	2.806	2.816		50.2	50.0	0.3	20.0
sec-Butylbenzene	Ave	3.426	3.510		51.2	50.0	2.5	20.0
4-Isopropyltoluene	Ave	3.003	3.129		52.1	50.0	4.2	20.0
1,3-Dichlorobenzene	Ave	1.619	1.647	0.6000	50.9	50.0	1.7	20.0
1,4-Dichlorobenzene	Ave	1.655	1.679	0.5000	50.7	50.0	1.5	20.0
n-Butylbenzene	Ave	2.644	2.717		51.4	50.0	2.8	20.0
1,2-Dichlorobenzene	Ave	1.545	1.565	0.4000	50.7	50.0	1.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-381944/4 Calibration Date: 10/16/2017 10:53

Instrument ID: HP5973F Calib Start Date: 09/29/2017 15:58

GC Column: ZB-624 (30) ID: 0.25(mm) Calib End Date: 09/29/2017 18:33

Lab File ID: F8269.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1469	0.0500	54.9	50.0	9.8	50.0
1,2,4-Trichlorobenzene	Ave	1.067	1.162	0.2000	54.5	50.0	8.9	20.0
Hexachlorobutadiene	Ave	0.6040	0.6961		57.6	50.0	15.2	20.0
Naphthalene	Ave	2.637	2.734		51.8	50.0	3.7	20.0
1,2,3-Trichlorobenzene	Ave	1.004	1.062		52.9	50.0	5.8	20.0
Dibromofluoromethane (Surr)	Ave	1.240	1.329		53.6	50.0	7.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7957	0.7972		50.1	50.0	0.2	20.0
Toluene-d8 (Surr)	Ave	2.463	2.421		49.1	50.0	-1.7	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8068	0.8379		51.9	50.0	3.9	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8269.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Oct-2017 10:53:30 ALS Bottle#: 1 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0066422-004
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2017 11:56:09 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: cwiklinc Date: 16-Oct-2017 11:07:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	291050	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	615889	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	662491	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	93	386830	50.0	53.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.953	4.953	0.000	0	232020	50.0	50.1	
$ 5 Toluene-d8 (Surr)	98	6.559	6.559	0.000	92	1490871	50.0	49.1	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	97	516068	50.0	51.9	
10 Dichlorodifluoromethane	85	1.814	1.814	0.000	99	485216	50.0	62.9	
12 Chloromethane	50	1.997	1.997	0.000	99	288493	50.0	40.4	
151 Butadiene	54	2.088	2.088	0.000	86	327532	50.0	46.2	
13 Vinyl chloride	62	2.088	2.088	0.000	98	352199	50.0	49.5	
14 Bromomethane	94	2.362	2.362	0.000	92	170546	50.0	51.6	
15 Chloroethane	64	2.410	2.410	0.000	99	153418	50.0	51.0	
16 Dichlorofluoromethane	67	2.575	2.575	0.000	97	478047	50.0	51.5	
17 Trichlorofluoromethane	101	2.611	2.611	0.000	99	514519	50.0	56.8	
18 Ethyl ether	59	2.763	2.763	0.000	89	300757	50.0	53.4	
20 Acrolein	56	2.915	2.915	0.000	100	347837	250.0	245.4	
21 1,1,2-Trichloro-1,2,2-trif	101	2.958	2.958	0.000	92	415198	50.0	54.7	
22 1,1-Dichloroethene	96	2.976	2.976	0.000	95	389429	50.0	54.1	
23 Acetone	43	3.025	3.025	0.000	98	828238	250.0	273.9	
25 Iodomethane	142	3.128	3.128	0.000	98	717574	50.0	56.1	
26 Carbon disulfide	76	3.177	3.177	0.000	99	1344628	50.0	60.5	
27 Methyl acetate	43	3.238	3.238	0.000	81	651766	100.0	98.6	
28 3-Chloro-1-propene	41	3.238	3.238	0.000	91	713750	50.0	53.9	
30 Methylene Chloride	84	3.353	3.353	0.000	97	455879	50.0	53.6	
31 2-Methyl-2-propanol	59	3.402	3.402	0.000	99	589783	500.0	526.6	
32 Methyl tert-butyl ether	73	3.499	3.499	0.000	96	1222057	50.0	50.3	
34 trans-1,2-Dichloroethene	96	3.530	3.530	0.000	95	450853	50.0	54.6	
33 Acrylonitrile	53	3.548	3.548	0.000	99	1841809	500.0	520.8	
35 Hexane	57	3.664	3.664	0.000	86	914625	50.0	59.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.846	3.846	0.000	97	1619879	100.0	106.6	
39 1,1-Dichloroethane	63	3.858	3.858	0.000	96	856264	50.0	54.0	
43 2-Butanone (MEK)	43	4.290	4.290	0.000	100	1131912	250.0	264.8	
44 2,2-Dichloropropane	77	4.290	4.290	0.000	90	599946	50.0	54.3	
45 cis-1,2-Dichloroethene	96	4.302	4.302	0.000	90	494720	50.0	53.4	
48 Chlorobromomethane	128	4.503	4.503	0.000	97	240368	50.0	57.0	
49 Tetrahydrofuran	42	4.528	4.528	0.000	88	282083	100.0	103.9	
50 Chloroform	83	4.540	4.540	0.000	94	731740	50.0	52.8	
51 1,1,1-Trichloroethane	97	4.680	4.680	0.000	99	662854	50.0	58.1	
52 Cyclohexane	56	4.710	4.710	0.000	90	970398	50.0	53.7	
54 1,1-Dichloropropene	75	4.795	4.795	0.000	97	608284	50.0	56.5	
55 Carbon tetrachloride	117	4.807	4.807	0.000	97	608580	50.0	70.8	
53 Isobutyl alcohol	43	4.868	4.868	0.000	95	561789	1250.0	1420.3	
57 Benzene	78	4.978	4.978	0.000	97	1715860	50.0	52.9	
58 1,2-Dichloroethane	62	5.014	5.014	0.000	97	637877	50.0	52.0	
59 n-Heptane	43	5.075	5.075	0.000	90	772540	50.0	52.4	
62 Trichloroethene	95	5.495	5.495	0.000	97	453461	50.0	55.2	
64 Methylcyclohexane	83	5.629	5.629	0.000	92	848161	50.0	54.8	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	479147	50.0	54.3	
66 1,4-Dioxane	88	5.823	5.823	0.000	96	111297	1000.0	1163.9	
67 Dibromomethane	93	5.842	5.842	0.000	94	249245	50.0	54.6	
68 Dichlorobromomethane	83	5.951	5.951	0.000	100	562819	50.0	64.5	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	91	281890	50.0	57.7	
72 cis-1,3-Dichloropropene	75	6.328	6.328	0.000	96	661177	50.0	60.8	
73 4-Methyl-2-pentanone (MIBK	43	6.432	6.432	0.000	93	2109859	250.0	246.7	
74 Toluene	92	6.620	6.620	0.000	99	1125333	50.0	51.3	
75 Ethyl methacrylate	69	6.845	6.845	0.000	89	509147	50.0	50.3	
77 trans-1,3-Dichloropropene	75	6.845	6.845	0.000	96	586086	50.0	58.8	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	92	292112	50.0	50.5	
81 Tetrachloroethene	166	7.137	7.137	0.000	98	531060	50.0	56.5	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	99	611531	50.0	51.3	
80 2-Hexanone	43	7.223	7.223	0.000	90	1593830	250.0	255.7	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	446881	50.0	61.5	
84 Ethylene Dibromide	107	7.569	7.569	0.000	99	382674	50.0	54.3	
87 Chlorobenzene	112	8.020	8.020	0.000	96	1253717	50.0	53.1	
88 Ethylbenzene	91	8.086	8.086	0.000	98	2054877	50.0	51.9	
89 1,1,1,2-Tetrachloroethane	131	8.099	8.099	0.000	94	443612	50.0	64.0	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	861325	50.0	53.3	
91 o-Xylene	106	8.628	8.628	0.000	96	815610	50.0	52.3	
92 Styrene	104	8.652	8.652	0.000	95	1407169	50.0	52.3	
95 Bromoform	173	8.920	8.920	0.000	98	310820	50.0	75.3	
94 Isopropylbenzene	105	8.999	8.999	0.000	95	2130372	50.0	50.1	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	77	475770	50.0	49.5	
101 Bromobenzene	156	9.388	9.388	0.000	90	556718	50.0	49.3	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	2419178	50.0	50.0	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	57	174801	50.0	52.9	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	79	157625	50.0	49.1	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	531746	50.0	50.8	
102 1,3,5-Trimethylbenzene	105	9.607	9.607	0.000	94	1828554	50.0	50.8	
105 4-Chlorotoluene	126	9.668	9.668	0.000	97	554539	50.0	51.1	
106 tert-Butylbenzene	134	9.930	9.930	0.000	92	416439	50.0	51.6	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	96	1865472	50.0	50.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	2325386	50.0	51.2	
110 4-Isopropyltoluene	119	10.270	10.270	0.000	97	2072905	50.0	52.1	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	1090817	50.0	50.9	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	96	1112447	50.0	50.7	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	1799696	50.0	51.4	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	99	1036807	50.0	50.7	
117 1,2-Dibromo-3-Chloropropan	75	11.414	11.414	0.000	90	97310	50.0	54.9	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	769959	50.0	54.5	
120 Hexachlorobutadiene	225	12.144	12.144	0.000	95	461184	50.0	57.6	
121 Naphthalene	128	12.266	12.266	0.000	97	1811064	50.0	51.8	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	97	703615	50.0	52.9	

Reagents:

8260 CORP mix_00112	Amount Added: 25.00	Units: uL	
GAS CORP mix_00245	Amount Added: 25.00	Units: uL	
F 8260 SURR_00263	Amount Added: 1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added: 1.00	Units: uL	Run Reagent

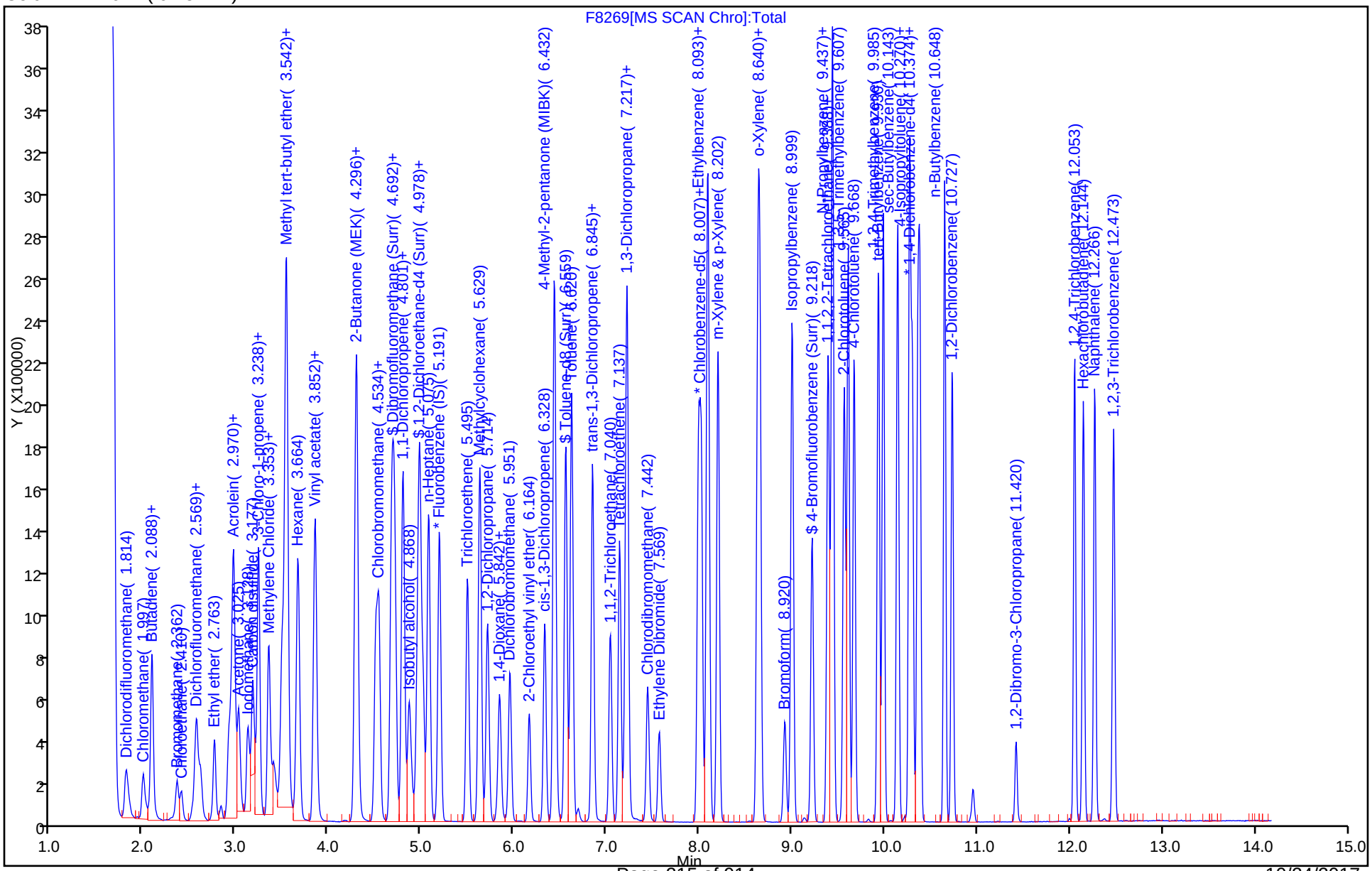
Report Date: 16-Oct-2017 11:56:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8269.D

Injection Date:	16-Oct-2017 10:53:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	CCVIS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382134/3 Calibration Date: 10/17/2017 09:07

Instrument ID: HP5973F Calib Start Date: 09/29/2017 15:58

GC Column: ZB-624 (30) ID: 0.25(mm) Calib End Date: 09/29/2017 18:33

Lab File ID: F8294.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.325	1.439	0.1000	54.3	50.0	8.6	50.0
Chloromethane	Ave	1.227	0.9531	0.1000	38.8	50.0	-22.3*	20.0
Vinyl chloride	Ave	1.222	1.071	0.1000	43.8	50.0	-12.3	20.0
Butadiene	Ave	1.218	1.012		41.6	50.0	-16.9	20.0
Bromomethane	Ave	0.5682	0.5468	0.1000	48.1	50.0	-3.8	50.0
Chloroethane	Ave	0.5170	0.4882	0.1000	47.2	50.0	-5.6	50.0
Dichlorofluoromethane	Ave	1.594	1.512		47.4	50.0	-5.2	20.0
Trichlorofluoromethane	Ave	1.556	1.629	0.1000	52.4	50.0	4.7	20.0
Ethyl ether	Ave	0.9679	0.7843		40.5	50.0	-19.0	20.0
Acrolein	Ave	0.2435	0.2166		222	250	-11.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.304	1.300	0.1000	49.8	50.0	-0.3	20.0
1,1-Dichloroethene	Ave	1.238	1.224	0.1000	49.5	50.0	-1.1	20.0
Acetone	Ave	0.5194	0.5162	0.1000	248	250	-0.6	50.0
Iodomethane	Ave	2.197	2.278		51.9	50.0	3.7	20.0
Carbon disulfide	Ave	3.821	3.965	0.1000	51.9	50.0	3.8	20.0
Allyl chloride	Ave	2.275	2.066		45.4	50.0	-9.2	20.0
Methyl acetate	Ave	1.136	1.024	0.1000	90.2	100	-9.8	50.0
Methylene Chloride	Lin1		1.504	0.1000	51.4	50.0	2.7	20.0
2-Methyl-2-propanol	Ave	0.1924	0.1843		479	500	-4.2	50.0
Methyl tert-butyl ether	Ave	4.171	4.004	0.1000	48.0	50.0	-4.0	20.0
trans-1,2-Dichloroethene	Ave	1.419	1.420	0.1000	50.0	50.0	0.0	20.0
Acrylonitrile	Ave	0.6075	0.5827		480	500	-4.1	20.0
Hexane	Lin1		2.813		53.1	50.0	6.1	20.0
Vinyl acetate	Ave	2.612	2.424		92.8	100	-7.2	20.0
1,1-Dichloroethane	Ave	2.724	2.707	0.2000	49.7	50.0	-0.7	20.0
2,2-Dichloropropane	Ave	1.900	1.738		45.7	50.0	-8.5	20.0
2-Butanone (MEK)	Ave	0.7342	0.7071	0.1000	241	250	-3.7	20.0
cis-1,2-Dichloroethene	Ave	1.593	1.600	0.1000	50.2	50.0	0.5	20.0
Chlorobromomethane	Ave	0.7241	0.7668		52.9	50.0	5.9	20.0
Tetrahydrofuran	Ave	0.4665	0.4304		92.3	100	-7.7	20.0
Chloroform	Ave	2.382	2.357	0.2000	49.5	50.0	-1.1	20.0
1,1,1-Trichloroethane	Ave	1.959	1.992	0.1000	50.8	50.0	1.7	20.0
Cyclohexane	Ave	3.102	2.982	0.1000	48.1	50.0	-3.9	20.0
1,1-Dichloropropene	Ave	1.849	1.909		51.6	50.0	3.2	20.0
Carbon tetrachloride	Ave	1.477	1.647	0.1000	55.8	50.0	11.5	20.0
Isobutyl alcohol	Ave	0.0680	0.0685		1260	1250	0.8	50.0
Benzene	Ave	5.571	5.521	0.5000	49.6	50.0	-0.9	20.0
1,2-Dichloroethane	Ave	2.109	2.043	0.1000	48.4	50.0	-3.2	20.0
n-Heptane	Ave	2.533	2.296		45.3	50.0	-9.3	20.0
Trichloroethene	Ave	1.411	1.443	0.2000	51.1	50.0	2.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382134/3 Calibration Date: 10/17/2017 09:07

Instrument ID: HP5973F Calib Start Date: 09/29/2017 15:58

GC Column: ZB-624 (30) ID: 0.25(mm) Calib End Date: 09/29/2017 18:33

Lab File ID: F8294.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.659	2.711	0.1000	51.0	50.0	1.9	20.0
1,2-Dichloropropane	Ave	1.516	1.507	0.1000	49.7	50.0	-0.6	20.0
1,4-Dioxane	Ave	0.0078	0.0089		1140	1000	14.0	50.0
Dibromomethane	Ave	0.7835	0.8071	0.1000	51.5	50.0	3.0	20.0
Bromodichloromethane	Ave	1.499	1.662	0.2000	55.4	50.0	10.8	20.0
2-Chloroethyl vinyl ether	Ave	0.8397	0.8950		53.3	50.0	6.6	20.0
cis-1,3-Dichloropropene	Ave	1.869	1.965	0.2000	52.6	50.0	5.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6944	0.6358	0.1000	229	250	-8.4	20.0
Toluene	Ave	1.780	1.754	0.4000	49.3	50.0	-1.5	20.0
trans-1,3-Dichloropropene	Ave	0.8090	0.8200	0.1000	50.7	50.0	1.4	20.0
Ethyl methacrylate	Ave	0.8218	0.8070		49.1	50.0	-1.8	20.0
1,1,2-Trichloroethane	Ave	0.4701	0.4647	0.1000	49.4	50.0	-1.1	20.0
Tetrachloroethene	Ave	0.7634	0.8212	0.2000	53.8	50.0	7.6	20.0
1,3-Dichloropropane	Ave	0.9676	0.9629		49.8	50.0	-0.5	20.0
2-Hexanone	Ave	0.5060	0.4788	0.1000	237	250	-5.4	20.0
Dibromochloromethane	Lin1		0.6182	0.1000	52.9	50.0	5.7	20.0
1,2-Dibromoethane	Ave	0.5717	0.5901		51.6	50.0	3.2	20.0
Chlorobenzene	Ave	1.917	1.959	0.5000	51.1	50.0	2.2	20.0
Ethylbenzene	Ave	3.212	3.196	0.1000	49.8	50.0	-0.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5627	0.6262		55.6	50.0	11.3	20.0
m,p-Xylene	Ave	1.313	1.338	0.1000	51.0	50.0	1.9	20.0
o-Xylene	Ave	1.266	1.278	0.3000	50.5	50.0	1.0	20.0
Styrene	Ave	2.185	2.201	0.3000	50.4	50.0	0.7	20.0
Bromoform	Qua		0.3818	0.1000	60.7	50.0	21.4	50.0
Isopropylbenzene	Ave	3.209	3.087	0.1000	48.1	50.0	-3.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7250	0.6946	0.3000	47.9	50.0	-4.2	20.0
Bromobenzene	Ave	0.8527	0.8242		48.3	50.0	-3.4	20.0
N-Propylbenzene	Ave	3.653	3.494		47.8	50.0	-4.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2496	0.2265		45.4	50.0	-9.3	50.0
1,2,3-Trichloropropane	Ave	0.2423	0.2332		48.1	50.0	-3.8	20.0
2-Chlorotoluene	Ave	0.7902	0.7677		48.6	50.0	-2.8	20.0
1,3,5-Trimethylbenzene	Ave	2.715	2.651		48.8	50.0	-2.3	20.0
4-Chlorotoluene	Ave	0.8192	0.8005		48.9	50.0	-2.3	20.0
tert-Butylbenzene	Ave	0.6096	0.5998		49.2	50.0	-1.6	20.0
1,2,4-Trimethylbenzene	Ave	2.806	2.732		48.7	50.0	-2.7	20.0
sec-Butylbenzene	Ave	3.426	3.372		49.2	50.0	-1.6	20.0
4-Isopropyltoluene	Ave	3.003	3.029		50.4	50.0	0.9	20.0
1,3-Dichlorobenzene	Ave	1.619	1.603	0.6000	49.5	50.0	-1.0	20.0
1,4-Dichlorobenzene	Ave	1.655	1.623	0.5000	49.0	50.0	-1.9	20.0
n-Butylbenzene	Ave	2.644	2.597		49.1	50.0	-1.8	20.0
1,2-Dichlorobenzene	Ave	1.545	1.520	0.4000	49.2	50.0	-1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382134/3 Calibration Date: 10/17/2017 09:07

Instrument ID: HP5973F Calib Start Date: 09/29/2017 15:58

GC Column: ZB-624 (30) ID: 0.25(mm) Calib End Date: 09/29/2017 18:33

Lab File ID: F8294.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.1252	0.0500	47.2	50.0	-5.6	50.0
1,2,4-Trichlorobenzene	Ave	1.067	1.145	0.2000	53.7	50.0	7.3	20.0
Hexachlorobutadiene	Ave	0.6040	0.6785		56.2	50.0	12.3	20.0
Naphthalene	Ave	2.637	2.698		51.2	50.0	2.3	20.0
1,2,3-Trichlorobenzene	Ave	1.004	1.039		51.8	50.0	3.5	20.0
Dibromofluoromethane (Surr)	Ave	1.240	1.292		52.1	50.0	4.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7957	0.7960		50.0	50.0	0.0	20.0
Toluene-d8 (Surr)	Ave	2.463	2.457		49.9	50.0	-0.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8068	0.8352		51.8	50.0	3.5	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8294.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 17-Oct-2017 09:07:30 ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvis
Misc. Info.: 480-0066449-003
Operator ID: CDC Instrument ID: HP5973F
Sublist: chrom-F-8260 SOIL*sub27

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 09:47:29 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 09:47:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.197	5.197	0.000	99	275571	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	565500	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	93	604551	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	356118	50.0	52.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.960	4.960	0.000	0	219346	50.0	50.0	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	93	1389502	50.0	49.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	93	472277	50.0	51.8	
10 Dichlorodifluoromethane	85	1.820	1.820	0.000	99	396632	50.0	54.3	
12 Chloromethane	50	2.003	2.003	0.000	99	262650	50.0	38.8	M
13 Vinyl chloride	62	2.094	2.094	0.000	98	295188	50.0	43.8	
151 Butadiene	54	2.100	2.100	0.000	86	278902	50.0	41.6	
14 Bromomethane	94	2.368	2.368	0.000	91	150668	50.0	48.1	
15 Chloroethane	64	2.417	2.417	0.000	99	134546	50.0	47.2	
16 Dichlorofluoromethane	67	2.575	2.575	0.000	98	416549	50.0	47.4	
17 Trichlorofluoromethane	101	2.617	2.617	0.000	98	448929	50.0	52.4	
18 Ethyl ether	59	2.769	2.769	0.000	87	216117	50.0	40.5	
20 Acrolein	56	2.922	2.922	0.000	99	298380	250.0	222.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.958	2.958	0.000	92	358291	50.0	49.8	
22 1,1-Dichloroethene	96	2.976	2.976	0.000	95	337369	50.0	49.5	
23 Acetone	43	3.031	3.031	0.000	98	711195	250.0	248.4	
25 Iodomethane	142	3.134	3.134	0.000	98	627836	50.0	51.9	
26 Carbon disulfide	76	3.183	3.183	0.000	99	1092697	50.0	51.9	
28 3-Chloro-1-propene	41	3.244	3.244	0.000	88	569248	50.0	45.4	
27 Methyl acetate	43	3.244	3.244	0.000	81	564615	100.0	90.2	
30 Methylene Chloride	84	3.354	3.354	0.000	94	414531	50.0	51.4	
31 2-Methyl-2-propanol	59	3.408	3.408	0.000	99	507955	500.0	479.0	
32 Methyl tert-butyl ether	73	3.506	3.506	0.000	95	1103327	50.0	48.0	
34 trans-1,2-Dichloroethene	96	3.536	3.536	0.000	95	391295	50.0	50.0	
33 Acrylonitrile	53	3.554	3.554	0.000	99	1605736	500.0	479.6	
35 Hexane	57	3.670	3.670	0.000	85	775089	50.0	53.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
37 Vinyl acetate	43	3.852	3.852	0.000	97	1335771	100.0	92.8	
39 1,1-Dichloroethane	63	3.858	3.858	0.000	96	745836	50.0	49.7	
43 2-Butanone (MEK)	43	4.296	4.296	0.000	99	974243	250.0	240.8	
44 2,2-Dichloropropane	77	4.296	4.296	0.000	63	478827	50.0	45.7	
45 cis-1,2-Dichloroethene	96	4.303	4.303	0.000	83	440967	50.0	50.2	
48 Chlorobromomethane	128	4.509	4.509	0.000	95	211297	50.0	52.9	
49 Tetrahydrofuran	42	4.528	4.528	0.000	87	237222	100.0	92.3	
50 Chloroform	83	4.540	4.540	0.000	93	649605	50.0	49.5	
51 1,1,1-Trichloroethane	97	4.680	4.680	0.000	99	548919	50.0	50.8	
52 Cyclohexane	56	4.710	4.710	0.000	89	821752	50.0	48.1	
54 1,1-Dichloropropene	75	4.801	4.801	0.000	96	525990	50.0	51.6	
55 Carbon tetrachloride	117	4.807	4.807	0.000	97	453994	50.0	55.8	
53 Isobutyl alcohol	43	4.874	4.874	0.000	93	471838	1250.0	1259.9	
57 Benzene	78	4.984	4.984	0.000	97	1521370	50.0	49.6	
58 1,2-Dichloroethane	62	5.020	5.020	0.000	97	562930	50.0	48.4	
59 n-Heptane	43	5.081	5.081	0.000	89	632781	50.0	45.3	
62 Trichloroethene	95	5.495	5.495	0.000	97	397528	50.0	51.1	
64 Methylcyclohexane	83	5.635	5.635	0.000	91	746945	50.0	51.0	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	415214	50.0	49.7	
66 1,4-Dioxane	88	5.830	5.830	0.000	95	100050	1000.0	1139.5	
67 Dibromomethane	93	5.842	5.842	0.000	94	222419	50.0	51.5	
68 Dichlorobromomethane	83	5.957	5.957	0.000	100	457880	50.0	55.4	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	90	246626	50.0	53.3	
72 cis-1,3-Dichloropropene	75	6.334	6.334	0.000	97	541486	50.0	52.6	
73 4-Methyl-2-pentanone (MIBK	43	6.438	6.438	0.000	92	1797572	250.0	228.9	
74 Toluene	92	6.620	6.620	0.000	99	991826	50.0	49.3	
77 trans-1,3-Dichloropropene	75	6.845	6.845	0.000	95	463692	50.0	50.7	
75 Ethyl methacrylate	69	6.852	6.852	0.000	87	456351	50.0	49.1	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	91	262785	50.0	49.4	
81 Tetrachloroethene	166	7.137	7.137	0.000	98	464380	50.0	53.8	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	97	544516	50.0	49.8	
80 2-Hexanone	43	7.223	7.223	0.000	94	1353681	250.0	236.5	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	349563	50.0	52.9	
84 Ethylene Dibromide	107	7.569	7.569	0.000	98	333710	50.0	51.6	
87 Chlorobenzene	112	8.020	8.020	0.000	96	1108090	50.0	51.1	
88 Ethylbenzene	91	8.087	8.087	0.000	98	1807487	50.0	49.8	
89 1,1,1,2-Tetrachloroethane	131	8.099	8.099	0.000	93	354124	50.0	55.6	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	756823	50.0	51.0	
91 o-Xylene	106	8.634	8.634	0.000	95	722888	50.0	50.5	
92 Styrene	104	8.652	8.652	0.000	95	1244407	50.0	50.4	
95 Bromoform	173	8.926	8.926	0.000	98	215915	50.0	60.7	
94 Isopropylbenzene	105	8.999	8.999	0.000	95	1866100	50.0	48.1	
101 Bromobenzene	156	9.388	9.388	0.000	90	498255	50.0	48.3	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	78	419942	50.0	47.9	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	60	136917	50.0	45.4	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	2112155	50.0	47.8	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	82	141002	50.0	48.1	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	464102	50.0	48.6	
102 1,3,5-Trimethylbenzene	105	9.607	9.607	0.000	94	1602940	50.0	48.8	
105 4-Chlorotoluene	126	9.674	9.674	0.000	97	483948	50.0	48.9	
106 tert-Butylbenzene	134	9.936	9.936	0.000	92	362594	50.0	49.2	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	96	1651541	50.0	48.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	2038507	50.0	49.2	
110 4-Isopropyltoluene	119	10.271	10.271	0.000	97	1831326	50.0	50.4	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	97	968887	50.0	49.5	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	95	981326	50.0	49.0	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	1569752	50.0	49.1	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	99	919195	50.0	49.2	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	90	75687	50.0	47.2	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	94	692192	50.0	53.7	
120 Hexachlorobutadiene	225	12.144	12.144	0.000	95	410185	50.0	56.2	
121 Naphthalene	128	12.266	12.266	0.000	97	1631330	50.0	51.2	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	96	628419	50.0	51.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00112	Amount Added:	25.00	Units: uL	
GAS CORP mix_00246	Amount Added:	25.00	Units: uL	
F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

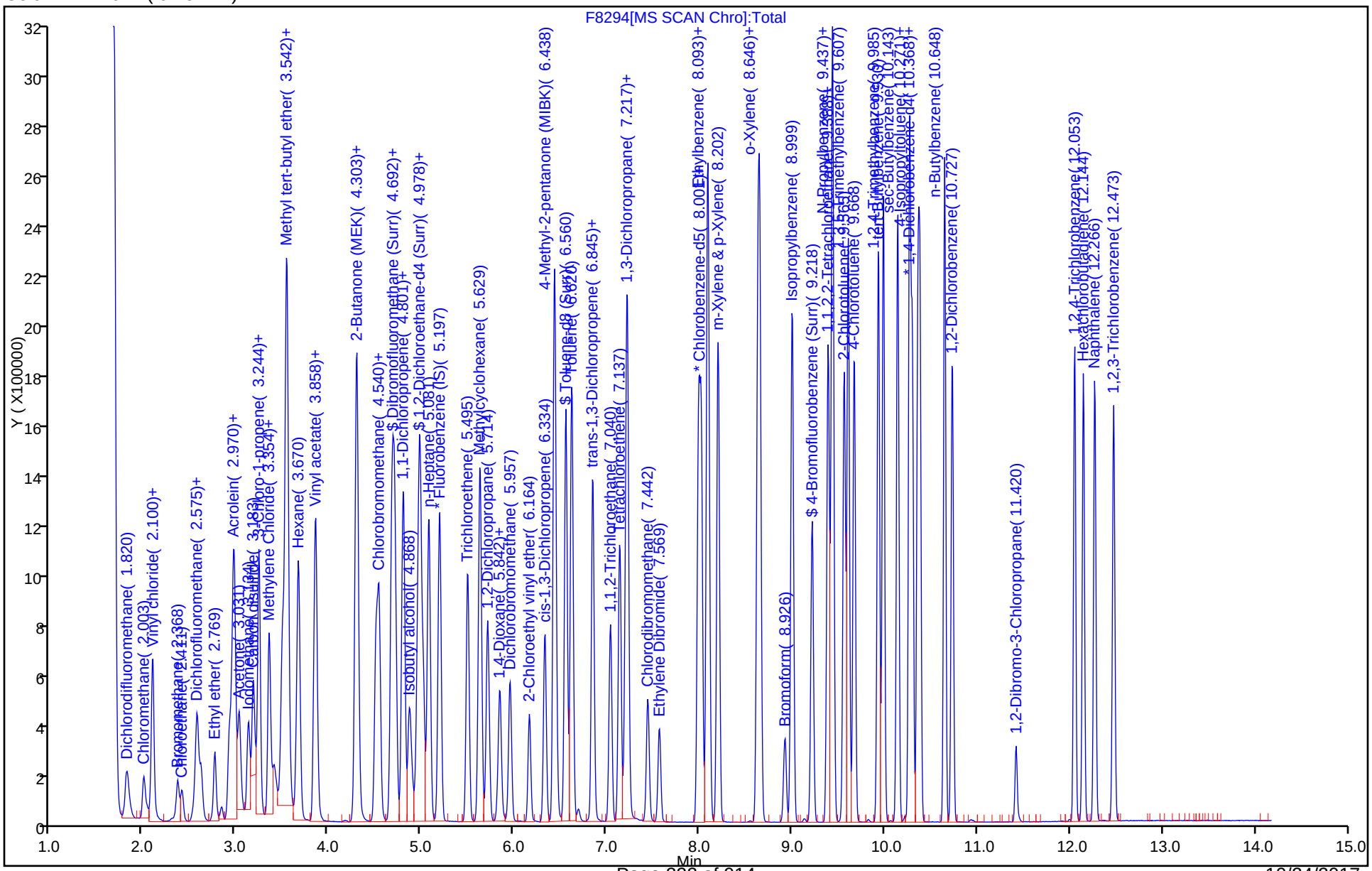
Report Date: 17-Oct-2017 09:47:31 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8294.D

Injection Date:	17-Oct-2017 09:07:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

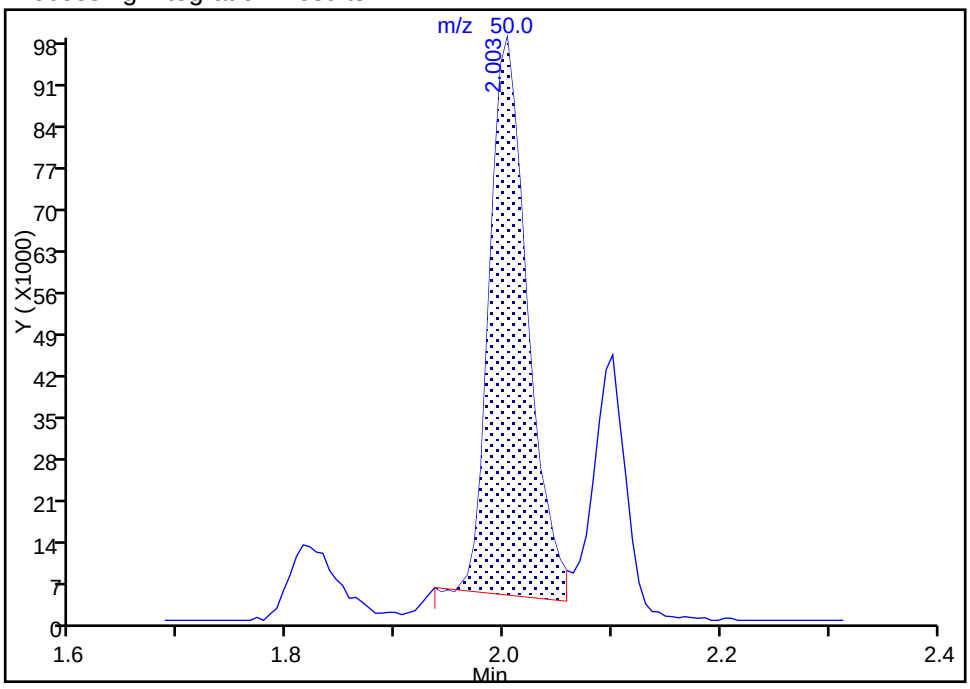
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8294.D
Injection Date: 17-Oct-2017 09:07:30 Instrument ID: HP5973F
Lims ID: CCVIS
Client ID:
Operator ID: CDC ALS Bottle#: 1 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

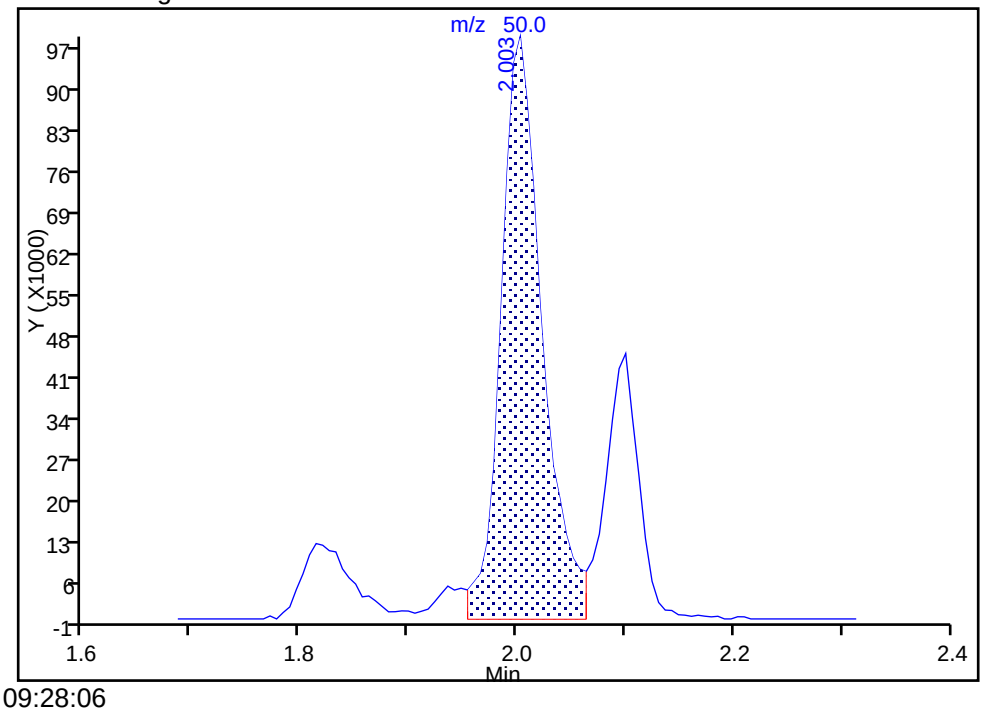
Processing Integration Results

RT: 2.00
Area: 231241
Amount: 34.190420
Amount Units: ug/kg



Manual Integration Results

RT: 2.00
Area: 262650
Amount: 38.834436
Amount Units: ug/kg



Reviewer: cwiklinc, 17-Oct-2017 09:28:06
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382381/3 Calibration Date: 10/18/2017 09:31

Instrument ID: HP5973P Calib Start Date: 10/10/2017 16:02

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 10/10/2017 20:22

Lab File ID: 93253P.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	2.081	2.226	0.1000	26.7	25.0	7.0	50.0
Chloromethane	Ave	4.552	5.273	0.1000	29.0	25.0	15.9	20.0
Vinyl chloride	Ave	2.816	3.102	0.1000	27.5	25.0	10.2	20.0
Butadiene	Ave	3.380	3.590		26.6	25.0	6.2	20.0
Bromomethane	Ave	1.531	1.665	0.1000	27.2	25.0	8.8	50.0
Chloroethane	Ave	1.617	1.693	0.1000	26.2	25.0	4.7	50.0
Dichlorofluoromethane	Ave	3.654	3.651		25.0	25.0	-0.0	20.0
Trichlorofluoromethane	Ave	2.991	3.223	0.1000	26.9	25.0	7.7	20.0
Ethyl ether	Ave	2.042	2.086		25.5	25.0	2.2	20.0
Acrolein	Ave	0.3341	0.3331		125	125	-0.3	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.779	1.657	0.1000	23.3	25.0	-6.9	20.0
1,1-Dichloroethene	Ave	1.839	1.617	0.1000	22.0	25.0	-12.0	20.0
Acetone	Ave	1.267	1.660	0.1000	164	125	30.9	50.0
Iodomethane	Ave	3.233	3.243		25.1	25.0	0.3	20.0
Methyl acetate	Ave	2.949	3.144	0.1000	53.3	50.0	6.6	50.0
Carbon disulfide	Ave	6.383	6.044	0.1000	23.7	25.0	-5.3	20.0
Allyl chloride	Ave	5.208	5.091		24.4	25.0	-2.2	20.0
2-Methyl-2-propanol	Ave	0.3743	0.3909		261	250	4.4	50.0
Methylene Chloride	Lin1		1.911	0.1000	21.1	25.0	-15.5	20.0
Methyl tert-butyl ether	Ave	5.590	5.589	0.1000	25.0	25.0	-0.0	20.0
trans-1,2-Dichloroethene	Ave	1.873	1.687	0.1000	22.5	25.0	-9.9	20.0
Acrylonitrile	Ave	1.226	1.322		270	250	7.8	20.0
Hexane	Ave	3.121	2.818		22.6	25.0	-9.7	20.0
Vinyl acetate	Ave	6.940	7.642		55.1	50.0	10.1	20.0
1,1-Dichloroethane	Ave	3.863	3.793	0.2000	24.5	25.0	-1.8	20.0
2-Butanone (MEK)	Ave	1.856	2.103	0.1000	142	125	13.3	20.0
2,2-Dichloropropane	Ave	1.632	1.901		29.1	25.0	16.5	20.0
cis-1,2-Dichloroethene	Ave	1.978	1.869	0.1000	23.6	25.0	-5.5	20.0
Chlorobromomethane	Ave	0.9919	0.998		25.2	25.0	0.6	20.0
Tetrahydrofuran	Ave	1.177	1.233		52.4	50.0	4.7	20.0
Chloroform	Ave	3.309	3.188	0.2000	24.1	25.0	-3.7	20.0
1,1,1-Trichloroethane	Ave	2.821	2.852	0.1000	25.3	25.0	1.1	20.0
Cyclohexane	Ave	4.190	3.684	0.1000	22.0	25.0	-12.1	20.0
1,1-Dichloropropene	Ave	2.362	2.216		23.5	25.0	-6.2	20.0
Isobutyl alcohol	Ave	0.1933	0.1998		646	625	3.4	50.0
Carbon tetrachloride	Ave	2.104	2.507	0.1000	29.8	25.0	19.2	20.0
Benzene	Ave	6.565	6.359	0.5000	24.2	25.0	-3.1	20.0
1,2-Dichloroethane	Ave	3.664	3.651	0.1000	24.9	25.0	-0.4	20.0
n-Heptane	Ave	3.317	2.940		22.2	25.0	-11.4	20.0
Trichloroethene	Ave	1.860	1.727	0.2000	23.2	25.0	-7.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382381/3 Calibration Date: 10/18/2017 09:31

Instrument ID: HP5973P Calib Start Date: 10/10/2017 16:02

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 10/10/2017 20:22

Lab File ID: 93253P.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.492	2.145	0.1000	21.5	25.0	-14.0	20.0
1,2-Dichloropropane	Ave	2.114	2.104	0.1000	24.9	25.0	-0.5	20.0
1,4-Dioxane	Ave	0.0098	0.0105		539	500	7.7	50.0
Dibromomethane	Ave	1.263	1.237	0.1000	24.5	25.0	-2.1	20.0
Bromodichloromethane	Ave	2.473	2.591	0.2000	26.2	25.0	4.8	20.0
2-Chloroethyl vinyl ether	Ave	1.484	1.576		26.6	25.0	6.2	20.0
cis-1,3-Dichloropropene	Ave	2.814	2.884	0.2000	25.6	25.0	2.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.738	1.849	0.1000	133	125	6.4	20.0
Toluene	Ave	1.835	1.816	0.4000	24.7	25.0	-1.1	20.0
Ethyl methacrylate	Ave	1.027	0.996		24.3	25.0	-3.0	20.0
trans-1,3-Dichloropropene	Ave	1.273	1.311	0.1000	25.7	25.0	3.0	20.0
1,1,2-Trichloroethane	Ave	0.6343	0.6187	0.1000	24.4	25.0	-2.5	20.0
Tetrachloroethene	Ave	0.8961	0.8598	0.2000	24.0	25.0	-4.1	20.0
2-Hexanone	Ave	1.247	1.382	0.1000	139	125	10.8	20.0
1,3-Dichloropropane	Ave	1.232	1.262		25.6	25.0	2.4	20.0
Dibromochloromethane	Ave	0.8865	0.9538	0.1000	26.9	25.0	7.6	20.0
1,2-Dibromoethane	Ave	0.8151	0.8231		25.2	25.0	1.0	20.0
Chlorobenzene	Ave	2.229	2.210	0.5000	24.8	25.0	-0.9	20.0
Ethylbenzene	Ave	3.538	3.385	0.1000	23.9	25.0	-4.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8265	0.8693		26.3	25.0	5.2	20.0
m,p-Xylene	Ave	1.373	1.371	0.1000	25.0	25.0	-0.1	20.0
o-Xylene	Ave	1.363	1.353	0.3000	24.8	25.0	-0.8	20.0
Styrene	Ave	2.250	2.271	0.3000	25.2	25.0	0.9	20.0
Bromoform	Ave	0.6691	0.7249	0.1000	27.1	25.0	8.3	50.0
Isopropylbenzene	Ave	3.060	2.921	0.1000	23.9	25.0	-4.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9458	0.9295	0.3000	24.6	25.0	-1.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.5514	0.5483		24.9	25.0	-0.6	50.0
N-Propylbenzene	Ave	3.746	3.502		23.4	25.0	-6.5	20.0
Bromobenzene	Ave	0.9922	0.9914		25.0	25.0	-0.0	20.0
1,2,3-Trichloropropane	Ave	0.3083	0.3017		24.5	25.0	-2.1	20.0
1,3,5-Trimethylbenzene	Ave	2.679	2.542		23.7	25.0	-5.1	20.0
2-Chlorotoluene	Ave	0.8300	0.8111		24.4	25.0	-2.3	20.0
4-Chlorotoluene	Ave	0.8724	0.8419		24.1	25.0	-3.5	20.0
tert-Butylbenzene	Ave	0.6041	0.5609		23.2	25.0	-7.1	20.0
1,2,4-Trimethylbenzene	Ave	2.789	2.744		24.6	25.0	-1.6	20.0
sec-Butylbenzene	Ave	3.186	2.953		23.2	25.0	-7.3	20.0
4-Isopropyltoluene	Ave	3.004	2.786		23.2	25.0	-7.2	20.0
1,3-Dichlorobenzene	Ave	1.837	1.773	0.6000	24.1	25.0	-3.5	20.0
1,4-Dichlorobenzene	Ave	1.907	1.856	0.5000	24.3	25.0	-2.7	20.0
n-Butylbenzene	Ave	2.562	2.286		22.3	25.0	-10.8	20.0
1,2-Dichlorobenzene	Ave	1.782	1.780	0.4000	25.0	25.0	-0.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382381/3 Calibration Date: 10/18/2017 09:31

Instrument ID: HP5973P Calib Start Date: 10/10/2017 16:02

GC Column: ZB-624 (60) ID: 0.25(mm) Calib End Date: 10/10/2017 20:22

Lab File ID: 93253P.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.2322	0.0500	23.6	25.0	-5.7	50.0
1,2,4-Trichlorobenzene	Ave	1.308	1.239	0.2000	23.7	25.0	-5.3	20.0
Hexachlorobutadiene	Ave	0.5555	0.4808		21.6	25.0	-13.4	20.0
Naphthalene	Ave	3.432	3.361		24.5	25.0	-2.1	20.0
1,2,3-Trichlorobenzene	Ave	1.292	1.169		22.6	25.0	-9.5	20.0
Dibromofluoromethane (Surr)	Ave	1.410	1.529		27.1	25.0	8.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.9762	1.005		25.7	25.0	2.9	20.0
Toluene-d8 (Surr)	Ave	2.228	2.381		26.7	25.0	6.9	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8126	0.8600		26.5	25.0	5.8	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93253P.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 18-Oct-2017 09:31:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ccvis
Misc. Info.: 480-0066487-003
Operator ID: RF/RB Instrument ID: HP5973P
Sublist: chrom-P-8260H2O*sub11

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 18-Oct-2017 10:04:25 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: farrellr Date: 18-Oct-2017 10:04:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.434	10.434	0.000	97	182584	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.382	14.382	0.000	91	401251	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.344	17.344	0.000	94	445448	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.631	9.631	0.000	92	279144	25.0	27.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.087	10.087	0.000	0	183446	25.0	25.7	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	955403	25.0	26.7	
$ 6 4-Bromofluorobenzene (Surr	174	15.884	15.884	0.000	93	345064	25.0	26.5	
10 Dichlorodifluoromethane	85	4.332	4.332	0.000	97	406475	25.0	26.7	
11 Chloromethane	50	4.764	4.764	0.000	99	962821	25.0	29.0	
17 Vinyl chloride	62	4.964	4.964	0.000	97	566340	25.0	27.5	
144 Butadiene	54	5.013	5.013	0.000	100	655541	25.0	26.6	
12 Bromomethane	94	5.615	5.615	0.000	94	304053	25.0	27.2	
13 Chloroethane	64	5.707	5.707	0.000	93	309138	25.0	26.2	
19 Dichlorofluoromethane	67	6.029	6.029	0.000	97	666558	25.0	25.0	
14 Trichlorofluoromethane	101	6.090	6.090	0.000	84	588407	25.0	26.9	
20 Ethyl ether	59	6.388	6.388	0.000	89	380896	25.0	25.5	
22 Acrolein	56	6.692	6.692	0.000	98	304115	125.0	124.6	
16 1,1,2-Trichloro-1,2,2-trif	101	6.735	6.735	0.000	93	302463	25.0	23.3	
25 1,1-Dichloroethene	96	6.844	6.844	0.000	88	295266	25.0	22.0	
24 Acetone	43	6.887	6.887	0.000	96	1514996	125.0	163.7	
18 Iodomethane	142	7.142	7.142	0.000	99	592087	25.0	25.1	
30 Methyl acetate	43	7.252	7.252	0.000	99	1148238	50.0	53.3	
27 Carbon disulfide	76	7.270	7.270	0.000	79	1103594	25.0	23.7	
28 3-Chloro-1-propene	41	7.276	7.276	0.000	86	929462	25.0	24.4	
33 2-Methyl-2-propanol	59	7.507	7.507	0.000	94	713747	250.0	261.1	
31 Methylene Chloride	84	7.507	7.507	0.000	87	348864	25.0	21.1	
32 Methyl tert-butyl ether	73	7.684	7.684	0.000	90	1020432	25.0	25.0	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	89	307988	25.0	22.5	
34 Acrylonitrile	53	7.812	7.812	0.000	96	2413421	250.0	269.6	
36 Hexane	57	7.976	7.976	0.000	93	514595	25.0	22.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
38 Vinyl acetate	43	8.280	8.280	0.000	97	2790722	50.0	55.1	
40 1,1-Dichloroethane	63	8.335	8.335	0.000	97	692481	25.0	24.5	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	95	1919636	125.0	141.6	
45 2,2-Dichloropropane	77	9.034	9.034	0.000	80	347081	25.0	29.1	
43 cis-1,2-Dichloroethene	96	9.053	9.053	0.000	91	341194	25.0	23.6	
50 Chlorobromomethane	128	9.387	9.387	0.000	86	182240	25.0	25.2	
51 Tetrahydrofuran	42	9.399	9.399	0.000	90	450069	50.0	52.4	
49 Chloroform	83	9.418	9.418	0.000	93	582063	25.0	24.1	
52 1,1,1-Trichloroethane	97	9.649	9.649	0.000	95	520709	25.0	25.3	
54 Cyclohexane	56	9.691	9.691	0.000	95	672641	25.0	22.0	
56 1,1-Dichloropropene	75	9.831	9.831	0.000	89	404564	25.0	23.5	
53 Isobutyl alcohol	43	9.843	9.843	0.000	92	912041	625.0	646.0	
55 Carbon tetrachloride	117	9.850	9.850	0.000	57	457797	25.0	29.8	
57 Benzene	78	10.129	10.129	0.000	94	1160997	25.0	24.2	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	95	666539	25.0	24.9	
59 n-Heptane	43	10.184	10.184	0.000	85	536789	25.0	22.2	
62 Trichloroethene	95	10.884	10.884	0.000	92	315353	25.0	23.2	
64 Methylcyclohexane	83	11.084	11.084	0.000	90	391556	25.0	21.5	
63 1,2-Dichloropropane	63	11.224	11.224	0.000	81	384194	25.0	24.9	
68 1,4-Dioxane	88	11.340	11.340	0.000	87	84615	500.0	538.5	
69 Dibromomethane	93	11.431	11.431	0.000	95	225780	25.0	24.5	
70 Dichlorobromomethane	83	11.559	11.559	0.000	94	473103	25.0	26.2	
71 2-Chloroethyl vinyl ether	63	11.815	11.815	0.000	85	287813	25.0	26.6	
73 cis-1,3-Dichloropropene	75	12.094	12.094	0.000	79	526547	25.0	25.6	
75 4-Methyl-2-pentanone (MIBK	43	12.198	12.198	0.000	97	3710234	125.0	133.0	
76 Toluene	92	12.514	12.514	0.000	96	728473	25.0	24.7	
77 Ethyl methacrylate	69	12.733	12.733	0.000	83	399707	25.0	24.3	
78 trans-1,3-Dichloropropene	75	12.806	12.806	0.000	85	525895	25.0	25.7	
79 1,1,2-Trichloroethane	83	13.092	13.092	0.000	93	248260	25.0	24.4	
80 Tetrachloroethene	166	13.244	13.244	0.000	94	344983	25.0	24.0	
83 2-Hexanone	43	13.287	13.287	0.000	96	2773131	125.0	138.5	
82 1,3-Dichloropropane	76	13.329	13.329	0.000	91	506268	25.0	25.6	
81 Chlorodibromomethane	129	13.676	13.676	0.000	88	382697	25.0	26.9	
85 Ethylene Dibromide	107	13.871	13.871	0.000	97	330255	25.0	25.2	
87 Chlorobenzene	112	14.424	14.424	0.000	95	886932	25.0	24.8	
89 Ethylbenzene	91	14.467	14.467	0.000	97	1358041	25.0	23.9	
88 1,1,1,2-Tetrachloroethane	131	14.510	14.510	0.000	92	348799	25.0	26.3	
90 m-Xylene & p-Xylene	106	14.601	14.601	0.000	0	549996	25.0	25.0	
93 o-Xylene	106	15.154	15.154	0.000	97	542702	25.0	24.8	
94 Styrene	104	15.179	15.179	0.000	92	911123	25.0	25.2	
92 Bromoform	173	15.568	15.568	0.000	91	290872	25.0	27.1	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	1301238	25.0	23.9	
97 1,1,2,2-Tetrachloroethane	83	16.055	16.055	0.000	96	414037	25.0	24.6	
98 trans-1,4-Dichloro-2-buten	53	16.103	16.103	0.000	56	244228	25.0	24.9	
99 N-Propylbenzene	91	16.110	16.110	0.000	97	1559886	25.0	23.4	
100 Bromobenzene	156	16.128	16.128	0.000	85	441604	25.0	25.0	
101 1,2,3-Trichloropropane	110	16.146	16.146	0.000	89	134387	25.0	24.5	
102 1,3,5-Trimethylbenzene	105	16.298	16.298	0.000	95	1132169	25.0	23.7	
103 2-Chlorotoluene	126	16.316	16.316	0.000	95	361288	25.0	24.4	
105 4-Chlorotoluene	126	16.444	16.444	0.000	98	375007	25.0	24.1	
106 tert-Butylbenzene	134	16.736	16.736	0.000	96	249845	25.0	23.2	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	97	1222105	25.0	24.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	17.004	17.004	0.000	96	1315403	25.0	23.2	
112 4-Isopropyltoluene	119	17.150	17.150	0.000	98	1241160	25.0	23.2	
110 1,3-Dichlorobenzene	146	17.265	17.265	0.000	97	789568	25.0	24.1	
111 1,4-Dichlorobenzene	146	17.375	17.375	0.000	93	826722	25.0	24.3	
115 n-Butylbenzene	91	17.661	17.661	0.000	97	1018437	25.0	22.3	
116 1,2-Dichlorobenzene	146	17.874	17.874	0.000	96	792944	25.0	25.0	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	77	103446	25.0	23.6	
119 1,2,4-Trichlorobenzene	180	20.027	20.027	0.000	94	551948	25.0	23.7	
120 Hexachlorobutadiene	225	20.149	20.149	0.000	95	214185	25.0	21.6	
121 Naphthalene	128	20.471	20.471	0.000	97	1497368	25.0	24.5	
122 1,2,3-Trichlorobenzene	180	20.855	20.855	0.000	93	520747	25.0	22.6	

Reagents:

8260 CORP mix_00110	Amount Added: 12.50	Units: uL	
GAS CORP mix_00246	Amount Added: 12.50	Units: uL	
P 8260 IS_00248	Amount Added: 1.25	Units: uL	Run Reagent
P 8260 Surr._00243	Amount Added: 1.25	Units: uL	Run Reagent

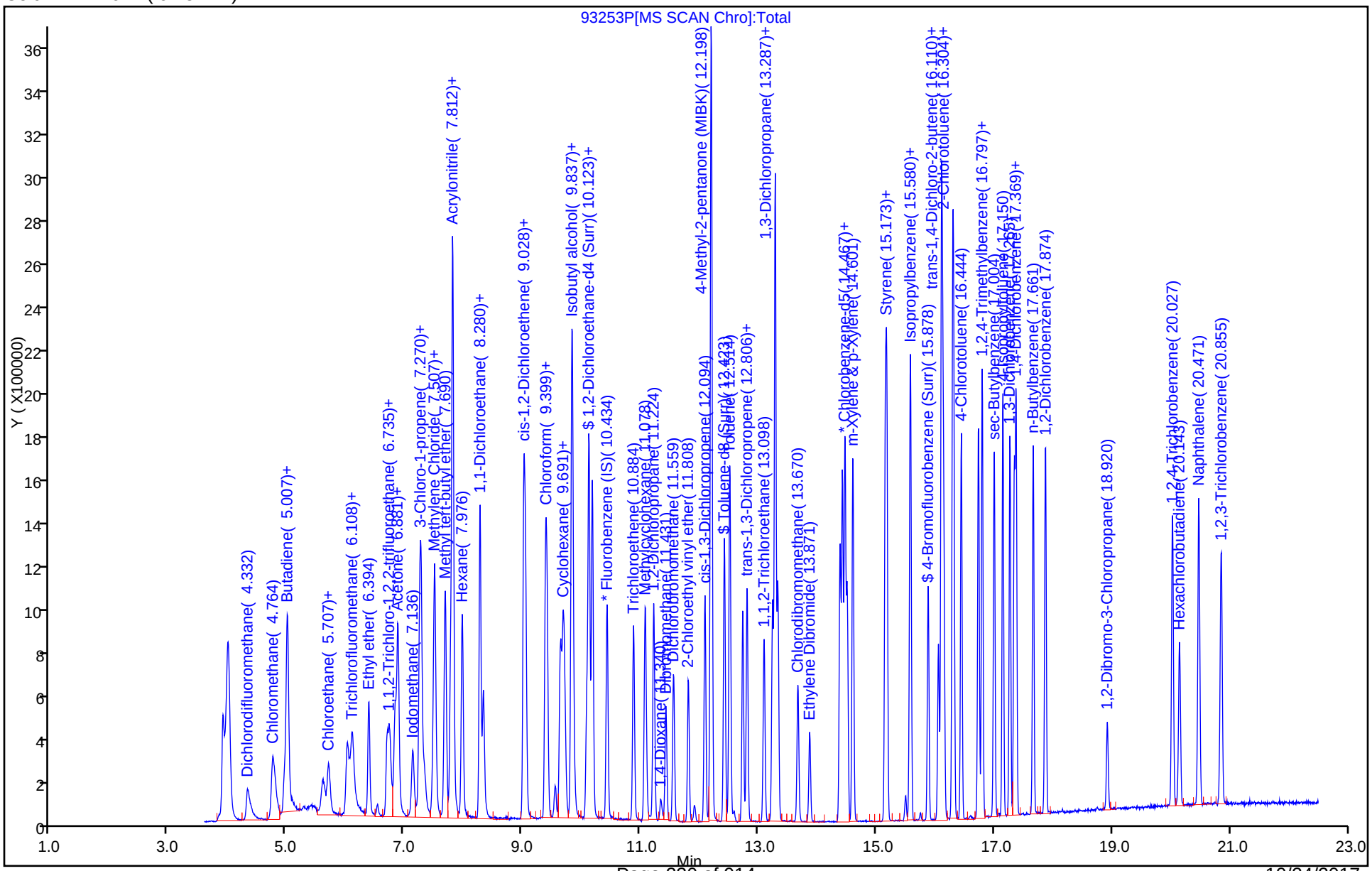
Report Date: 18-Oct-2017 10:04:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93253P.D

Injection Date:	18-Oct-2017 09:31:30	Instrument ID:	HP5973P	Operator ID:	RF/RB
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7934.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	29-Sep-2017 15:08:30	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0066009-004				
Operator ID:	CDC	Instrument ID:	HP5973F		
Method:	\\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F-8260 SOIL.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	29-Sep-2017 15:10:00	Calib Date:	25-Sep-2017 19:12:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Buffalo\ChromData\HP5973F\20170925-65871.b\F7808.D				
Column 1 :	ZB-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK019				
First Level Reviewer: cwiklinc		Date:	29-Sep-2017 15:10:00		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
$ 61 BFB	95	5.339	5.339	0.000	0	138362	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

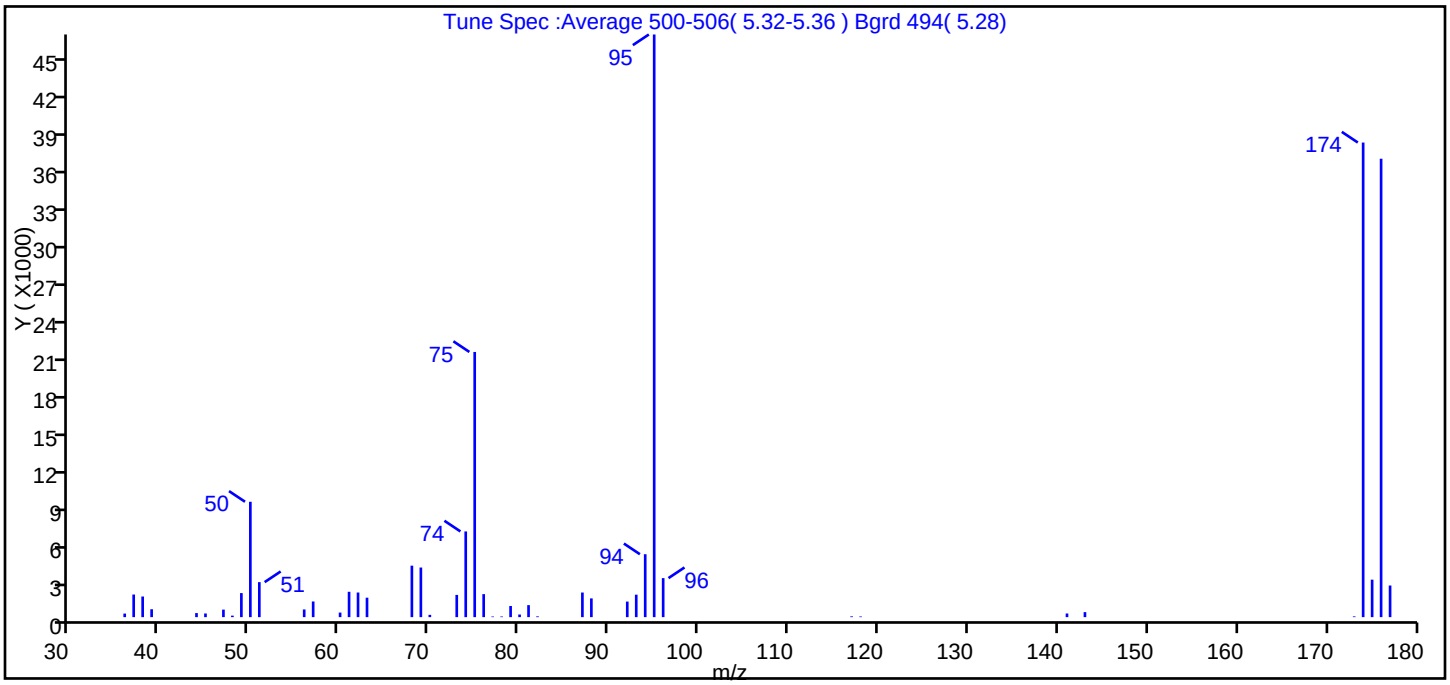
BFB_WRK_00065 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7934.D
Injection Date: 29-Sep-2017 15:08:30 Instrument ID: HP5973F
Lims ID: BFB
Client ID:
Operator ID: CDC ALS Bottle#: 1 Worklist Smp#: 4
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.8
75	30 to 60% of m/z 95	45.5
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.1 (0.2)
174	50 to 120% of m/z 95	81.5
175	5 to 9% of m/z 174	6.4 (7.9)
176	Greater than 95% but less than 101% of m/z 174	78.7 (96.6)
177	5 to 9% of m/z 176	5.4 (6.9)

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7934.D\F-8260 SOIL.rslt\spectra.d
Injection Date: 29-Sep-2017 15:08:30
Spectrum: Tune Spec :Average 500-506(5.32-5.36) Bgrd 494(5.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 46

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	285	57.00	1254	77.00	50	96.00	3124
37.00	1810	60.00	366	78.00	51	117.00	62
38.00	1652	61.00	2029	79.00	893	118.00	52
39.00	633	62.00	1971	80.00	211	141.00	292
44.00	326	63.00	1557	81.00	960	143.00	402
45.00	293	68.00	4120	82.00	62	173.00	59
47.00	602	69.00	3971	87.00	1971	174.00	37984
48.00	120	70.00	184	88.00	1501	175.00	3000
49.00	1926	73.00	1779	92.00	1245	176.00	36688
50.00	9234	74.00	6860	93.00	1797	177.00	2532
51.00	2802	75.00	21224	94.00	5036		
56.00	615	76.00	1842	95.00	46632		

TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8268.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	16-Oct-2017 10:20:30	ALS Bottle#:	1	Worklist Smp#:	3
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0066422-003				
Operator ID:	CDC	Instrument ID:	HP5973F		
Method:	\\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F-8260 SOIL.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	16-Oct-2017 10:23:57	Calib Date:	29-Sep-2017 21:59:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D				
Column 1 :	ZB-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK011				
First Level Reviewer: cwiklinc		Date:	16-Oct-2017 10:23:57		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
$ 61 BFB	95	5.339	5.339	0.000	0	128191	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

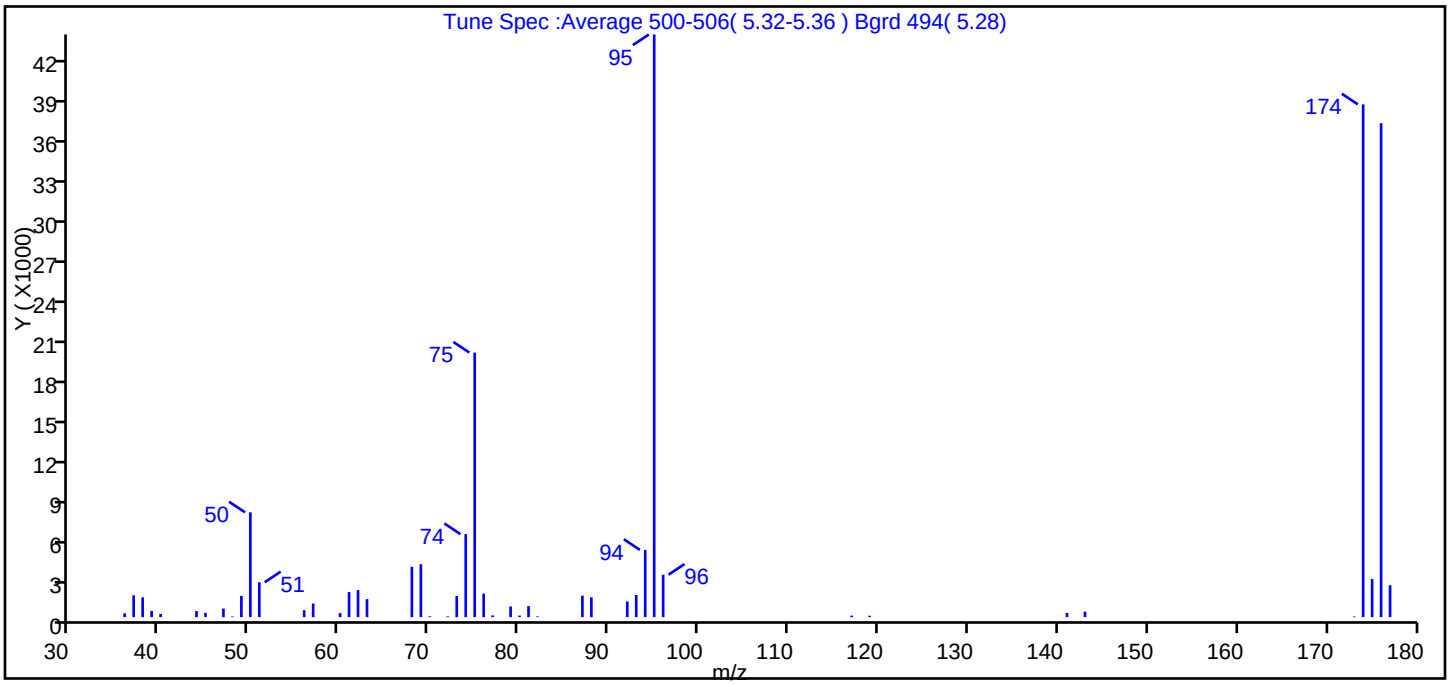
BFB_WRK_00065 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8268.D
Injection Date: 16-Oct-2017 10:20:30 Instrument ID: HP5973F
Lims ID: BFB
Client ID:
Operator ID: CDC ALS Bottle#: 1 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.0
75	30 to 60% of m/z 95	45.4
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.1 (0.1)
174	50 to 120% of m/z 95	88.0
175	5 to 9% of m/z 174	6.5 (7.4)
176	Greater than 95% but less than 101% of m/z 174	84.8 (96.3)
177	5 to 9% of m/z 176	5.5 (6.5)

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8268.D\F-8260 SOIL.rslt\spectra.d
Injection Date: 16-Oct-2017 10:20:30
Spectrum: Tune Spec :Average 500-506(5.32-5.36) Bgrd 494(5.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 47

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	287	56.00	518	75.00	19864	95.00	43752
37.00	1635	57.00	1025	76.00	1764	96.00	3186
38.00	1488	60.00	301	77.00	130	117.00	117
39.00	467	61.00	1882	79.00	805	119.00	107
40.00	244	62.00	2034	80.00	117	141.00	318
44.00	456	63.00	1350	81.00	825	143.00	415
45.00	321	68.00	3783	82.00	58	173.00	52
47.00	646	69.00	3975	87.00	1618	174.00	38504
48.00	50	70.00	64	88.00	1489	175.00	2859
49.00	1596	72.00	57	92.00	1179	176.00	37088
50.00	7869	73.00	1587	93.00	1662	177.00	2398
51.00	2617	74.00	6234	94.00	5048		

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8293.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 17-Oct-2017 08:39:30 ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: bfb
Misc. Info.: 480-0066449-002
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 08:43:15 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 08:43:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
$ 61 BFB	95	5.339	5.339	0.000	0	106290	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

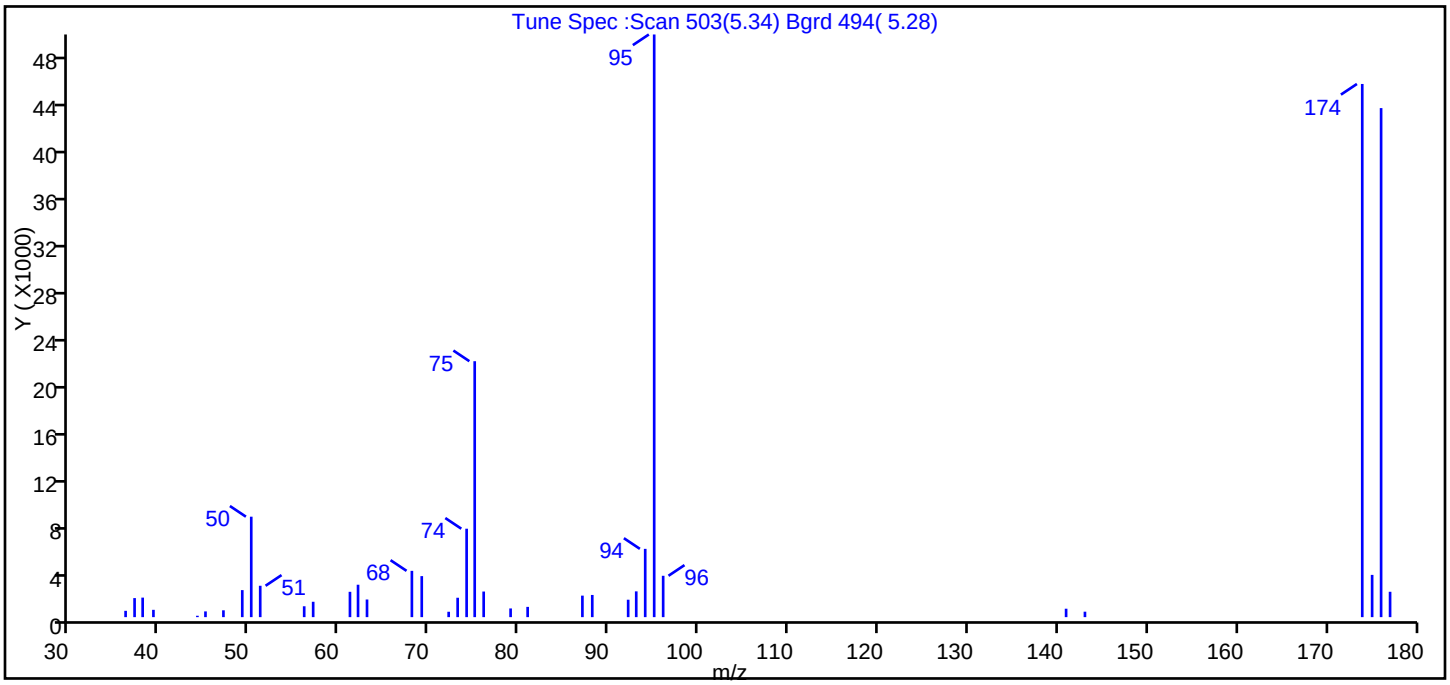
BFB_WRK_00065 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8293.D
Injection Date: 17-Oct-2017 08:39:30 Instrument ID: HP5973F
Lims ID: BFB
Client ID:
Operator ID: CDC ALS Bottle#: 1 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.2
75	30 to 60% of m/z 95	43.9
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	91.5
175	5 to 9% of m/z 174	7.3 (7.9)
176	Greater than 95% but less than 101% of m/z 174	87.4 (95.5)
177	5 to 9% of m/z 176	4.4 (5.0)

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8293.D\F-8260 SOIL.rslt\spectra.d
Injection Date: 17-Oct-2017 08:39:30
Spectrum: Tune Spec :Scan 503(5.34) Bgrd 494(5.28)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 37

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	536	56.00	923	75.00	21720	96.00	3510
37.10	1617	57.00	1305	76.00	2173	140.90	715
38.00	1657	61.10	2150	79.00	738	143.00	463
39.20	621	62.00	2751	80.90	871	173.90	45248
44.10	118	63.00	1498	87.00	1826	175.00	3586
45.00	487	68.00	3928	88.10	1883	176.00	43200
47.00	581	69.10	3482	92.10	1479	177.00	2153
49.10	2294	72.10	457	93.00	2188		
50.10	8525	73.10	1646	94.00	5795		
51.10	2663	74.10	7505	95.00	49448		

TestAmerica Buffalo
Target Compound Quantitation Report

Data File:	\\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3040P.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	10-Oct-2017 15:02:30	ALS Bottle#:	2	Worklist Smp#:	3
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0066269-002				
Operator ID:	RF	Instrument ID:	HP5973P		
Method:	\\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P-8260H2O.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	10-Oct-2017 15:07:35	Calib Date:	06-Oct-2017 20:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Buffalo\ChromData\HP5973P\20171006-66198.b\P30168.D				
Column 1 :	ZB-624 (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK006				
First Level Reviewer: farrellr		Date:	10-Oct-2017 15:07:35		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 21 BFB	95	7.627	7.627	0.000	0	118145	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

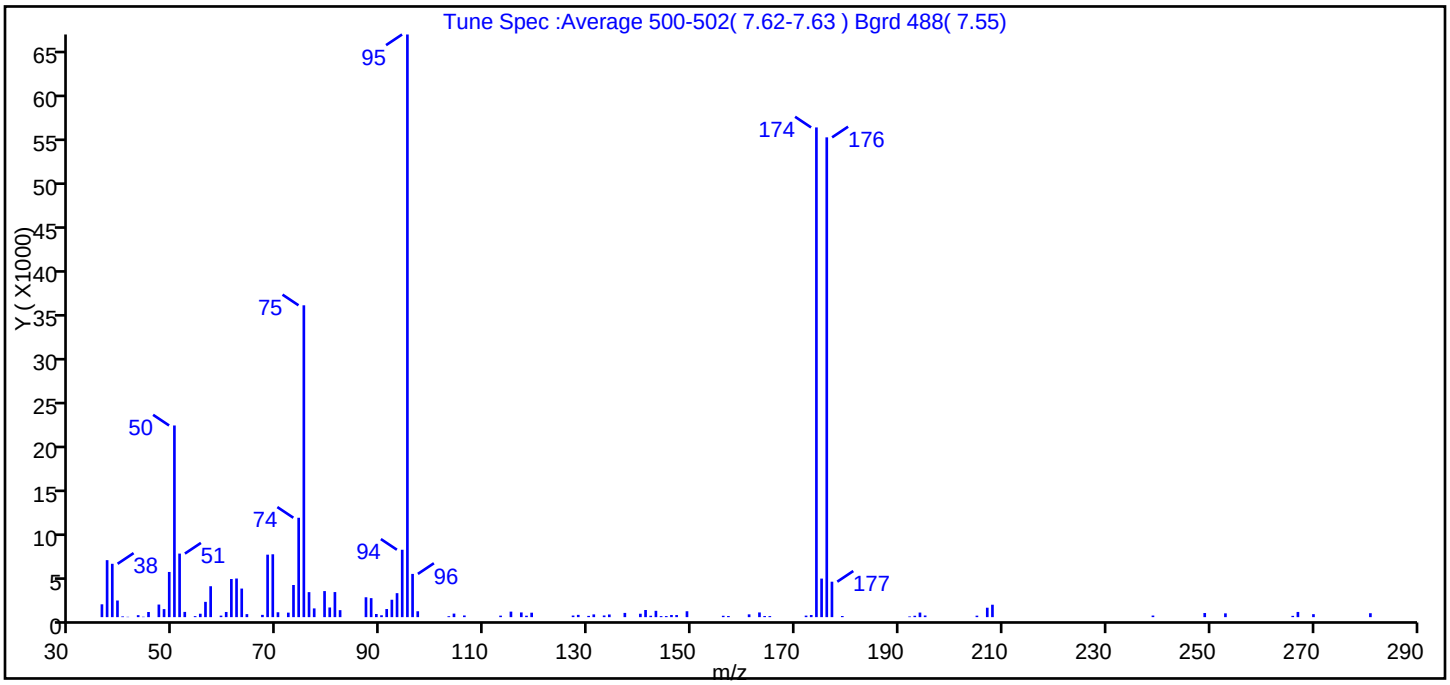
BFB_WRK_00065 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3040P.D
Injection Date: 10-Oct-2017 15:02:30 Instrument ID: HP5973P
Lims ID: BFB
Client ID:
Operator ID: RF ALS Bottle#: 2 Worklist Smp#: 3
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 21 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	32.9
75	30 to 60% of m/z 95	53.5
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	84.0
175	5 to 9% of m/z 174	6.6 (7.9)
176	Greater than 95% but less than 101% of m/z 174	82.3 (98.0)
177	5 to 9% of m/z 176	6.1 (7.4)

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3040P.D\P-8260H2O.rslt\spectra.d
Injection Date: 10-Oct-2017 15:02:30
Spectrum: Tune Spec :Average 500-502(7.62-7.63) Bgrd 488(7.55)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1460	68.00	7104	106.00	190	164.00	127
37.00	6480	69.00	7148	113.00	171	165.00	121
38.00	6066	70.00	555	115.00	628	172.00	174
39.00	1892	72.00	513	117.00	535	173.00	241
40.00	85	73.00	3655	118.00	163	174.00	55680
41.00	39	74.00	11301	119.00	506	175.00	4384
43.00	224	75.00	35456	127.00	183	176.00	54552
44.00	48	76.00	2843	128.00	259	177.00	4031
45.00	585	77.00	994	130.00	143	179.00	128
47.00	1432	79.00	2963	131.00	313	192.00	79
48.00	915	80.00	1099	133.00	190	193.00	158
49.00	5138	81.00	2852	134.00	302	194.00	520
50.00	21792	82.00	794	137.00	482	195.00	186
51.00	7226	87.00	2261	140.00	387	205.00	168
52.00	596	88.00	2161	141.00	813	207.00	1072
54.00	116	89.00	358	142.00	157	208.00	1413
55.00	388	90.00	212	143.00	720	239.00	181
56.00	1739	91.00	923	144.00	119	249.00	469
57.00	3515	92.00	1979	145.00	123	253.00	432
59.00	173	93.00	2727	146.00	243	266.00	146
60.00	588	94.00	7664	147.00	239	267.00	592
61.00	4334	95.00	66248	149.00	672	270.00	338
62.00	4392	96.00	4916	156.00	157	281.00	447
63.00	3249	97.00	670	157.00	127		
64.00	343	103.00	106	161.00	317		
67.00	259	104.00	403	163.00	535		

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93252P.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 18-Oct-2017 09:04:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: bfb
Misc. Info.: 480-0066487-002
Operator ID: RF/RB Instrument ID: HP5973P

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 18-Oct-2017 09:08:05 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: farrellr Date: 18-Oct-2017 09:08:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 21 BFB	95	7.627	7.627	0.000	0	134920	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

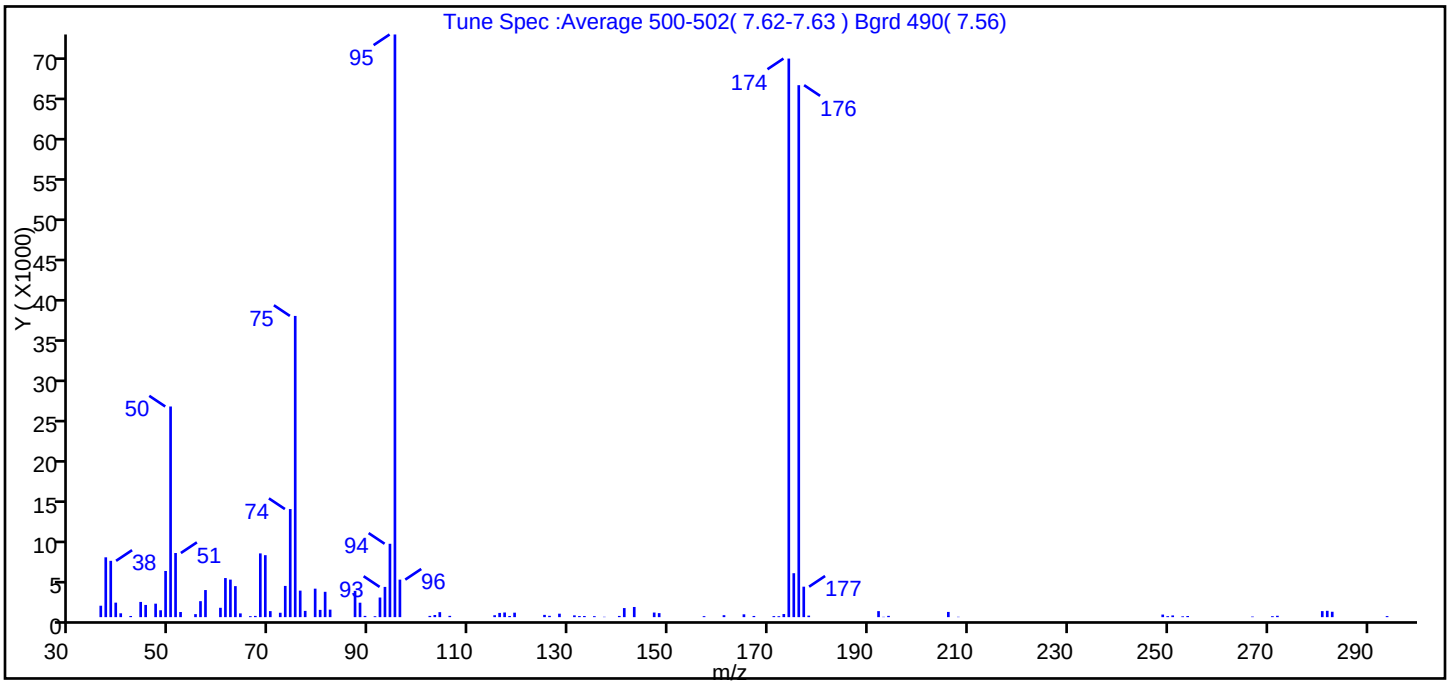
BFB_WRK_00065 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93252P.D
Injection Date: 18-Oct-2017 09:04:30 Instrument ID: HP5973P
Lims ID: BFB
Client ID:
Operator ID: RF/RB ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: P-8260H2O Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 21 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	36.2
75	30 to 60% of m/z 95	51.7
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	95.9
175	5 to 9% of m/z 174	7.5 (7.9)
176	Greater than 95% but less than 101% of m/z 174	91.3 (95.2)
177	5 to 9% of m/z 176	5.2 (5.7)

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93252P.D\P-8260H2O.rslt\spectra.d
Injection Date: 18-Oct-2017 09:04:30
Spectrum: Tune Spec :Average 500-502(7.62-7.63) Bgrd 490(7.56)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1415	69.00	7674	115.00	238	174.00	69176
37.00	7409	70.00	746	116.00	522	175.00	5441
38.00	6975	72.00	544	117.00	576	176.00	65880
39.00	1796	73.00	3867	118.00	144	177.00	3773
40.00	478	74.00	13386	119.00	553	178.00	190
42.00	145	75.00	37304	125.00	280	192.00	746
44.00	1884	76.00	3283	126.00	164	193.00	42
45.00	1511	77.00	777	128.00	428	194.00	159
47.00	1669	79.00	3527	131.00	221	206.00	646
48.00	852	80.00	899	132.00	137	208.00	43
49.00	5719	81.00	3138	133.00	142	249.00	319
50.00	26088	82.00	930	135.00	122	250.00	122
51.00	7942	87.00	3257	137.00	43	251.00	212
52.00	636	88.00	1789	140.00	149	253.00	100
55.00	373	89.00	156	141.00	1124	254.00	142
56.00	1979	91.00	114	143.00	1259	267.00	72
57.00	3354	92.00	2430	147.00	569	271.00	118
60.00	1159	93.00	3745	148.00	498	272.00	170
61.00	4841	94.00	9087	157.00	123	281.00	747
62.00	4648	95.00	72160	161.00	242	282.00	785
63.00	3841	96.00	4646	165.00	350	283.00	669
64.00	465	102.00	155	167.00	146	294.00	131
66.00	119	103.00	265	171.00	129		
67.00	153	104.00	619	172.00	117		
68.00	7895	106.00	161	173.00	386		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-382014/2-A

Matrix: Solid | Lab File ID: F8273.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/16/2017 13:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 381944 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-382014/2-A

Matrix: Solid | Lab File ID: F8273.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/16/2017 13:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 381944 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	3.0
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	ND		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		64-126
460-00-4	4-Bromofluorobenzene (Surr)	104		72-126
1868-53-7	Dibromofluoromethane (Surr)	108		60-140
2037-26-5	Toluene-d8 (Surr)	99		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8273.D
Lims ID: MB 480-382014/2-A
Client ID:
Sample Type: MB
Inject. Date: 16-Oct-2017 13:08:30 ALS Bottle#: 5 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0066422-008
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2017 11:17:40 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: cwiklinc Date: 16-Oct-2017 13:28:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.197	5.191	0.006	99	266370	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	566057	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	606218	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	357884	50.0	54.2	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.960	4.953	0.007	0	212931	50.0	50.2	
$ 5 Toluene-d8 (Surr)	98	6.559	6.559	0.000	93	1378656	50.0	49.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	94	476330	50.0	52.2	
10 Dichlorodifluoromethane	85		1.814					ND	
11 Chlorodifluoromethane	51		1.833					ND	
12 Chloromethane	50		1.997					ND	
151 Butadiene	54		2.088					ND	
13 Vinyl chloride	62		2.088					ND	
14 Bromomethane	94		2.362					ND	
15 Chloroethane	64		2.410					ND	
16 Dichlorofluoromethane	67		2.575					ND	
17 Trichlorofluoromethane	101		2.611					ND	
148 Ethanol	45		2.745					ND	
18 Ethyl ether	59		2.763					ND	
19 Propene oxide	58		2.861					ND	
20 Acrolein	56		2.915					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.958					ND	
22 1,1-Dichloroethene	96		2.976					ND	
23 Acetone	43	3.043	3.025	0.018	64	3794		1.37	
24 Isopropyl alcohol	45		3.122					ND	
25 Iodomethane	142		3.128					ND	
26 Carbon disulfide	76		3.177					ND	
27 Methyl acetate	43		3.238					ND	
28 3-Chloro-1-propene	41		3.238					ND	
29 Acetonitrile	40		3.281					ND	
31 2-Methyl-2-propanol	59		3.402					ND	
32 Methyl tert-butyl ether	73		3.499					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
34 trans-1,2-Dichloroethene	96		3.530					ND	
33 Acrylonitrile	53		3.548					ND	
134 Halothane	117		3.816					ND	
36 Isopropyl ether	45		3.822					ND	
37 Vinyl acetate	43		3.846					ND	
39 1,1-Dichloroethane	63		3.858					ND	
38 1,1-Dimethoxyethane	75		3.895					ND	
40 2-Chloro-1,3-butadiene	53		3.913					ND	
41 Tert-butyl ethyl ether	59		4.096					ND	
43 2-Butanone (MEK)	43		4.290					ND	
44 2,2-Dichloropropane	77		4.290					ND	
42 Ethyl acetate	43		4.290					ND	
45 cis-1,2-Dichloroethene	96		4.302					ND	
46 Propionitrile	54		4.388					ND	
47 Methacrylonitrile	41		4.479					ND	
48 Chlorobromomethane	128		4.503					ND	
49 Tetrahydrofuran	42		4.528					ND	
50 Chloroform	83		4.540					ND	
51 1,1,1-Trichloroethane	97		4.680					ND	
52 Cyclohexane	56		4.710					ND	
54 1,1-Dichloropropene	75		4.795					ND	
55 Carbon tetrachloride	117		4.807					ND	
53 Isobutyl alcohol	43		4.868					ND	
147 t-Amyl alcohol	59		4.941					ND	
152 Isooctane	57		4.954					ND	
57 Benzene	78		4.978					ND	
56 Tert-amyl methyl ether	73		5.002					ND	
58 1,2-Dichloroethane	62		5.014					ND	
59 n-Heptane	43		5.075					ND	
1 1,4-Difluorobenzene	114		5.258					ND	
136 2,4,4-Trimethyl-1-pentene	55		5.385					ND	
60 n-Butanol	56		5.410					ND	
62 Trichloroethene	95		5.495					ND	
137 Ethyl acrylate	55		5.568					ND	
135 2,4,4-Trimethyl-2-pentene	97		5.568					ND	
64 Methylcyclohexane	83		5.629					ND	
65 1,2-Dichloropropane	63		5.714					ND	
63 Methyl methacrylate	41		5.732					ND	
66 1,4-Dioxane	88		5.823					ND	
67 Dibromomethane	93		5.842					ND	
68 Dichlorobromomethane	83		5.951					ND	
69 2-Chloroethyl vinyl ether	63		6.164					ND	
70 2-Nitropropane	43		6.164					ND	
71 Epichlorohydrin	57		6.274					ND	
72 cis-1,3-Dichloropropene	75		6.328					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.432					ND	
74 Toluene	92		6.620					ND	
76 2-Methylthiophene	97		6.754					ND	
75 Ethyl methacrylate	69		6.845					ND	
77 trans-1,3-Dichloropropene	75		6.845					ND	
78 3-Methylthiophene	97		6.906					ND	
79 1,1,2-Trichloroethane	83		7.040					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
81 Tetrachloroethene	166	7.137	7.137	0.000	95	4231		0.4895	
82 1,3-Dichloropropane	76		7.204					ND	
80 2-Hexanone	43		7.223					ND	
155 n-Butyl acetate	43		7.302					ND	
83 Chlorodibromomethane	129		7.442					ND	
84 Ethylene Dibromide	107		7.569					ND	
146 1-Chlorohexane	55		7.922					ND	
85 3-Chlorobenzotrifluoride	180		7.928					ND	
86 4-Chlorobenzotrifluoride	180		7.983					ND	
87 Chlorobenzene	112		8.020					ND	
88 Ethylbenzene	91		8.086					ND	
89 1,1,1,2-Tetrachloroethane	131		8.099					ND	
90 m-Xylene & p-Xylene	106		8.202					ND	
91 o-Xylene	106		8.628					ND	
93 2-Chlorobenzotrifluoride	180		8.914					ND	
95 Bromoform	173		8.920					ND	
94 Isopropylbenzene	105		8.999					ND	
96 Cyclohexanone	55		9.200					ND	
97 1,1,2,2-Tetrachloroethane	83		9.388					ND	
101 Bromobenzene	156		9.388					ND	
99 N-Propylbenzene	91		9.437					ND	
98 trans-1,4-Dichloro-2-buten	53		9.437					ND	
100 1,2,3-Trichloropropane	110		9.443					ND	
103 2-Chlorotoluene	126		9.565					ND	
102 1,3,5-Trimethylbenzene	105		9.607					ND	
104 3-Chlorotoluene	126		9.626					ND	
105 4-Chlorotoluene	126		9.668					ND	
106 tert-Butylbenzene	134		9.930					ND	
107 1,2,4-Trimethylbenzene	105		9.985					ND	
108 Pentachloroethane	167		10.009					ND	
109 sec-Butylbenzene	105		10.143					ND	
110 4-Isopropyltoluene	119		10.270					ND	
111 1,3-Dichlorobenzene	146		10.301					ND	
113 1,4-Dichlorobenzene	146		10.380					ND	
112 1,2,3-Trimethylbenzene	105		10.398					ND	
150 Benzyl chloride	126		10.508					ND	
115 n-Butylbenzene	91		10.648					ND	
116 1,2-Dichlorobenzene	146		10.733					ND	
117 1,2-Dibromo-3-Chloropropan	75		11.414					ND	
118 1,3,5-Trichlorobenzene	180		11.548					ND	
119 1,2,4-Trichlorobenzene	180		12.053					ND	
120 Hexachlorobutadiene	225		12.144					ND	
121 Naphthalene	128		12.266					ND	
122 1,2,3-Trichlorobenzene	180		12.473					ND	
149 2-Methylnaphthalene	142		13.276					ND	
156 1-Chloro-1-fluoroethane TI	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	
S 123 Total BTEX	1		30.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
S 124 Xylenes, Total	1		30.000					ND	
T 7 Ethylene oxide	1		0.000					ND	
T 138 Aziridine TIC	1		0.000					ND	
T 130 Hexachloroethane	117		0.000					ND	
T 140 bis(chloromethyl)ether TIC	1		0.000					ND	
T 132 Methyl acrylate	1		0.000					ND	
T 141 Pentachloroethane TIC	1		0.000					ND	
T 142 1-Bromopropane	1		0.000					ND	
T 133 cis-1,4-Dichloro-2-butene	88		0.000					ND	
T 131 Nitrobenzene	77		0.000					ND	
T 139 Bromoethane TIC	1		0.000					ND	
T 9 bis(2-chloromethyl)ether T	1		0.000					ND	
T 129 tert-amyl alcohol TIC	59		0.000					ND	
T 128 Hexachloroethane TIC	1		0.000					ND	
T 127 Ethanol TIC	45		0.000					ND	

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

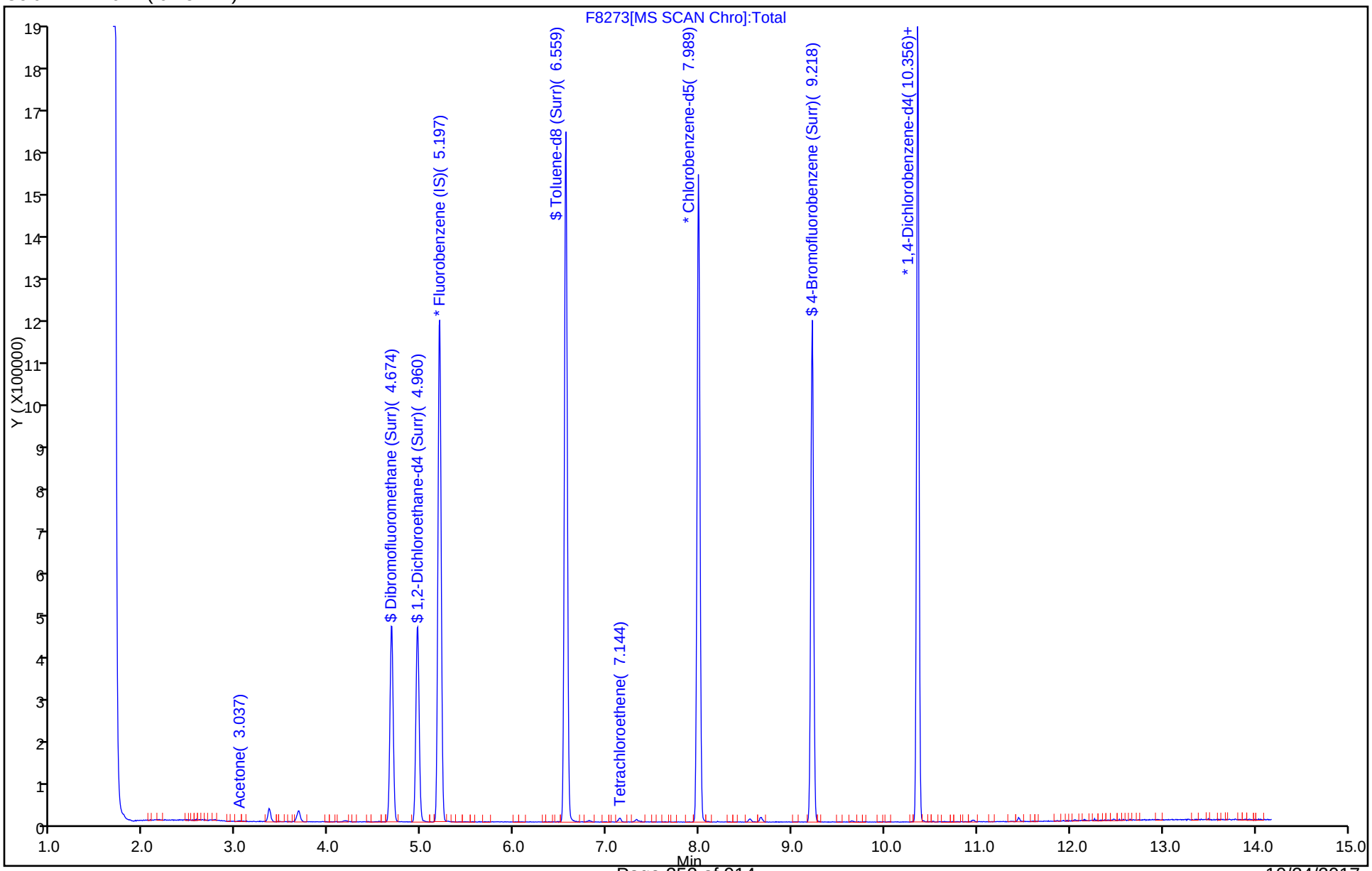
Report Date: 16-Oct-2017 13:28:48 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8273.D

Injection Date:	16-Oct-2017 13:08:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	MB 480-382014/2-A			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-382187/2-A

Matrix: Solid | Lab File ID: F8298.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/17/2017 10:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	ND		5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-382187/2-A

Matrix: Solid | Lab File ID: F8298.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/17/2017 10:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	3.0
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
100-42-5	Styrene	ND		5.0	0.25
127-18-4	Tetrachloroethene	ND		5.0	0.67
108-88-3	Toluene	ND		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		64-126
460-00-4	4-Bromofluorobenzene (Surr)	106		72-126
1868-53-7	Dibromofluoromethane (Surr)	102		60-140
2037-26-5	Toluene-d8 (Surr)	101		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8298.D
Lims ID: MB 480-382187/2-A
Client ID:
Sample Type: MB
Inject. Date: 17-Oct-2017 10:58:30 ALS Bottle#: 5 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 480-0066449-007
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 12:42:19 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 12:45:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.197	-0.006	99	244765	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	85	500962	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	540122	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.680	-0.006	94	311132	50.0	51.2	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.947	4.960	-0.013	0	195983	50.0	50.3	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	93	1248031	50.0	50.6	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	95	430396	50.0	53.2	
10 Dichlorodifluoromethane	85		1.820					ND	
11 Chlorodifluoromethane	51		1.833					ND	
12 Chloromethane	50		2.003					ND	
13 Vinyl chloride	62		2.094					ND	
151 Butadiene	54		2.100					ND	
14 Bromomethane	94		2.368					ND	
15 Chloroethane	64		2.417					ND	
16 Dichlorofluoromethane	67		2.575					ND	
17 Trichlorofluoromethane	101		2.617					ND	
148 Ethanol	45		2.751					ND	
18 Ethyl ether	59		2.769					ND	
19 Propene oxide	58		2.861					ND	
20 Acrolein	56		2.922					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.958					ND	
22 1,1-Dichloroethene	96		2.976					ND	
23 Acetone	43		3.031					ND	
24 Isopropyl alcohol	45		3.122					ND	
25 Iodomethane	142		3.134					ND	
26 Carbon disulfide	76		3.183					ND	
28 3-Chloro-1-propene	41		3.244					ND	
27 Methyl acetate	43		3.244					ND	
29 Acetonitrile	40		3.287					ND	
30 Methylene Chloride	84	3.354	3.354	0.000	92	20396		0.6867	
31 2-Methyl-2-propanol	59		3.408					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
32 Methyl tert-butyl ether	73		3.506					ND	
34 trans-1,2-Dichloroethene	96		3.536					ND	
33 Acrylonitrile	53		3.554					ND	
134 Halothane	117		3.822					ND	
36 Isopropyl ether	45		3.822					ND	
37 Vinyl acetate	43		3.852					ND	
39 1,1-Dichloroethane	63		3.858					ND	
38 1,1-Dimethoxyethane	75		3.895					ND	
40 2-Chloro-1,3-butadiene	53		3.913					ND	
41 Tert-butyl ethyl ether	59		4.096					ND	
42 Ethyl acetate	43		4.291					ND	
43 2-Butanone (MEK)	43		4.296					ND	
44 2,2-Dichloropropane	77		4.296					ND	
45 cis-1,2-Dichloroethene	96		4.303					ND	
46 Propionitrile	54		4.388					ND	
47 Methacrylonitrile	41		4.479					ND	
48 Chlorobromomethane	128		4.509					ND	
49 Tetrahydrofuran	42		4.528					ND	
50 Chloroform	83		4.540					ND	
51 1,1,1-Trichloroethane	97		4.680					ND	
52 Cyclohexane	56		4.710					ND	
54 1,1-Dichloropropene	75		4.801					ND	
55 Carbon tetrachloride	117		4.807					ND	
53 Isobutyl alcohol	43		4.874					ND	
147 t-Amyl alcohol	59		4.948					ND	
152 Isooctane	57		4.954					ND	
57 Benzene	78		4.984					ND	
56 Tert-amyl methyl ether	73		5.002					ND	
58 1,2-Dichloroethane	62		5.020					ND	
59 n-Heptane	43		5.081					ND	
1 1,4-Difluorobenzene	114		5.264					ND	
136 2,4,4-Trimethyl-1-pentene	55		5.386					ND	
60 n-Butanol	56		5.410					ND	
62 Trichloroethene	95		5.495					ND	
137 Ethyl acrylate	55		5.568					ND	
135 2,4,4-Trimethyl-2-pentene	97		5.568					ND	
64 Methylcyclohexane	83		5.635					ND	
65 1,2-Dichloropropane	63		5.714					ND	
63 Methyl methacrylate	41		5.732					ND	
66 1,4-Dioxane	88		5.830					ND	
67 Dibromomethane	93		5.842					ND	
68 Dichlorobromomethane	83		5.957					ND	
69 2-Chloroethyl vinyl ether	63		6.164					ND	
70 2-Nitropropane	43		6.170					ND	
71 Epichlorohydrin	57		6.280					ND	
72 cis-1,3-Dichloropropene	75		6.334					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.438					ND	
74 Toluene	92		6.620					ND	
76 2-Methylthiophene	97		6.754					ND	
77 trans-1,3-Dichloropropene	75		6.845					ND	
75 Ethyl methacrylate	69		6.852					ND	
78 3-Methylthiophene	97		6.906					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
79 1,1,2-Trichloroethane	83		7.040					ND	
81 Tetrachloroethene	166	7.144	7.137	0.007	88	2513		0.3285	
82 1,3-Dichloropropane	76		7.204					ND	
80 2-Hexanone	43		7.223					ND	
155 n-Butyl acetate	43		7.302					ND	
83 Chlorodibromomethane	129		7.442					ND	
84 Ethylene Dibromide	107		7.569					ND	
146 1-Chlorohexane	55		7.922					ND	
85 3-Chlorobenzotrifluoride	180		7.929					ND	
86 4-Chlorobenzotrifluoride	180		7.989					ND	
87 Chlorobenzene	112		8.020					ND	
88 Ethylbenzene	91		8.087					ND	
89 1,1,1,2-Tetrachloroethane	131		8.099					ND	
90 m-Xylene & p-Xylene	106		8.202					ND	
91 o-Xylene	106		8.634					ND	
92 Styrene	104		8.652					ND	
93 2-Chlorobenzotrifluoride	180		8.914					ND	
95 Bromoform	173		8.926					ND	
94 Isopropylbenzene	105		8.999					ND	
96 Cyclohexanone	55		9.200					ND	
101 Bromobenzene	156		9.388					ND	
97 1,1,2,2-Tetrachloroethane	83		9.388					ND	
98 trans-1,4-Dichloro-2-buten	53		9.437					ND	
99 N-Propylbenzene	91		9.437					ND	
100 1,2,3-Trichloropropane	110		9.443					ND	
103 2-Chlorotoluene	126		9.565					ND	
102 1,3,5-Trimethylbenzene	105		9.607					ND	
104 3-Chlorotoluene	126		9.626					ND	
105 4-Chlorotoluene	126		9.674					ND	
106 tert-Butylbenzene	134		9.936					ND	
107 1,2,4-Trimethylbenzene	105		9.985					ND	
108 Pentachloroethane	167		10.009					ND	
109 sec-Butylbenzene	105		10.143					ND	
110 4-Isopropyltoluene	119		10.271					ND	
111 1,3-Dichlorobenzene	146		10.301					ND	
114 Dicyclopentadiene	66		10.374					ND	
113 1,4-Dichlorobenzene	146		10.380					ND	
112 1,2,3-Trimethylbenzene	105		10.398					ND	
150 Benzyl chloride	126		10.514					ND	
115 n-Butylbenzene	91		10.648					ND	
116 1,2-Dichlorobenzene	146		10.733					ND	
117 1,2-Dibromo-3-Chloropropan	75		11.420					ND	
118 1,3,5-Trichlorobenzene	180		11.542					ND	
119 1,2,4-Trichlorobenzene	180		12.053					ND	
120 Hexachlorobutadiene	225		12.144					ND	
121 Naphthalene	128		12.266					ND	
122 1,2,3-Trichlorobenzene	180		12.473					ND	
149 2-Methylnaphthalene	142		13.276					ND	
156 1-Chloro-1-fluoroethane TI	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
144 1-Bromopropane TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
S 123 Total BTEX	1		30.000					ND	
S 124 Xylenes, Total	1		30.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	
T 139 Bromoethane TIC	1		0.000					ND	
T 131 Nitrobenzene	77		0.000					ND	
T 133 cis-1,4-Dichloro-2-butene	88		0.000					ND	
T 9 bis(2-chloromethyl)ether T	1		0.000					ND	
T 127 Ethanol TIC	45		0.000					ND	
T 128 Hexachloroethane TIC	1		0.000					ND	
T 129 tert-amyl alcohol TIC	59		0.000					ND	
T 130 Hexachloroethane	117		0.000					ND	
T 138 Aziridine TIC	1		0.000					ND	
T 7 Ethylene oxide	1		0.000					ND	
T 140 bis(chloromethyl)ether TIC	1		0.000					ND	
T 142 1-Bromopropane	1		0.000					ND	
T 141 Pentachloroethane TIC	1		0.000					ND	
T 132 Methyl acrylate	1		0.000					ND	

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

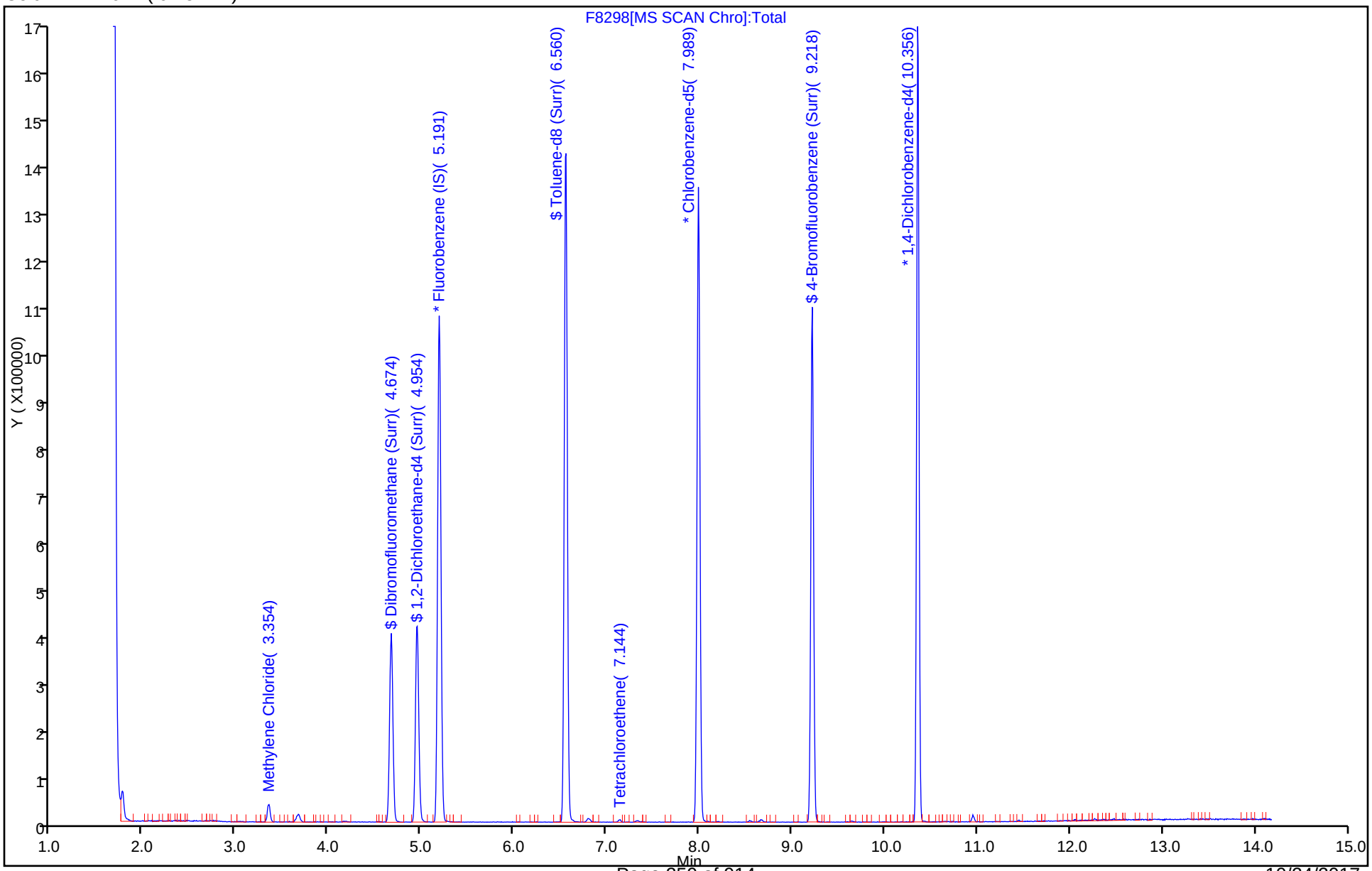
Report Date: 17-Oct-2017 12:45:14 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8298.D

Injection Date:	17-Oct-2017 10:58:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	MB 480-382187/2-A			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-382381/7

Matrix: Water | Lab File ID: 93257P.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2017 11:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382381 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-382381/7

Matrix: Water | Lab File ID: 93257P.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2017 11:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382381 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		77-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
1868-53-7	Dibromofluoromethane (Surr)	100		75-123
2037-26-5	Toluene-d8 (Surr)	104		80-120

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93257P.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 18-Oct-2017 11:20:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: mb
Misc. Info.: 480-0066487-007
Operator ID: RF/RB Instrument ID: HP5973P

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 18-Oct-2017 11:40:35 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: farrellr Date: 18-Oct-2017 11:40:35

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.433	10.434	-0.001	96	190146	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.382	14.388	-0.006	93	403178	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.338	17.338	0.000	95	424452	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.636	9.637	-0.001	93	267863	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.093	10.093	0.000	0	179789	25.0	24.2	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	96	934864	25.0	26.0	
$ 6 4-Bromofluorobenzene (Surr	174	15.878	15.878	0.000	91	342862	25.0	26.2	
10 Dichlorodifluoromethane	85		4.332					ND	
15 Chlorodifluoromethane	51		4.374					ND	
11 Chloromethane	50		4.764					ND	
17 Vinyl chloride	62		4.964					ND	
144 Butadiene	54		5.013					ND	
12 Bromomethane	94		5.615					ND	
13 Chloroethane	64		5.707					ND	
19 Dichlorofluoromethane	67		6.029					ND	
14 Trichlorofluoromethane	101		6.090					ND	
141 Ethanol	45		6.315					ND	
20 Ethyl ether	59		6.388					ND	
26 Propene oxide	58		6.577					ND	
22 Acrolein	56		6.692					ND	
16 1,1,2-Trichloro-1,2,2-trif	101		6.735					ND	
25 1,1-Dichloroethene	96		6.844					ND	
24 Acetone	43		6.887					ND	
23 Isopropyl alcohol	45		6.996					ND	
18 Iodomethane	142		7.142					ND	
30 Methyl acetate	43		7.252					ND	
27 Carbon disulfide	76		7.270					ND	
28 3-Chloro-1-propene	41		7.276					ND	
29 Acetonitrile	40		7.337					ND	
33 2-Methyl-2-propanol	59		7.507					ND	
31 Methylene Chloride	84		7.507					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		7.684					ND	
35 trans-1,2-Dichloroethene	96		7.781					ND	
34 Acrylonitrile	53		7.812					ND	
36 Hexane	57		7.976					ND	
37 Isopropyl ether	45		8.201					ND	
38 Vinyl acetate	43		8.280					ND	
40 1,1-Dichloroethane	63		8.335					ND	
39 1,1-Dimethoxyethane	75		8.341					ND	
41 2-Chloro-1,3-butadiene	53		8.408					ND	
42 Tert-butyl ethyl ether	59		8.657					ND	
46 Ethyl acetate	43		8.980					ND	
44 2-Butanone (MEK)	43		9.022					ND	
45 2,2-Dichloropropane	77		9.034					ND	
43 cis-1,2-Dichloroethene	96		9.053					ND	
47 Propionitrile	54		9.186					ND	
48 Methacrylonitrile	41		9.339					ND	
50 Chlorobromomethane	128		9.387					ND	
51 Tetrahydrofuran	42		9.399					ND	
49 Chloroform	83		9.418					ND	
52 1,1,1-Trichloroethane	97		9.649					ND	
66 2-Methylthiophene	97		9.687					ND	
54 Cyclohexane	56		9.691					ND	
56 1,1-Dichloropropene	75		9.831					ND	
53 Isobutyl alcohol	43		9.843					ND	
55 Carbon tetrachloride	117		9.850					ND	
67 3-Methylthiophene	97		9.894					ND	
140 t-Amyl alcohol	59		9.965					ND	
146 Isooctane	57		10.020					ND	
58 Tert-amyl methyl ether	73		10.087					ND	
57 Benzene	78		10.129					ND	
60 1,2-Dichloroethane	62		10.184					ND	
59 n-Heptane	43		10.184					ND	
1 1,4-Difluorobenzene	114		10.507					ND	
61 n-Butanol	56		10.653					ND	
145 Ethyl acrylate	55		10.859					ND	
62 Trichloroethene	95		10.884					ND	
64 Methylcyclohexane	83		11.084					ND	
65 Methyl methacrylate	41		11.164					ND	
63 1,2-Dichloropropane	63		11.224					ND	
68 1,4-Dioxane	88		11.340					ND	
69 Dibromomethane	93		11.431					ND	
70 Dichlorobromomethane	83		11.559					ND	
71 2-Chloroethyl vinyl ether	63		11.815					ND	
72 2-Nitropropane	43		11.869					ND	
74 Epichlorohydrin	57		12.021					ND	
73 cis-1,3-Dichloropropene	75		12.094					ND	
75 4-Methyl-2-pentanone (MIBK	43		12.198					ND	
76 Toluene	92		12.514					ND	
77 Ethyl methacrylate	69		12.733					ND	
78 trans-1,3-Dichloropropene	75		12.806					ND	
79 1,1,2-Trichloroethane	83		13.092					ND	
80 Tetrachloroethene	166		13.244					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
83 2-Hexanone	43		13.287					ND	
82 1,3-Dichloropropane	76		13.329					ND	
149 n-Butyl acetate	43		13.342					ND	
81 Chlorodibromomethane	129		13.676					ND	
85 Ethylene Dibromide	107		13.871					ND	
84 3-Chlorobenzotrifluoride	180		14.205					ND	
139 1-Chlorohexane	55		14.218					ND	
86 4-Chlorobenzotrifluoride	180		14.278					ND	
87 Chlorobenzene	112		14.424					ND	
89 Ethylbenzene	91		14.467					ND	
88 1,1,1,2-Tetrachloroethane	131		14.510					ND	
90 m-Xylene & p-Xylene	106		14.601					ND	
93 o-Xylene	106		15.154					ND	
94 Styrene	104		15.179					ND	
91 2-Chlorobenzotrifluoride	180		15.459					ND	
92 Bromoform	173		15.568					ND	
95 Isopropylbenzene	105		15.580					ND	
96 Cyclohexanone	55		15.891					ND	
97 1,1,2,2-Tetrachloroethane	83		16.055					ND	
98 trans-1,4-Dichloro-2-buten	53		16.103					ND	
99 N-Propylbenzene	91		16.110					ND	
100 Bromobenzene	156		16.128					ND	
101 1,2,3-Trichloropropane	110		16.146					ND	
102 1,3,5-Trimethylbenzene	105		16.298					ND	
103 2-Chlorotoluene	126		16.316					ND	
104 3-Chlorotoluene	126		16.383					ND	
105 4-Chlorotoluene	126		16.444					ND	
106 tert-Butylbenzene	134		16.736					ND	
107 1,2,4-Trimethylbenzene	105		16.797					ND	
108 Pentachloroethane	167		16.870					ND	
109 sec-Butylbenzene	105		17.004					ND	
112 4-Isopropyltoluene	119		17.150					ND	
110 1,3-Dichlorobenzene	146		17.265					ND	
113 1,2,3-Trimethylbenzene	105		17.357					ND	
111 1,4-Dichlorobenzene	146		17.375					ND	
114 Dicyclopentadiene	66		17.375					ND	
143 Benzyl chloride	126		17.539					ND	
115 n-Butylbenzene	91		17.661					ND	
116 1,2-Dichlorobenzene	146		17.874					ND	
117 1,2-Dibromo-3-Chloropropan	75		18.920					ND	
118 1,3,5-Trichlorobenzene	180		19.097					ND	
119 1,2,4-Trichlorobenzene	180		20.027					ND	
120 Hexachlorobutadiene	225	20.137	20.149	-0.012	86	4517		0.4789	
121 Naphthalene	128		20.471					ND	
122 1,2,3-Trichlorobenzene	180		20.855					ND	
142 2-Methylnaphthalene	142		22.424					ND	
136 Propene oxide TIC	1		0.000					ND	
138 Ethylene oxide TIC	1		0.000					ND	
137 1-Bromopropane TIC	1		0.000					ND	
134 Halothane	1		0.000					ND	
135 Pentachloroethane TIC	1		0.000					ND	
S 123 1,2-Dichloroethene, Total	1		30.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
S 124 1,3-Dichloropropene, Total	1		30.000					ND	
S 125 Total BTEX	1		30.000					ND	
S 126 Xylenes, Total	1		30.000					ND	
T 150 1-Chloro-1-fluoroethane TI	47		5.300					ND	
T 129 bis(chloromethyl)ether TIC	1		0.000					ND	
T 131 1-Bromopropane	1		0.000					ND	
T 7 Ethylene oxide	1		0.000					ND	
T 130 Bromoethane TIC	1		0.000					ND	
T 133 Aziridine TIC	1		0.000					ND	
T 132 tert-amyl alcohol TIC	1		0.000					ND	
T 128 Hexachloroethane TIC	201		0.000					ND	
T 9 bis(2-chloromethyl)ether T	1		0.000					ND	
T 127 Ethanol TIC	45		0.000					ND	

Reagents:

P 8260 IS_00248	Amount Added:	1.25	Units: uL	Run Reagent
P 8260 Surr._00243	Amount Added:	1.25	Units: uL	Run Reagent

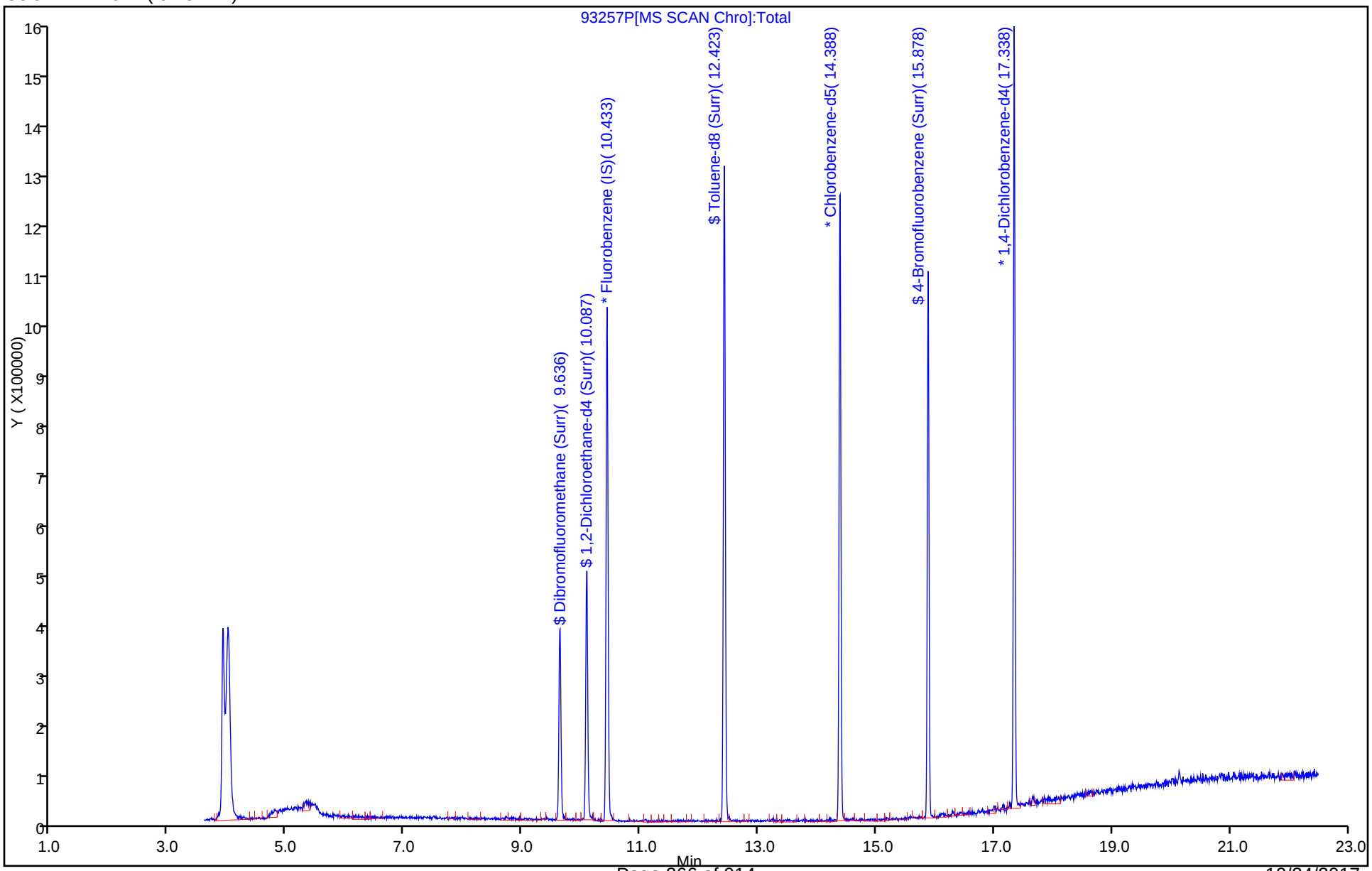
Report Date: 18-Oct-2017 11:40:36 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93257P.D

Injection Date:	18-Oct-2017 11:20:30	Instrument ID:	HP5973P	Operator ID:	RF/RB
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-382014/1-A

Matrix: Solid | Lab File ID: F8271.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/16/2017 12:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 381944 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	55.4		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	47.5		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	52.2		5.0	1.1
79-00-5	1,1,2-Trichloroethane	49.2		5.0	0.65
75-34-3	1,1-Dichloroethane	51.9		5.0	0.61
75-35-4	1,1-Dichloroethene	52.3		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	53.6		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	51.4		5.0	2.5
106-93-4	1,2-Dibromoethane	52.4		5.0	0.64
95-50-1	1,2-Dichlorobenzene	49.5		5.0	0.39
107-06-2	1,2-Dichloroethane	49.5		5.0	0.25
78-87-5	1,2-Dichloropropane	52.0		5.0	2.5
541-73-1	1,3-Dichlorobenzene	49.6		5.0	0.26
106-46-7	1,4-Dichlorobenzene	49.6		5.0	0.70
78-93-3	2-Butanone (MEK)	239		25	1.8
591-78-6	2-Hexanone	236		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	230		25	1.6
67-64-1	Acetone	247		25	4.2
71-43-2	Benzene	50.9		5.0	0.25
75-27-4	Bromodichloromethane	60.9		5.0	0.67
75-25-2	Bromoform	71.5		5.0	2.5
74-83-9	Bromomethane	50.8		5.0	0.45
75-15-0	Carbon disulfide	57.6		5.0	2.5
56-23-5	Carbon tetrachloride	67.5		5.0	0.48
108-90-7	Chlorobenzene	52.0		5.0	0.66
75-00-3	Chloroethane	50.6		5.0	1.1
67-66-3	Chloroform	51.0		5.0	0.31
74-87-3	Chloromethane	42.6		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	51.7		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	57.7		5.0	0.72
110-82-7	Cyclohexane	51.2		5.0	0.70
124-48-1	Dibromochloromethane	59.5		5.0	0.64
75-71-8	Dichlorodifluoromethane	59.7		5.0	0.41
100-41-4	Ethylbenzene	50.4		5.0	0.35
98-82-8	Isopropylbenzene	49.0		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-382014/1-A

Matrix: Solid | Lab File ID: F8271.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/16/2017 12:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 381944 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	92.1		25	3.0
1634-04-4	Methyl tert-butyl ether	48.4		5.0	0.49
108-87-2	Methylcyclohexane	52.7		5.0	0.76
75-09-2	Methylene Chloride	52.8		5.0	2.3
100-42-5	Styrene	50.8		5.0	0.25
127-18-4	Tetrachloroethene	55.3		5.0	0.67
108-88-3	Toluene	49.8		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	52.3		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	55.9		5.0	2.2
79-01-6	Trichloroethene	52.8		5.0	1.1
75-69-4	Trichlorofluoromethane	54.4		5.0	0.47
75-01-4	Vinyl chloride	47.4		5.0	0.61
1330-20-7	Xylenes, Total	103		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		64-126
460-00-4	4-Bromofluorobenzene (Surr)	103		72-126
1868-53-7	Dibromofluoromethane (Surr)	105		60-140
2037-26-5	Toluene-d8 (Surr)	98		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8271.D
Lims ID: LCS 480-382014/1-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Oct-2017 12:17:30 ALS Bottle#: 3 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0066422-006
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 16-Oct-2017 13:32:06 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: cwiklinc Date: 16-Oct-2017 13:32:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.191	0.000	99	289139	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	604935	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	94	646823	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.674	0.000	94	377065	50.0	52.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.954	4.953	0.001	0	225536	50.0	49.0	
$ 5 Toluene-d8 (Surr)	98	6.560	6.559	0.001	93	1460303	50.0	49.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	93	505093	50.0	51.7	
10 Dichlorodifluoromethane	85	1.821	1.814	0.006	100	457142	50.0	59.7	
12 Chloromethane	50	1.997	1.997	0.000	100	302528	50.0	42.6	
151 Butadiene	54	2.094	2.088	0.006	86	306601	50.0	43.5	
13 Vinyl chloride	62	2.094	2.088	0.006	92	334726	50.0	47.4	
14 Bromomethane	94	2.368	2.362	0.006	90	167068	50.0	50.8	
15 Chloroethane	64	2.411	2.410	0.001	100	151334	50.0	50.6	
16 Dichlorofluoromethane	67	2.575	2.575	0.000	96	464782	50.0	50.4	
17 Trichlorofluoromethane	101	2.611	2.611	0.000	99	489661	50.0	54.4	
18 Ethyl ether	59	2.770	2.763	0.007	87	236074	50.0	42.2	
20 Acrolein	56	2.922	2.915	0.007	100	326600	250.0	231.9	
21 1,1,2-Trichloro-1,2,2-trif	101	2.958	2.958	0.000	92	393862	50.0	52.2	
22 1,1-Dichloroethene	96	2.976	2.976	0.000	94	374131	50.0	52.3	
23 Acetone	43	3.031	3.025	0.006	98	740496	250.0	246.5	
25 Iodomethane	142	3.128	3.128	0.000	98	693048	50.0	54.6	
26 Carbon disulfide	76	3.183	3.177	0.006	99	1271567	50.0	57.6	
27 Methyl acetate	43	3.244	3.238	0.006	76	604702	100.0	92.1	
28 3-Chloro-1-propene	41	3.244	3.238	0.006	90	668349	50.0	50.8	
30 Methylene Chloride	84	3.354	3.353	0.001	96	446933	50.0	52.8	
31 2-Methyl-2-propanol	59	3.414	3.402	0.012	99	542743	500.0	487.8	
32 Methyl tert-butyl ether	73	3.500	3.499	0.001	96	1168168	50.0	48.4	
34 trans-1,2-Dichloroethene	96	3.536	3.530	0.006	95	429217	50.0	52.3	
33 Acrylonitrile	53	3.548	3.548	0.000	99	1711806	500.0	487.3	
35 Hexane	57	3.670	3.664	0.006	85	865351	50.0	56.6	
37 Vinyl acetate	43	3.846	3.846	0.000	97	1516282	100.0	100.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
39 1,1-Dichloroethane	63	3.859	3.858	0.000	96	817187	50.0	51.9	
43 2-Butanone (MEK)	43	4.297	4.290	0.007	100	1016633	250.0	239.4	
44 2,2-Dichloropropane	77	4.290	4.290	0.000	91	563833	50.0	51.3	
45 cis-1,2-Dichloroethene	96	4.303	4.302	0.001	87	476494	50.0	51.7	
48 Chlorobromomethane	128	4.509	4.503	0.006	95	229296	50.0	54.8	
49 Tetrahydrofuran	42	4.528	4.528	0.000	89	254771	100.0	94.4	
50 Chloroform	83	4.540	4.540	0.000	94	702967	50.0	51.0	
51 1,1,1-Trichloroethane	97	4.680	4.680	0.000	98	627323	50.0	55.4	
52 Cyclohexane	56	4.704	4.710	-0.006	90	918030	50.0	51.2	
54 1,1-Dichloropropene	75	4.795	4.795	0.000	97	575805	50.0	53.8	
55 Carbon tetrachloride	117	4.808	4.807	0.001	97	576487	50.0	67.5	
53 Isobutyl alcohol	43	4.868	4.868	0.000	95	508006	1250.0	1292.8	
57 Benzene	78	4.984	4.978	0.006	97	1640718	50.0	50.9	
58 1,2-Dichloroethane	62	5.014	5.014	0.000	97	604235	50.0	49.5	
59 n-Heptane	43	5.081	5.075	0.006	90	722546	50.0	49.3	
62 Trichloroethene	95	5.495	5.495	0.000	97	430467	50.0	52.8	
64 Methylcyclohexane	83	5.629	5.629	0.000	92	810082	50.0	52.7	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	455733	50.0	52.0	
66 1,4-Dioxane	88	5.823	5.823	0.000	98	101656	1000.0	1082.3	
67 Dibromomethane	93	5.842	5.842	0.000	94	238998	50.0	52.7	
68 Dichlorobromomethane	83	5.957	5.951	0.006	99	527714	50.0	60.9	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	91	262454	50.0	54.0	
72 cis-1,3-Dichloropropene	75	6.335	6.328	0.007	96	623664	50.0	57.7	
73 4-Methyl-2-pentanone (MIBK	43	6.438	6.432	0.006	92	1935141	250.0	230.3	
74 Toluene	92	6.620	6.620	0.000	99	1072136	50.0	49.8	
75 Ethyl methacrylate	69	6.852	6.845	0.007	87	482437	50.0	48.5	
77 trans-1,3-Dichloropropene	75	6.846	6.845	0.001	96	546906	50.0	55.9	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	93	279656	50.0	49.2	
81 Tetrachloroethene	166	7.138	7.137	0.001	98	510373	50.0	55.3	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	98	579299	50.0	49.5	
80 2-Hexanone	43	7.223	7.223	0.000	91	1446114	250.0	236.2	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	423863	50.0	59.5	
84 Ethylene Dibromide	107	7.569	7.569	0.000	98	362545	50.0	52.4	
87 Chlorobenzene	112	8.020	8.020	0.000	96	1205691	50.0	52.0	
88 Ethylbenzene	91	8.087	8.086	0.001	98	1958990	50.0	50.4	
89 1,1,1,2-Tetrachloroethane	131	8.099	8.099	0.000	95	416581	50.0	61.2	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	817677	50.0	51.5	
91 o-Xylene	106	8.628	8.628	0.000	96	780687	50.0	51.0	
92 Styrene	104	8.652	8.652	0.000	95	1341901	50.0	50.8	
95 Bromoform	173	8.920	8.920	0.000	98	285344	50.0	71.5	
94 Isopropylbenzene	105	8.999	8.999	0.000	94	2035308	50.0	49.0	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	76	445845	50.0	47.5	
101 Bromobenzene	156	9.388	9.388	0.000	90	532827	50.0	48.3	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	2309320	50.0	48.9	
98 trans-1,4-Dichloro-2-buten	53	9.431	9.437	-0.006	57	160456	50.0	49.7	
100 1,2,3-Trichloropropane	110	9.443	9.443	0.000	82	146690	50.0	46.8	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	505283	50.0	49.4	
102 1,3,5-Trimethylbenzene	105	9.607	9.607	0.000	94	1735577	50.0	49.4	
105 4-Chlorotoluene	126	9.674	9.668	0.006	97	526312	50.0	49.7	
106 tert-Butylbenzene	134	9.930	9.930	0.000	92	393185	50.0	49.9	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	0.000	96	1785067	50.0	49.2	
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	2217629	50.0	50.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
110 4-Isopropyltoluene	119	10.271	10.270	0.001	97	1976928	50.0	50.9	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	1038474	50.0	49.6	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	96	1061926	50.0	49.6	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	1726066	50.0	50.5	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	99	989462	50.0	49.5	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.414	0.006	91	88604	50.0	51.4	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	739922	50.0	53.6	
120 Hexachlorobutadiene	225	12.144	12.144	0.000	95	440376	50.0	56.4	
121 Naphthalene	128	12.266	12.266	0.000	97	1716594	50.0	50.3	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	97	675280	50.0	52.0	

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

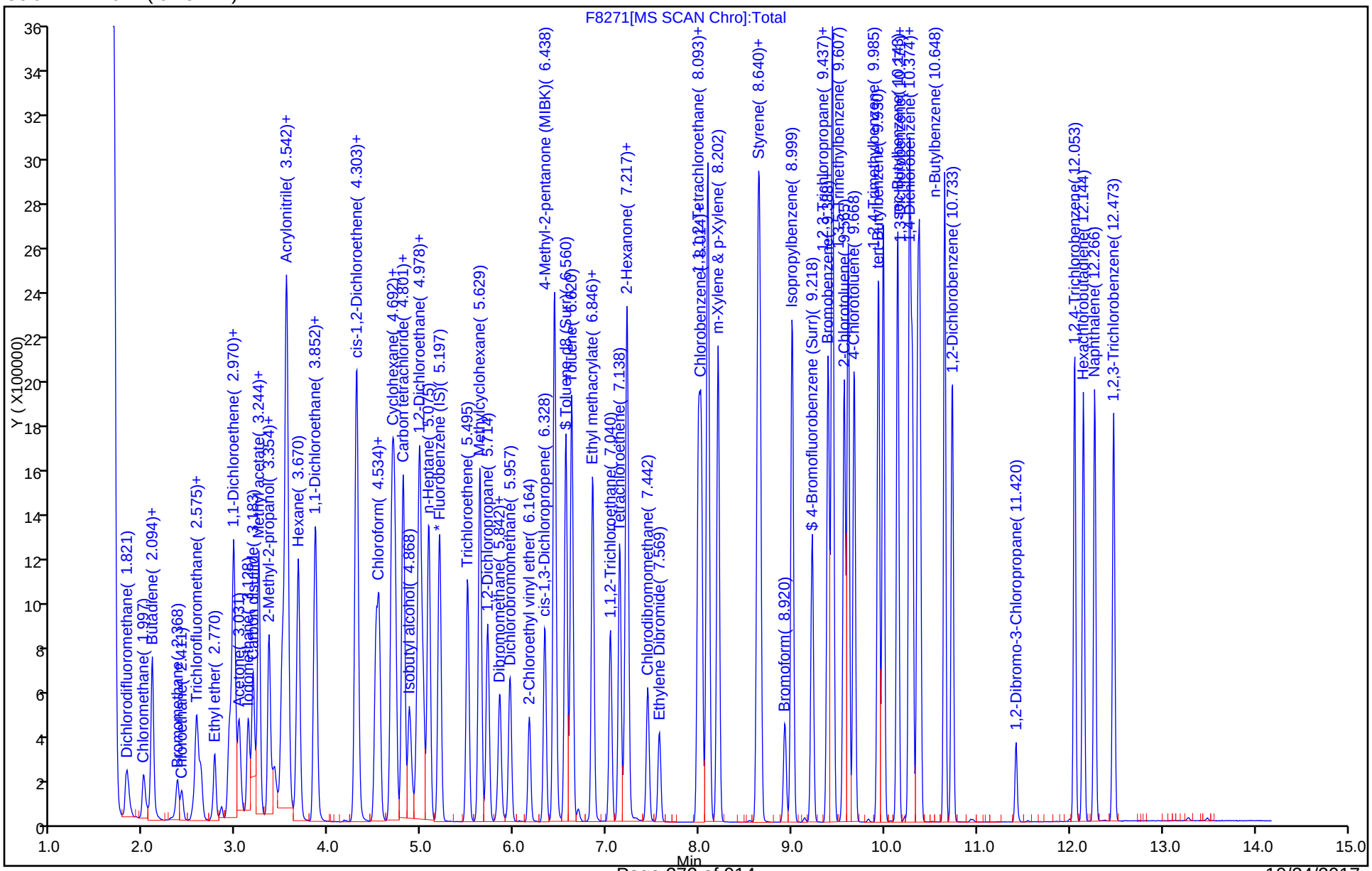
Report Date: 16-Oct-2017 13:32:07 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171016-66422.b\F8271.D

Injection Date:	16-Oct-2017 12:17:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	LCS 480-382014/1-A			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-382187/1-A

Matrix: Solid | Lab File ID: F8296.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/17/2017 10:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	52.8		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	48.4		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	53.1		5.0	1.1
79-00-5	1,1,2-Trichloroethane	50.2		5.0	0.65
75-34-3	1,1-Dichloroethane	50.4		5.0	0.61
75-35-4	1,1-Dichloroethene	52.1		5.0	0.61
120-82-1	1,2,4-Trichlorobenzene	54.9		5.0	0.30
96-12-8	1,2-Dibromo-3-Chloropropane	45.0		5.0	2.5
106-93-4	1,2-Dibromoethane	52.4		5.0	0.64
95-50-1	1,2-Dichlorobenzene	50.5		5.0	0.39
107-06-2	1,2-Dichloroethane	48.4		5.0	0.25
78-87-5	1,2-Dichloropropane	50.7		5.0	2.5
541-73-1	1,3-Dichlorobenzene	50.9		5.0	0.26
106-46-7	1,4-Dichlorobenzene	51.0		5.0	0.70
78-93-3	2-Butanone (MEK)	234		25	1.8
591-78-6	2-Hexanone	230		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	224		25	1.6
67-64-1	Acetone	242		25	4.2
71-43-2	Benzene	51.1		5.0	0.25
75-27-4	Bromodichloromethane	57.1		5.0	0.67
75-25-2	Bromoform	59.9		5.0	2.5
74-83-9	Bromomethane	52.5		5.0	0.45
75-15-0	Carbon disulfide	54.9		5.0	2.5
56-23-5	Carbon tetrachloride	57.6		5.0	0.48
108-90-7	Chlorobenzene	52.7		5.0	0.66
75-00-3	Chloroethane	50.8		5.0	1.1
67-66-3	Chloroform	50.6		5.0	0.31
74-87-3	Chloromethane	40.7		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	51.1		5.0	0.64
10061-01-5	cis-1,3-Dichloropropene	54.0		5.0	0.72
110-82-7	Cyclohexane	49.4		5.0	0.70
124-48-1	Dibromochloromethane	52.8		5.0	0.64
75-71-8	Dichlorodifluoromethane	60.0		5.0	0.41
100-41-4	Ethylbenzene	52.0		5.0	0.35
98-82-8	Isopropylbenzene	50.7		5.0	0.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-382187/1-A

Matrix: Solid | Lab File ID: F8296.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 10/17/2017 10:07

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	88.7		25	3.0
1634-04-4	Methyl tert-butyl ether	48.3		5.0	0.49
108-87-2	Methylcyclohexane	53.2		5.0	0.76
75-09-2	Methylene Chloride	52.2		5.0	2.3
100-42-5	Styrene	52.1		5.0	0.25
127-18-4	Tetrachloroethene	57.1		5.0	0.67
108-88-3	Toluene	51.3		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	53.0		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	51.6		5.0	2.2
79-01-6	Trichloroethene	53.4		5.0	1.1
75-69-4	Trichlorofluoromethane	57.9		5.0	0.47
75-01-4	Vinyl chloride	47.9		5.0	0.61
1330-20-7	Xylenes, Total	106		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		64-126
460-00-4	4-Bromofluorobenzene (Surr)	104		72-126
1868-53-7	Dibromofluoromethane (Surr)	104		60-140
2037-26-5	Toluene-d8 (Surr)	100		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8296.D
Lims ID: LCS 480-382187/1-A
Client ID:
Sample Type: LCS
Inject. Date: 17-Oct-2017 10:07:30 ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 480-0066449-005
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 12:42:19 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 12:42:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.197	-0.006	99	270885	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	85	560814	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	93	595966	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.680	-0.006	93	349352	50.0	52.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.953	4.960	-0.007	0	213713	50.0	49.6	
$ 5 Toluene-d8 (Surr)	98	6.559	6.560	-0.001	92	1376038	50.0	49.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	94	471543	50.0	52.1	
10 Dichlorodifluoromethane	85	1.814	1.820	-0.006	100	430407	50.0	60.0	
12 Chloromethane	50	1.991	2.003	-0.012	98	270308	50.0	40.7	M
13 Vinyl chloride	62	2.088	2.094	-0.006	98	317149	50.0	47.9	
151 Butadiene	54	2.088	2.100	-0.012	85	292865	50.0	44.4	
14 Bromomethane	94	2.356	2.368	-0.012	91	161738	50.0	52.5	
15 Chloroethane	64	2.404	2.417	-0.013	99	142268	50.0	50.8	
16 Dichlorofluoromethane	67	2.575	2.575	0.000	98	451102	50.0	52.2	
17 Trichlorofluoromethane	101	2.611	2.617	-0.006	98	487839	50.0	57.9	
18 Ethyl ether	59	2.763	2.769	-0.006	87	212792	50.0	40.6	
20 Acrolein	56	2.915	2.922	-0.007	100	286274	250.0	217.0	
21 1,1,2-Trichloro-1,2,2-trif	101	2.958	2.958	0.000	92	375594	50.0	53.1	
22 1,1-Dichloroethene	96	2.976	2.976	0.000	95	349020	50.0	52.1	
23 Acetone	43	3.025	3.031	-0.006	98	682038	250.0	242.4	
25 Iodomethane	142	3.122	3.134	-0.012	98	638104	50.0	53.6	
26 Carbon disulfide	76	3.177	3.183	-0.006	99	1135568	50.0	54.9	
28 3-Chloro-1-propene	41	3.238	3.244	-0.006	87	563566	50.0	45.7	
27 Methyl acetate	43	3.238	3.244	-0.006	81	545630	100.0	88.7	
30 Methylene Chloride	84	3.347	3.354	-0.007	94	413592	50.0	52.2	
31 2-Methyl-2-propanol	59	3.408	3.408	0.000	100	513792	500.0	492.9	
32 Methyl tert-butyl ether	73	3.499	3.506	-0.007	95	1090650	50.0	48.3	
34 trans-1,2-Dichloroethene	96	3.530	3.536	-0.006	96	407447	50.0	53.0	
33 Acrylonitrile	53	3.548	3.554	-0.006	100	1544196	500.0	469.2	
35 Hexane	57	3.664	3.670	-0.006	85	786440	50.0	54.8	
37 Vinyl acetate	43	3.846	3.852	-0.006	97	1328892	100.0	93.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
39 1,1-Dichloroethane	63	3.858	3.858	0.000	96	744304	50.0	50.4	
43 2-Butanone (MEK)	43	4.290	4.296	-0.006	99	930796	250.0	234.0	
44 2,2-Dichloropropane	77	4.290	4.296	-0.006	63	493218	50.0	47.9	
45 cis-1,2-Dichloroethene	96	4.302	4.303	-0.001	84	440597	50.0	51.1	
48 Chlorobromomethane	128	4.503	4.509	-0.006	95	212515	50.0	54.2	
49 Tetrahydrofuran	42	4.521	4.528	-0.007	87	224403	100.0	88.8	
50 Chloroform	83	4.540	4.540	0.000	94	653441	50.0	50.6	
51 1,1,1-Trichloroethane	97	4.680	4.680	0.000	99	560535	50.0	52.8	
52 Cyclohexane	56	4.704	4.710	-0.006	89	830072	50.0	49.4	
54 1,1-Dichloropropene	75	4.795	4.801	-0.006	99	543702	50.0	54.3	
55 Carbon tetrachloride	117	4.801	4.807	-0.006	97	460730	50.0	57.6	
53 Isobutyl alcohol	43	4.868	4.874	-0.006	95	468902	1250.0	1273.7	
57 Benzene	78	4.978	4.984	-0.006	97	1543768	50.0	51.1	
58 1,2-Dichloroethane	62	5.014	5.020	-0.006	97	553145	50.0	48.4	
59 n-Heptane	43	5.075	5.081	-0.006	89	641195	50.0	46.7	
62 Trichloroethene	95	5.495	5.495	0.000	96	408023	50.0	53.4	
64 Methylcyclohexane	83	5.629	5.635	-0.006	91	766319	50.0	53.2	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	416285	50.0	50.7	
66 1,4-Dioxane	88	5.817	5.830	-0.013	97	96541	1000.0	1108.8	
67 Dibromomethane	93	5.842	5.842	0.000	93	220725	50.0	52.0	
68 Dichlorobromomethane	83	5.951	5.957	-0.006	99	463554	50.0	57.1	
69 2-Chloroethyl vinyl ether	63	6.164	6.164	0.000	91	241674	50.0	53.1	
72 cis-1,3-Dichloropropene	75	6.328	6.334	-0.006	97	547007	50.0	54.0	
73 4-Methyl-2-pentanone (MIBK	43	6.432	6.438	-0.006	92	1742064	250.0	223.7	
74 Toluene	92	6.620	6.620	0.000	99	1025281	50.0	51.3	
77 trans-1,3-Dichloropropene	75	6.845	6.845	0.000	95	468382	50.0	51.6	
75 Ethyl methacrylate	69	6.851	6.852	-0.001	86	455396	50.0	49.4	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	92	264801	50.0	50.2	
81 Tetrachloroethene	166	7.137	7.137	0.000	98	489134	50.0	57.1	
82 1,3-Dichloropropane	76	7.204	7.204	0.000	98	544678	50.0	50.2	
80 2-Hexanone	43	7.223	7.223	0.000	91	1307156	250.0	230.3	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	346497	50.0	52.8	
84 Ethylene Dibromide	107	7.569	7.569	0.000	99	336101	50.0	52.4	
87 Chlorobenzene	112	8.020	8.020	0.000	96	1132686	50.0	52.7	
88 Ethylbenzene	91	8.086	8.087	-0.001	98	1871832	50.0	52.0	
89 1,1,1,2-Tetrachloroethane	131	8.099	8.099	0.000	94	354064	50.0	56.1	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	782246	50.0	53.1	
91 o-Xylene	106	8.628	8.634	-0.006	95	748802	50.0	52.7	
92 Styrene	104	8.652	8.652	0.000	95	1275762	50.0	52.1	
95 Bromoform	173	8.926	8.926	0.000	99	210545	50.0	59.9	
94 Isopropylbenzene	105	8.999	8.999	0.000	95	1938703	50.0	50.7	
101 Bromobenzene	156	9.388	9.388	0.000	89	510517	50.0	50.2	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	76	418642	50.0	48.4	
98 trans-1,4-Dichloro-2-buten	53	9.437	9.437	0.000	60	132575	50.0	44.6	
99 N-Propylbenzene	91	9.437	9.437	0.000	98	2184444	50.0	50.2	
100 1,2,3-Trichloropropane	110	9.437	9.443	-0.006	82	136880	50.0	47.4	
103 2-Chlorotoluene	126	9.565	9.565	0.000	97	474164	50.0	50.3	
102 1,3,5-Trimethylbenzene	105	9.607	9.607	0.000	94	1637852	50.0	50.6	
105 4-Chlorotoluene	126	9.668	9.674	-0.006	97	497104	50.0	50.9	
106 tert-Butylbenzene	134	9.936	9.936	0.000	92	374008	50.0	51.5	
107 1,2,4-Trimethylbenzene	105	9.985	9.985	-0.001	96	1692426	50.0	50.6	
109 sec-Butylbenzene	105	10.143	10.143	0.000	94	2110585	50.0	51.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
110 4-Isopropyltoluene	119	10.270	10.271	-0.001	97	1877682	50.0	52.5	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	98	982704	50.0	50.9	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	96	1006213	50.0	51.0	
115 n-Butylbenzene	91	10.648	10.648	0.000	97	1625244	50.0	51.6	
116 1,2-Dichlorobenzene	146	10.733	10.733	0.000	99	929973	50.0	50.5	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	90	70821	50.0	45.0	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	94	698503	50.0	54.9	
120 Hexachlorobutadiene	225	12.144	12.144	0.000	95	417710	50.0	58.0	
121 Naphthalene	128	12.272	12.266	0.006	97	1602643	50.0	51.0	
122 1,2,3-Trichlorobenzene	180	12.473	12.473	0.000	96	628909	50.0	52.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

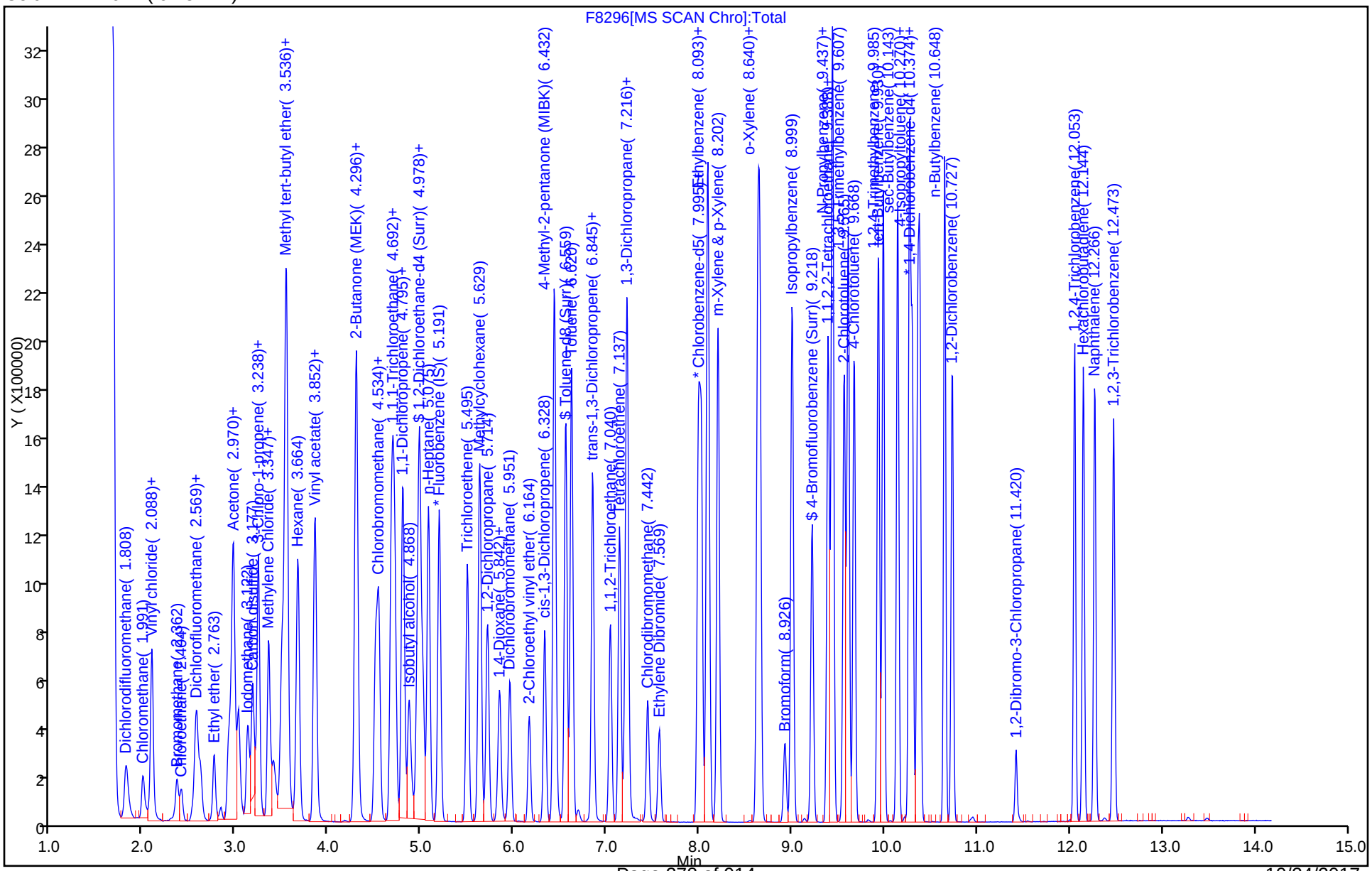
Report Date: 17-Oct-2017 12:42:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8296.D

Injection Date:	17-Oct-2017 10:07:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	LCS 480-382187/1-A			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

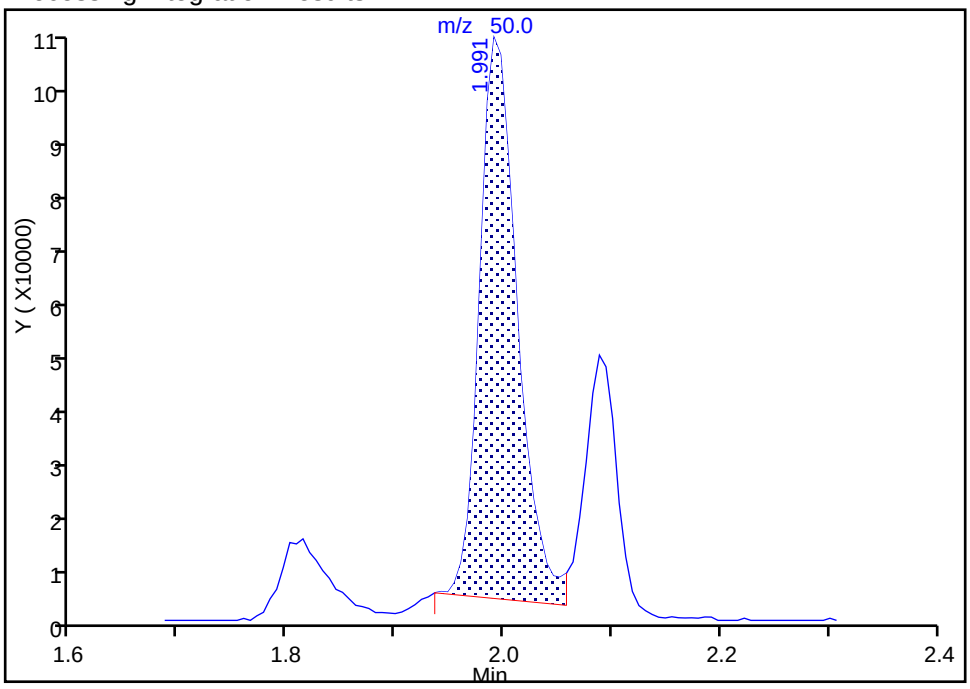
Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8296.D
Injection Date: 17-Oct-2017 10:07:30 Instrument ID: HP5973F
Lims ID: LCS 480-382187/1-A
Client ID:
Operator ID: CDC ALS Bottle#: 3 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: F-8260 SOIL Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.25 mm) Detector MS SCAN

12 Chloromethane, CAS: 74-87-3

Signal: 1

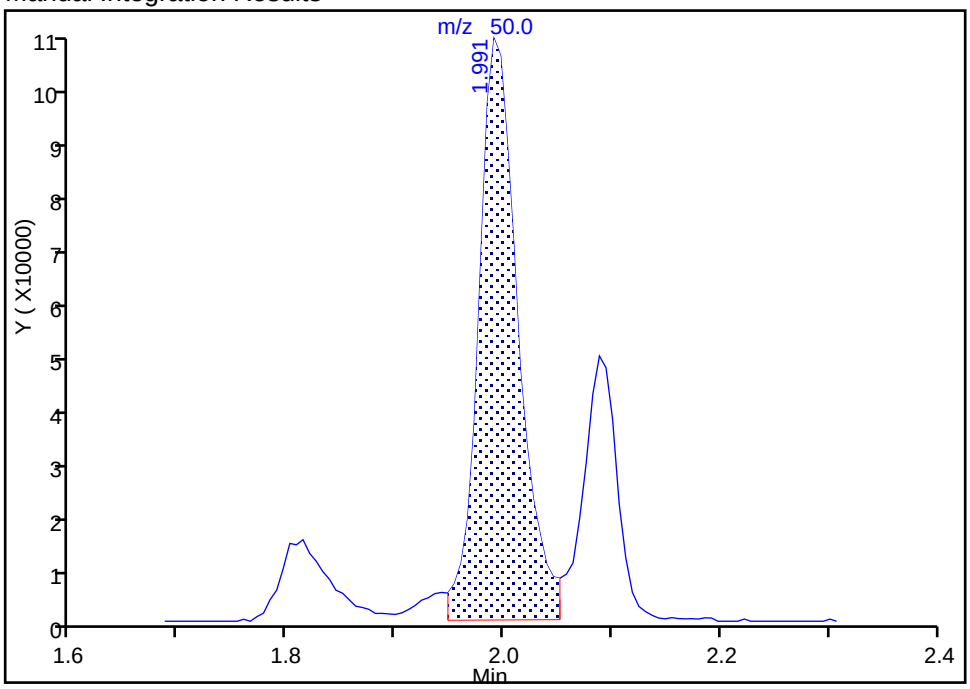
Processing Integration Results

RT: 1.99
Area: 249004
Amount: 37.453678
Amount Units: ug/kg



Manual Integration Results

RT: 1.99
Area: 270308
Amount: 40.658097
Amount Units: ug/kg



Reviewer: cwiklinc, 17-Oct-2017 12:40:19
Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-382381/5

Matrix: Water | Lab File ID: 93255P.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2017 10:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382381 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	24.5		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	24.8		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	22.3		1.0	0.31
79-00-5	1,1,2-Trichloroethane	23.8		1.0	0.23
75-34-3	1,1-Dichloroethane	23.8		1.0	0.38
75-35-4	1,1-Dichloroethene	20.7		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	24.1		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	22.9		1.0	0.39
106-93-4	1,2-Dibromoethane	24.5		1.0	0.73
95-50-1	1,2-Dichlorobenzene	25.2		1.0	0.79
107-06-2	1,2-Dichloroethane	23.1		1.0	0.21
78-87-5	1,2-Dichloropropane	24.0		1.0	0.72
541-73-1	1,3-Dichlorobenzene	24.8		1.0	0.78
106-46-7	1,4-Dichlorobenzene	24.9		1.0	0.84
78-93-3	2-Butanone (MEK)	135		10	1.3
591-78-6	2-Hexanone	137		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	132		5.0	2.1
67-64-1	Acetone	152		10	3.0
71-43-2	Benzene	23.5		1.0	0.41
75-27-4	Bromodichloromethane	25.2		1.0	0.39
75-25-2	Bromoform	25.9		1.0	0.26
74-83-9	Bromomethane	24.7		1.0	0.69
75-15-0	Carbon disulfide	22.6		1.0	0.19
56-23-5	Carbon tetrachloride	29.7		1.0	0.27
108-90-7	Chlorobenzene	24.6		1.0	0.75
75-00-3	Chloroethane	24.0		1.0	0.32
67-66-3	Chloroform	23.4		1.0	0.34
74-87-3	Chloromethane	25.4		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	23.7		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	23.9		1.0	0.36
110-82-7	Cyclohexane	23.1		1.0	0.18
124-48-1	Dibromochloromethane	25.9		1.0	0.32
75-71-8	Dichlorodifluoromethane	25.5		1.0	0.68
100-41-4	Ethylbenzene	23.9		1.0	0.74
98-82-8	Isopropylbenzene	24.9		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-382381/5

Matrix: Water | Lab File ID: 93255P.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 10/18/2017 10:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (60) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 382381 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	49.5		2.5	1.3
1634-04-4	Methyl tert-butyl ether	24.0		1.0	0.16
108-87-2	Methylcyclohexane	21.7		1.0	0.16
75-09-2	Methylene Chloride	19.8		1.0	0.44
100-42-5	Styrene	25.1		1.0	0.73
127-18-4	Tetrachloroethene	24.3		1.0	0.36
108-88-3	Toluene	24.8		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	22.2		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.2		1.0	0.37
79-01-6	Trichloroethene	23.1		1.0	0.46
75-69-4	Trichlorofluoromethane	25.3		1.0	0.88
75-01-4	Vinyl chloride	25.7		1.0	0.90
1330-20-7	Xylenes, Total	50.3		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
1868-53-7	Dibromofluoromethane (Surr)	104		75-123
2037-26-5	Toluene-d8 (Surr)	104		80-120

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93255P.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 18-Oct-2017 10:25:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: lcs
Misc. Info.: 480-0066487-005
Operator ID: RF/RB Instrument ID: HP5973P

Method: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\P-8260H2O.m
Limit Group: MV - 8260C ICAL
Last Update: 18-Oct-2017 10:48:58 Calib Date: 11-Oct-2017 00:40:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973P\20171010-66269.b\P3056P.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK019

First Level Reviewer: farrellr Date: 18-Oct-2017 10:48:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 147 Fluorobenzene (IS)	70	10.434	10.434	0.000	97	196682	25.0	25.0	
* 2 Chlorobenzene-d5	82	14.382	14.388	-0.006	92	423713	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	17.339	17.338	0.001	94	458294	25.0	25.0	
$ 148 Dibromofluoromethane (Surr	113	9.631	9.637	-0.006	91	287777	25.0	25.9	
$ 4 1,2-Dichloroethane-d4 (Sur	67	10.087	10.093	-0.006	0	189503	25.0	24.7	
$ 5 Toluene-d8 (Surr)	98	12.423	12.423	0.000	95	979791	25.0	25.9	
$ 6 4-Bromofluorobenzene (Surr	174	15.879	15.878	0.000	90	365058	25.0	26.5	
10 Dichlorodifluoromethane	85	4.338	4.332	0.006	96	417389	25.0	25.5	
11 Chloromethane	50	4.764	4.764	0.000	99	910212	25.0	25.4	
17 Vinyl chloride	62	4.971	4.964	0.007	98	569436	25.0	25.7	
144 Butadiene	54	5.013	5.013	0.000	99	666103	25.0	25.0	
12 Bromomethane	94	5.628	5.615	0.013	92	297895	25.0	24.7	
13 Chloroethane	64	5.707	5.707	0.000	93	305756	25.0	24.0	
19 Dichlorofluoromethane	67	6.029	6.029	0.000	97	661177	25.0	23.0	
14 Trichlorofluoromethane	101	6.090	6.090	0.000	84	595199	25.0	25.3	
20 Ethyl ether	59	6.388	6.388	0.000	90	385901	25.0	24.0	
22 Acrolein	56	6.698	6.692	0.006	98	292529	125.0	111.3	
16 1,1,2-Trichloro-1,2,2-trif	101	6.741	6.735	0.006	92	312428	25.0	22.3	
25 1,1-Dichloroethene	96	6.832	6.844	-0.012	89	298819	25.0	20.7	
24 Acetone	43	6.881	6.887	-0.006	96	1511985	125.0	151.6	
18 Iodomethane	142	7.130	7.142	-0.012	99	627282	25.0	24.7	
30 Methyl acetate	43	7.252	7.252	0.000	99	1148328	50.0	49.5	
27 Carbon disulfide	76	7.276	7.270	0.006	69	1135259	25.0	22.6	
28 3-Chloro-1-propene	41	7.276	7.276	0.000	88	971462	25.0	23.7	
33 2-Methyl-2-propanol	59	7.495	7.507	-0.012	96	744194	250.0	252.7	
31 Methylene Chloride	84	7.514	7.507	0.007	87	353848	25.0	19.8	
32 Methyl tert-butyl ether	73	7.684	7.684	0.000	90	1057208	25.0	24.0	
35 trans-1,2-Dichloroethene	96	7.781	7.781	0.000	88	326781	25.0	22.2	
34 Acrylonitrile	53	7.812	7.812	0.000	96	2435029	250.0	252.5	
36 Hexane	57	7.976	7.976	0.000	91	550748	25.0	22.4	
38 Vinyl acetate	43	8.274	8.280	-0.006	96	2805946	50.0	51.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
40 1,1-Dichloroethane	63	8.335	8.335	0.000	97	723880	25.0	23.8	
44 2-Butanone (MEK)	43	9.022	9.022	0.000	95	1976423	125.0	135.3	
45 2,2-Dichloropropane	77	9.028	9.034	-0.006	81	351649	25.0	27.4	
43 cis-1,2-Dichloroethene	96	9.053	9.053	0.000	90	369211	25.0	23.7	
50 Chlorobromomethane	128	9.387	9.387	0.000	85	192279	25.0	24.6	
51 Tetrahydrofuran	42	9.400	9.399	0.001	90	459475	50.0	49.6	
49 Chloroform	83	9.418	9.418	0.000	94	608098	25.0	23.4	
52 1,1,1-Trichloroethane	97	9.649	9.649	0.000	95	544256	25.0	24.5	
54 Cyclohexane	56	9.692	9.691	0.001	96	762893	25.0	23.1	
56 1,1-Dichloropropene	75	9.825	9.831	-0.006	87	433666	25.0	23.3	
53 Isobutyl alcohol	43	9.844	9.843	0.001	90	977946	625.0	643.0	
55 Carbon tetrachloride	117	9.844	9.850	-0.006	93	491430	25.0	29.7	
57 Benzene	78	10.130	10.129	0.001	94	1214684	25.0	23.5	
59 n-Heptane	43	10.184	10.184	0.000	88	597382	25.0	22.9	
60 1,2-Dichloroethane	62	10.184	10.184	0.000	94	666935	25.0	23.1	
62 Trichloroethene	95	10.884	10.884	0.000	92	337711	25.0	23.1	
64 Methylcyclohexane	83	11.079	11.084	-0.005	90	426468	25.0	21.7	
63 1,2-Dichloropropane	63	11.225	11.224	0.001	83	399699	25.0	24.0	
68 1,4-Dioxane	88	11.346	11.340	0.006	91	89340	500.0	538.5	
69 Dibromomethane	93	11.425	11.431	-0.006	94	231653	25.0	23.3	
70 Dichlorobromomethane	83	11.559	11.559	0.000	94	490037	25.0	25.2	
71 2-Chloroethyl vinyl ether	63	11.809	11.815	-0.006	85	293837	25.0	25.2	
73 cis-1,3-Dichloropropene	75	12.095	12.094	0.001	78	528027	25.0	23.9	
75 4-Methyl-2-pentanone (MIBK	43	12.198	12.198	0.000	97	3893589	125.0	132.2	
76 Toluene	92	12.514	12.514	0.000	96	771698	25.0	24.8	
77 Ethyl methacrylate	69	12.739	12.733	0.006	83	427568	25.0	24.6	
78 trans-1,3-Dichloropropene	75	12.806	12.806	0.000	88	544316	25.0	25.2	
79 1,1,2-Trichloroethane	83	13.092	13.092	0.000	93	255562	25.0	23.8	
80 Tetrachloroethene	166	13.238	13.244	-0.006	95	369455	25.0	24.3	
83 2-Hexanone	43	13.287	13.287	0.000	96	2895733	125.0	137.0	
82 1,3-Dichloropropane	76	13.329	13.329	0.000	89	532749	25.0	25.5	
81 Chlorodibromomethane	129	13.670	13.676	-0.006	89	388418	25.0	25.9	
85 Ethylene Dibromide	107	13.871	13.871	0.000	98	338535	25.0	24.5	
87 Chlorobenzene	112	14.425	14.424	0.001	95	930454	25.0	24.6	
89 Ethylbenzene	91	14.467	14.467	0.000	97	1436006	25.0	23.9	
88 1,1,1,2-Tetrachloroethane	131	14.504	14.510	-0.006	93	372078	25.0	26.6	
90 m-Xylene & p-Xylene	106	14.601	14.601	0.000	0	587948	25.0	25.3	
93 o-Xylene	106	15.155	15.154	0.001	97	578179	25.0	25.0	
94 Styrene	104	15.179	15.179	0.000	92	958488	25.0	25.1	
92 Bromoform	173	15.568	15.568	0.000	91	294257	25.0	25.9	
95 Isopropylbenzene	105	15.580	15.580	0.000	97	1394702	25.0	24.9	
97 1,1,2,2-Tetrachloroethane	83	16.055	16.055	0.000	97	429905	25.0	24.8	
98 trans-1,4-Dichloro-2-buten	53	16.104	16.103	0.001	56	235186	25.0	23.3	
99 N-Propylbenzene	91	16.104	16.110	-0.006	98	1662926	25.0	24.2	
100 Bromobenzene	156	16.128	16.128	0.000	85	456652	25.0	25.1	
101 1,2,3-Trichloropropane	110	16.146	16.146	0.000	86	142579	25.0	25.2	
102 1,3,5-Trimethylbenzene	105	16.292	16.298	-0.006	95	1203394	25.0	24.5	
103 2-Chlorotoluene	126	16.317	16.316	0.001	94	380300	25.0	25.0	
105 4-Chlorotoluene	126	16.444	16.444	0.000	97	396436	25.0	24.8	
106 tert-Butylbenzene	134	16.730	16.736	-0.006	96	260982	25.0	23.6	
107 1,2,4-Trimethylbenzene	105	16.797	16.797	0.000	97	1295113	25.0	25.3	
109 sec-Butylbenzene	105	16.998	17.004	-0.006	96	1401370	25.0	24.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
112 4-Isopropyltoluene	119	17.144	17.150	-0.006	98	1313971	25.0	23.9	
110 1,3-Dichlorobenzene	146	17.266	17.265	0.001	97	834388	25.0	24.8	
111 1,4-Dichlorobenzene	146	17.369	17.375	-0.006	93	869246	25.0	24.9	
115 n-Butylbenzene	91	17.661	17.661	0.000	97	1079145	25.0	23.0	
116 1,2-Dichlorobenzene	146	17.868	17.874	-0.006	96	821798	25.0	25.2	
117 1,2-Dibromo-3-Chloropropan	75	18.920	18.920	0.000	76	103408	25.0	22.9	
119 1,2,4-Trichlorobenzene	180	20.021	20.027	-0.006	94	577759	25.0	24.1	
120 Hexachlorobutadiene	225	20.137	20.149	-0.012	96	219518	25.0	21.6	
121 Naphthalene	128	20.472	20.471	0.001	97	1553722	25.0	24.7	
122 1,2,3-Trichlorobenzene	180	20.849	20.855	-0.006	94	556391	25.0	23.5	

Reagents:

8260 CORP mix_00110	Amount Added: 12.50	Units: uL	
GAS CORP mix_00246	Amount Added: 12.50	Units: uL	
P 8260 IS_00248	Amount Added: 1.25	Units: uL	Run Reagent
P 8260 Surr._00243	Amount Added: 1.25	Units: uL	Run Reagent

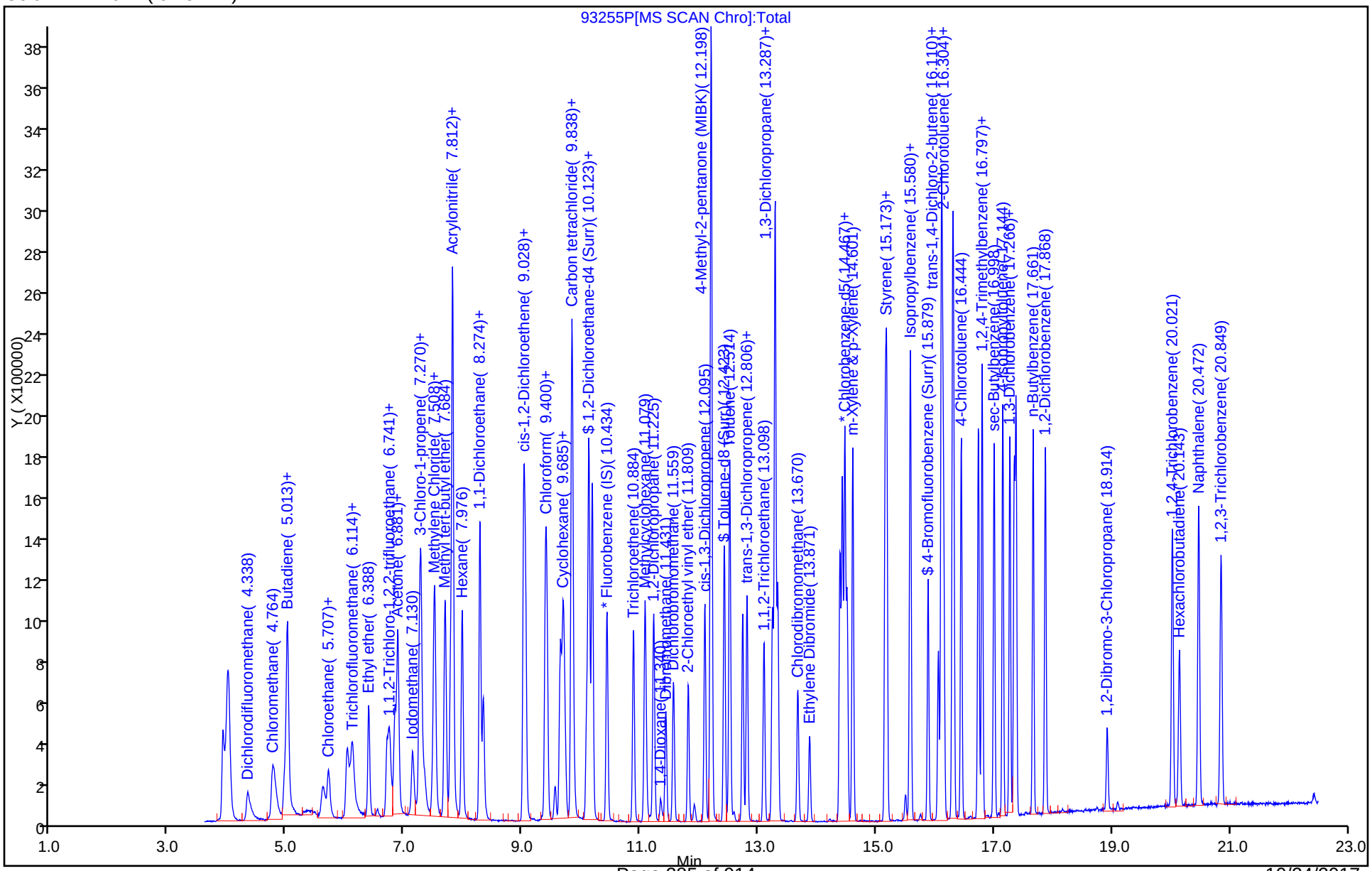
Report Date: 18-Oct-2017 10:48:58 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973P\20171018-66487.b\93255P.D

Injection Date:	18-Oct-2017 10:25:30	Instrument ID:	HP5973P	Operator ID:	RF/RB
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	P-8260H2O	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MS | Lab Sample ID: 480-125579-1 MS

Matrix: Solid | Lab File ID: F8306.D

Analysis Method: 8260C | Date Collected: 10/08/2017 11:30

Sample wt/vol: 6.172(g) | Date Analyzed: 10/17/2017 14:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.6 | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	41.6		4.8	0.35
79-34-5	1,1,2,2-Tetrachloroethane	39.9		4.8	0.78
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	42.5		4.8	1.1
79-00-5	1,1,2-Trichloroethane	40.5		4.8	0.62
75-34-3	1,1-Dichloroethane	43.8		4.8	0.59
75-35-4	1,1-Dichloroethene	40.0		4.8	0.59
120-82-1	1,2,4-Trichlorobenzene	18.8		4.8	0.29
96-12-8	1,2-Dibromo-3-Chloropropane	25.8		4.8	2.4
106-93-4	1,2-Dibromoethane	35.6		4.8	0.62
95-50-1	1,2-Dichlorobenzene	33.9		4.8	0.38
107-06-2	1,2-Dichloroethane	37.5		4.8	0.24
78-87-5	1,2-Dichloropropane	42.3		4.8	2.4
541-73-1	1,3-Dichlorobenzene	34.2		4.8	0.25
106-46-7	1,4-Dichlorobenzene	32.3		4.8	0.67
78-93-3	2-Butanone (MEK)	146		24	1.8
591-78-6	2-Hexanone	153		24	2.4
108-10-1	4-Methyl-2-pentanone (MIBK)	161		24	1.6
67-64-1	Acetone	156		24	4.0
71-43-2	Benzene	45.2		4.8	0.24
75-27-4	Bromodichloromethane	43.3		4.8	0.64
75-25-2	Bromoform	37.4		4.8	2.4
74-83-9	Bromomethane	46.1		4.8	0.43
75-15-0	Carbon disulfide	34.7		4.8	2.4
56-23-5	Carbon tetrachloride	39.9		4.8	0.46
108-90-7	Chlorobenzene	40.1		4.8	0.63
75-00-3	Chloroethane	44.2		4.8	1.1
67-66-3	Chloroform	43.5		4.8	0.30
74-87-3	Chloromethane	33.4		4.8	0.29
156-59-2	cis-1,2-Dichloroethene	39.7		4.8	0.61
10061-01-5	cis-1,3-Dichloropropene	36.8		4.8	0.69
110-82-7	Cyclohexane	36.7		4.8	0.67
124-48-1	Dibromochloromethane	38.8		4.8	0.61
75-71-8	Dichlorodifluoromethane	49.0		4.8	0.40
100-41-4	Ethylbenzene	41.4		4.8	0.33
98-82-8	Isopropylbenzene	45.9		4.8	0.72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MS | Lab Sample ID: 480-125579-1 MS

Matrix: Solid | Lab File ID: F8306.D

Analysis Method: 8260C | Date Collected: 10/08/2017 11:30

Sample wt/vol: 6.172(g) | Date Analyzed: 10/17/2017 14:36

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.6 | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	62.2		24	2.9
1634-04-4	Methyl tert-butyl ether	40.8		4.8	0.47
108-87-2	Methylcyclohexane	34.2		4.8	0.73
75-09-2	Methylene Chloride	43.0		4.8	2.2
100-42-5	Styrene	38.3		4.8	0.24
127-18-4	Tetrachloroethene	43.9		4.8	0.64
108-88-3	Toluene	46.7		4.8	0.36
156-60-5	trans-1,2-Dichloroethene	37.9		4.8	0.50
10061-02-6	trans-1,3-Dichloropropene	32.2		4.8	2.1
79-01-6	Trichloroethene	38.9		4.8	1.1
75-69-4	Trichlorofluoromethane	48.3		4.8	0.45
75-01-4	Vinyl chloride	35.4		4.8	0.59
1330-20-7	Xylenes, Total	86.4		9.6	0.81

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		64-126
460-00-4	4-Bromofluorobenzene (Surr)	95		72-126
1868-53-7	Dibromofluoromethane (Surr)	100		60-140
2037-26-5	Toluene-d8 (Surr)	104		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8306.D
Lims ID: 480-125579-C-1-A MS
Client ID: MW-8 (4-6)
Sample Type: MS
Inject. Date: 17-Oct-2017 14:36:30 ALS Bottle#: 8 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-125579-C-1-A MS
Misc. Info.: 480-0066449-015
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 14:48:20 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 14:48:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.197	5.197	0.000	99	253909	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	488993	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	93	433524	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.680	-0.006	94	315600	50.0	50.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.953	4.960	-0.007	0	175738	50.0	43.5	
$ 5 Toluene-d8 (Surr)	98	6.560	6.560	0.000	92	1253389	50.0	52.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	94	374427	50.0	47.5	
10 Dichlorodifluoromethane	85	1.820	1.820	0.000	99	343729	50.0	51.1	
12 Chloromethane	50	2.003	2.003	0.000	98	216589	50.0	34.8	
13 Vinyl chloride	62	2.094	2.094	0.000	98	228653	50.0	36.9	
14 Bromomethane	94	2.374	2.368	0.006	91	138667	50.0	48.1	
15 Chloroethane	64	2.417	2.417	0.000	99	120816	50.0	46.0	
17 Trichlorofluoromethane	101	2.617	2.617	0.000	98	397485	50.0	50.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.964	2.958	0.006	91	293316	50.0	44.3	
22 1,1-Dichloroethene	96	2.982	2.976	0.006	96	261539	50.0	41.6	
23 Acetone	43	3.031	3.031	0.000	98	427667	250.0	162.1	
26 Carbon disulfide	76	3.183	3.183	0.000	99	701636	50.0	36.2	
27 Methyl acetate	43	3.244	3.244	0.000	86	373540	100.0	64.8	
30 Methylene Chloride	84	3.354	3.354	0.000	93	335015	50.0	44.8	
32 Methyl tert-butyl ether	73	3.500	3.506	-0.006	96	899685	50.0	42.5	
34 trans-1,2-Dichloroethene	96	3.536	3.536	0.000	96	284286	50.0	39.4	
39 1,1-Dichloroethane	63	3.865	3.858	0.007	97	630945	50.0	45.6	
43 2-Butanone (MEK)	43	4.296	4.296	0.000	100	568044	250.0	152.4	
45 cis-1,2-Dichloroethene	96	4.303	4.303	0.000	85	334800	50.0	41.4	
50 Chloroform	83	4.546	4.540	0.006	94	547992	50.0	45.3	
51 1,1,1-Trichloroethane	97	4.686	4.680	0.006	99	430679	50.0	43.3	
52 Cyclohexane	56	4.710	4.710	0.000	89	601996	50.0	38.2	
55 Carbon tetrachloride	117	4.807	4.807	0.000	96	311599	50.0	41.5	
57 Benzene	78	4.984	4.984	0.000	97	1333349	50.0	47.1	
58 1,2-Dichloroethane	62	5.020	5.020	0.000	98	417976	50.0	39.0	
62 Trichloroethene	95	5.501	5.495	0.006	96	290207	50.0	40.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
64 Methylcyclohexane	83	5.629	5.635	-0.006	90	480441	50.0	35.6	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	339292	50.0	44.1	
68 Dichlorobromomethane	83	5.957	5.957	0.000	100	343385	50.0	45.1	
72 cis-1,3-Dichloropropene	75	6.334	6.334	0.000	97	363757	50.0	38.3	
73 4-Methyl-2-pentanone (MIBK	43	6.438	6.438	0.000	92	1138508	250.0	167.6	
74 Toluene	92	6.620	6.620	0.000	99	846613	50.0	48.6	
77 trans-1,3-Dichloropropene	75	6.845	6.845	0.000	94	265196	50.0	33.5	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	91	194076	50.0	42.2	
81 Tetrachloroethene	166	7.138	7.137	0.001	98	341545	50.0	45.7	
80 2-Hexanone	43	7.223	7.223	0.000	90	788613	250.0	159.4	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	226753	50.0	40.4	
84 Ethylene Dibromide	107	7.569	7.569	0.000	98	207358	50.0	37.1	
87 Chlorobenzene	112	8.020	8.020	0.000	96	782370	50.0	41.7	
88 Ethylbenzene	91	8.087	8.087	0.000	98	1354605	50.0	43.1	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	578177		45.0	
91 o-Xylene	106	8.634	8.634	0.000	96	557236		45.0	
92 Styrene	104	8.652	8.652	0.000	95	851481	50.0	39.8	
95 Bromoform	173	8.926	8.926	0.000	98	107701	50.0	39.0	
94 Isopropylbenzene	105	8.999	8.999	0.000	95	1329193	50.0	47.8	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	78	261271	50.0	41.6	
111 1,3-Dichlorobenzene	146	10.295	10.301	-0.006	98	499911	50.0	35.6	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	95	482823	50.0	33.7	
116 1,2-Dichlorobenzene	146	10.727	10.733	-0.006	99	473413	50.0	35.3	
117 1,2-Dibromo-3-Chloropropan	75	11.414	11.420	-0.006	88	29382	50.0	26.9	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	181142	50.0	19.6	
S 124 Xylenes, Total	1				0			90.0	

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

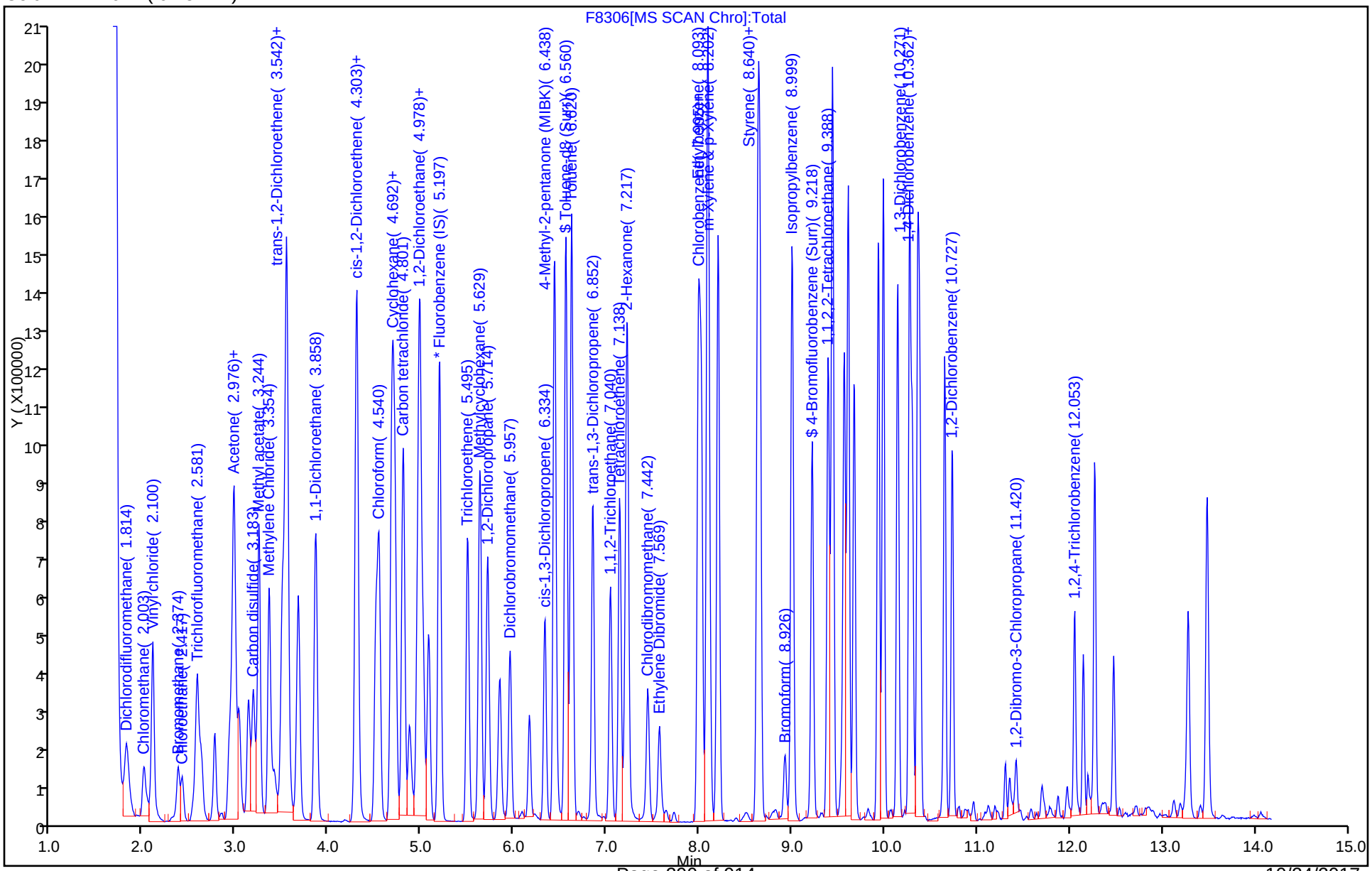
Report Date: 17-Oct-2017 14:48:54 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8306.D

Injection Date:	17-Oct-2017 14:36:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	480-125579-C-1-A MS			Worklist Smp#:	15
Client ID:	MW-8 (4-6)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MSD | Lab Sample ID: 480-125579-1 MSD

Matrix: Solid | Lab File ID: F8307.D

Analysis Method: 8260C | Date Collected: 10/08/2017 11:30

Sample wt/vol: 5.401(g) | Date Analyzed: 10/17/2017 15:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.6 | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	47.0		5.5	0.40
79-34-5	1,1,2,2-Tetrachloroethane	42.9		5.5	0.89
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	45.1		5.5	1.3
79-00-5	1,1,2-Trichloroethane	41.1		5.5	0.71
75-34-3	1,1-Dichloroethane	47.0		5.5	0.67
75-35-4	1,1-Dichloroethene	41.3		5.5	0.67
120-82-1	1,2,4-Trichlorobenzene	19.1		5.5	0.33
96-12-8	1,2-Dibromo-3-Chloropropane	30.1		5.5	2.7
106-93-4	1,2-Dibromoethane	32.7		5.5	0.70
95-50-1	1,2-Dichlorobenzene	33.0		5.5	0.43
107-06-2	1,2-Dichloroethane	36.2		5.5	0.28
78-87-5	1,2-Dichloropropane	45.3		5.5	2.7
541-73-1	1,3-Dichlorobenzene	31.9		5.5	0.28
106-46-7	1,4-Dichlorobenzene	29.5		5.5	0.77
78-93-3	2-Butanone (MEK)	155		27	2.0
591-78-6	2-Hexanone	154		27	2.7
108-10-1	4-Methyl-2-pentanone (MIBK)	173		27	1.8
67-64-1	Acetone	181		27	4.6
71-43-2	Benzene	46.4		5.5	0.27
75-27-4	Bromodichloromethane	44.0		5.5	0.74
75-25-2	Bromoform	36.4		5.5	2.7
74-83-9	Bromomethane	47.7		5.5	0.49
75-15-0	Carbon disulfide	28.1		5.5	2.7
56-23-5	Carbon tetrachloride	45.6		5.5	0.53
108-90-7	Chlorobenzene	37.2		5.5	0.72
75-00-3	Chloroethane	44.9		5.5	1.2
67-66-3	Chloroform	45.4		5.5	0.34
74-87-3	Chloromethane	34.6		5.5	0.33
156-59-2	cis-1,2-Dichloroethene	35.4		5.5	0.70
10061-01-5	cis-1,3-Dichloropropene	31.9		5.5	0.79
110-82-7	Cyclohexane	37.7		5.5	0.77
124-48-1	Dibromochloromethane	37.2		5.5	0.70
75-71-8	Dichlorodifluoromethane	53.4		5.5	0.45
100-41-4	Ethylbenzene	41.0		5.5	0.38
98-82-8	Isopropylbenzene	48.6		5.5	0.83

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MSD | Lab Sample ID: 480-125579-1 MSD

Matrix: Solid | Lab File ID: F8307.D

Analysis Method: 8260C | Date Collected: 10/08/2017 11:30

Sample wt/vol: 5.401(g) | Date Analyzed: 10/17/2017 15:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) ID: 0.25(mm)

% Moisture: 15.6 | Level: (low/med) Low

Analysis Batch No.: 382134 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	66.3		27	3.3
1634-04-4	Methyl tert-butyl ether	46.2		5.5	0.54
108-87-2	Methylcyclohexane	35.0		5.5	0.83
75-09-2	Methylene Chloride	39.6		5.5	2.5
100-42-5	Styrene	35.3		5.5	0.27
127-18-4	Tetrachloroethene	44.0		5.5	0.74
108-88-3	Toluene	45.5		5.5	0.41
156-60-5	trans-1,2-Dichloroethene	31.4		5.5	0.57
10061-02-6	trans-1,3-Dichloropropene	24.9		5.5	2.4
79-01-6	Trichloroethene	37.3		5.5	1.2
75-69-4	Trichlorofluoromethane	52.1		5.5	0.52
75-01-4	Vinyl chloride	35.2		5.5	0.67
1330-20-7	Xylenes, Total	86.9		11	0.92

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		64-126
460-00-4	4-Bromofluorobenzene (Surr)	94		72-126
1868-53-7	Dibromofluoromethane (Surr)	103		60-140
2037-26-5	Toluene-d8 (Surr)	106		71-125

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8307.D
Lims ID: 480-125579-C-1-B MSD
Client ID: MW-8 (4-6)
Sample Type: MSD
Inject. Date: 17-Oct-2017 15:02:30 ALS Bottle#: 9 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-125579-C-1-B MSD
Misc. Info.: 480-0066449-016
Operator ID: CDC Instrument ID: HP5973F

Method: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F-8260 SOIL.m
Limit Group: MV - 8260C ICAL
Last Update: 17-Oct-2017 13:11:36 Calib Date: 29-Sep-2017 21:59:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973F\20170929-66009.b\F7950.D

Column 1 : ZB-624 (0.25 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: cwiklinc Date: 17-Oct-2017 15:32:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
* 153 Fluorobenzene (IS)	70	5.191	5.197	-0.006	99	249751	50.0	50.0	
* 2 Chlorobenzene-d5	82	7.989	7.989	0.000	86	485423	50.0	50.0	
* 3 1,4-Dichlorobenzene-d4	152	10.356	10.356	0.000	93	414471	50.0	50.0	
$ 154 Dibromofluoromethane (Surr	113	4.674	4.680	-0.006	94	319645	50.0	51.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	4.953	4.960	-0.007	0	172656	50.0	43.4	
$ 5 Toluene-d8 (Surr)	98	6.559	6.560	-0.001	92	1265771	50.0	52.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.218	9.218	0.000	94	369037	50.0	47.1	
10 Dichlorodifluoromethane	85	1.820	1.820	0.000	99	322048	50.0	48.7	
12 Chloromethane	50	1.997	2.003	-0.006	99	193518	50.0	31.6	
13 Vinyl chloride	62	2.094	2.094	0.000	98	195847	50.0	32.1	
14 Bromomethane	94	2.374	2.368	0.006	90	123336	50.0	43.5	
15 Chloroethane	64	2.417	2.417	0.000	99	105707	50.0	40.9	
17 Trichlorofluoromethane	101	2.617	2.617	0.000	98	368859	50.0	47.5	
21 1,1,2-Trichloro-1,2,2-trif	101	2.964	2.958	0.006	91	267616	50.0	41.1	
22 1,1-Dichloroethene	96	2.976	2.976	0.000	96	232795	50.0	37.7	
23 Acetone	43	3.031	3.031	0.000	98	427920	250.0	164.9	
26 Carbon disulfide	76	3.183	3.183	0.000	99	489512	50.0	25.7	
27 Methyl acetate	43	3.244	3.244	0.000	82	342690	100.0	60.4	
30 Methylene Chloride	84	3.353	3.354	-0.001	93	268944	50.0	36.1	
32 Methyl tert-butyl ether	73	3.505	3.506	-0.001	95	877632	50.0	42.1	
34 trans-1,2-Dichloroethene	96	3.536	3.536	0.000	95	202726	50.0	28.6	
39 1,1-Dichloroethane	63	3.858	3.858	0.000	97	583428	50.0	42.9	
43 2-Butanone (MEK)	43	4.296	4.296	0.000	98	516887	250.0	140.9	
45 cis-1,2-Dichloroethene	96	4.302	4.303	-0.001	85	256765	50.0	32.3	
50 Chloroform	83	4.540	4.540	0.000	94	492501	50.0	41.4	
51 1,1,1-Trichloroethane	97	4.686	4.680	0.006	99	419363	50.0	42.9	
52 Cyclohexane	56	4.710	4.710	0.000	88	532949	50.0	34.4	
55 Carbon tetrachloride	117	4.807	4.807	0.000	98	306418	50.0	41.5	
57 Benzene	78	4.984	4.984	0.000	97	1175788	50.0	42.3	
58 1,2-Dichloroethane	62	5.020	5.020	0.000	97	347998	50.0	33.0	
62 Trichloroethene	95	5.495	5.495	0.000	96	239669	50.0	34.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/kg	OnCol Amt ug/kg	Flags
64 Methylcyclohexane	83	5.629	5.635	-0.006	90	423737	50.0	31.9	
65 1,2-Dichloropropane	63	5.714	5.714	0.000	97	312488	50.0	41.3	
68 Dichlorobromomethane	83	5.957	5.957	0.000	99	300225	50.0	40.1	
72 cis-1,3-Dichloropropene	75	6.334	6.334	0.000	97	271364	50.0	29.1	
73 4-Methyl-2-pentanone (MIBK	43	6.438	6.438	0.000	92	1060063	250.0	157.2	
74 Toluene	92	6.620	6.620	0.000	99	717389	50.0	41.5	
77 trans-1,3-Dichloropropene	75	6.845	6.845	0.000	95	177955	50.0	22.7	
79 1,1,2-Trichloroethane	83	7.040	7.040	0.000	92	171143	50.0	37.5	
81 Tetrachloroethene	166	7.143	7.137	0.006	98	297048	50.0	40.1	
80 2-Hexanone	43	7.223	7.223	0.000	88	690492	250.0	140.6	
83 Chlorodibromomethane	129	7.442	7.442	0.000	90	186403	50.0	33.9	
84 Ethylene Dibromide	107	7.569	7.569	0.000	98	165234	50.0	29.8	
87 Chlorobenzene	112	8.019	8.020	-0.001	96	630688	50.0	33.9	
88 Ethylbenzene	91	8.086	8.087	-0.001	98	1166074	50.0	37.4	
90 m-Xylene & p-Xylene	106	8.202	8.202	0.000	99	498333		39.1	
91 o-Xylene	106	8.634	8.634	0.000	96	493185		40.1	
92 Styrene	104	8.652	8.652	0.000	96	682862	50.0	32.2	
95 Bromoform	173	8.926	8.926	0.000	98	88104	50.0	33.2	
94 Isopropylbenzene	105	8.999	8.999	0.000	96	1179045	50.0	44.3	
97 1,1,2,2-Tetrachloroethane	83	9.388	9.388	0.000	81	235025	50.0	39.1	
111 1,3-Dichlorobenzene	146	10.301	10.301	0.000	97	389529	50.0	29.0	
113 1,4-Dichlorobenzene	146	10.380	10.380	0.000	96	368722	50.0	26.9	
116 1,2-Dichlorobenzene	146	10.727	10.733	-0.006	99	384792	50.0	30.1	
117 1,2-Dibromo-3-Chloropropan	75	11.420	11.420	0.000	82	28695	50.0	27.4	
119 1,2,4-Trichlorobenzene	180	12.053	12.053	0.000	95	153770	50.0	17.4	
S 124 Xylenes, Total	1				0			79.2	

Reagents:

F 8260 SURR_00263	Amount Added:	1.00	Units: uL	Run Reagent
F 8260 IS_00580	Amount Added:	1.00	Units: uL	Run Reagent

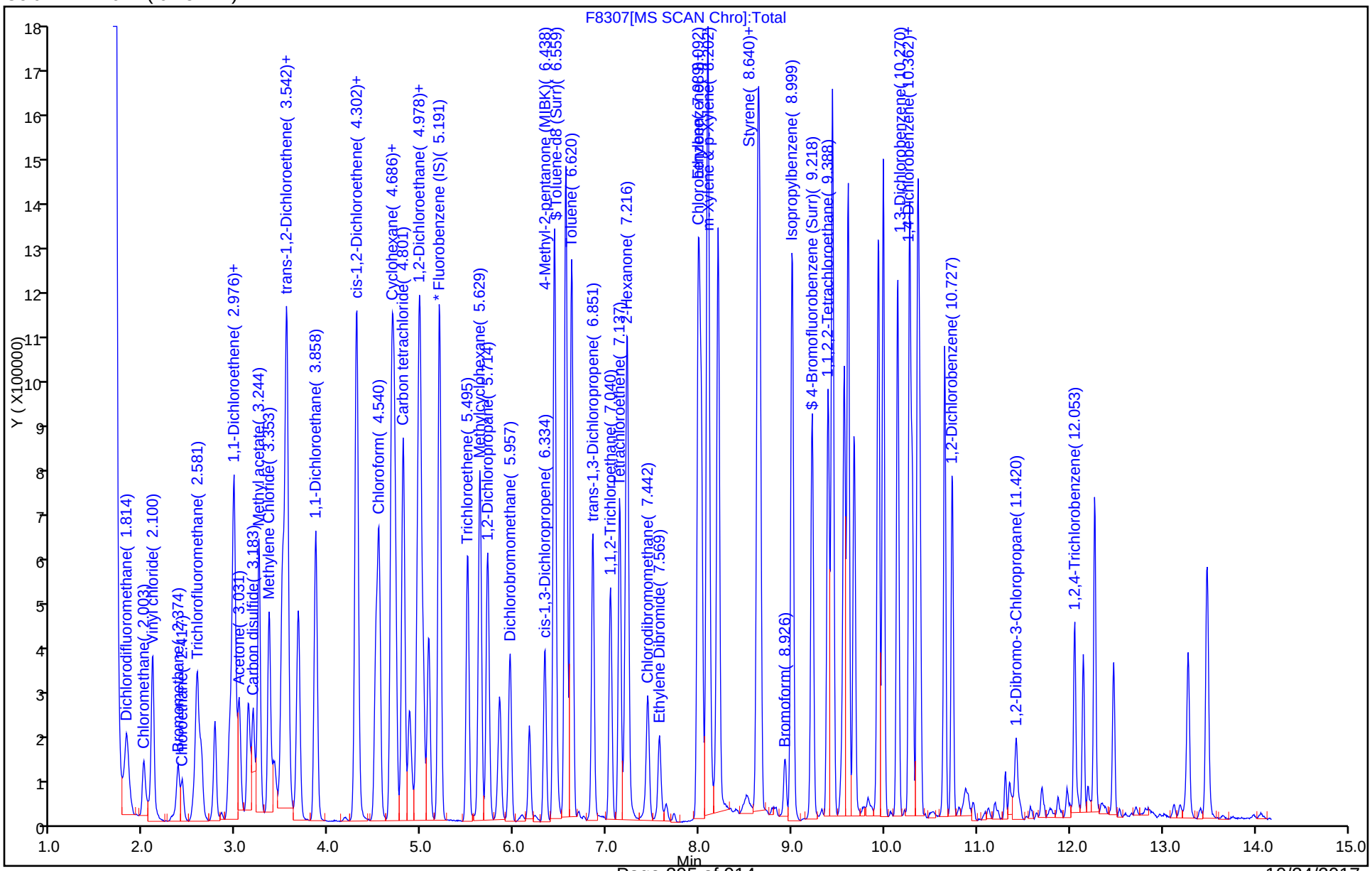
Report Date: 17-Oct-2017 15:32:49 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973F\20171017-66449.b\F8307.D

Injection Date:	17-Oct-2017 15:02:30	Instrument ID:	HP5973F	Operator ID:	CDC
Lims ID:	480-125579-C-1-B MSD			Worklist Smp#:	16
Client ID:	MW-8 (4-6)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	F-8260 SOIL	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.25 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973F Start Date: 09/29/2017 15:08

Analysis Batch Number: 379439 End Date: 09/30/2017 00:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-379439/4		09/29/2017 15:08	1	F7934.D	ZB-624 (30) 0.25(mm)
IC 480-379439/6		09/29/2017 15:58	1	F7936.D	ZB-624 (30) 0.25(mm)
IC 480-379439/7		09/29/2017 16:24	1	F7937.D	ZB-624 (30) 0.25(mm)
IC 480-379439/8		09/29/2017 16:50	1	F7938.D	ZB-624 (30) 0.25(mm)
IC 480-379439/9		09/29/2017 17:16	1	F7939.D	ZB-624 (30) 0.25(mm)
ICIS 480-379439/10		09/29/2017 17:41	1	F7940.D	ZB-624 (30) 0.25(mm)
IC 480-379439/11		09/29/2017 18:07	1	F7941.D	ZB-624 (30) 0.25(mm)
IC 480-379439/12		09/29/2017 18:33	1	F7942.D	ZB-624 (30) 0.25(mm)
IC 480-379439/14		09/29/2017 19:24	1		ZB-624 (30) 0.25(mm)
IC 480-379439/15		09/29/2017 19:50	1		ZB-624 (30) 0.25(mm)
IC 480-379439/16		09/29/2017 20:16	1		ZB-624 (30) 0.25(mm)
IC 480-379439/17		09/29/2017 20:42	1		ZB-624 (30) 0.25(mm)
IC 480-379439/18		09/29/2017 21:08	1		ZB-624 (30) 0.25(mm)
IC 480-379439/19		09/29/2017 21:33	1		ZB-624 (30) 0.25(mm)
IC 480-379439/20		09/29/2017 21:59	1		ZB-624 (30) 0.25(mm)
MDLV 480-379439/22		09/29/2017 22:49	1		ZB-624 (30) 0.25(mm)
MDLV 480-379439/23		09/29/2017 23:15	1		ZB-624 (30) 0.25(mm)
ICV 480-379439/24		09/29/2017 23:40	1		ZB-624 (30) 0.25(mm)
ICV 480-379439/25		09/30/2017 00:05	1		ZB-624 (30) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973F Start Date: 10/16/2017 10:20

Analysis Batch Number: 381944 End Date: 10/16/2017 21:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-381944/3		10/16/2017 10:20	1	F8268.D	ZB-624 (30) 0.25(mm)
CCVIS 480-381944/4		10/16/2017 10:53	1	F8269.D	ZB-624 (30) 0.25(mm)
CCV 480-381944/5		10/16/2017 11:31	1		ZB-624 (30) 0.25(mm)
LCS 480-382014/1-A		10/16/2017 12:17	1	F8271.D	ZB-624 (30) 0.25(mm)
MB 480-382014/2-A		10/16/2017 13:08	1	F8273.D	ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 13:46	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 14:12	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 14:37	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 15:29	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 15:54	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 16:20	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 16:46	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 17:11	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 17:37	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 18:02	1		ZB-624 (30) 0.25(mm)
480-125579-1		10/16/2017 18:28	1	F8285.D	ZB-624 (30) 0.25(mm)
480-125579-2		10/16/2017 18:54	1	F8286.D	ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 19:19	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 19:44	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 20:10	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 20:35	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/16/2017 21:01	1		ZB-624 (30) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973F Start Date: 10/17/2017 08:39

Analysis Batch Number: 382134 End Date: 10/17/2017 19:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-382134/2		10/17/2017 08:39	1	F8293.D	ZB-624 (30) 0.25(mm)
CCVIS 480-382134/3		10/17/2017 09:07	1	F8294.D	ZB-624 (30) 0.25(mm)
CCV 480-382134/4		10/17/2017 09:41	1		ZB-624 (30) 0.25(mm)
LCS 480-382187/1-A		10/17/2017 10:07	1	F8296.D	ZB-624 (30) 0.25(mm)
RL 480-382134/6		10/17/2017 10:33	1		ZB-624 (30) 0.25(mm)
MB 480-382187/2-A		10/17/2017 10:58	1	F8298.D	ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 11:38	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 12:03	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 12:28	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 12:54	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 13:20	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 13:45	1		ZB-624 (30) 0.25(mm)
480-125579-3		10/17/2017 14:11	1	F8305.D	ZB-624 (30) 0.25(mm)
480-125579-1 MS		10/17/2017 14:36	1	F8306.D	ZB-624 (30) 0.25(mm)
480-125579-1 MSD		10/17/2017 15:02	1	F8307.D	ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 15:53	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 16:19	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 16:44	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 17:09	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 17:35	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 18:01	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 18:26	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 18:51	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 19:17	1		ZB-624 (30) 0.25(mm)
ZZZZZ		10/17/2017 19:43	1		ZB-624 (30) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973P Start Date: 10/10/2017 15:02

Analysis Batch Number: 381079 End Date: 10/11/2017 02:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-381079/3		10/10/2017 15:02	1	P3040P.D	ZB-624 (60) 0.25(mm)
IC 480-381079/5		10/10/2017 16:02	1	P3042P.D	ZB-624 (60) 0.25(mm)
IC 480-381079/6		10/10/2017 16:29	1	P3043P.D	ZB-624 (60) 0.25(mm)
IC 480-381079/7		10/10/2017 16:56	1	P3044P.D	ZB-624 (60) 0.25(mm)
IC 480-381079/8		10/10/2017 17:24	1	P3045P.D	ZB-624 (60) 0.25(mm)
ICIS 480-381079/9		10/10/2017 17:51	1	P3046P.D	ZB-624 (60) 0.25(mm)
IC 480-381079/10		10/10/2017 19:55	1	P3047P.D	ZB-624 (60) 0.25(mm)
IC 480-381079/11		10/10/2017 20:22	1	P3048P.D	ZB-624 (60) 0.25(mm)
IC 480-381079/13		10/10/2017 21:18	1		ZB-624 (60) 0.25(mm)
IC 480-381079/14		10/10/2017 22:17	1		ZB-624 (60) 0.25(mm)
IC 480-381079/15		10/10/2017 22:45	1		ZB-624 (60) 0.25(mm)
IC 480-381079/16		10/10/2017 23:12	1		ZB-624 (60) 0.25(mm)
IC 480-381079/17		10/10/2017 23:40	1		ZB-624 (60) 0.25(mm)
IC 480-381079/18		10/11/2017 00:07	1		ZB-624 (60) 0.25(mm)
IC 480-381079/19		10/11/2017 00:40	1		ZB-624 (60) 0.25(mm)
MDLV 480-381079/21		10/11/2017 01:35	1		ZB-624 (60) 0.25(mm)
MDLV 480-381079/22		10/11/2017 02:02	1		ZB-624 (60) 0.25(mm)
ICV 480-381079/23		10/11/2017 02:30	1		ZB-624 (60) 0.25(mm)
ICV 480-381079/24		10/11/2017 02:58	1		ZB-624 (60) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973P Start Date: 10/18/2017 09:04

Analysis Batch Number: 382381 End Date: 10/18/2017 19:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-382381/2		10/18/2017 09:04	1	93252P.D	ZB-624 (60) 0.25(mm)
CCVIS 480-382381/3		10/18/2017 09:31	1	93253P.D	ZB-624 (60) 0.25(mm)
CCV 480-382381/4		10/18/2017 09:58	1		ZB-624 (60) 0.25(mm)
LCS 480-382381/5		10/18/2017 10:25	1	93255P.D	ZB-624 (60) 0.25(mm)
RL 480-382381/6		10/18/2017 10:53	1		ZB-624 (60) 0.25(mm)
MB 480-382381/7		10/18/2017 11:20	1	93257P.D	ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 12:07	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 12:35	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 13:02	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 13:29	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 13:57	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 14:24	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 14:52	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 15:19	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 15:47	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 16:14	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 16:41	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 17:09	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 17:37	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 18:04	1		ZB-624 (60) 0.25(mm)
480-125579-4		10/18/2017 18:32	1	93272P.D	ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 19:00	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 19:27	1		ZB-624 (60) 0.25(mm)
ZZZZZ		10/18/2017 19:54	1		ZB-624 (60) 0.25(mm)

GC/MS VOA Worksheet

Batch Number: 480-382381
Method: 8260C
Analyst: Barone, Rachel L

Date Open: Oct 18 2017 9:04AM
Batch End:

Lab ID	Client ID	Method Chain	Basis	Initial weight/volume of sample	Final weight/volume of sample	Initial pH	8260 CORP mix_00110	ADD CORP mix_00063	BFB_WRK_00065
BFB~480-382381/2		8260C		1 uL	1 uL				1 uL
CCVIS~480-382381/3		8260C		5 mL	5 mL		12.5 uL		
CCV~480-382381/4		8260C		5 mL	5 mL			12.5 uL	
LCS~480-382381/5		8260C		5 mL	5 mL		12.5 uL		
RL~480-382381/6				5 mL	5 mL		1 uL	1 uL	
MB~480-382381/7		8260C		5 mL	5 mL				
480-125123-A-1	TRIP BLANK	8260C	T	5 mL	5 mL	<2 SU			
480-125509-H-1	EQ BLANK	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-2	L28D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-3	K28D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-4	P28D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-5	G603	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-6	R13D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-7	N28D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-8	M28D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-9	G36D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-10	G37D	8260C	T	5 mL	5 mL	<2 SU			
480-125568-E-11	G38D	8260C	T	5 mL	5 mL	<2 SU			
480-125579-A-4	TRIP BLANK	8260C	T	5 mL	5 mL	<2 SU			
480-125907-P-2	LF-5	8260C	T	5 mL	5 mL	7 SU			
480-125509-H-1~MS		8260C	T	5 mL	5 mL	<2 SU	12.5 uL		
480-125509-H-1~MSD		8260C	T	5 mL	5 mL	<2 SU	12.5 uL		
480-125568-A-25	TB02	8260C	T	5 mL	5 mL	<2 SU			
480-125568-A-26	TB03	8260C	T	5 mL	5 mL	<2 SU			

GC/MS VOA Worksheet

Batch Number: 480-382381
Method: 8260C
Analyst: Barone, Rachel L

Date Open: Oct 18 2017 9:04AM
Batch End:

Lab ID	Client ID	Method Chain	Basis GAS CORP mix_00246	P 8260 IS_00248	P 8260 Surr._00243
BFB~480-382381/2		8260C			
CCVIS~480-382381/3		8260C	12.5 uL	1.25 uL	1.25 uL
CCV~480-382381/4		8260C		1.25 uL	1.25 uL
LCS~480-382381/5		8260C	12.5 uL	1.25 uL	1.25 uL
RL~480-382381/6			1 uL	1.25 uL	1.25 uL
MB~480-382381/7		8260C		1.25 uL	1.25 uL
480-125123-A-1	TRIP BLANK	8260C	T	1.25 uL	1.25 uL
480-125509-H-1	EQ BLANK	8260C	T	1.25 uL	1.25 uL
480-125568-E-2	L28D	8260C	T	1.25 uL	1.25 uL
480-125568-E-3	K28D	8260C	T	1.25 uL	1.25 uL
480-125568-E-4	P28D	8260C	T	1.25 uL	1.25 uL
480-125568-E-5	G603	8260C	T	1.25 uL	1.25 uL
480-125568-E-6	R13D	8260C	T	1.25 uL	1.25 uL
480-125568-E-7	N28D	8260C	T	1.25 uL	1.25 uL
480-125568-E-8	M28D	8260C	T	1.25 uL	1.25 uL
480-125568-E-9	G36D	8260C	T	1.25 uL	1.25 uL
480-125568-E-10	G37D	8260C	T	1.25 uL	1.25 uL
480-125568-E-11	G38D	8260C	T	1.25 uL	1.25 uL
480-125579-A-4	TRIP BLANK	8260C	T	1.25 uL	1.25 uL
480-125907-P-2	LF-5	8260C	T	1.25 uL	1.25 uL
480-125509-H-1~MS		8260C	T 12.5 uL	1.25 uL	1.25 uL
480-125509-H-1~MSD		8260C	T 12.5 uL	1.25 uL	1.25 uL
480-125568-A-25	TB02	8260C	T	1.25 uL	1.25 uL
480-125568-A-26	TB03	8260C	T	1.25 uL	1.25 uL

GC/MS VOA Worksheet

Batch Number: 480-382381
Method: 8260C
Analyst: Barone, Rachel L

Date Open: Oct 18 2017 9:04AM
Batch End:

Comments

Lab ID	Client ID	Method Chain	Basis	Analysis comment
BFB~480-382381/2		8260C		
CCVIS~480-382381/3		8260C		
CCV~480-382381/4		8260C		
LCS~480-382381/5		8260C		
RL~480-382381/6				
MB~480-382381/7		8260C		
480-125123-A-1	TRIP BLANK	8260C	T	
480-125509-H-1	EQ BLANK	8260C	T	
480-125568-E-2	L28D	8260C	T	
480-125568-E-3	K28D	8260C	T	
480-125568-E-4	P28D	8260C	T	
480-125568-E-5	G603	8260C	T	
480-125568-E-6	R13D	8260C	T	
480-125568-E-7	N28D	8260C	T	Rerun at 2x
480-125568-E-8	M28D	8260C	T	
480-125568-E-9	G36D	8260C	T	
480-125568-E-10	G37D	8260C	T	
480-125568-E-11	G38D	8260C	T	
480-125579-A-4	TRIP BLANK	8260C	T	
480-125907-P-2	LF-5	8260C	T	
480-125509-H-1~MS		8260C	T	
480-125509-H-1~MSD		8260C	T	
480-125568-A-25	TB02	8260C	T	
480-125568-A-26	TB03	8260C	T	

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Batch Number: 382014 Batch Start Date: 10/16/17 11:39 Batch Analyst: Cwiklinski, Charles D

Batch Method: 5035A_L Batch End Date: 10/16/17 14:39

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount	8260 CORP mix 00112	GAS CORP mix 00246
LCS 480-382014/1		5035A_L, 8260C		25.11 g	30.11 g	5 g	5 mL	2.5 uL	2.5 uL
MB 480-382014/2		5035A_L, 8260C		25.06 g	30.06 g	5 g	5 mL		
480-125579-B-1	MW-8 (4-6)	5035A_L, 8260C	T	+030.869 g	36.75 g	5.881 g	5 mL		
480-125579-B-2	MW-8 (13-14)	5035A_L, 8260C	T	+030.754 g	37.71 g	6.956 g	5 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
LCS 480-382014/1		5035A_L, 8260C							
MB 480-382014/2		5035A_L, 8260C							
480-125579-B-1	MW-8 (4-6)	5035A_L, 8260C	T	TC					
480-125579-B-2	MW-8 (13-14)	5035A_L, 8260C	T	TC					

Batch Notes	
Balance ID	b202613314
Batch Comment	sand lot 164908

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Batch Number: 382187 Batch Start Date: 10/17/17 09:33 Batch Analyst: Cwiklinski, Charles D

Batch Method: 5035A_L Batch End Date: 10/17/17 12:33

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount	8260 CORP mix 00112	GAS CORP mix 00246
LCS 480-382187/1		5035A_L, 8260C		25.09 g	30.09 g	5 g	5 mL	2.5 uL	2.5 uL
MB 480-382187/2		5035A_L, 8260C		25.06 g	30.06 g	5 g	5 mL		
480-125579-C-3	DUP-100817	5035A_L, 8260C	T	30.772 g	37.52 g	6.748 g	5 mL		
480-125579-C-1 MS	MW-8 (4-6)	5035A_L, 8260C	T	+030.188 g	36.36 g	6.172 g	5 mL	2.5 uL	2.5 uL
480-125579-C-1 MSD	MW-8 (4-6)	5035A_L, 8260C	T	30.409 g	35.81 g	5.401 g	5 mL	2.5 uL	2.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
LCS 480-382187/1		5035A_L, 8260C							
MB 480-382187/2		5035A_L, 8260C							
480-125579-C-3	DUP-100817	5035A_L, 8260C	T	TC confirm IS					
480-125579-C-1 MS	MW-8 (4-6)	5035A_L, 8260C	T	TC client qc confirm SS parent in B:381944					
480-125579-C-1 MSD	MW-8 (4-6)	5035A_L, 8260C	T	TC client qc parent in B:381944					

Batch Notes	
Balance ID	b202613314
Batch Comment	sand lot 164908

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP	#	PHL	#	NBZ	#	FBP	#	TBP	#	TPHd14	#
MW-8 (4-6)	480-125579-1	0	X	0	X	0	X	83		0	X	0	X
MW-8 (13-14)	480-125579-2	73		82		55		88		111		98	
DUP-100817	480-125579-3	72		59		78		87		119		95	
	MB 480-381332/1-A	77		80		73		84		86		101	
	LCS 480-381332/2-A	76		78		77		80		95		96	
MW-8 (4-6) MS	480-125579-1 MS	0	X	0	X	0	X	0	X	0	X	0	X
MW-8 (4-6) MSD	480-125579-1 MSD	47	X	0	X	63		75		0	X	119	

	QC LIMITS
2FP = 2-Fluorophenol	52-120
PHL = Phenol-d5	54-120
NBZ = Nitrobenzene-d5	53-120
FBP = 2-Fluorobiphenyl	60-120
TBP = 2,4,6-Tribromophenol	54-120
TPHd14 = p-Terphenyl-d14	65-121

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U328232.D

Lab ID: LCS 480-381332/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	1620	1350	83	59-126	
2,4,6-Trichlorophenol	1620	1290	80	59-123	
2,4-Dichlorophenol	1620	1310	80	61-120	
2,4-Dimethylphenol	1620	1300	80	59-120	
2,4-Dinitrophenol	3250	1870	58	41-146	
2,4-Dinitrotoluene	1620	1380	85	63-120	
2,6-Dinitrotoluene	1620	1350	83	66-120	
2-Chloronaphthalene	1620	1250	77	57-120	
2-Chlorophenol	1620	1180	73	53-120	
2-Methylnaphthalene	1620	1280	79	59-120	
2-Methylphenol	1620	1270	78	54-120	
2-Nitroaniline	1620	1260	78	61-120	
2-Nitrophenol	1620	1220	75	56-120	
3,3'-Dichlorobenzidine	3250	2940	91	54-120	
3-Nitroaniline	1620	1300	80	48-120	
4,6-Dinitro-2-methylphenol	3250	2620	81	49-122	
4-Bromophenyl phenyl ether	1620	1490	92	58-120	
4-Chloro-3-methylphenol	1620	1340	83	61-120	
4-Chloroaniline	1620	1180	73	38-120	
4-Chlorophenyl phenyl ether	1620	1360	84	63-124	
4-Methylphenol	1620	1330	82	55-120	
4-Nitroaniline	1620	1310	81	56-120	
4-Nitrophenol	3250	2720	84	43-147	
Acenaphthene	1620	1330	82	62-120	
Acenaphthylene	1620	1310	81	58-121	
Acetophenone	1620	1230	76	54-120	
Anthracene	1620	1480	91	62-120	
Atrazine	3250	3030	93	60-127	
Benzaldehyde	3250	2130	66	10-150	
Benzo[a]anthracene	1620	1510	93	65-120	
Benzo[a]pyrene	1620	1860	115	64-120	
Benzo[b]fluoranthene	1620	1940	119	64-120	
Benzo[g,h,i]perylene	1620	1970	122	45-145	
Benzo[k]fluoranthene	1620	1770	109	65-120	
Biphenyl	1620	1300	80	59-120	
bis (2-chloroisopropyl) ether	1620	1140	70	44-120	
Bis(2-chloroethoxy)methane	1620	1180	73	55-120	
Bis(2-chloroethyl)ether	1620	1150	71	45-120	
Bis(2-ethylhexyl) phthalate	1620	1490	92	61-133	
Butyl benzyl phthalate	1620	1480	91	61-129	
Caprolactam	3250	2790	86	47-120	
Carbazole	1620	1510	93	65-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U328232.D

Lab ID: LCS 480-381332/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Chrysene	1620	1490	92	64-120	
Dibenz(a,h)anthracene	1620	1950	120	54-132	
Dibenzofuran	1620	1360	84	63-120	
Diethyl phthalate	1620	1440	89	66-120	
Dimethyl phthalate	1620	1420	88	65-124	
Di-n-butyl phthalate	1620	1510	93	58-130	
Di-n-octyl phthalate	1620	1540	95	57-133	
Fluoranthene	1620	1530	94	62-120	
Fluorene	1620	1350	83	63-120	
Hexachlorobenzene	1620	1500	92	60-120	
Hexachlorobutadiene	1620	1220	75	45-120	
Hexachlorocyclopentadiene	1620	1160	71	47-120	
Hexachloroethane	1620	1160	72	41-120	
Indeno[1,2,3-cd]pyrene	1620	1940	120	56-134	
Isophorone	1620	1300	80	56-120	
Naphthalene	1620	1230	76	55-120	
Nitrobenzene	1620	1240	77	54-120	
N-Nitrosodi-n-propylamine	1620	1220	75	52-120	
Pentachlorophenol	3250	2440	75	51-120	
Phenanthrene	1620	1480	91	60-120	
Phenol	1620	1290	80	53-120	
Pyrene	1620	1480	91	61-133	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U328233.D

Lab ID: 480-125579-1 MS Client ID: MW-8 (4-6) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	1930	ND	ND	NC	46-120	
2,4,6-Trichlorophenol	1930	ND	ND	NC	41-123	
2,4-Dichlorophenol	1930	ND	ND	NC	45-120	
2,4-Dimethylphenol	1930	ND	ND	NC	52-120	
2,4-Dinitrophenol	3850	ND	ND	NC	41-146	
2,4-Dinitrotoluene	1930	ND	ND	NC	63-125	
2,6-Dinitrotoluene	1930	ND	ND	NC	66-120	
2-Chloronaphthalene	1930	ND	ND	NC	57-120	
2-Chlorophenol	1930	ND	ND	NC	43-120	
2-Methylnaphthalene	1930	ND	4060 J	NC	55-120	
2-Methylphenol	1930	ND	ND	NC	48-120	
2-Nitroaniline	1930	ND	ND	NC	61-120	
2-Nitrophenol	1930	ND	ND	NC	37-120	
3,3'-Dichlorobenzidine	3850	ND	ND	NC	37-126	
3-Nitroaniline	1930	ND	ND	NC	48-120	
4,6-Dinitro-2-methylphenol	3850	ND	ND	NC	23-149	
4-Bromophenyl phenyl ether	1930	ND	ND	NC	58-120	
4-Chloro-3-methylphenol	1930	ND	ND	NC	49-125	
4-Chloroaniline	1930	ND	ND	NC	38-120	
4-Chlorophenyl phenyl ether	1930	ND	ND	NC	63-124	
4-Methylphenol	1930	ND	ND	NC	50-120	
4-Nitroaniline	1930	ND	ND	NC	47-120	
4-Nitrophenol	3850	ND	ND	NC	31-147	
Acenaphthene	1930	3800 J	5760 J	101	60-120	
Acenaphthylene	1930	17000 J	16700 J	3	58-121	4
Acetophenone	1930	ND	ND	NC	47-120	
Anthracene	1930	40000	39700	-38	62-120	4
Atrazine	3850	ND	ND	NC	60-150	
Benzaldehyde	3850	ND	ND	NC	10-150	
Benzo[a]anthracene	1930	87000	78500	-442	65-120	4
Benzo[a]pyrene	1930	69000	73300	224	64-120	4
Benzo[b]fluoranthene	1930	83000	79300	-206	64-120	4
Benzo[g,h,i]perylene	1930	38000	41300	179	45-145	4
Benzo[k]fluoranthene	1930	34000	47600	694	65-120	4
Biphenyl	1930	ND	ND	NC	58-120	
bis (2-chloroisopropyl) ether	1930	ND	ND	NC	31-120	
Bis(2-chloroethoxy)methane	1930	ND	ND	NC	52-120	
Bis(2-chloroethyl)ether	1930	ND	ND	NC	45-120	
Bis(2-ethylhexyl) phthalate	1930	ND	ND	NC	61-133	
Butyl benzyl phthalate	1930	ND	ND	NC	61-120	
Caprolactam	3850	ND	ND	NC	37-133	
Carbazole	1930	ND	3420 J	NC	59-120	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U328233.D

Lab ID: 480-125579-1 MS Client ID: MW-8 (4-6) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Chrysene	1930	70000	64700	-291	64-120	4
Dibenz(a,h)anthracene	1930	ND	ND	NC	54-132	
Dibenzofuran	1930	9100 J	13100 J	209	62-120	4
Diethyl phthalate	1930	ND	ND	NC	66-120	
Dimethyl phthalate	1930	ND	ND	NC	65-124	
Di-n-butyl phthalate	1930	ND	ND	NC	58-130	
Di-n-octyl phthalate	1930	ND	ND	NC	57-133	
Fluoranthene	1930	170000	152000	-705	62-120	4
Fluorene	1930	18000 J	22000	232	63-120	4
Hexachlorobenzene	1930	ND	ND	NC	60-120	
Hexachlorobutadiene	1930	ND	ND	NC	45-120	
Hexachlorocyclopentadiene	1930	ND	ND	NC	31-120	
Hexachloroethane	1930	ND	ND	NC	21-120	
Indeno[1,2,3-cd]pyrene	1930	36000	40800	236	56-134	4
Isophorone	1930	ND	ND	NC	56-120	
Naphthalene	1930	ND	3040 J	NC	46-120	
Nitrobenzene	1930	ND	ND	NC	49-120	
N-Nitrosodi-n-propylamine	1930	ND	ND	NC	46-120	
Pentachlorophenol	3850	ND	ND	NC	25-136	
Phenanthrene	1930	110000	117000	420	60-122	4
Phenol	1930	ND	ND	NC	50-120	
Pyrene	1930	130000	124000	-527	61-133	4

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U328234.D

Lab ID: 480-125579-1 MSD Client ID: MW-8 (4-6) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	1940	ND	NC	NC	18	46-120	
2,4,6-Trichlorophenol	1940	ND	NC	NC	19	41-123	
2,4-Dichlorophenol	1940	ND	NC	NC	19	45-120	
2,4-Dimethylphenol	1940	ND	NC	NC	42	52-120	
2,4-Dinitrophenol	3870	ND	NC	NC	22	41-146	
2,4-Dinitrotoluene	1940	ND	NC	NC	20	63-125	
2,6-Dinitrotoluene	1940	ND	NC	NC	15	66-120	
2-Chloronaphthalene	1940	ND	NC	NC	21	57-120	
2-Chlorophenol	1940	ND	NC	NC	25	43-120	
2-Methylnaphthalene	1940	ND	NC	NC	21	55-120	
2-Methylphenol	1940	ND	NC	NC	27	48-120	
2-Nitroaniline	1940	ND	NC	NC	15	61-120	
2-Nitrophenol	1940	ND	NC	NC	18	37-120	
3,3'-Dichlorobenzidine	3870	ND	NC	NC	25	37-126	
3-Nitroaniline	1940	ND	NC	NC	19	48-120	
4,6-Dinitro-2-methylphenol	3870	ND	NC	NC	15	23-149	
4-Bromophenyl phenyl ether	1940	ND	NC	NC	15	58-120	
4-Chloro-3-methylphenol	1940	ND	NC	NC	27	49-125	
4-Chloroaniline	1940	ND	NC	NC	22	38-120	
4-Chlorophenyl phenyl ether	1940	ND	NC	NC	16	63-124	
4-Methylphenol	1940	ND	NC	NC	24	50-120	
4-Nitroaniline	1940	ND	NC	NC	24	47-120	
4-Nitrophenol	3870	ND	NC	NC	25	31-147	
Acenaphthene	1940	7940 J	213	32	35	60-120	F1
Acenaphthylene	1940	26500	505	45	18	58-121	4 F2
Acetophenone	1940	ND	NC	NC	20	47-120	
Anthracene	1940	60700	1042	42	15	62-120	4 F2
Atrazine	3870	ND	NC	NC	20	60-150	
Benzaldehyde	3870	ND	NC	NC	20	10-150	
Benzo[a]anthracene	1940	120000	1687	42	15	65-120	4 F2
Benzo[a]pyrene	1940	113000	2250	42	15	64-120	4 F2
Benzo[b]fluoranthene	1940	137000	2768	53	15	64-120	4 F2
Benzo[g,h,i]perylene	1940	62700	1283	41	15	45-145	4 F2
Benzo[k]fluoranthene	1940	55000	1071	14	22	65-120	4
Biphenyl	1940	ND	NC	NC	20	58-120	
bis (2-chloroisopropyl) ether	1940	ND	NC	NC	24	31-120	
Bis(2-chloroethoxy)methane	1940	ND	NC	NC	17	52-120	
Bis(2-chloroethyl)ether	1940	ND	NC	NC	21	45-120	
Bis(2-ethylhexyl) phthalate	1940	ND	NC	NC	15	61-133	
Butyl benzyl phthalate	1940	ND	NC	NC	16	61-120	
Caprolactam	3870	ND	NC	NC	20	37-133	
Carbazole	1940	4700 J	NC	31	20	59-120	F2

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: U328234.D

Lab ID: 480-125579-1 MSD Client ID: MW-8 (4-6) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chrysene	1940	98100	1437	41	15	64-120	4 F2
Dibenz(a,h)anthracene	1940	ND	NC	NC	15	54-132	
Dibenzofuran	1940	15500 J	332	17	15	62-120	4 F2
Diethyl phthalate	1940	ND	NC	NC	15	66-120	
Dimethyl phthalate	1940	ND	NC	NC	15	65-124	
Di-n-butyl phthalate	1940	ND	NC	NC	15	58-130	
Di-n-octyl phthalate	1940	ND	NC	NC	16	57-133	
Fluoranthene	1940	233000	3468	42	15	62-120	4 F2
Fluorene	1940	29500	622	29	15	63-120	4 F2
Hexachlorobenzene	1940	ND	NC	NC	15	60-120	
Hexachlorobutadiene	1940	ND	NC	NC	44	45-120	
Hexachlorocyclopentadiene	1940	ND	NC	NC	49	31-120	
Hexachloroethane	1940	ND	NC	NC	46	21-120	
Indeno[1,2,3-cd]pyrene	1940	63400	1404	43	15	56-134	4 F2
Isophorone	1940	ND	NC	NC	17	56-120	
Naphthalene	1940	4050 J	NC	28	29	46-120	
Nitrobenzene	1940	ND	NC	NC	24	49-120	
N-Nitrosodi-n-propylamine	1940	ND	NC	NC	31	46-120	
Pentachlorophenol	3870	ND	NC	NC	35	25-136	
Phenanthrene	1940	165000	2906	34	15	60-122	4 F2
Phenol	1940	ND	NC	NC	35	50-120	
Pyrene	1940	189000	2852	42	35	61-133	4 F2

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: U328231.D Lab Sample ID: MB 480-381332/1-A

Matrix: Solid Date Extracted: 10/11/2017 14:06

Instrument ID: HP5973U Date Analyzed: 10/16/2017 20:13

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
MW-8 (13-14)	480-125579-2	X20526.D	10/13/2017 08:02
DUP-100817	480-125579-3	X20527.D	10/13/2017 08:28
	LCS 480-381332/2-A	U328232.D	10/16/2017 20:39
MW-8 (4-6) MS	480-125579-1 MS	U328233.D	10/16/2017 21:05
MW-8 (4-6) MSD	480-125579-1 MSD	U328234.D	10/16/2017 21:32
MW-8 (4-6)	480-125579-1	U328235.D	10/16/2017 21:58

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: U328216.D DFTPP Injection Date: 10/16/2017

Instrument ID: HP5973U DFTPP Injection Time: 11:41

Analysis Batch No.: 382005

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	33.2	
68	Less than 2% of mass 69	0.0	(0.0) 1
69	Mass 69 Relative abundance	31.8	
70	Less than 2% of mass 69	0.0	(0.0) 1
127	10-80% of Base Peak	46.5	
197	Less than 2% of mass 198	0.6	
198	Base peak	100.0	
199	5-9% of mass 198	5.9	
275	10-60% of Base Peak	27.8	
365	Greater than 1% of mass 198	5.7	
441	present but less than 24% of mass 442	15.4	(15.6) 2
442	Greater than 50% of mass 198	98.9	
443	15-24% of mass 442	18.7	(18.9) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-382005/3	U328217.D	10/16/2017	12:07
	IC 480-382005/4	U328218.D	10/16/2017	12:34
	ICIS 480-382005/5	U328219.D	10/16/2017	13:00
	IC 480-382005/6	U328220.D	10/16/2017	13:26
	IC 480-382005/7	U328221.D	10/16/2017	13:53
	IC 480-382005/8	U328222.D	10/16/2017	14:19

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: U328226.D DFTPP Injection Date: 10/16/2017

Instrument ID: HP5973U DFTPP Injection Time: 18:01

Analysis Batch No.: 382085

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	32.5	
68	Less than 2% of mass 69	0.0	(0.0) 1
69	Mass 69 Relative abundance	34.3	
70	Less than 2% of mass 69	0.0	(0.0) 1
127	10-80% of Base Peak	48.4	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	7.5	
275	10-60% of Base Peak	30.0	
365	Greater than 1% of mass 198	6.1	
441	present but less than 24% of mass 442	19.8	(17.9) 2
442	Greater than 50% of mass 198	111.0	
443	15-24% of mass 442	20.9	(18.8) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-382085/3	U328227.D	10/16/2017	18:27
	MB 480-381332/1-A	U328231.D	10/16/2017	20:13
	LCS 480-381332/2-A	U328232.D	10/16/2017	20:39
MW-8 (4-6) MS	480-125579-1 MS	U328233.D	10/16/2017	21:05
MW-8 (4-6) MSD	480-125579-1 MSD	U328234.D	10/16/2017	21:32
MW-8 (4-6)	480-125579-1	U328235.D	10/16/2017	21:58

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: X20236.D DFTPP Injection Date: 09/29/2017

Instrument ID: HP5973X DFTPP Injection Time: 19:07

Analysis Batch No.: 379526

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	36.5	
68	Less than 2% of mass 69	0.2	(0.5) 1
69	Mass 69 Relative abundance	42.0	
70	Less than 2% of mass 69	0.2	(0.5) 1
127	10-80% of Base Peak	49.0	
197	Less than 2% of mass 198	0.2	
198	Base peak	100.0	
199	5-9% of mass 198	7.0	
275	10-60% of Base Peak	27.6	
365	Greater than 1% of mass 198	3.6	
441	present but less than 24% of mass 442	7.6	(14.9) 2
442	Greater than 50% of mass 198	51.1	
443	15-24% of mass 442	9.2	(17.9) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-379526/3	X20237.D	09/29/2017	19:33
	IC 480-379526/4	X20238.D	09/29/2017	19:59
	ICIS 480-379526/5	X20239.D	09/29/2017	20:25
	IC 480-379526/6	X20240.D	09/29/2017	20:52
	IC 480-379526/7	X20241.D	09/29/2017	21:18
	IC 480-379526/8	X20242.D	09/29/2017	21:44

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab File ID: X20508.D DFTPP Injection Date: 10/13/2017

Instrument ID: HP5973X DFTPP Injection Time: 00:06

Analysis Batch No.: 381534

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	31.5	
68	Less than 2% of mass 69	0.0	(0.0) 1
69	Mass 69 Relative abundance	35.2	
70	Less than 2% of mass 69	0.1	(0.3) 1
127	10-80% of Base Peak	44.7	
197	Less than 2% of mass 198	0.2	
198	Base peak	100.0	
199	5-9% of mass 198	6.1	
275	10-60% of Base Peak	28.5	
365	Greater than 1% of mass 198	3.6	
441	present but less than 24% of mass 442	9.9	(14.3) 2
442	Greater than 50% of mass 198	69.0	
443	15-24% of mass 442	11.5	(16.7) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-381534/3	X20509.D	10/13/2017	00:32
MW-8 (13-14)	480-125579-2	X20526.D	10/13/2017	08:02
DUP-100817	480-125579-3	X20527.D	10/13/2017	08:28

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: ICIS 480-382005/5 Date Analyzed: 10/16/2017 13:00

Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

Lab File ID (Standard): U328219.D Heated Purge: (Y/N) N

Calibration ID: 31736

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		98141	6.71	336235	8.23	171632	10.29
UPPER LIMIT		196282	7.21	672470	8.73	343264	10.79
LOWER LIMIT		49071	6.21	168118	7.73	85816	9.79
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-382085/3		96571	6.71	327306	8.23	183173	10.29

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: ICIS 480-382005/5 Date Analyzed: 10/16/2017 13:00

Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

Lab File ID (Standard): U328219.D Heated Purge: (Y/N) N

Calibration ID: 31736

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		386287	11.81	495900	14.19	477639	15.69
UPPER LIMIT		772574	12.31	991800	14.69	955278	16.19
LOWER LIMIT		193144	11.31	247950	13.69	238820	15.19
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-382085/3		406535	11.81	559245	14.19	541112	15.69

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: CCVIS 480-382085/3 Date Analyzed: 10/16/2017 18:27

Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

Lab File ID (Standard): U328227.D Heated Purge: (Y/N) N

Calibration ID: 31736

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		96571	6.71	327306	8.23	183173	10.29
UPPER LIMIT		193142	7.21	654612	8.73	366346	10.79
LOWER LIMIT		48286	6.21	163653	7.73	91587	9.79
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-381332/1-A		154035	6.71	528736	8.23	262930	10.29
LCS 480-381332/2-A		92044	6.71	310349	8.23	166394	10.29
480-125579-1 MS	MW-8 (4-6) MS	121140	6.71	386209	8.23	192391	10.29
480-125579-1 MSD	MW-8 (4-6) MSD	107519	6.71	362961	8.23	187134	10.29
480-125579-1	MW-8 (4-6)	94542	6.71	308019	8.23	160582	10.29

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: CCVIS 480-382085/3 Date Analyzed: 10/16/2017 18:27

Instrument ID: HP5973U GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

Lab File ID (Standard): U328227.D Heated Purge: (Y/N) N

Calibration ID: 31736

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		406535	11.81	559245	14.19	541112	15.69
UPPER LIMIT		813070	12.31	1118490	14.69	1082224	16.19
LOWER LIMIT		203268	11.31	279623	13.69	270556	15.19
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-381332/1-A		553477	11.81	589648	14.19	371113	15.69
LCS 480-381332/2-A		351816	11.81	446511	14.19	344753	15.69
480-125579-1 MS	MW-8 (4-6) MS	403161	11.81	493583	14.19	403955	15.69
480-125579-1 MSD	MW-8 (4-6) MSD	416284	11.81	529808	14.19	424892	15.69
480-125579-1	MW-8 (4-6)	350957	11.81	440708	14.19	417519	15.69

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: ICIS 480-379526/5 Date Analyzed: 09/29/2017 20:25

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): X20239.D Heated Purge: (Y/N) N

Calibration ID: 31634

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		174918	5.75	608756	7.30	304192	9.36
UPPER LIMIT		349836	6.25	1217512	7.80	608384	9.86
LOWER LIMIT		87459	5.25	304378	6.80	152096	8.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-381534/3		181304	5.57	605227	7.12	371962	9.18

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: ICIS 480-379526/5 Date Analyzed: 09/29/2017 20:25

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): X20239.D Heated Purge: (Y/N) N

Calibration ID: 31634

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		668632	10.96	758990	13.34	702616	14.50
UPPER LIMIT		1337264	11.46	1517980	13.84	1405232	15.00
LOWER LIMIT		334316	10.46	379495	12.84	351308	14.00
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-381534/3		757394	10.82	943460	13.21	880860	14.37

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: CCVIS 480-381534/3 Date Analyzed: 10/13/2017 00:32

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): X20509.D Heated Purge: (Y/N) N

Calibration ID: 31634

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		181304	5.57	605227	7.12	371962	9.18
UPPER LIMIT		362608	6.07	1210454	7.62	743924	9.68
LOWER LIMIT		90652	5.07	302614	6.62	185981	8.68
LAB SAMPLE ID	CLIENT SAMPLE ID						
480-125579-2	MW-8 (13-14)	117503	5.56	415649	7.12	284808	9.19
480-125579-3	DUP-100817	115868	5.56	330471	7.11	287555	9.18

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Sample No.: CCVIS 480-381534/3 Date Analyzed: 10/13/2017 00:32

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): X20509.D Heated Purge: (Y/N) N

Calibration ID: 31634

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		757394	10.82	943460	13.21	880860	14.37
UPPER LIMIT		1514788	11.32	1886920	13.71	1761720	14.87
LOWER LIMIT		378697	10.32	471730	12.71	440430	13.87
LAB SAMPLE ID	CLIENT SAMPLE ID						
480-125579-2	MW-8 (13-14)	590185	10.82	684501	13.21	665780	14.37
480-125579-3	DUP-100817	599520	10.82	706315	13.21	656665	14.36

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) | Lab Sample ID: 480-125579-1

Matrix: Solid | Lab File ID: U328235.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.12(g) | Date Analyzed: 10/16/2017 21:58

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		20000	5400
88-06-2	2,4,6-Trichlorophenol	ND		20000	4000
120-83-2	2,4-Dichlorophenol	ND		20000	2100
105-67-9	2,4-Dimethylphenol	ND		20000	4800
51-28-5	2,4-Dinitrophenol	ND		200000	93000
121-14-2	2,4-Dinitrotoluene	ND		20000	4100
606-20-2	2,6-Dinitrotoluene	ND		20000	2400
91-58-7	2-Chloronaphthalene	ND		20000	3300
95-57-8	2-Chlorophenol	ND		20000	3700
91-57-6	2-Methylnaphthalene	ND		20000	4000
95-48-7	2-Methylphenol	ND		20000	2400
88-74-4	2-Nitroaniline	ND		39000	3000
88-75-5	2-Nitrophenol	ND		20000	5700
91-94-1	3,3'-Dichlorobenzidine	ND		39000	24000
99-09-2	3-Nitroaniline	ND		39000	5500
534-52-1	4,6-Dinitro-2-methylphenol	ND		39000	20000
101-55-3	4-Bromophenyl phenyl ether	ND		20000	2800
59-50-7	4-Chloro-3-methylphenol	ND		20000	5000
106-47-8	4-Chloroaniline	ND		20000	5000
7005-72-3	4-Chlorophenyl phenyl ether	ND		20000	2500
106-44-5	4-Methylphenol	ND		39000	2400
100-01-6	4-Nitroaniline	ND		39000	11000
100-02-7	4-Nitrophenol	ND		39000	14000
83-32-9	Acenaphthene	3800	J F1	20000	3000
208-96-8	Acenaphthylene	17000	J F2	20000	2600
98-86-2	Acetophenone	ND		20000	2700
120-12-7	Anthracene	40000	F2	20000	5000
1912-24-9	Atrazine	ND		20000	7000
100-52-7	Benzaldehyde	ND		20000	16000
56-55-3	Benzo[a]anthracene	87000	F2	20000	2000
50-32-8	Benzo[a]pyrene	69000	F2	20000	3000
205-99-2	Benzo[b]fluoranthene	83000	F2	20000	3200
191-24-2	Benzo[g,h,i]perylene	38000	F2	20000	2100
207-08-9	Benzo[k]fluoranthene	34000		20000	2600

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) | Lab Sample ID: 480-125579-1

Matrix: Solid | Lab File ID: U328235.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.12(g) | Date Analyzed: 10/16/2017 21:58

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		20000	3000
108-60-1	bis (2-chloroisopropyl) ether	ND		20000	4000
111-91-1	Bis(2-chloroethoxy)methane	ND		20000	4200
111-44-4	Bis(2-chloroethyl)ether	ND		20000	2600
117-81-7	Bis(2-ethylhexyl) phthalate	ND		20000	6800
85-68-7	Butyl benzyl phthalate	ND		20000	3300
105-60-2	Caprolactam	ND		20000	6000
86-74-8	Carbazole	ND	F2	20000	2400
218-01-9	Chrysene	70000	F2	20000	4500
53-70-3	Dibenz(a,h)anthracene	ND		20000	3500
132-64-9	Dibenzofuran	9100	J F2	20000	2400
84-66-2	Diethyl phthalate	ND		20000	2600
131-11-3	Dimethyl phthalate	ND		20000	2400
84-74-2	Di-n-butyl phthalate	ND		20000	3400
117-84-0	Di-n-octyl phthalate	ND		20000	2400
206-44-0	Fluoranthene	170000	F2	20000	2100
86-73-7	Fluorene	18000	J F2	20000	2400
118-74-1	Hexachlorobenzene	ND		20000	2700
87-68-3	Hexachlorobutadiene	ND		20000	3000
77-47-4	Hexachlorocyclopentadiene	ND		20000	2700
67-72-1	Hexachloroethane	ND		20000	2600
193-39-5	Indeno[1,2,3-cd]pyrene	36000	F2	20000	2500
78-59-1	Isophorone	ND		20000	4200
91-20-3	Naphthalene	ND		20000	2600
98-95-3	Nitrobenzene	ND		20000	2200
621-64-7	N-Nitrosodi-n-propylamine	ND		20000	3400
86-30-6	N-Nitrosodiphenylamine	ND		20000	16000
87-86-5	Pentachlorophenol	ND		39000	20000
85-01-8	Phenanthrene	110000	F2	20000	3000
108-95-2	Phenol	ND		20000	3100
129-00-0	Pyrene	130000	F2	20000	2400

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) | Lab Sample ID: 480-125579-1

Matrix: Solid | Lab File ID: U328235.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.12(g) | Date Analyzed: 10/16/2017 21:58

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	0	X	54-120
321-60-8	2-Fluorobiphenyl	83		60-120
367-12-4	2-Fluorophenol	0	X	52-120
4165-60-0	Nitrobenzene-d5	0	X	53-120
4165-62-2	Phenol-d5	0	X	54-120
1718-51-0	p-Terphenyl-d14	0	X	65-121

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D
Lims ID: 480-125579-F-1-E
Client ID: MW-8 (4-6)
Sample Type: Client
Inject. Date: 16-Oct-2017 21:58:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 100.0000
Sample Info: 480-0066446-011
Operator ID: DR Instrument ID: HP5973U

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Oct-2017 11:35:50 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: richardsd Date: 17-Oct-2017 11:22:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	94	94542	40.0	
* 2 Naphthalene-d8	136	8.226	8.226	0.000	99	308019	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	94	160582	40.0	
* 4 Phenanthrene-d10	188	11.811	11.811	0.000	96	350957	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	96	440708	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	98	417519	40.0	
$ 7 2-Fluorophenol	112		5.095				ND	
$ 8 Phenol-d5	99		6.228				ND	
$ 9 Nitrobenzene-d5	82		7.355				ND	
$ 10 2-Fluorobiphenyl	172	9.492	9.492	0.000	1	2238	0.3301	
$ 11 2,4,6-Tribromophenol	330		11.121				ND	
$ 12 p-Terphenyl-d14	244		13.221				ND	
32 Benzaldehyde	77		6.174				ND	
33 Phenol	94		6.244				ND	
35 Bis(2-chloroethyl)ether	93		6.356				ND	
37 2-Chlorophenol	128		6.458				ND	
43 2-Methylphenol	108		6.976				ND	
44 2,2'-oxybis[1-chloropropan	45		7.013				ND	
46 4-Methylphenol	108		7.152				ND	
47 N-Nitrosodi-n-propylamine	70		7.157				ND	
49 Acetophenone	105		7.168				ND	
53 Hexachloroethane	117		7.328				ND	
54 Nitrobenzene	77		7.376				ND	
56 Isophorone	82		7.654				ND	
59 2-Nitrophenol	139		7.761				ND	
60 2,4-Dimethylphenol	107		7.788				ND	
62 Bis(2-chloroethoxy)methane	93		7.895				ND	
67 2,4-Dichlorophenol	162		8.044				ND	
70 Naphthalene	128		8.253				ND	
72 4-Chloroaniline	127		8.290				ND	
74 Hexachlorobutadiene	225		8.402				ND	
76 Caprolactam	113		8.680				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
80 4-Chloro-3-methylphenol	107		8.851				ND	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	84	2877	0.5312	
86 Hexachlorocyclopentadiene	237		9.273				ND	
89 2,4,6-Trichlorophenol	196		9.396				ND	
91 2,4,5-Trichlorophenol	196		9.444				ND	
94 1,1'-Biphenyl	154		9.615				ND	
95 2-Chloronaphthalene	162		9.652				ND	
98 2-Nitroaniline	65		9.748				ND	
102 Dimethyl phthalate	163		9.946				ND	
104 2,6-Dinitrotoluene	165		10.016				ND	
105 Acenaphthylene	152	10.133	10.133	0.000	96	33331	4.24	
106 3-Nitroaniline	138		10.213				ND	
107 2,4-Dinitrophenol	184		10.331				ND	
108 Acenaphthene	153	10.325	10.331	-0.006	83	5318	0.9692	
109 4-Nitrophenol	109		10.379				ND	
111 2,4-Dinitrotoluene	165		10.470				ND	
112 Dibenzofuran	168	10.512	10.512	0.000	95	18526	2.31	
118 Diethyl phthalate	149		10.721				ND	
121 4-Chlorophenyl phenyl ethe	204		10.860				ND	
122 4-Nitroaniline	138		10.870				ND	
123 Fluorene	166	10.876	10.876	0.000	91	28789	4.45	
125 4,6-Dinitro-2-methylphenol	198		10.908				ND	
127 N-Nitrosodiphenylamine	169		10.977				ND	
137 4-Bromophenyl phenyl ether	248		11.356				ND	
139 Hexachlorobenzene	284		11.447				ND	
141 Atrazine	200		11.485				ND	
143 Pentachlorophenol	266		11.629				ND	
150 Phenanthrene	178	11.832	11.832	0.000	97	252062	27.7	
151 Anthracene	178	11.880	11.880	0.000	95	96661	10.3	
152 Carbazole	167	12.014	12.014	0.000	92	4817	0.5640	
155 Di-n-butyl phthalate	149		12.291				ND	
162 Fluoranthene	202	12.922	12.922	0.000	95	478732	42.1	
165 Pyrene	202	13.125	13.130	-0.005	98	400087	34.1	
172 Butyl benzyl phthalate	149		13.616				ND	
178 Bis(2-ethylhexyl) phthalat	149		14.097				ND	
179 3,3'-Dichlorobenzidine	252		14.124				ND	
181 Benzo[a]anthracene	228	14.183	14.182	0.001	96	270388	22.1	
182 Chrysene	228	14.215	14.220	-0.005	94	208345	17.9	
183 Di-n-octyl phthalate	149		14.669				ND	
185 Benzo[b]fluoranthene	252	15.246	15.240	0.006	94	268745	21.2	
187 Benzo[k]fluoranthene	252	15.267	15.272	-0.005	95	112713	8.70	M
190 Benzo[a]pyrene	252	15.625	15.625	0.000	73	207432	17.5	
193 Dibenz(a,h)anthracene	278		17.179				ND	
194 Indeno[1,2,3-cd]pyrene	276	17.174	17.179	-0.005	95	124601	9.21	
195 Benzo[g,h,i]perylene	276	17.634	17.639	-0.005	95	106929	9.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_INTSTD_STK_00039 Amount Added: 20.00 Units: uL Run Reagent

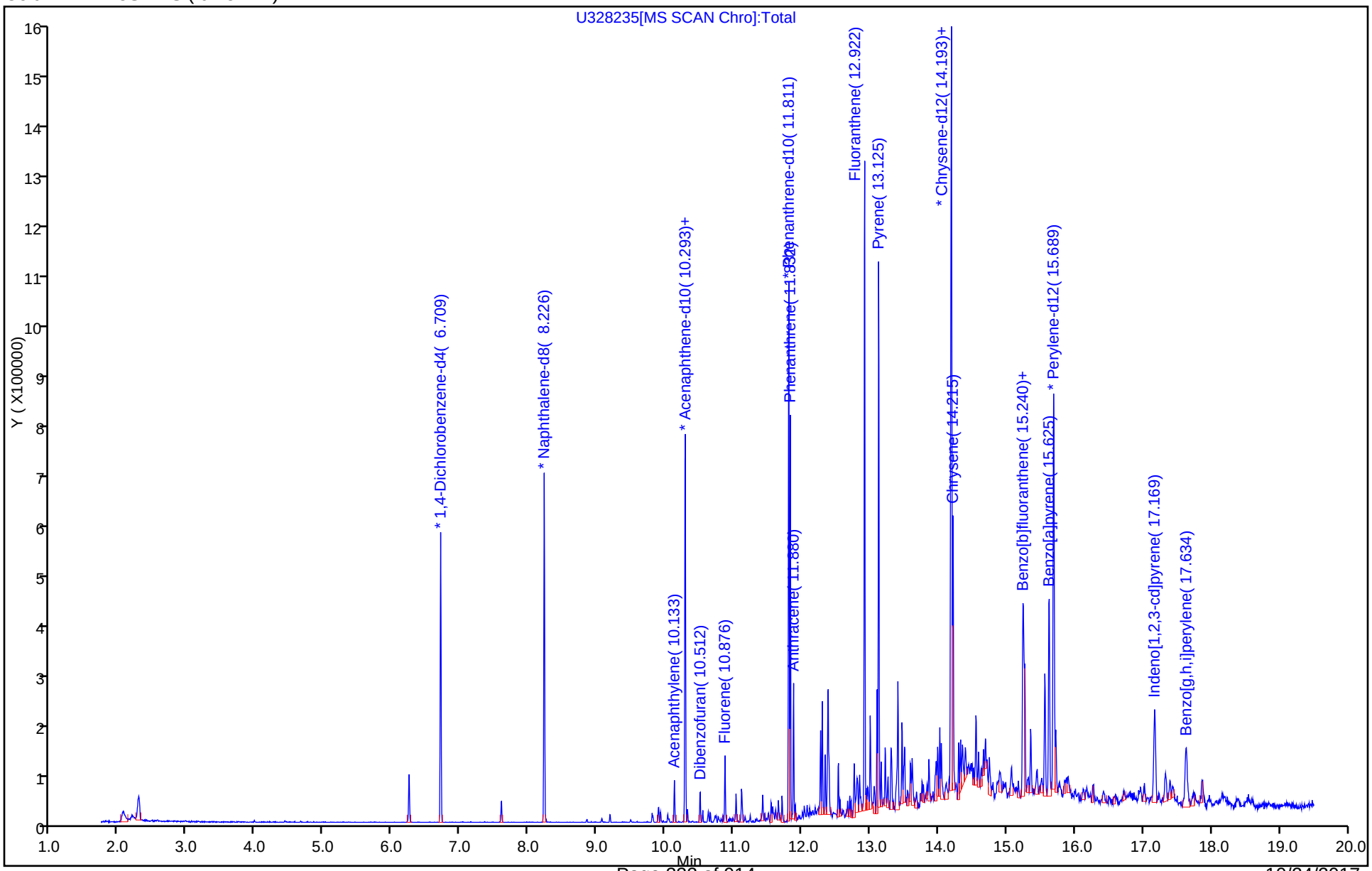
Report Date: 17-Oct-2017 11:38:08 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1	Worklist Smp#:	11
Client ID:	MW-8 (4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	100.0000	ALS Bottle#:	11
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)

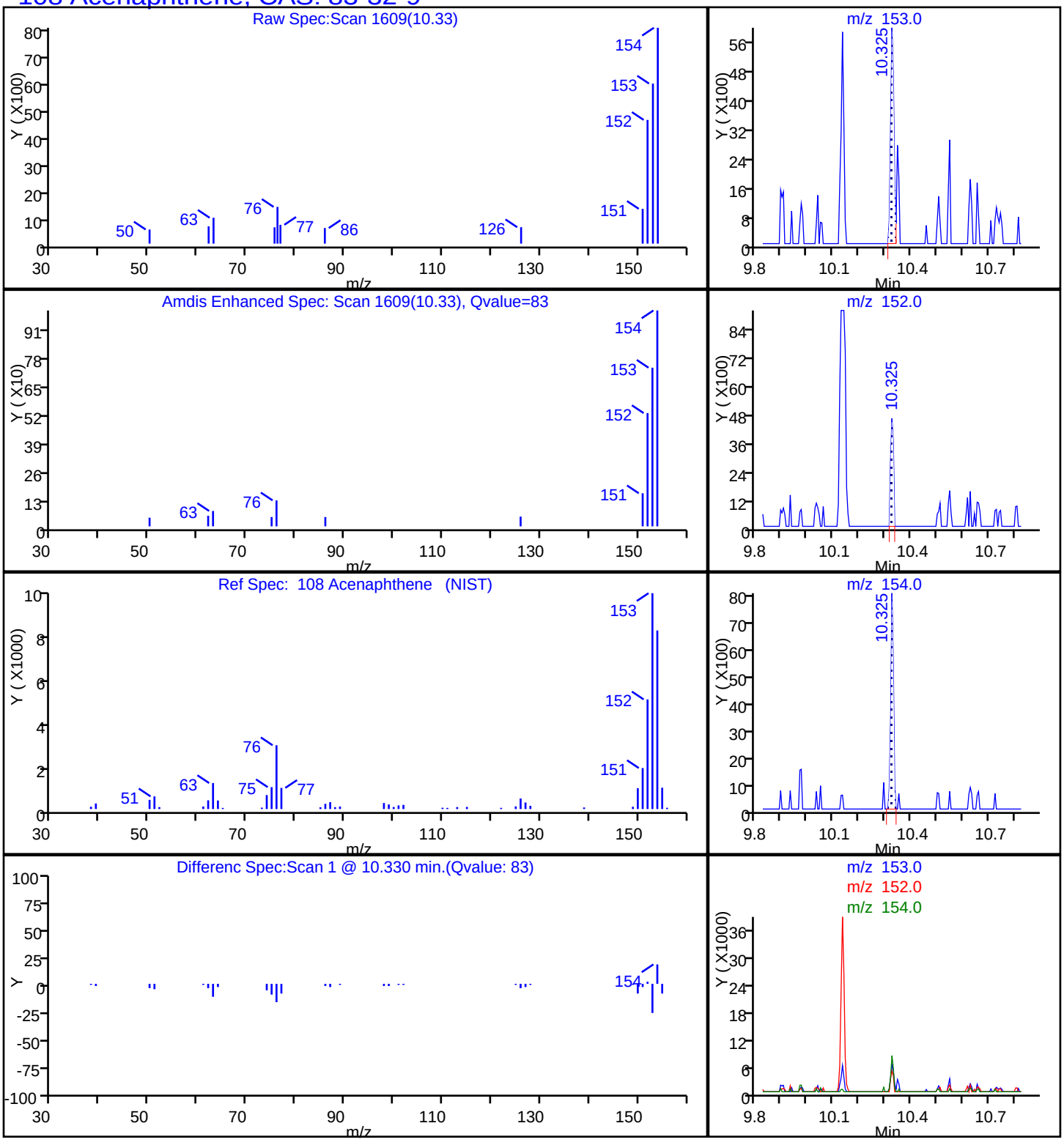


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

108 Acenaphthene, CAS: 83-32-9

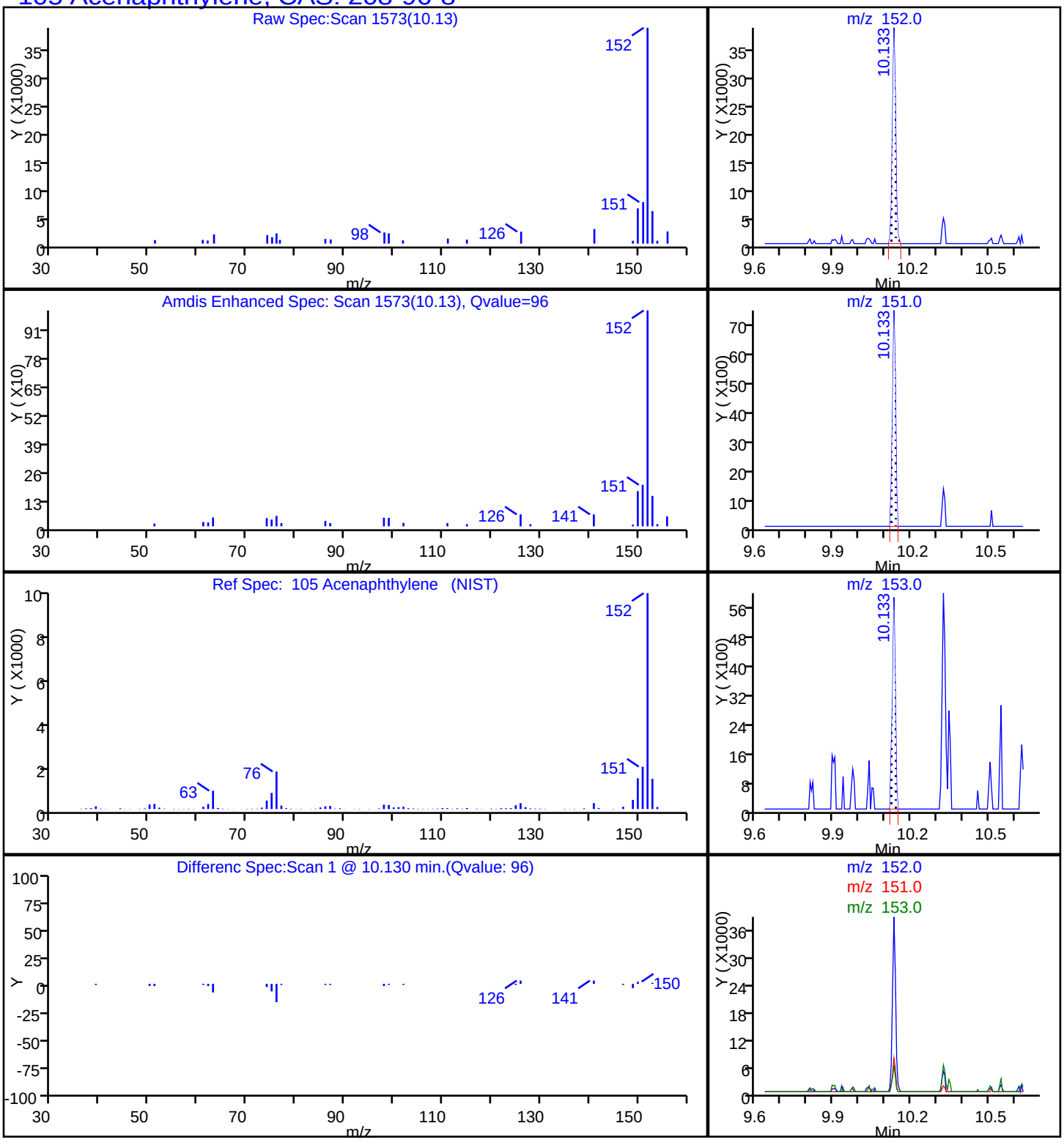


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

105 Acenaphthylene, CAS: 208-96-8

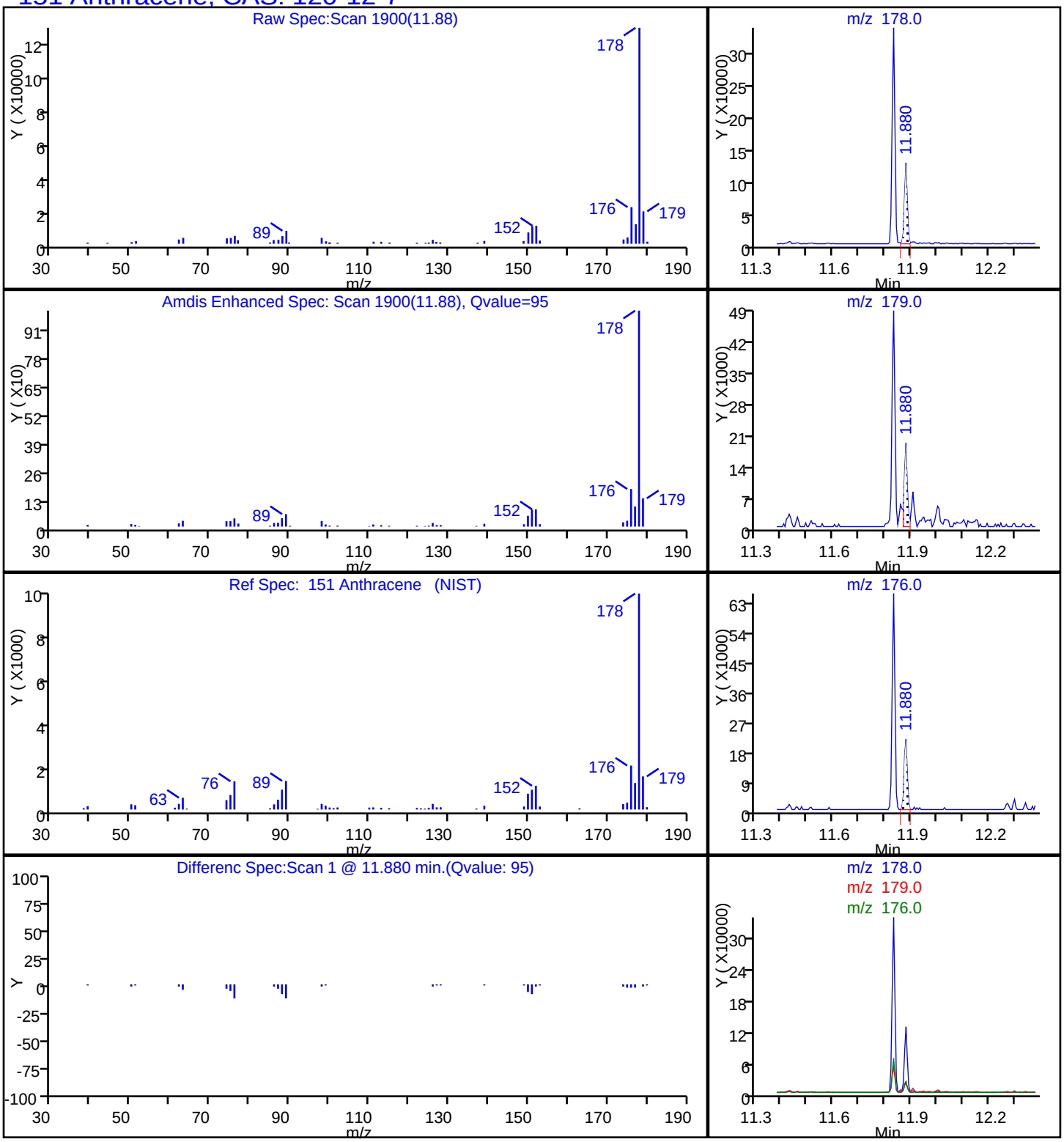


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

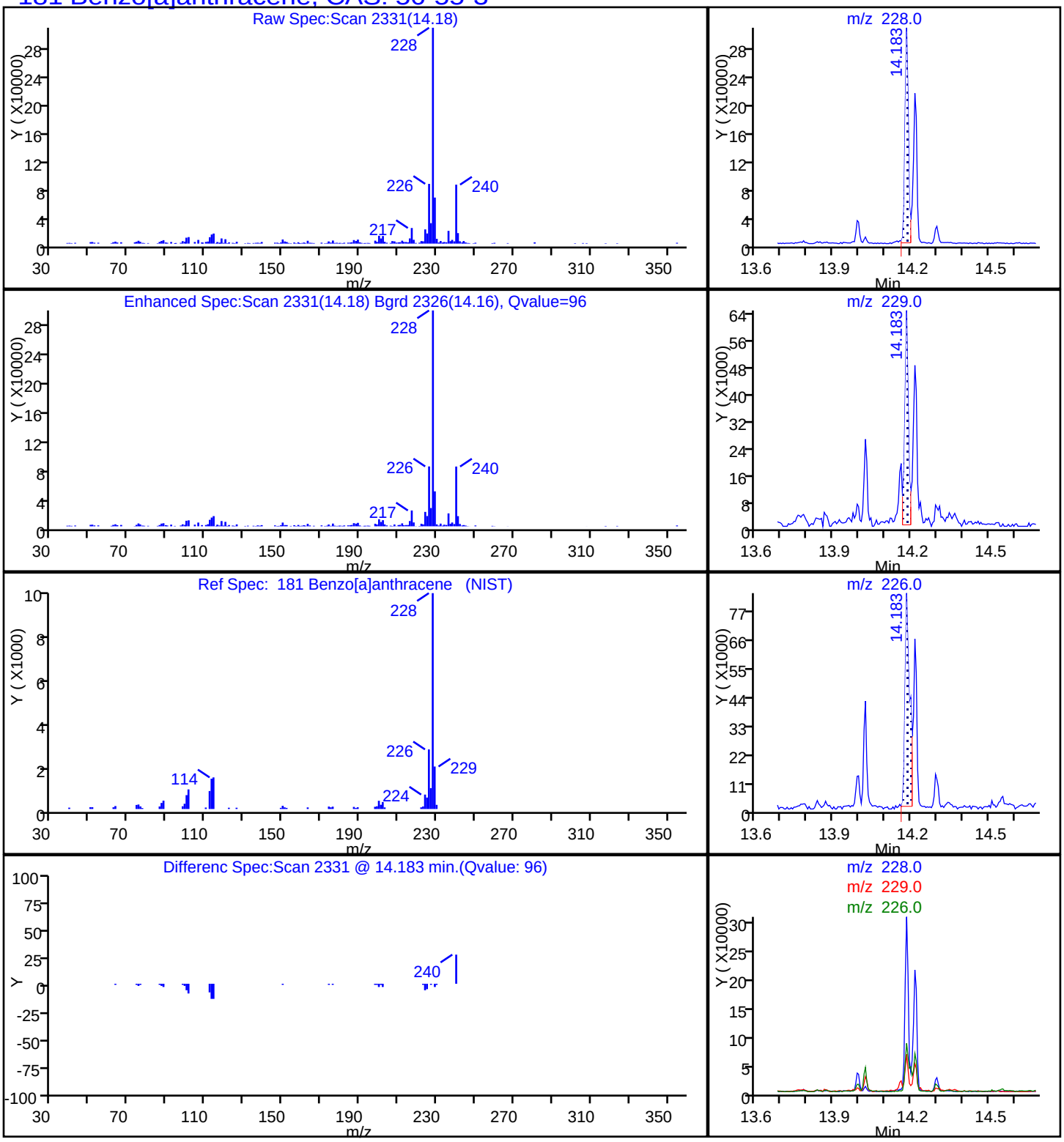
151 Anthracene, CAS: 120-12-7



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D				
Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

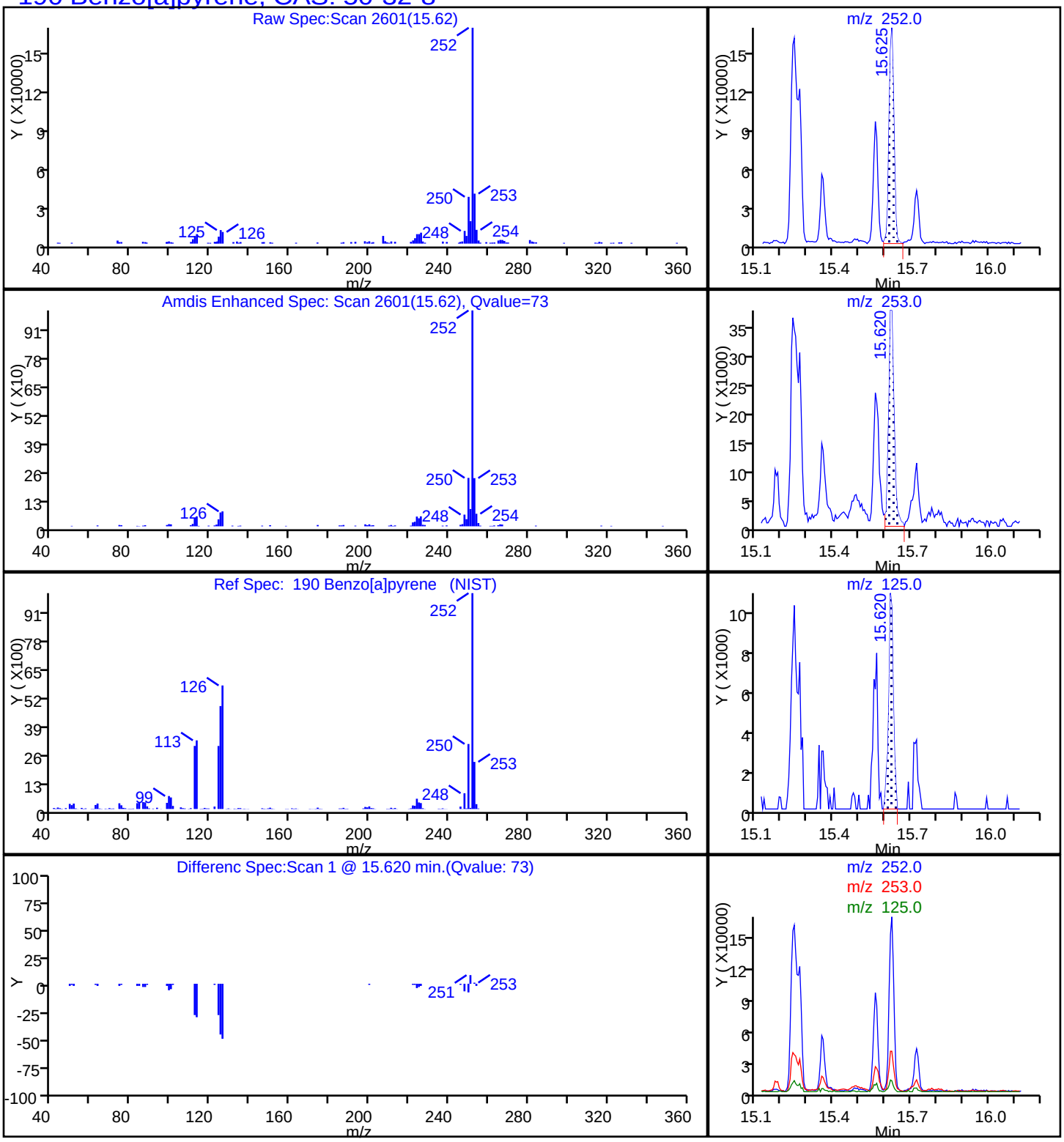
181 Benzo[a]anthracene, CAS: 56-55-3



Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

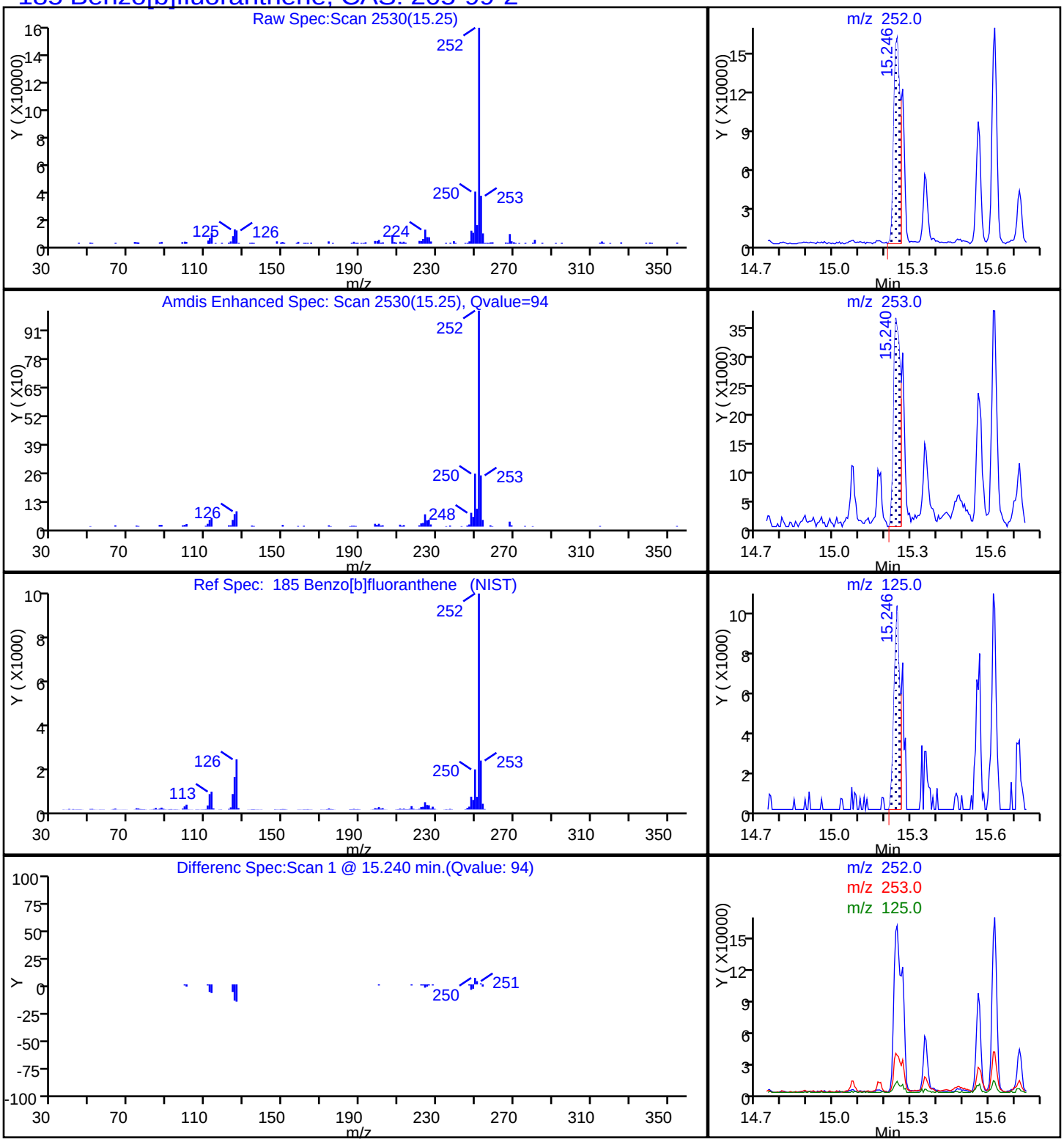
190 Benzo[a]pyrene, CAS: 50-32-8



Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

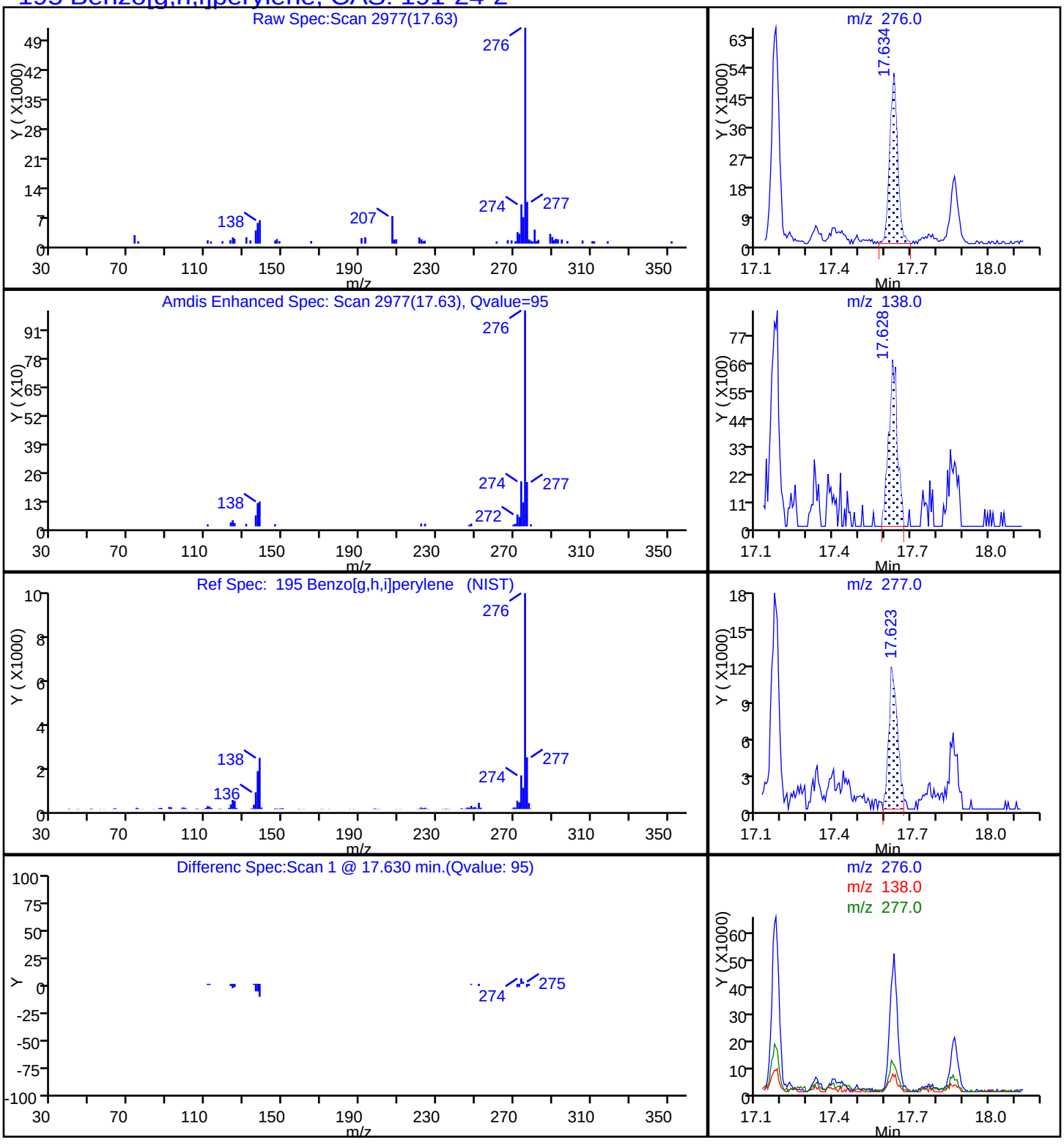
185 Benzo[b]fluoranthene, CAS: 205-99-2



Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

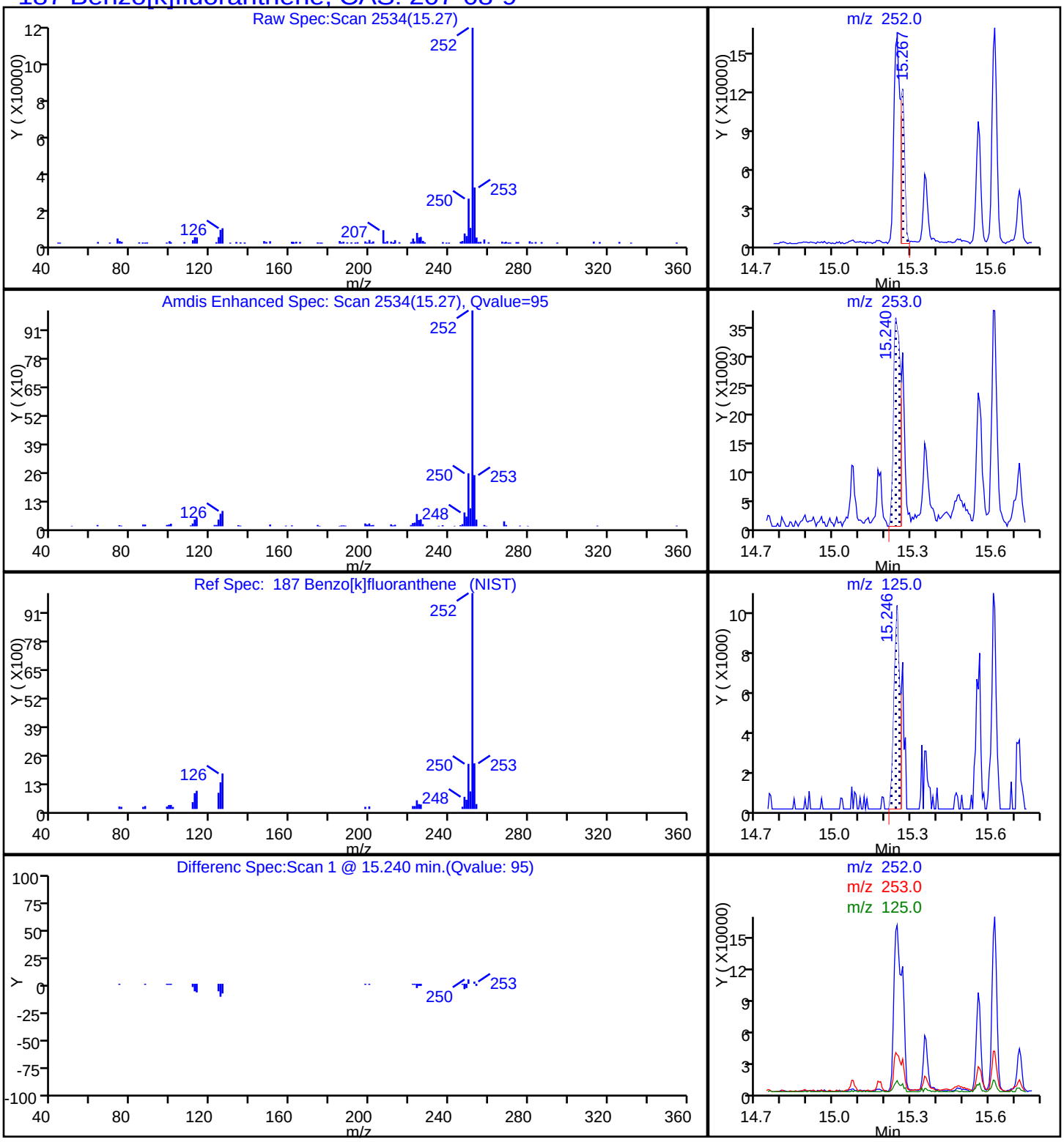
195 Benzo[g,h,i]perylene, CAS: 191-24-2



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D				
Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

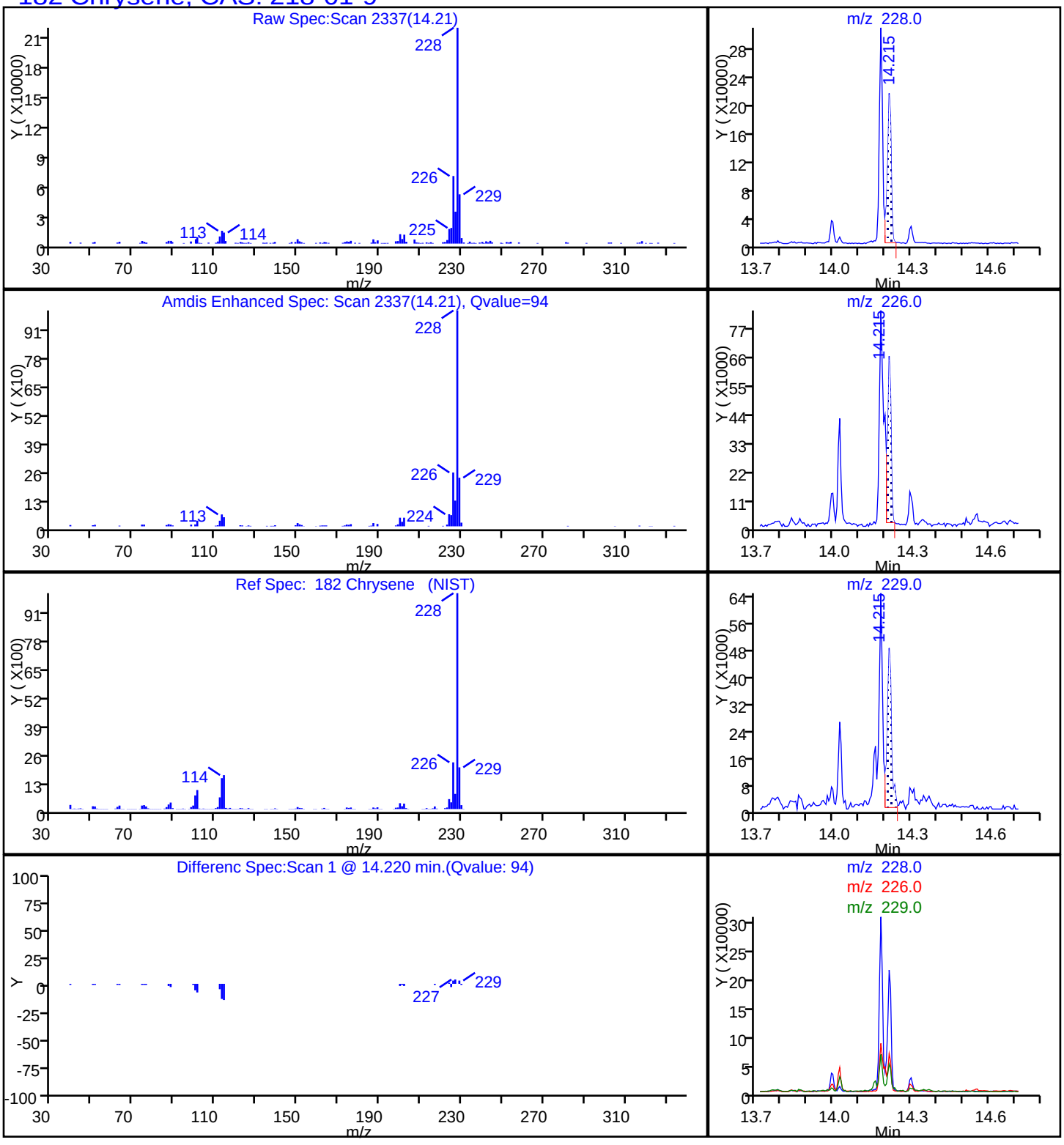
187 Benzo[k]fluoranthene, CAS: 207-08-9



Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

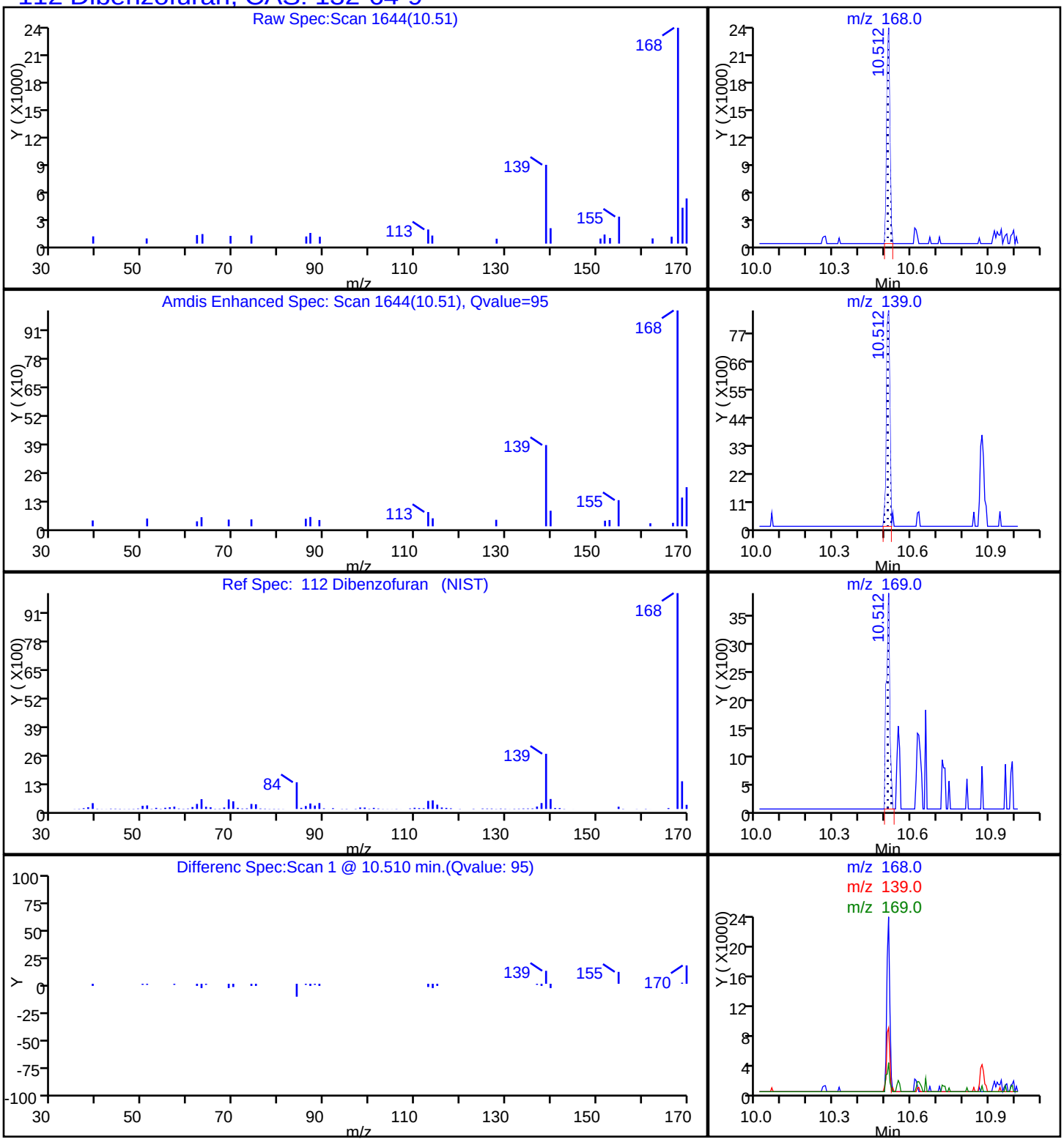
182 Chrysene, CAS: 218-01-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D				
Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

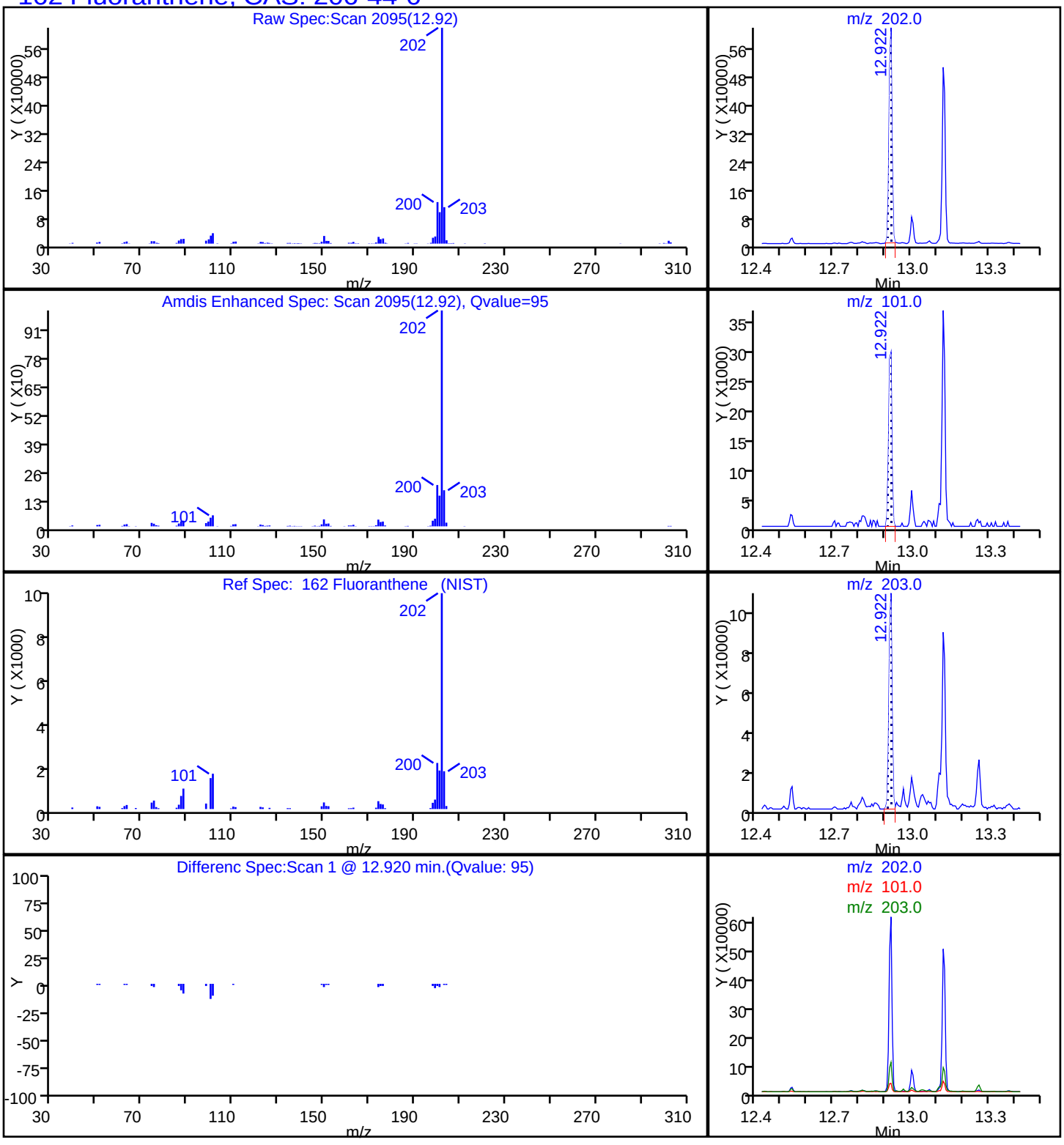
112 Dibenzofuran, CAS: 132-64-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D				
Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

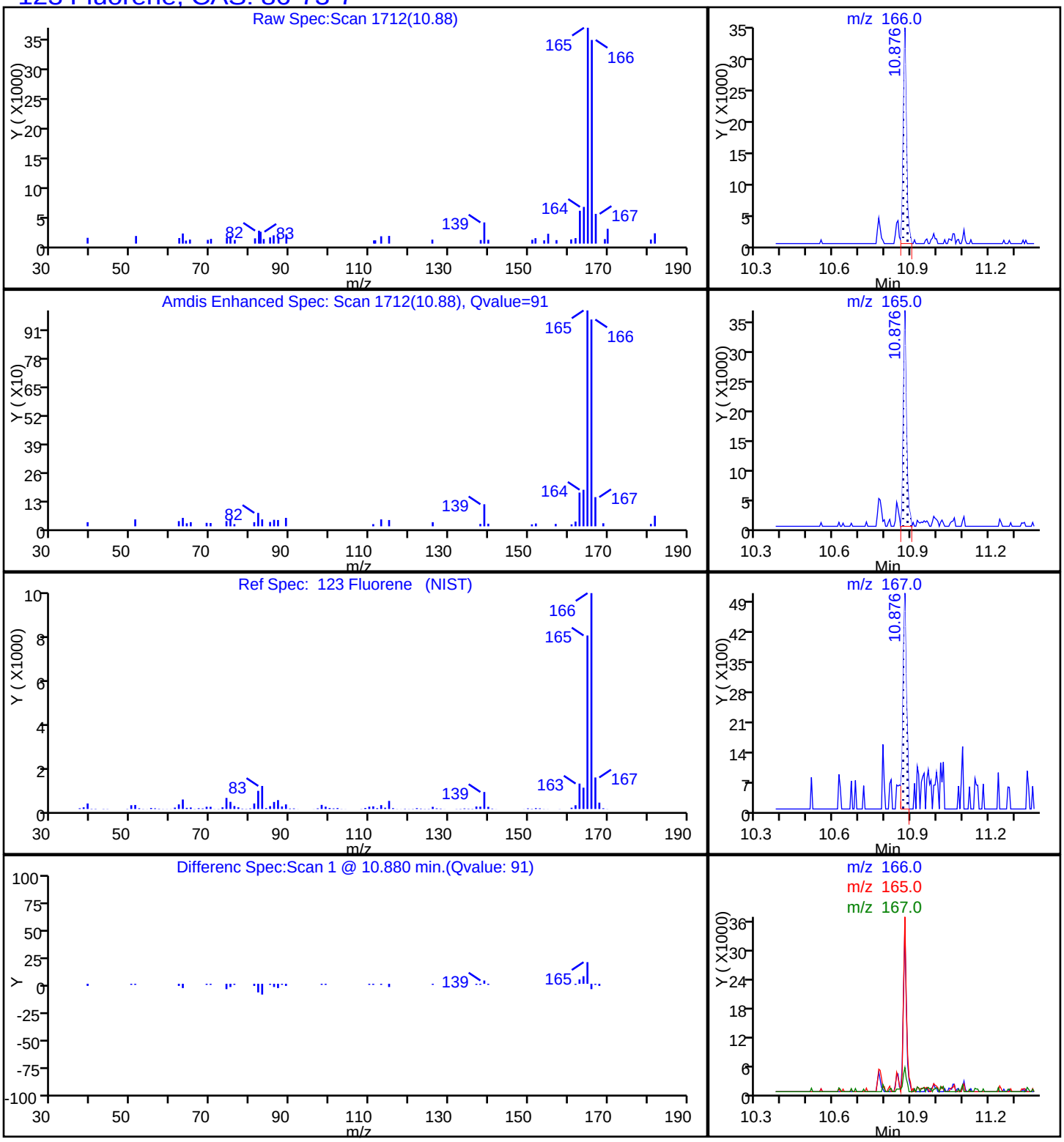
162 Fluoranthene, CAS: 206-44-0



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D				
Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

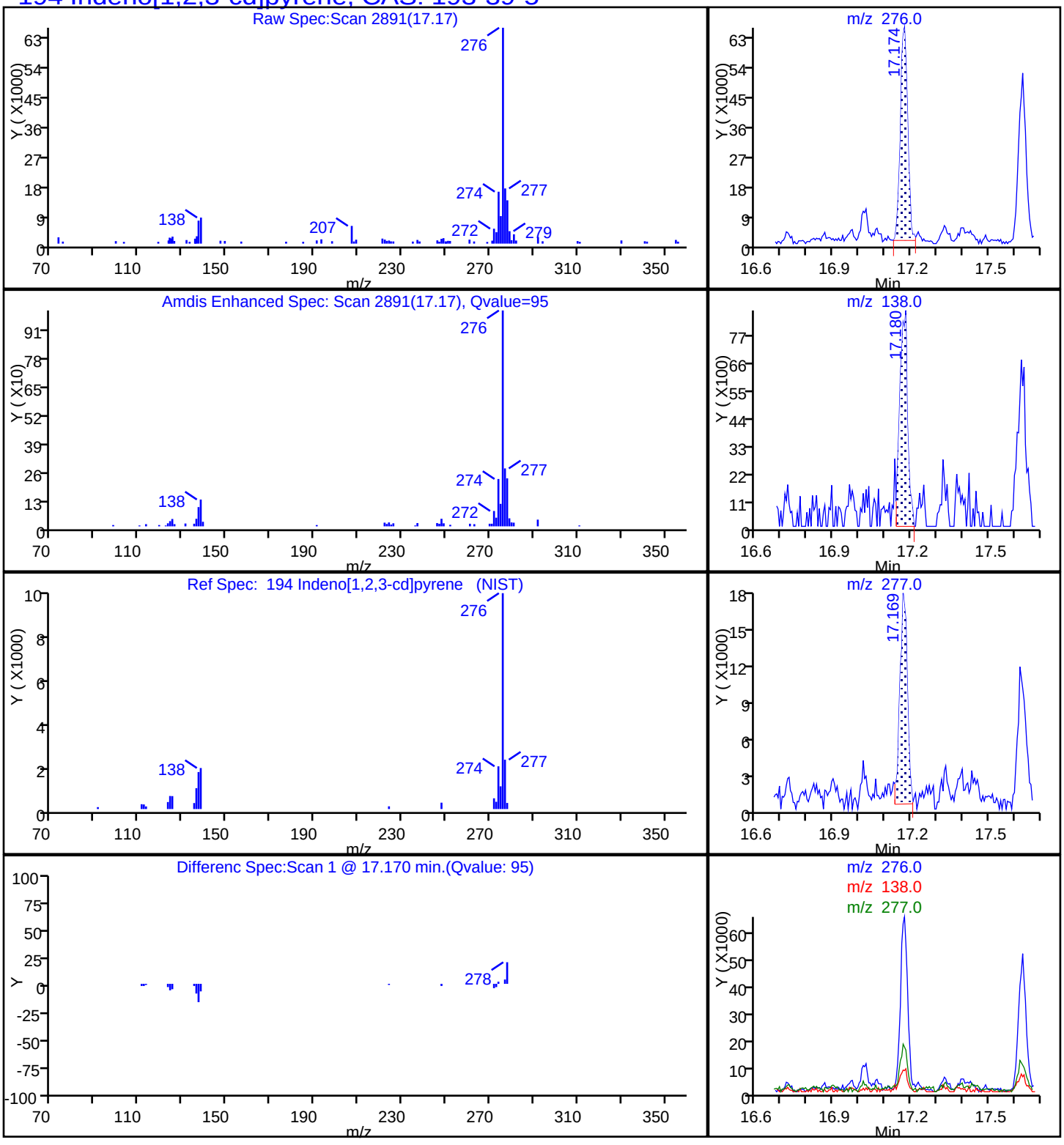
123 Fluorene, CAS: 86-73-7



Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

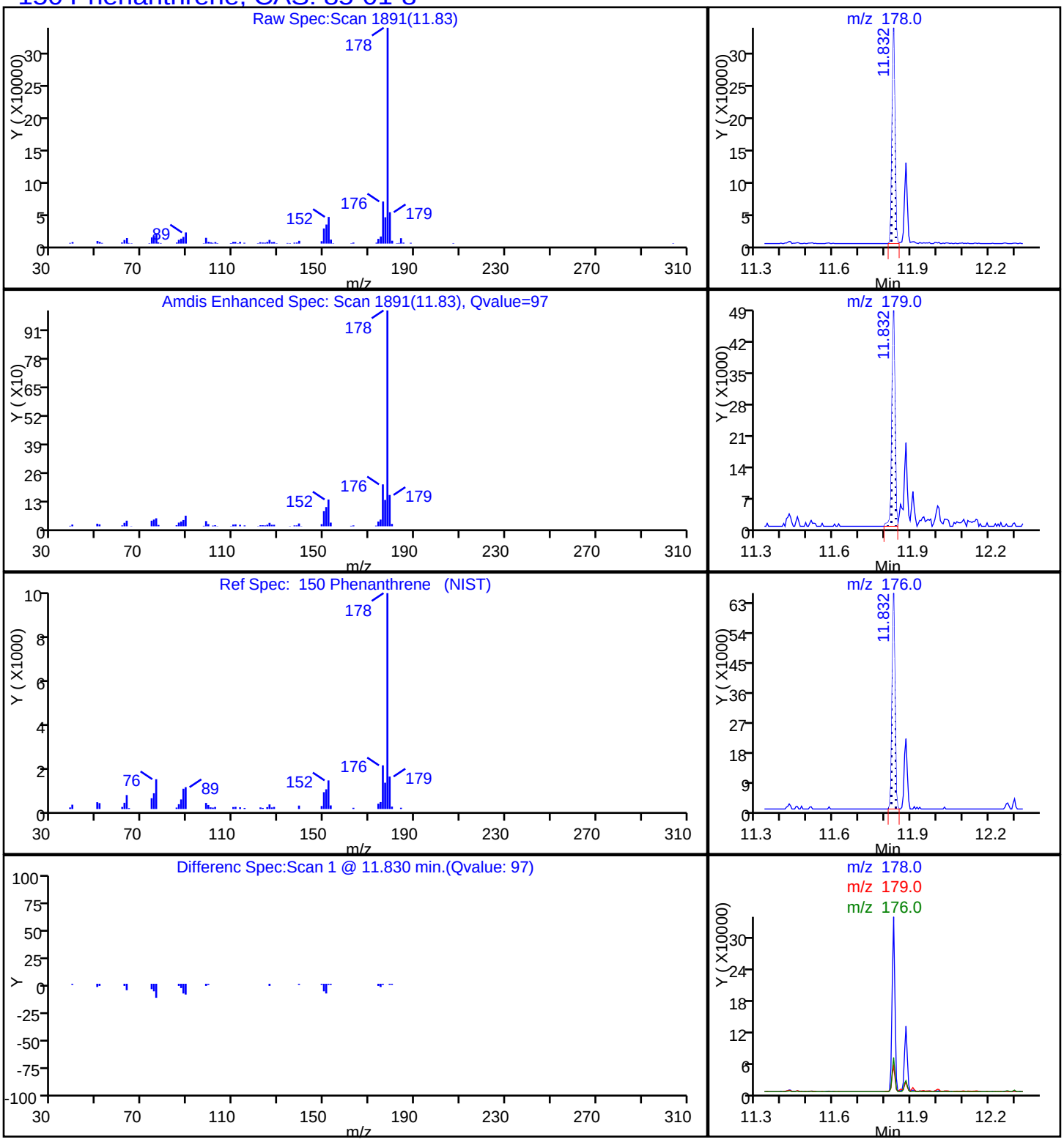
194 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D

Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

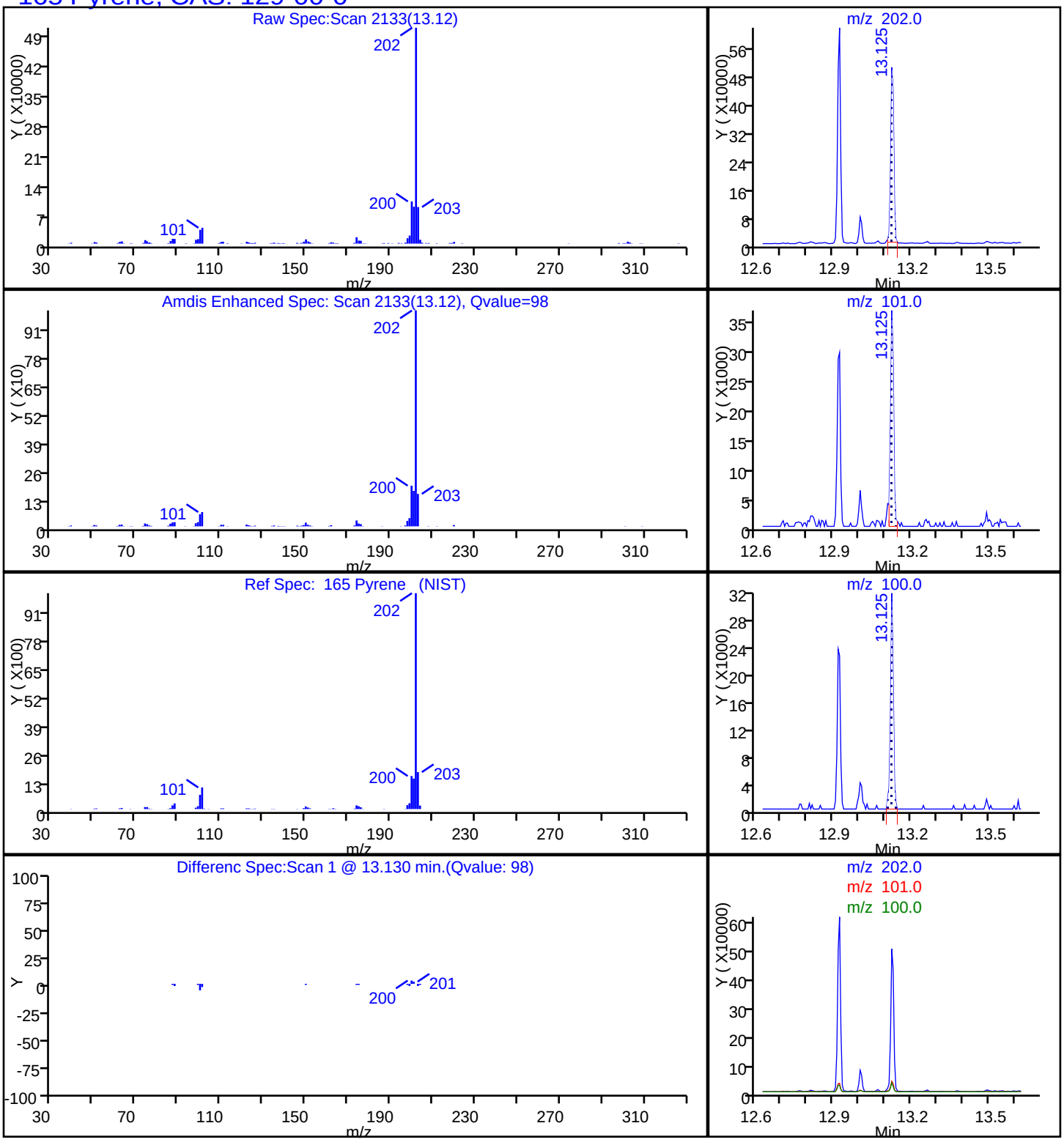
150 Phenanthrene, CAS: 85-01-8



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D				
Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

165 Pyrene, CAS: 129-00-0



TestAmerica Buffalo

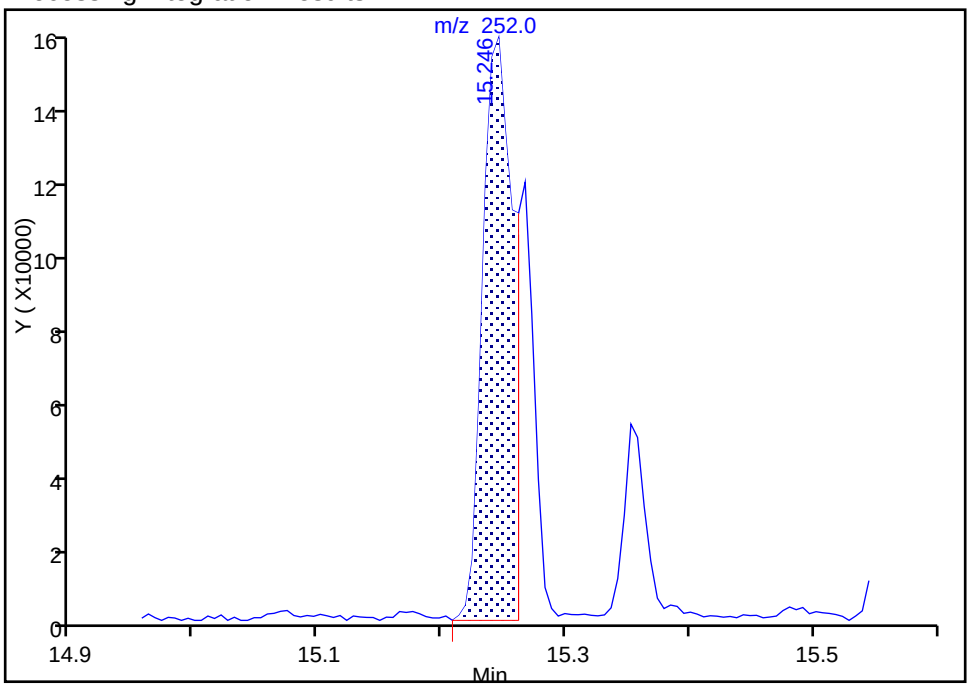
Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328235.D				
Injection Date:	16-Oct-2017 21:58:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-E	Lab Sample ID:	480-125579-1		
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

187 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

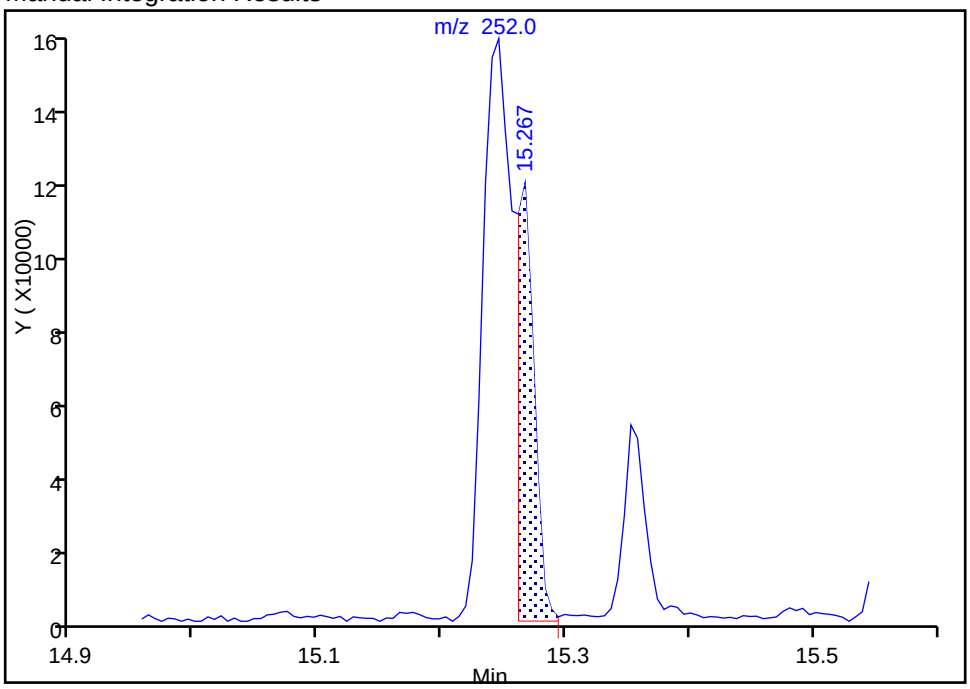
Processing Integration Results

RT: 15.25
Area: 268745
Amount: 20.740278
Amount Units: ng/uL



Manual Integration Results

RT: 15.27
Area: 112713
Amount: 8.698577
Amount Units: ng/uL



Reviewer: richardsd, 17-Oct-2017 11:21:09
Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (13-14) | Lab Sample ID: 480-125579-2

Matrix: Solid | Lab File ID: X20526.D

Analysis Method: 8270D | Date Collected: 10/08/2017 12:00

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.65(g) | Date Analyzed: 10/13/2017 08:02

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 381534 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		1000	280
88-06-2	2,4,6-Trichlorophenol	ND		1000	200
120-83-2	2,4-Dichlorophenol	ND		1000	110
105-67-9	2,4-Dimethylphenol	ND		1000	250
51-28-5	2,4-Dinitrophenol	ND		10000	4700
121-14-2	2,4-Dinitrotoluene	ND		1000	210
606-20-2	2,6-Dinitrotoluene	ND		1000	120
91-58-7	2-Chloronaphthalene	ND		1000	170
95-57-8	2-Chlorophenol	ND		1000	190
91-57-6	2-Methylnaphthalene	220	J	1000	200
95-48-7	2-Methylphenol	ND		1000	120
88-74-4	2-Nitroaniline	ND		2000	150
88-75-5	2-Nitrophenol	ND		1000	290
91-94-1	3,3'-Dichlorobenzidine	ND		2000	1200
99-09-2	3-Nitroaniline	ND		2000	280
534-52-1	4,6-Dinitro-2-methylphenol	ND		2000	1000
101-55-3	4-Bromophenyl phenyl ether	ND		1000	140
59-50-7	4-Chloro-3-methylphenol	ND		1000	250
106-47-8	4-Chloroaniline	ND		1000	250
7005-72-3	4-Chlorophenyl phenyl ether	ND		1000	130
106-44-5	4-Methylphenol	ND		2000	120
100-01-6	4-Nitroaniline	ND		2000	530
100-02-7	4-Nitrophenol	ND		2000	710
83-32-9	Acenaphthene	290	J	1000	150
208-96-8	Acenaphthylene	1000		1000	130
98-86-2	Acetophenone	ND		1000	140
120-12-7	Anthracene	1800		1000	250
1912-24-9	Atrazine	ND		1000	350
100-52-7	Benzaldehyde	ND		1000	810
56-55-3	Benzo[a]anthracene	2100		1000	100
50-32-8	Benzo[a]pyrene	1500		1000	150
205-99-2	Benzo[b]fluoranthene	1600		1000	160
191-24-2	Benzo[g,h,i]perylene	720	J	1000	110
207-08-9	Benzo[k]fluoranthene	700	J	1000	130

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (13-14) | Lab Sample ID: 480-125579-2

Matrix: Solid | Lab File ID: X20526.D

Analysis Method: 8270D | Date Collected: 10/08/2017 12:00

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.65(g) | Date Analyzed: 10/13/2017 08:02

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 381534 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		1000	150
108-60-1	bis (2-chloroisopropyl) ether	ND		1000	200
111-91-1	Bis(2-chloroethoxy)methane	ND		1000	220
111-44-4	Bis(2-chloroethyl)ether	ND		1000	130
117-81-7	Bis(2-ethylhexyl) phthalate	ND		1000	350
85-68-7	Butyl benzyl phthalate	ND		1000	170
105-60-2	Caprolactam	ND		1000	310
86-74-8	Carbazole	250	J	1000	120
218-01-9	Chrysene	1500		1000	230
53-70-3	Dibenz(a,h)anthracene	ND		1000	180
132-64-9	Dibenzofuran	950	J	1000	120
84-66-2	Diethyl phthalate	ND		1000	130
131-11-3	Dimethyl phthalate	ND		1000	120
84-74-2	Di-n-butyl phthalate	ND		1000	170
117-84-0	Di-n-octyl phthalate	ND		1000	120
206-44-0	Fluoranthene	4200		1000	110
86-73-7	Fluorene	1600		1000	120
118-74-1	Hexachlorobenzene	ND		1000	140
87-68-3	Hexachlorobutadiene	ND		1000	150
77-47-4	Hexachlorocyclopentadiene	ND		1000	140
67-72-1	Hexachloroethane	ND		1000	130
193-39-5	Indeno[1,2,3-cd]pyrene	790	J	1000	130
78-59-1	Isophorone	ND		1000	220
91-20-3	Naphthalene	ND		1000	130
98-95-3	Nitrobenzene	ND		1000	110
621-64-7	N-Nitrosodi-n-propylamine	ND		1000	170
86-30-6	N-Nitrosodiphenylamine	ND		1000	830
87-86-5	Pentachlorophenol	ND		2000	1000
85-01-8	Phenanthrene	5000		1000	150
108-95-2	Phenol	ND		1000	160
129-00-0	Pyrene	3300		1000	120

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (13-14) | Lab Sample ID: 480-125579-2

Matrix: Solid | Lab File ID: X20526.D

Analysis Method: 8270D | Date Collected: 10/08/2017 12:00

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.65(g) | Date Analyzed: 10/13/2017 08:02

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 381534 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	111		54-120
321-60-8	2-Fluorobiphenyl	88		60-120
367-12-4	2-Fluorophenol	73		52-120
4165-60-0	Nitrobenzene-d5	55		53-120
4165-62-2	Phenol-d5	82		54-120
1718-51-0	p-Terphenyl-d14	98		65-121

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D
Lims ID: 480-125579-E-2-A
Client ID: MW-8 (13-14)
Sample Type: Client
Inject. Date: 13-Oct-2017 08:02:30 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 480-0066346-020
Operator ID: DR Instrument ID: HP5973X

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 13-Oct-2017 12:06:35 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: richardsd Date: 13-Oct-2017 11:58:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.561	5.572	-0.011	94	117503	40.0	
* 2 Naphthalene-d8	136	7.116	7.115	0.001	98	415649	40.0	
* 3 Acenaphthene-d10	164	9.188	9.183	0.005	97	284808	40.0	
* 4 Phenanthrene-d10	188	10.818	10.818	0.000	99	590185	40.0	
* 5 Chrysene-d12	240	13.211	13.211	0.000	99	684501	40.0	
* 6 Perylene-d12	264	14.365	14.365	0.000	99	665780	40.0	
$ 7 2-Fluorophenol	112	3.825	3.835	-0.010	91	23192	5.87	
$ 8 Phenol-d5	99	5.128	5.150	-0.022	91	32278	6.57	
$ 9 Nitrobenzene-d5	82	6.250	6.261	-0.011	91	19401	4.40	
$ 10 2-Fluorobiphenyl	172	8.414	8.408	0.006	99	82988	7.04	
$ 11 2,4,6-Tribromophenol	330	10.091	10.091	0.000	94	11923	8.85	
$ 12 p-Terphenyl-d14	244	12.314	12.313	0.001	99	103642	7.87	
27 Benzaldehyde	77		5.011				ND	
28 Phenol	94		5.166				ND	
31 Bis(2-chloroethyl)ether	93		5.256				ND	
32 2-Chlorophenol	128		5.310				ND	
40 2-Methylphenol	108		5.924				ND	
42 2,2'-oxybis[1-chloropropan	45		5.940				ND	
45 Acetophenone	105		6.084				ND	
47 N-Nitrosodi-n-propylamine	70		6.100				ND	
46 4-Methylphenol	108		6.122				ND	
50 Hexachloroethane	117		6.197				ND	
52 Nitrobenzene	77		6.282				ND	
56 Isophorone	82		6.581				ND	
58 2-Nitrophenol	139		6.672				ND	
59 2,4-Dimethylphenol	107		6.758				ND	
62 Bis(2-chloroethoxy)methane	93		6.859				ND	
65 2,4-Dichlorophenol	162		6.966				ND	
69 Naphthalene	128		7.142				ND	
71 4-Chloroaniline	127		7.228				ND	
73 Hexachlorobutadiene	225		7.313				ND	
78 Caprolactam	113		7.644				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
79 4-Chloro-3-methylphenol	107		7.826				ND	
82 2-Methylnaphthalene	142	7.970	7.965	0.005	94	8184	1.09	
84 Hexachlorocyclopentadiene	237		8.168				ND	
86 2,4,6-Trichlorophenol	196		8.312				ND	
87 2,4,5-Trichlorophenol	196		8.355				ND	
90 1,1'-Biphenyl	154	8.526	8.520	0.006	97	6114	0.4937	
91 2-Chloronaphthalene	162		8.531				ND	
93 2-Nitroaniline	65		8.665				ND	
96 Dimethyl phthalate	163		8.900				ND	
99 2,6-Dinitrotoluene	165		8.959				ND	
100 Acenaphthylene	152	9.017	9.012	0.005	99	70509	5.03	
101 3-Nitroaniline	138		9.146				ND	
102 Acenaphthene	153	9.220	9.220	0.000	96	13608	1.44	
103 2,4-Dinitrophenol	184		9.268				ND	
104 4-Nitrophenol	109		9.381				ND	
106 2,4-Dinitrotoluene	165		9.423				ND	
107 Dibenzofuran	168	9.423	9.423	0.000	97	68158	4.75	
112 Diethyl phthalate	149		9.728				ND	
115 Fluorene	166	9.824	9.819	0.005	99	88994	8.03	
116 4-Chlorophenyl phenyl ethe	204		9.835				ND	
118 4-Nitroaniline	138		9.856				ND	
119 4,6-Dinitro-2-methylphenol	198		9.893				ND	
120 N-Nitrosodiphenylamine	169		9.968				ND	
130 4-Bromophenyl phenyl ether	248		10.364				ND	
131 Hexachlorobenzene	284		10.428				ND	
133 Atrazine	200		10.561				ND	
134 Pentachlorophenol	266		10.636				ND	
141 Phenanthrene	178	10.839	10.839	0.000	99	397186	25.0	
142 Anthracene	178	10.893	10.892	0.000	99	144246	8.84	
143 Carbazole	167	11.058	11.058	0.000	99	18802	1.26	
145 Di-n-butyl phthalate	149		11.421				ND	
152 Fluoranthene	202	11.966	11.966	0.000	98	386773	21.1	
155 Pyrene	202	12.169	12.169	0.000	99	321786	16.5	
162 Butyl benzyl phthalate	149		12.741				ND	
166 3,3'-Dichlorobenzidine	252		13.184				ND	
167 Benzo[a]anthracene	228	13.200	13.200	0.000	95	194927	10.3	
172 Bis(2-ethylhexyl) phthalat	149		13.227				ND	
169 Chrysene	228	13.232	13.232	0.000	98	144258	7.63	
168 Di-n-octyl phthalate	149		13.751				ND	
174 Benzo[b]fluoranthene	252	14.071	14.071	0.000	99	174401	8.22	M
175 Benzo[k]fluoranthene	252	14.087	14.092	-0.005	98	78958	3.49	M
177 Benzo[a]pyrene	252	14.317	14.317	0.000	99	143323	7.63	
180 Indeno[1,2,3-cd]pyrene	276	15.246	15.252	-0.006	97	74902	3.94	
181 Dibenz(a,h)anthracene	278		15.257				ND	
182 Benzo[g,h,i]perylene	276	15.498	15.503	-0.005	98	61860	3.61	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_INTSTD_STK_00039 Amount Added: 20.00 Units: uL Run Reagent

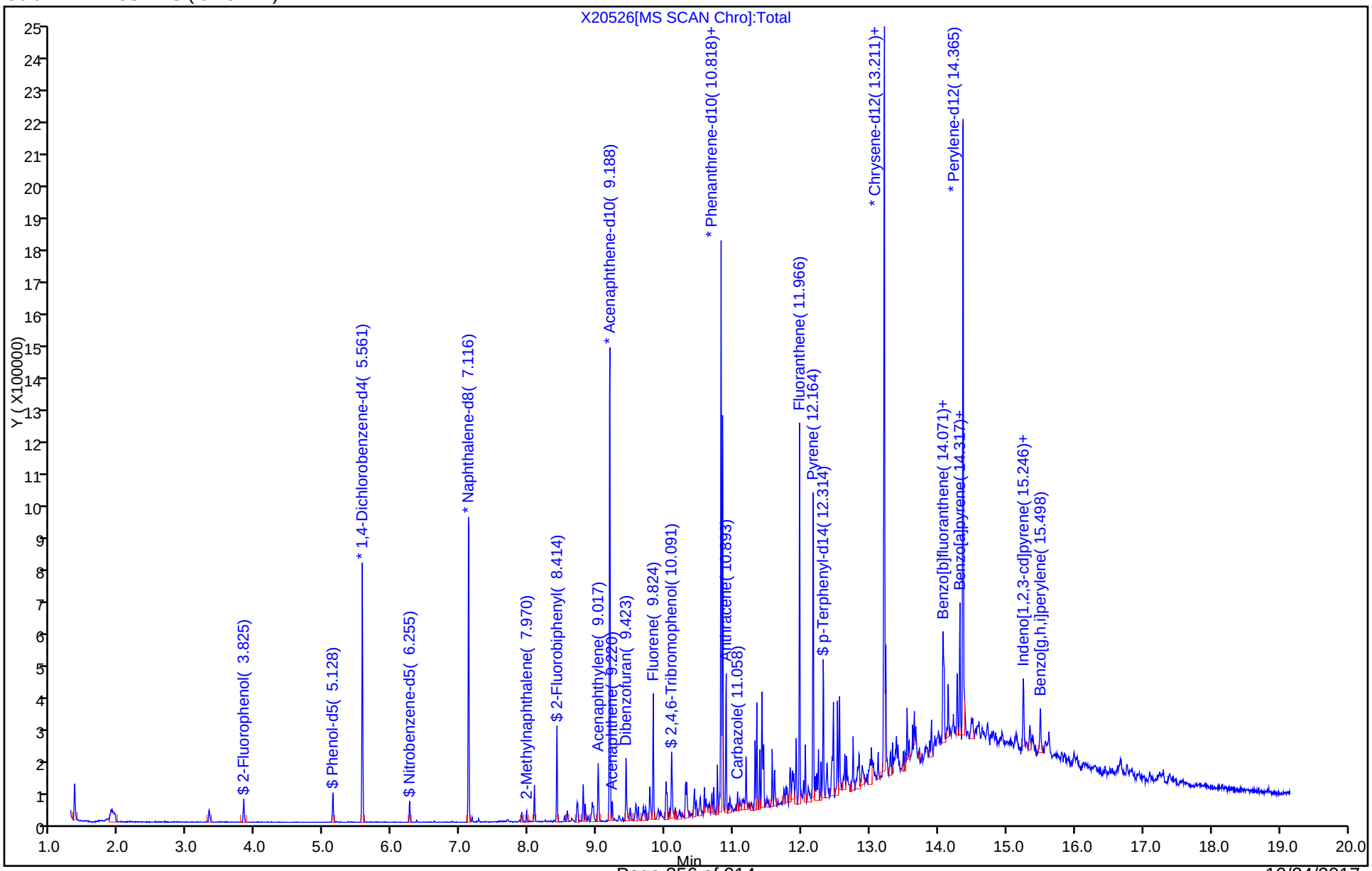
Report Date: 13-Oct-2017 12:07:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2	Worklist Smp#:	20
Client ID:	MW-8 (13-14)				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	20
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)

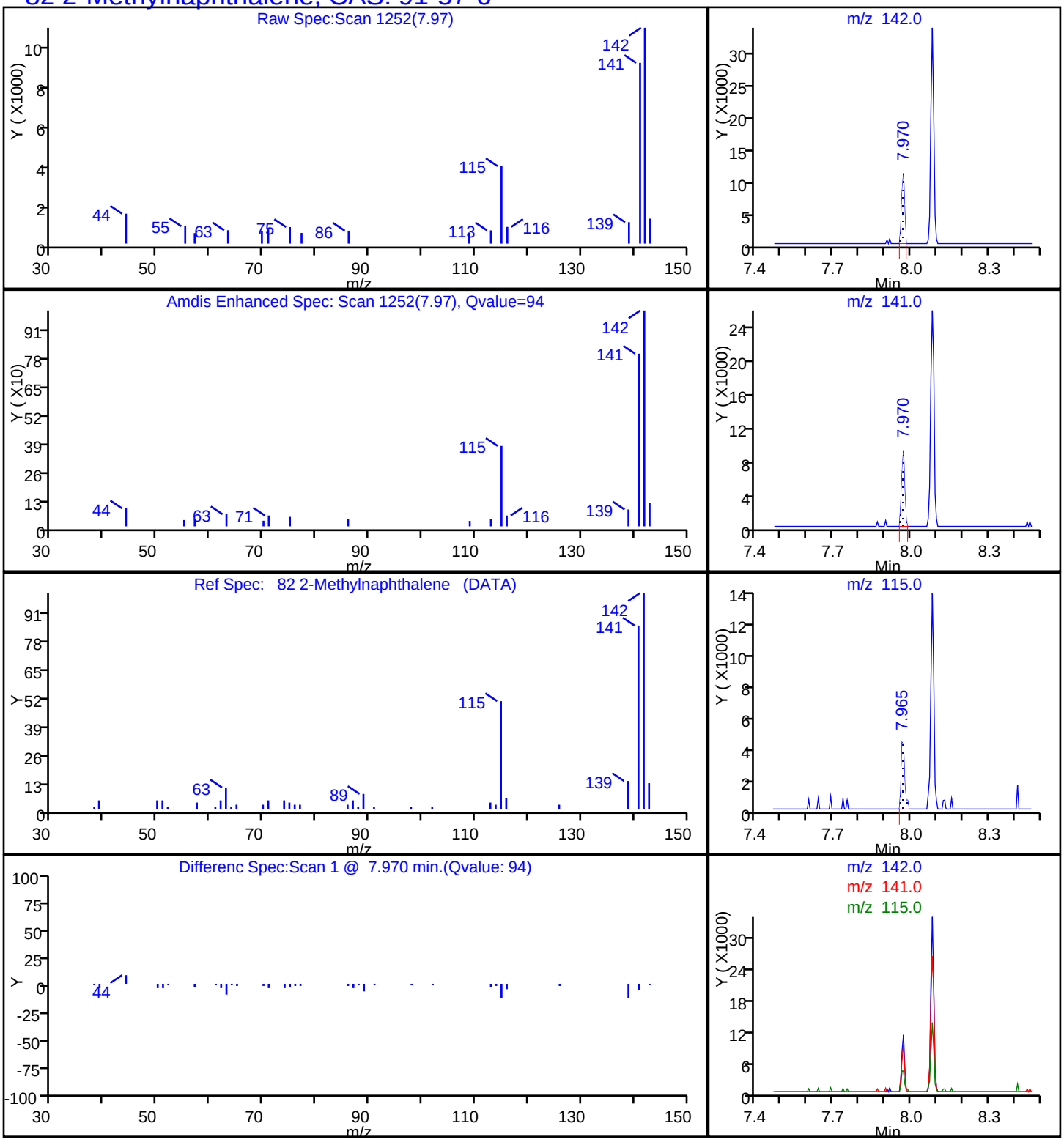


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2
Client ID:	MW-8 (13-14)		
Operator ID:	DR	ALS Bottle#:	20 Worklist Smp#: 20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000
Method:	X-8270	Limit Group:	MB - 8270D ICAL
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN

82 2-Methylnaphthalene, CAS: 91-57-6

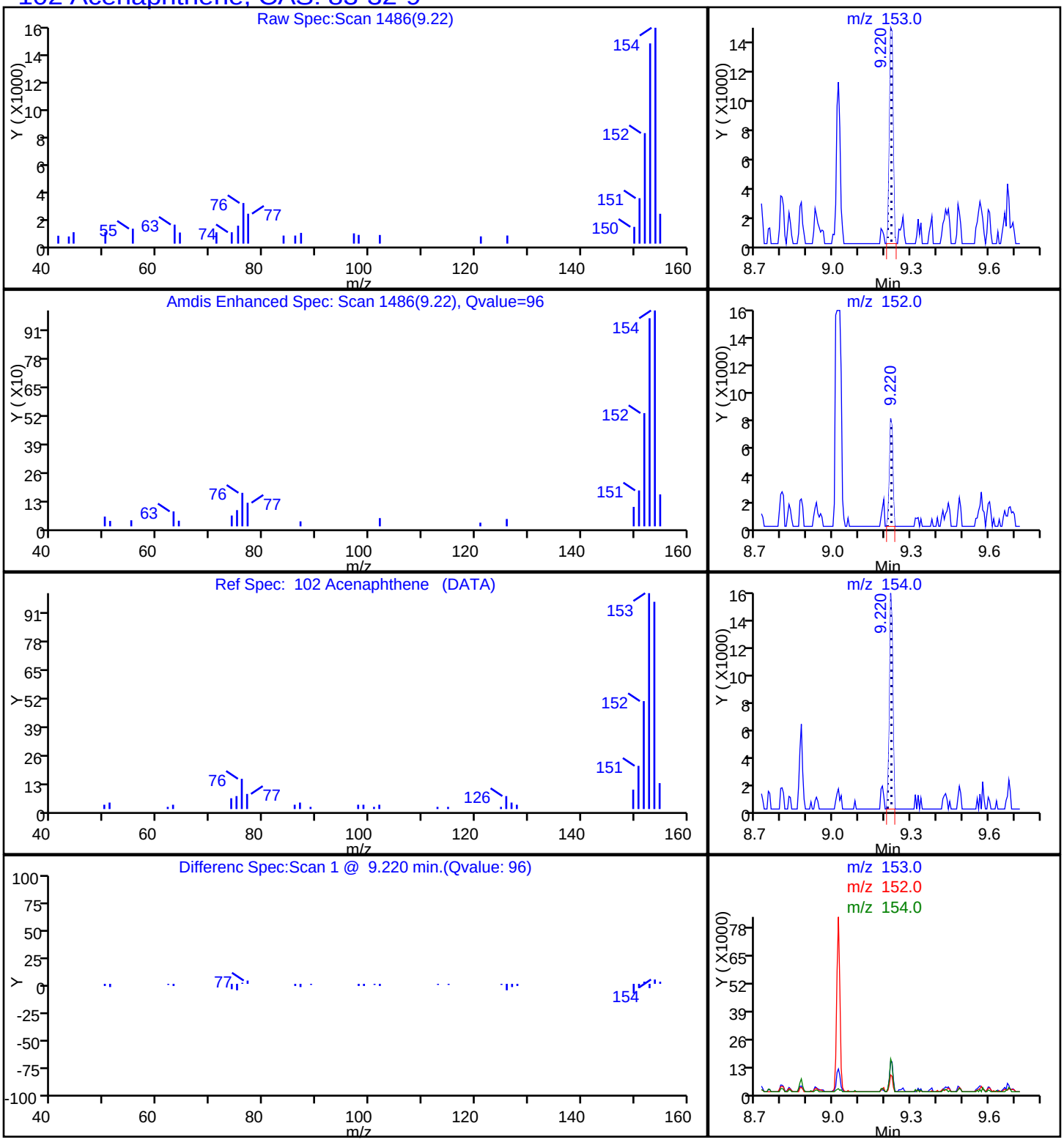


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

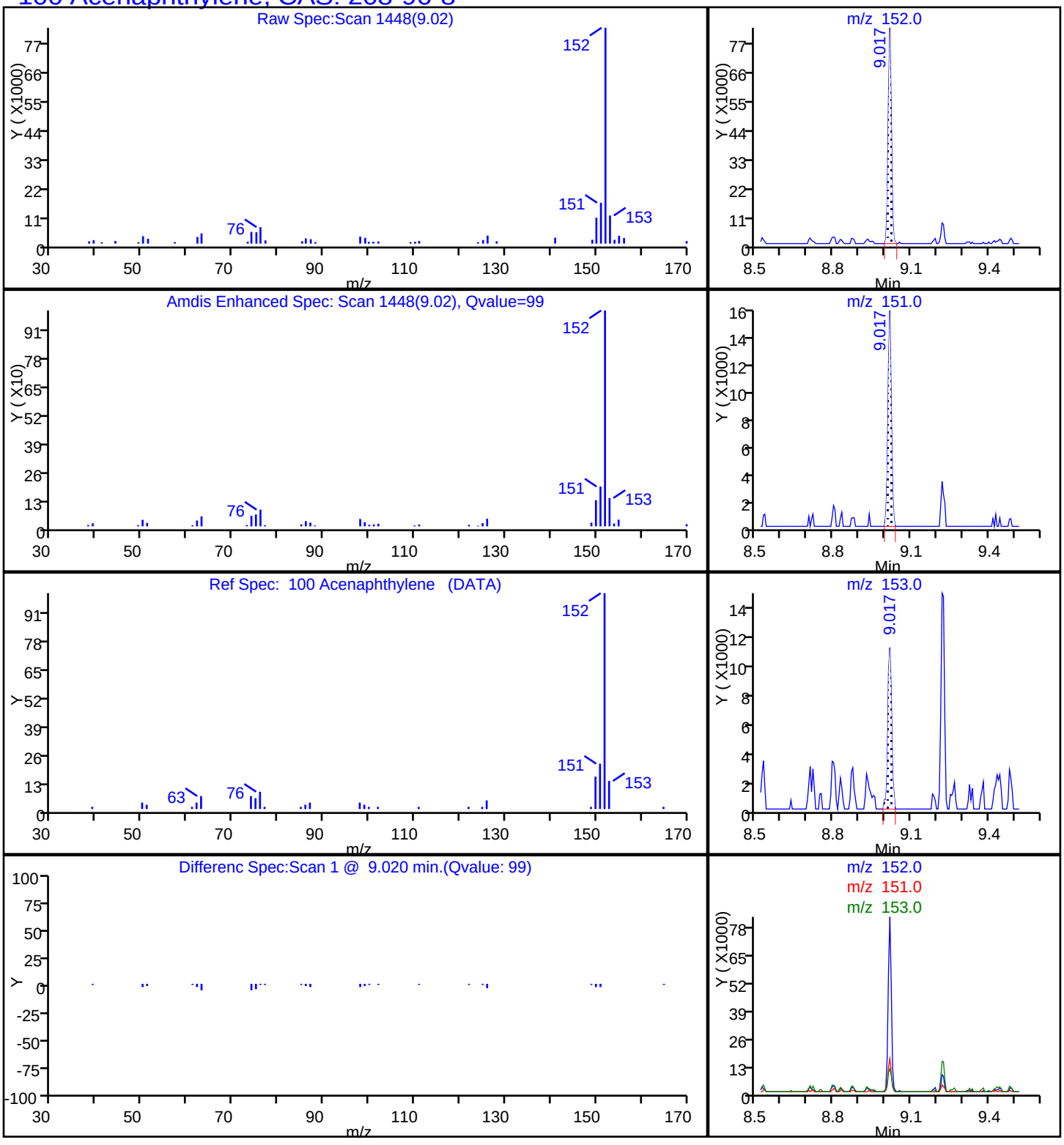
102 Acenaphthene, CAS: 83-32-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

100 Acenaphthylene, CAS: 208-96-8



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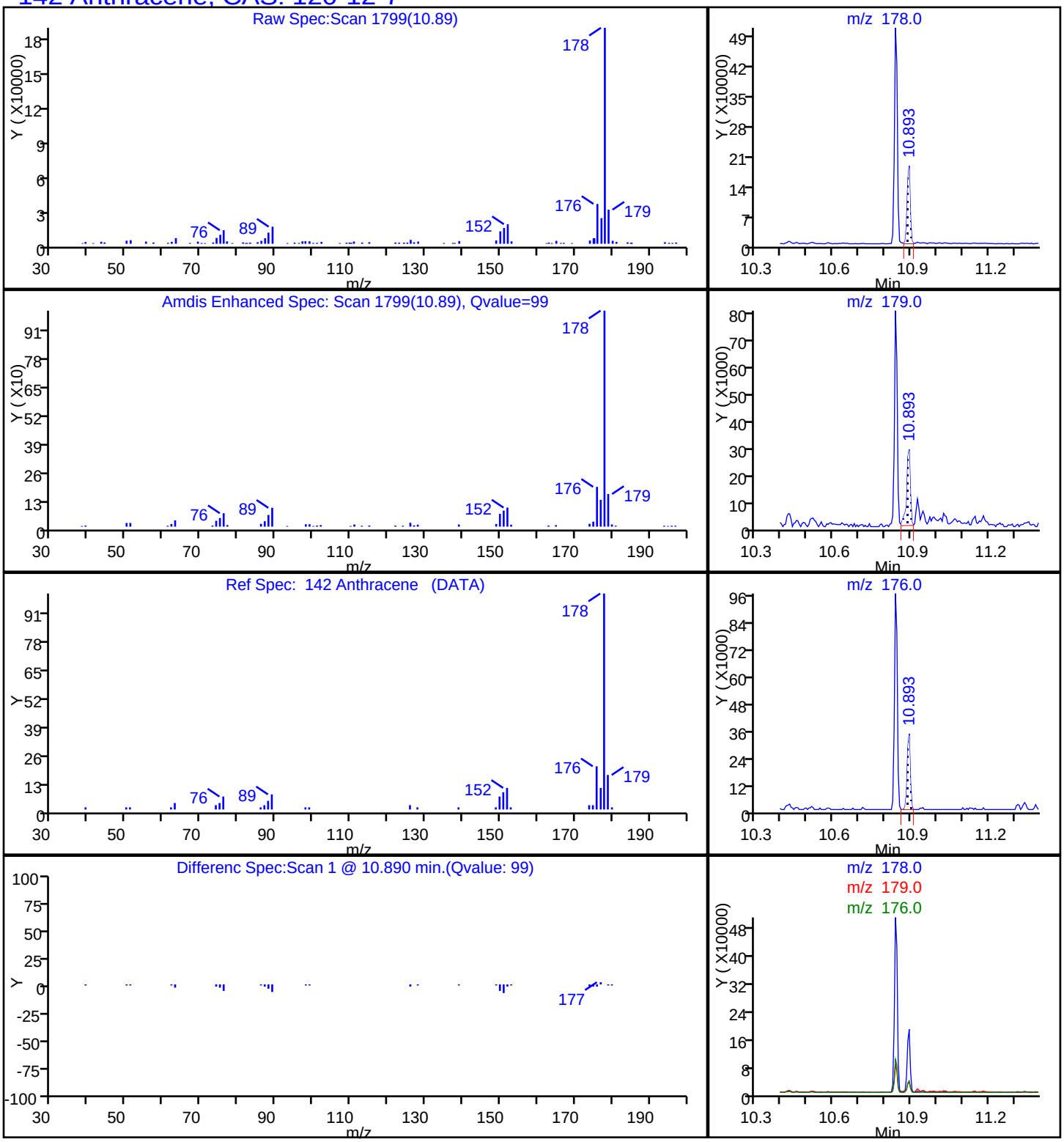
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

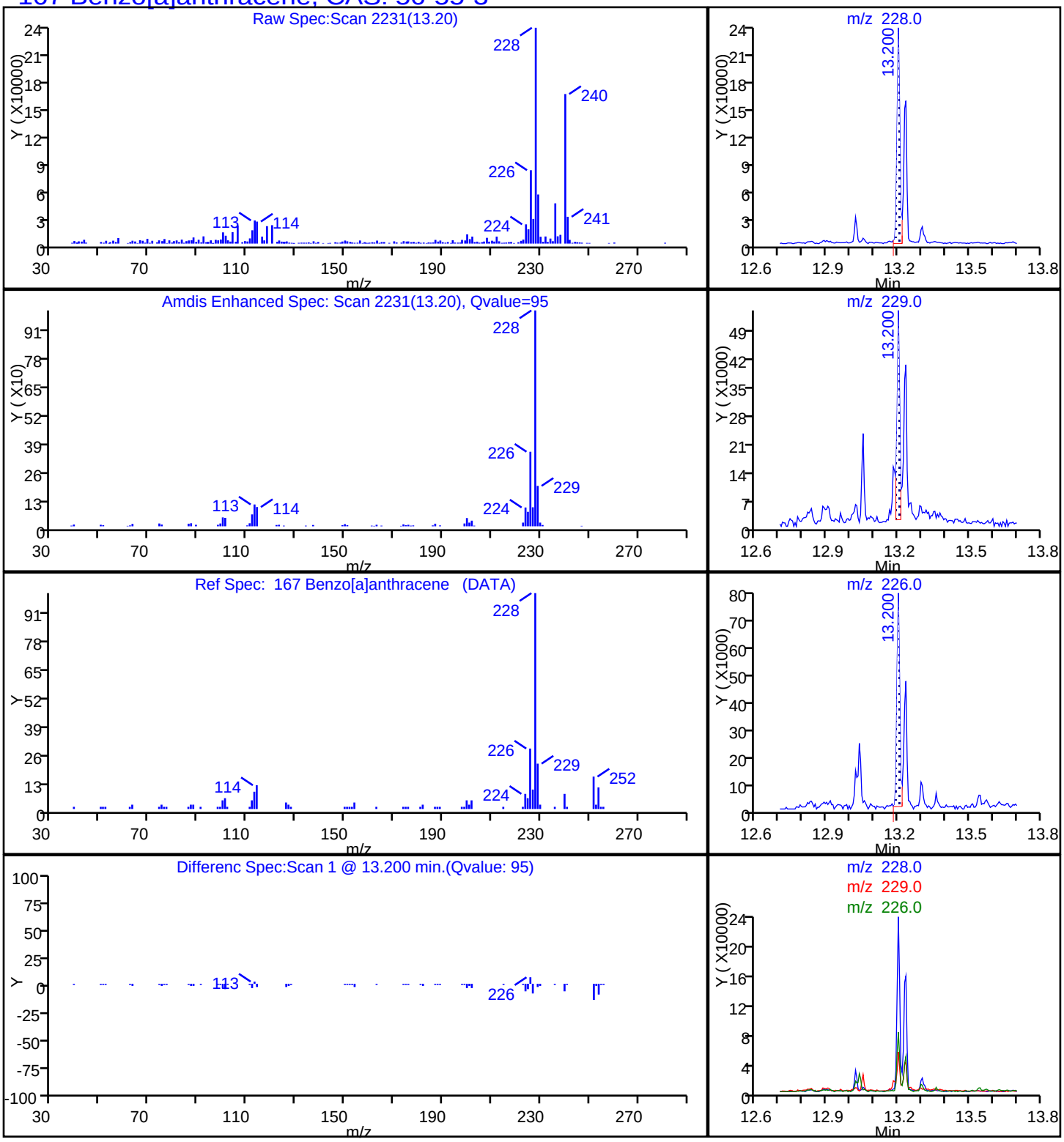
142 Anthracene, CAS: 120-12-7



TestAmerica Buffalo

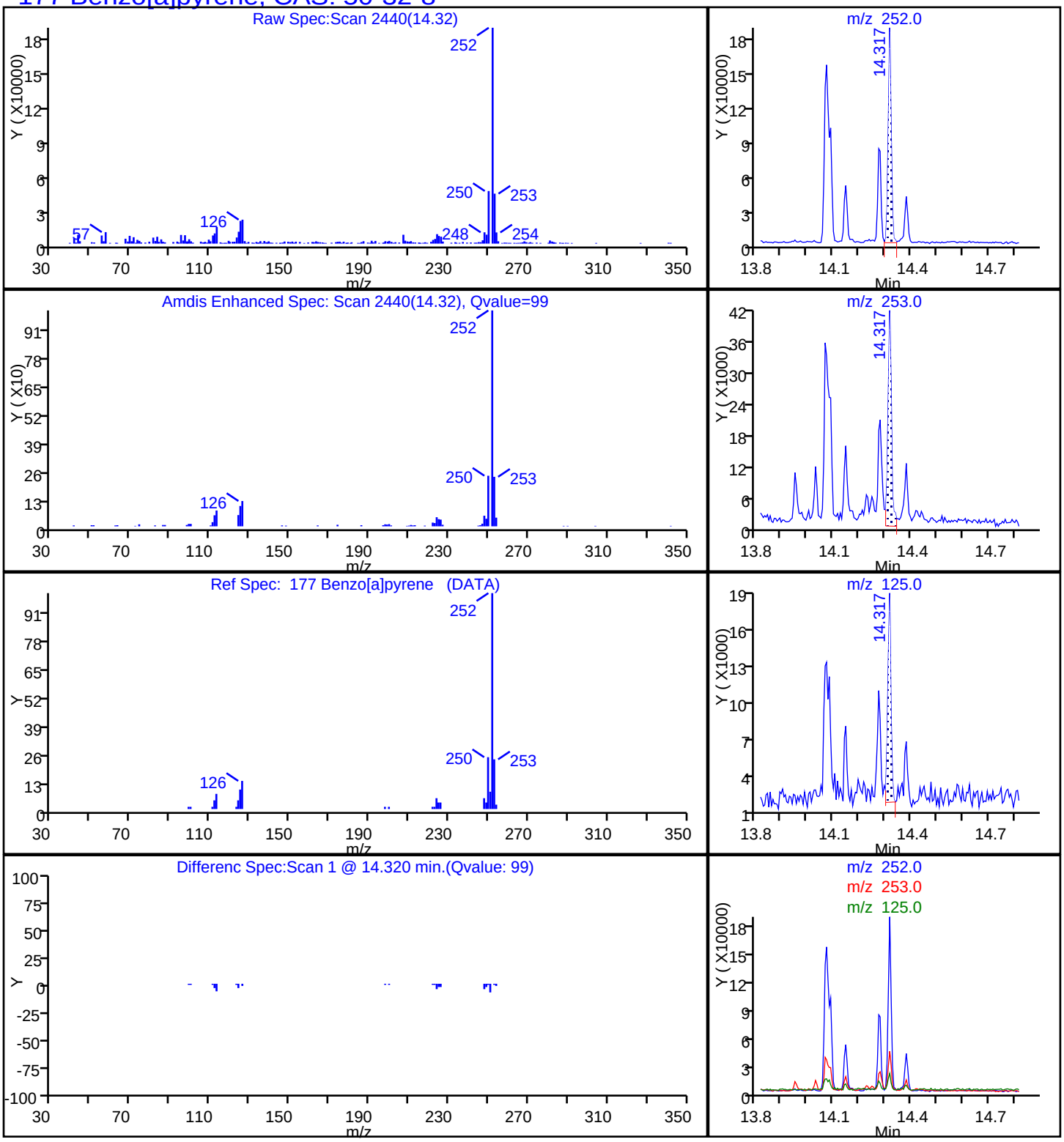
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

167 Benzo[a]anthracene, CAS: 56-55-3



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D
Injection Date: 13-Oct-2017 08:02:30 Instrument ID: HP5973X
Lims ID: 480-125579-E-2-A Lab Sample ID: 480-125579-2
Client ID: MW-8 (13-14)
Operator ID: DR ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

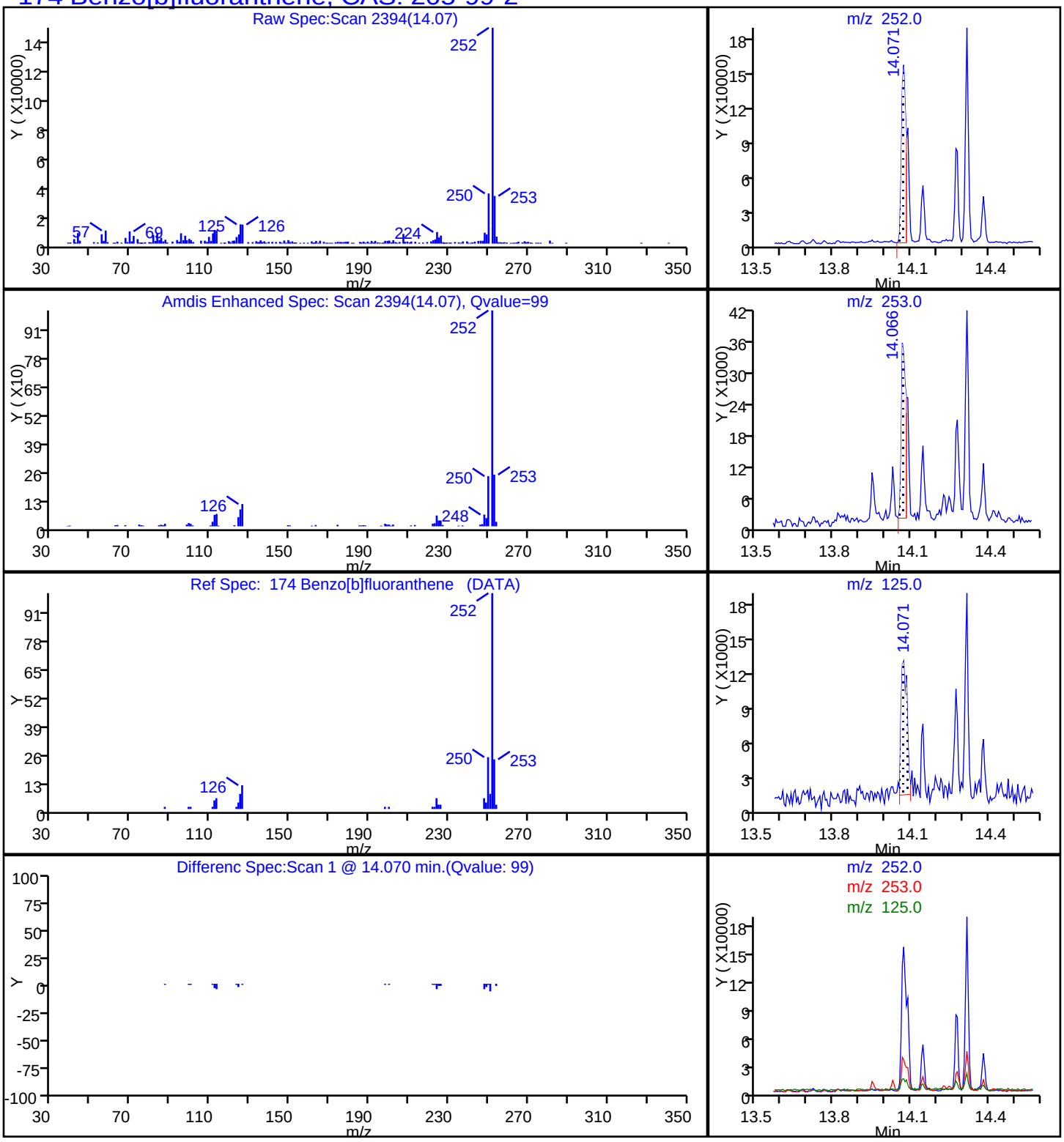
177 Benzo[a]pyrene, CAS: 50-32-8



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

174 Benzo[b]fluoranthene, CAS: 205-99-2



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
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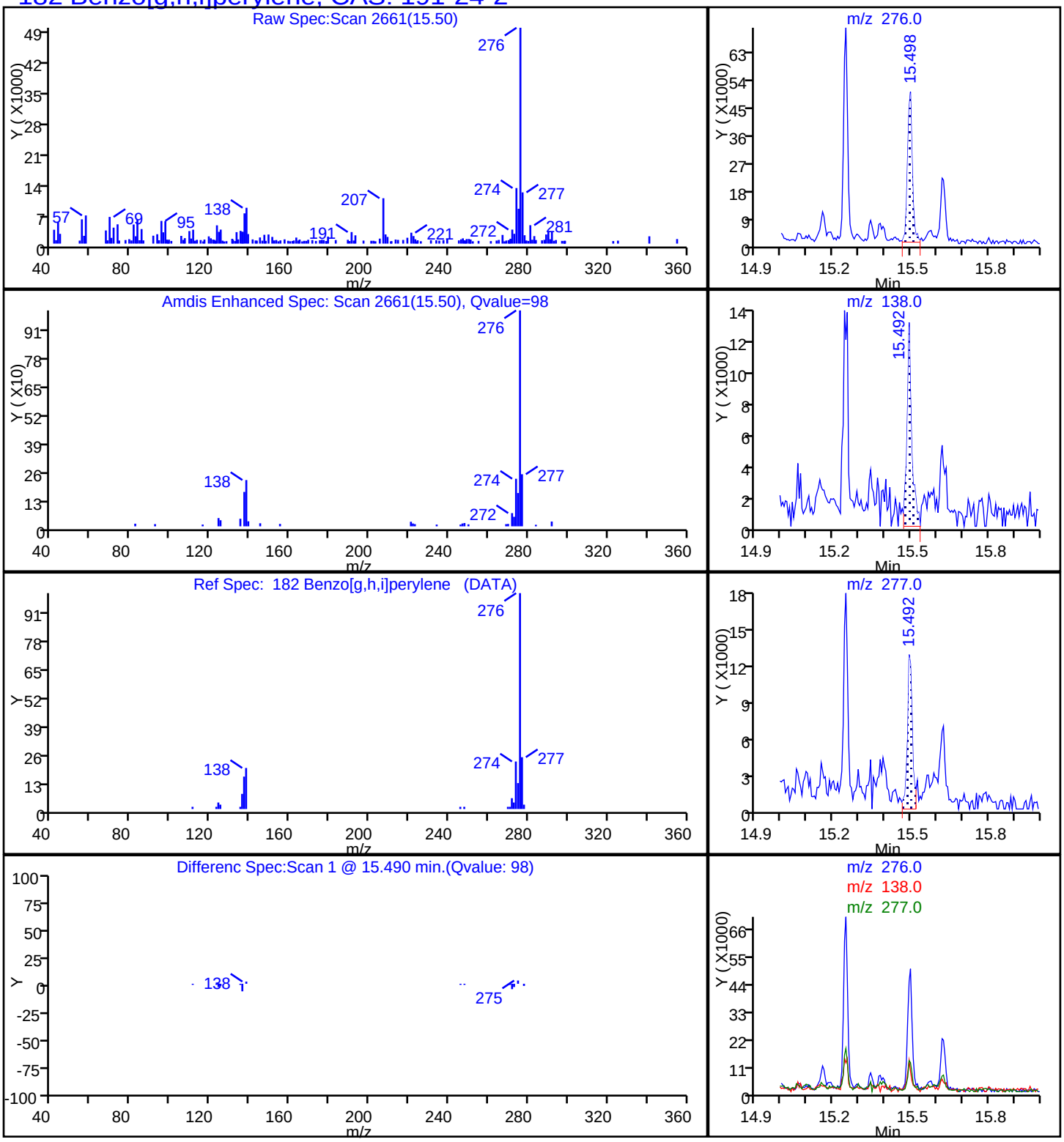
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

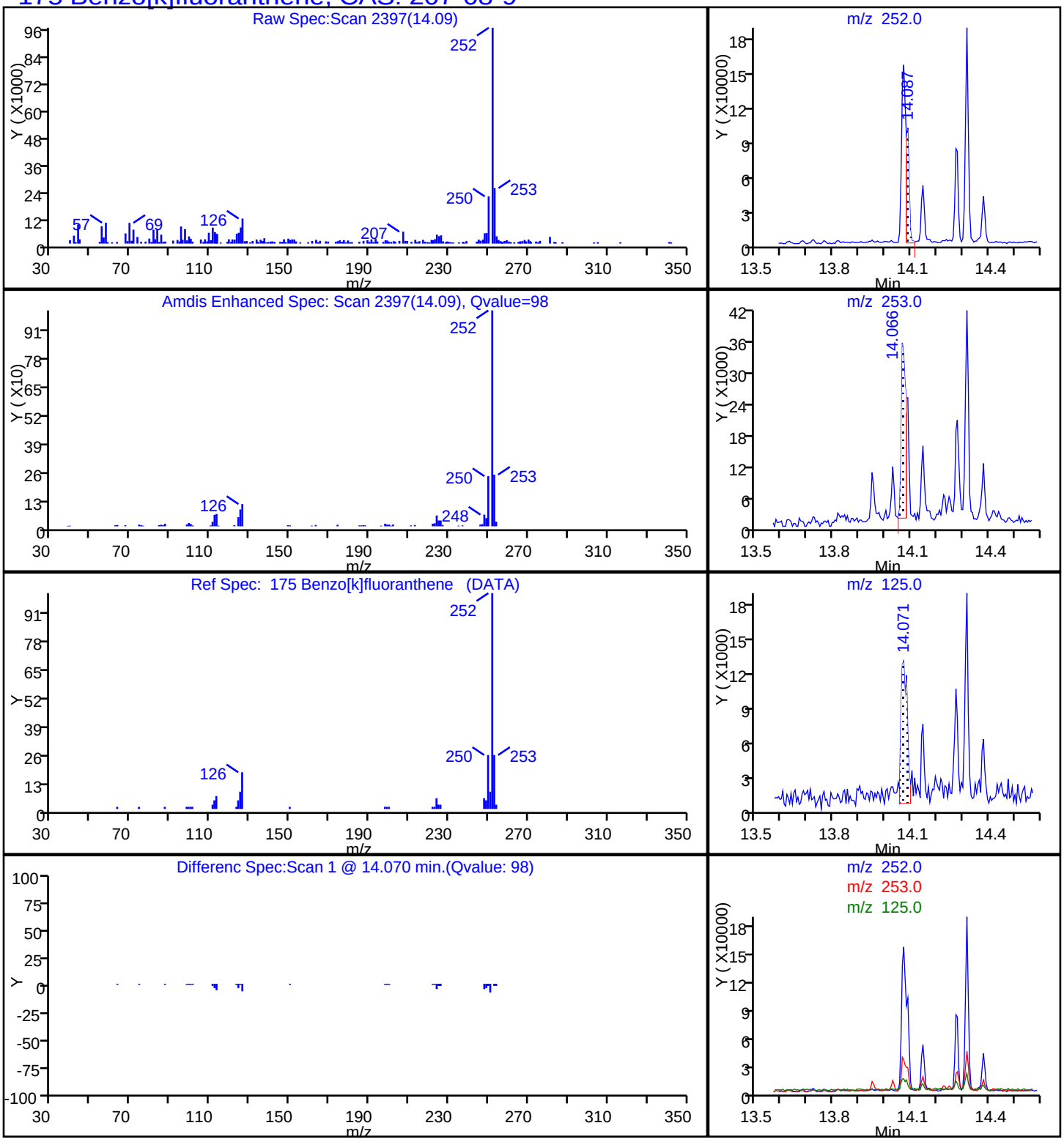
182 Benzo[g,h,i]perylene, CAS: 191-24-2



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

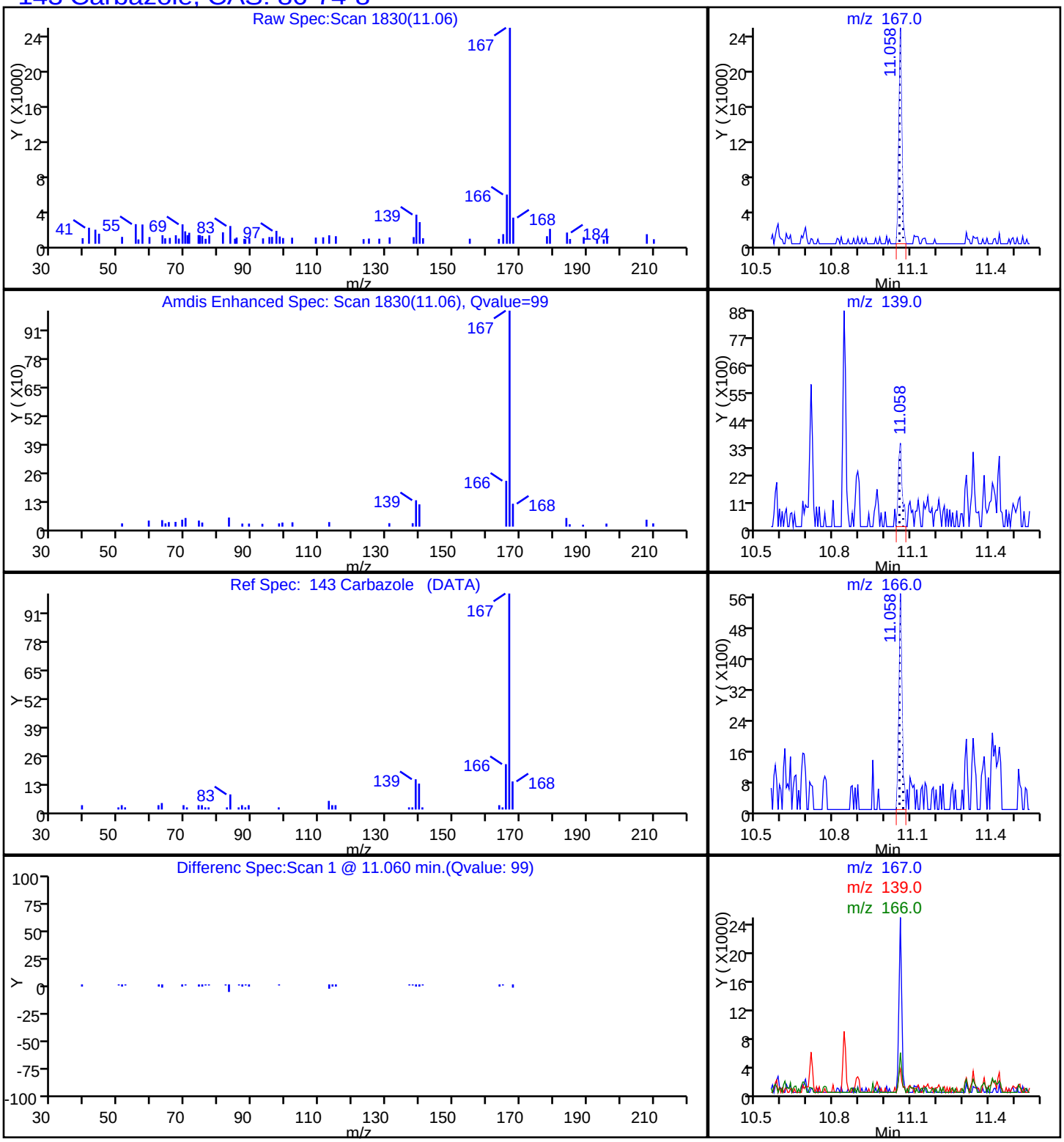
175 Benzo[k]fluoranthene, CAS: 207-08-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

143 Carbazole, CAS: 86-74-8



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

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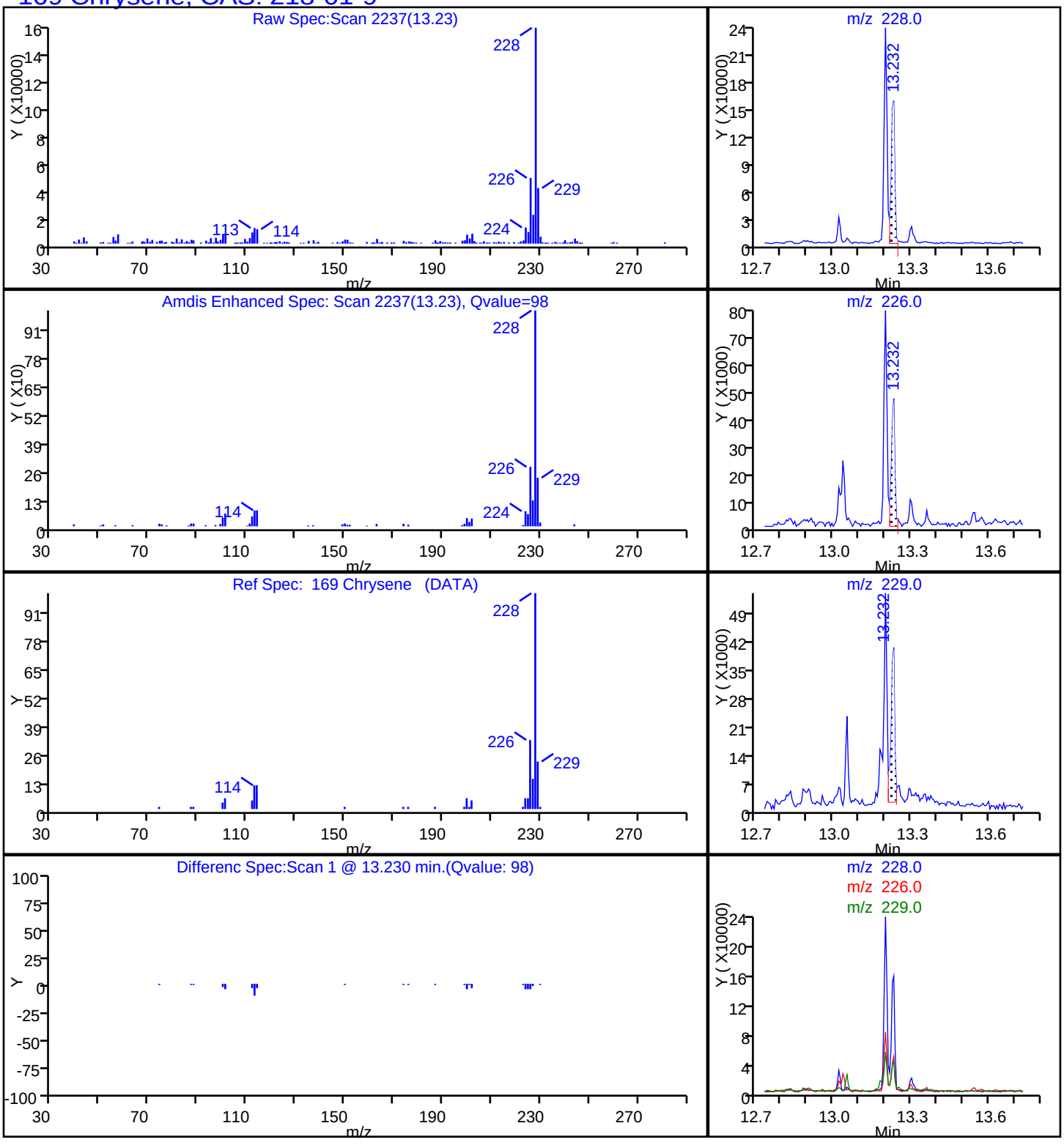
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

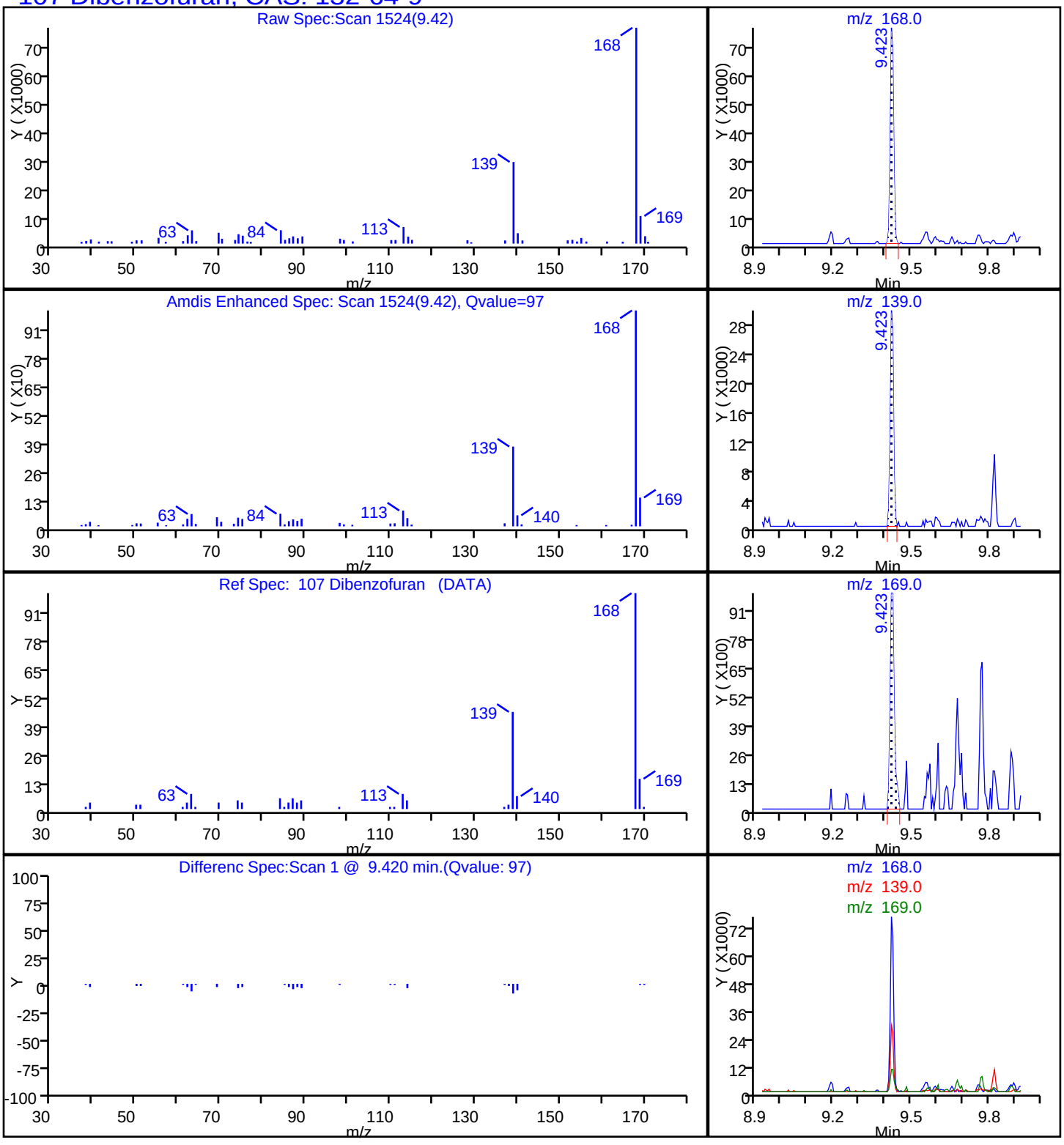
169 Chrysene, CAS: 218-01-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

107 Dibenzofuran, CAS: 132-64-9

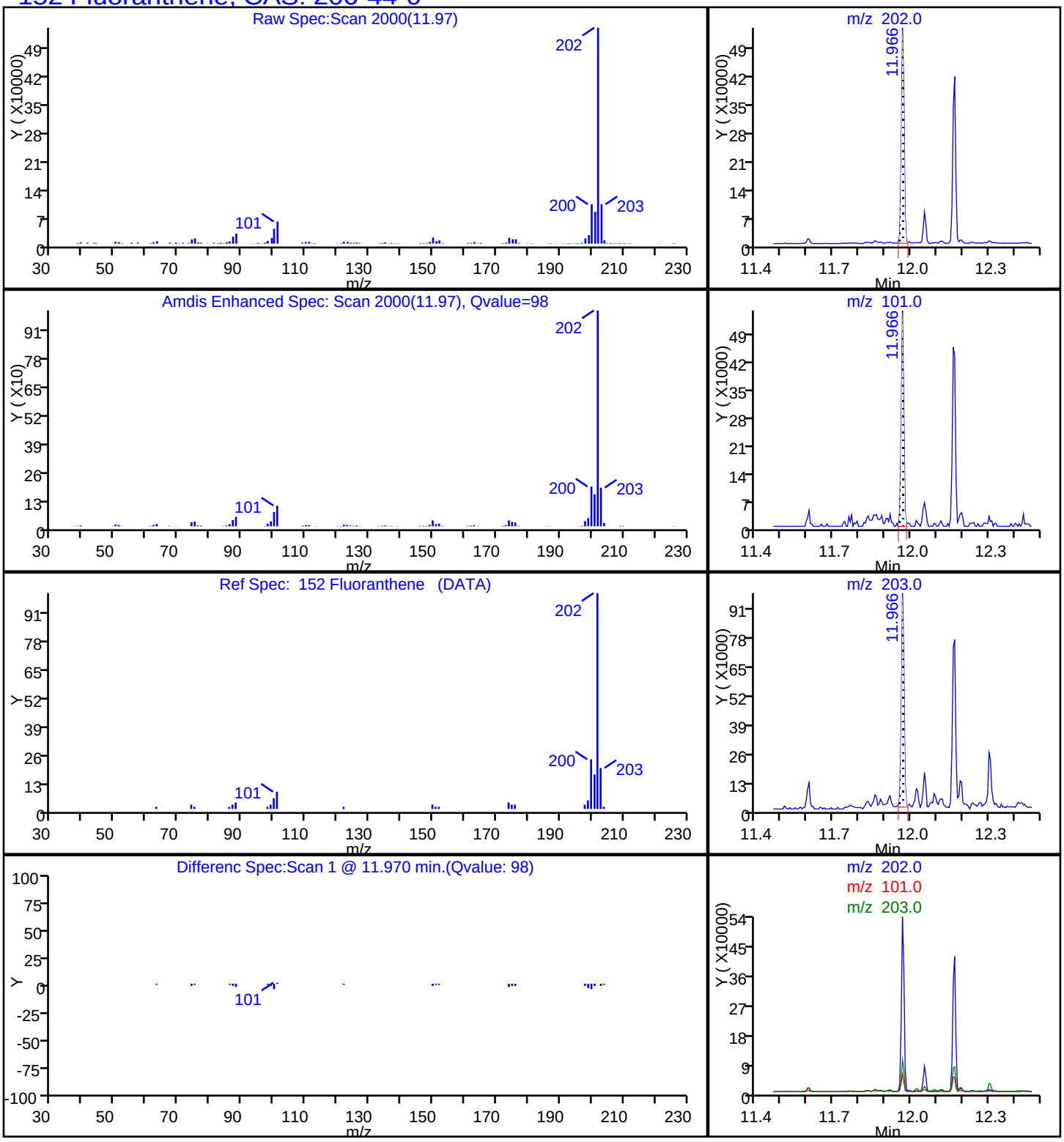


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

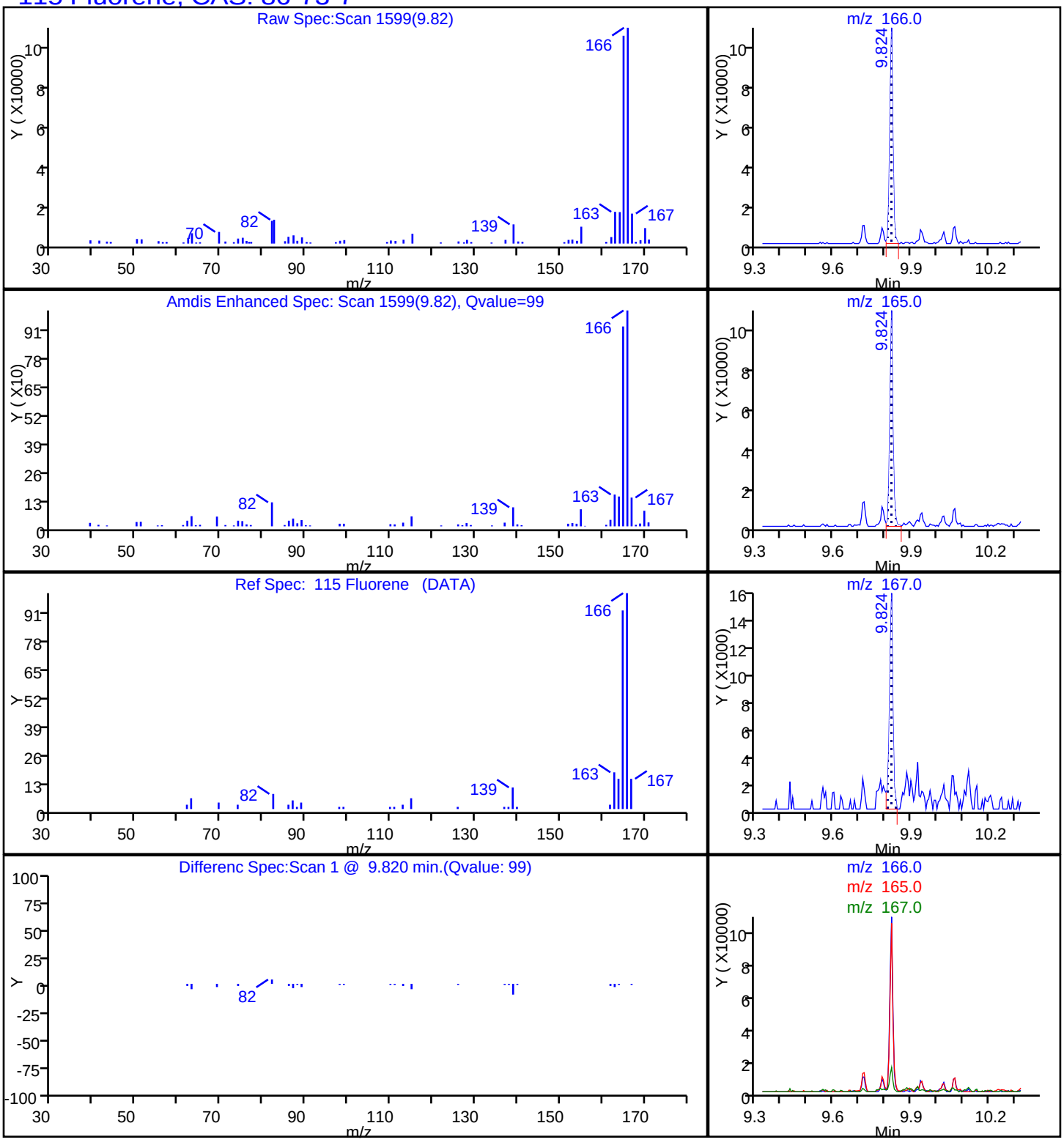
152 Fluoranthene, CAS: 206-44-0



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

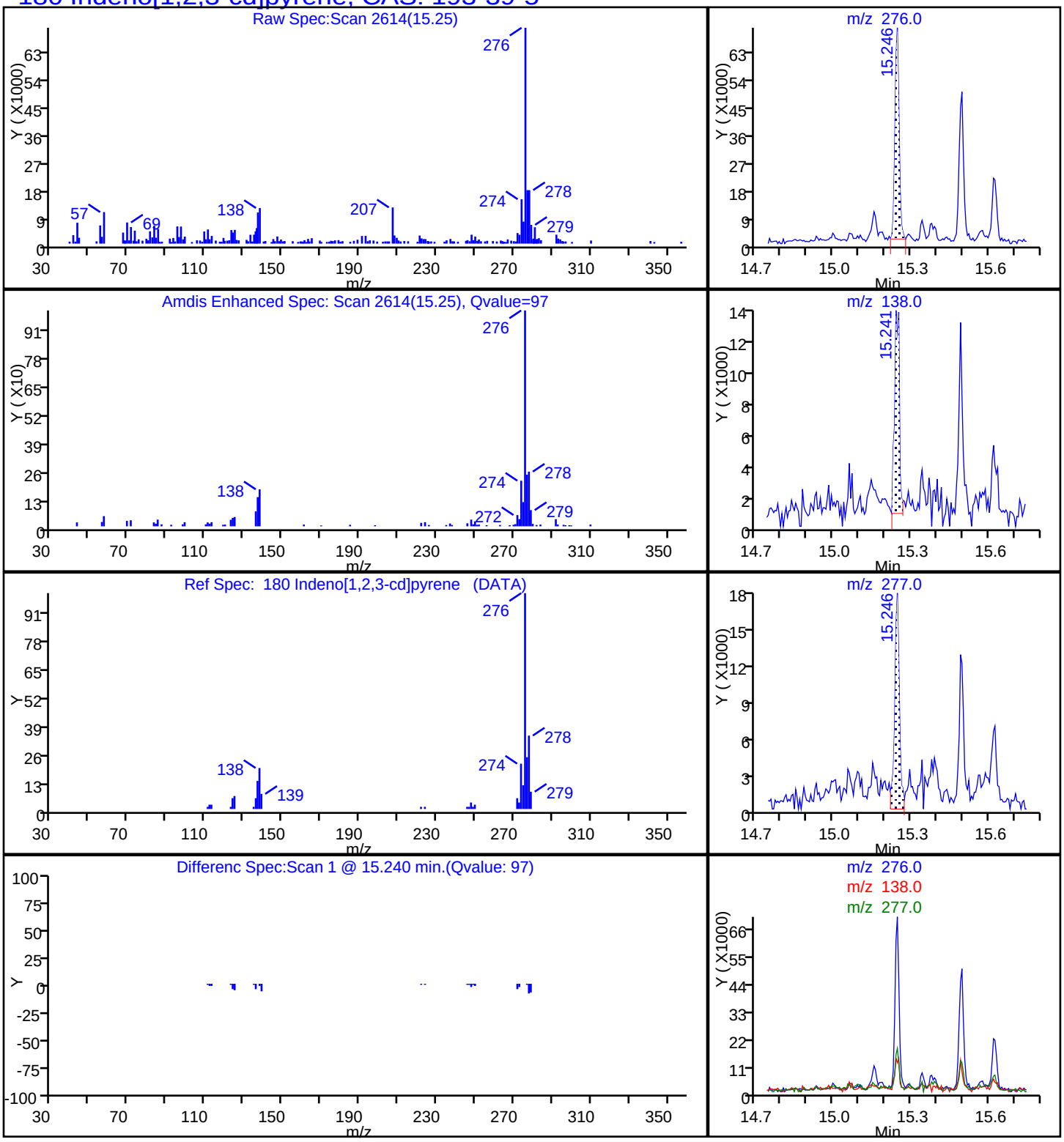
115 Fluorene, CAS: 86-73-7



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D

Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

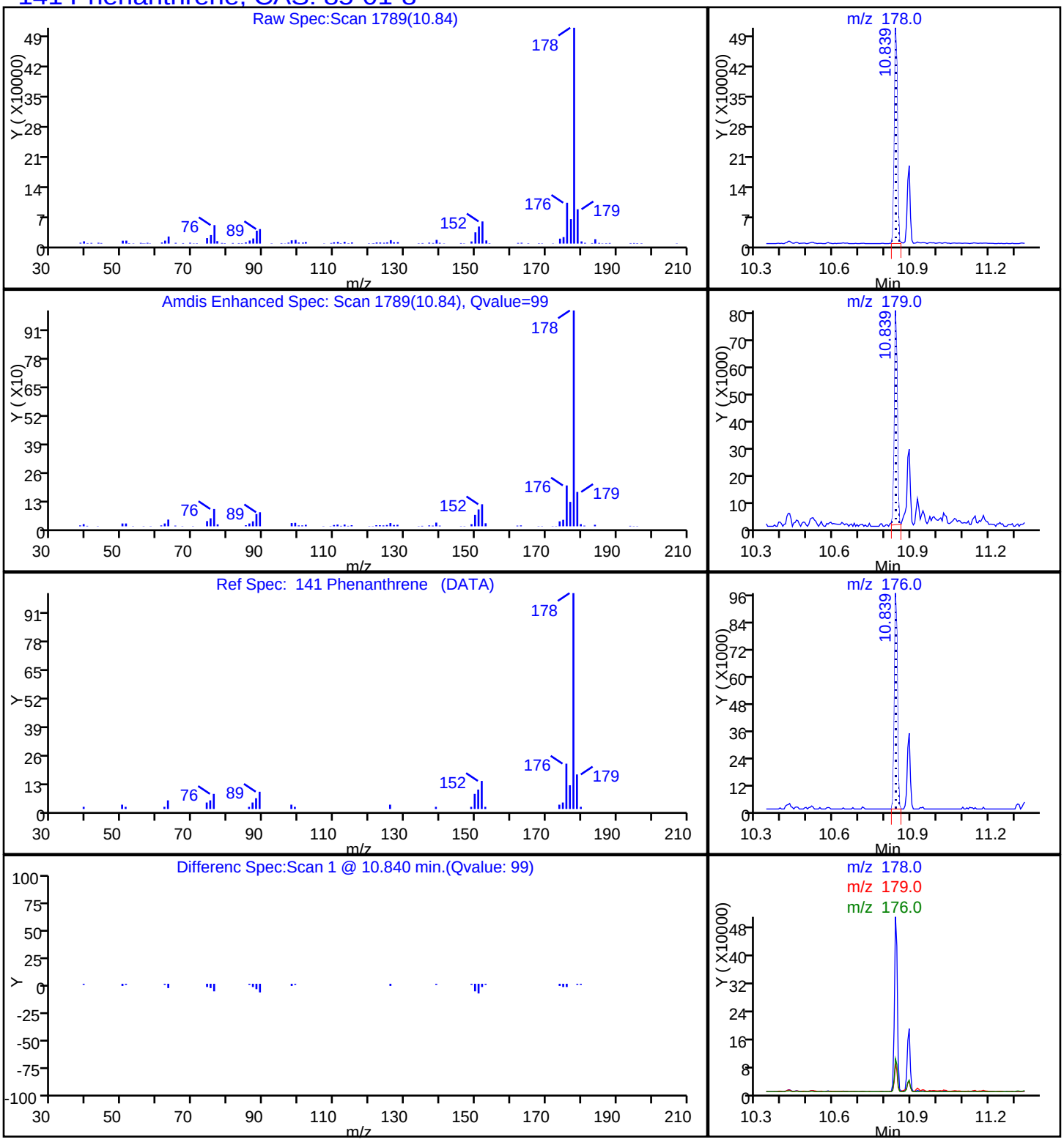
180 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



TestAmerica Buffalo

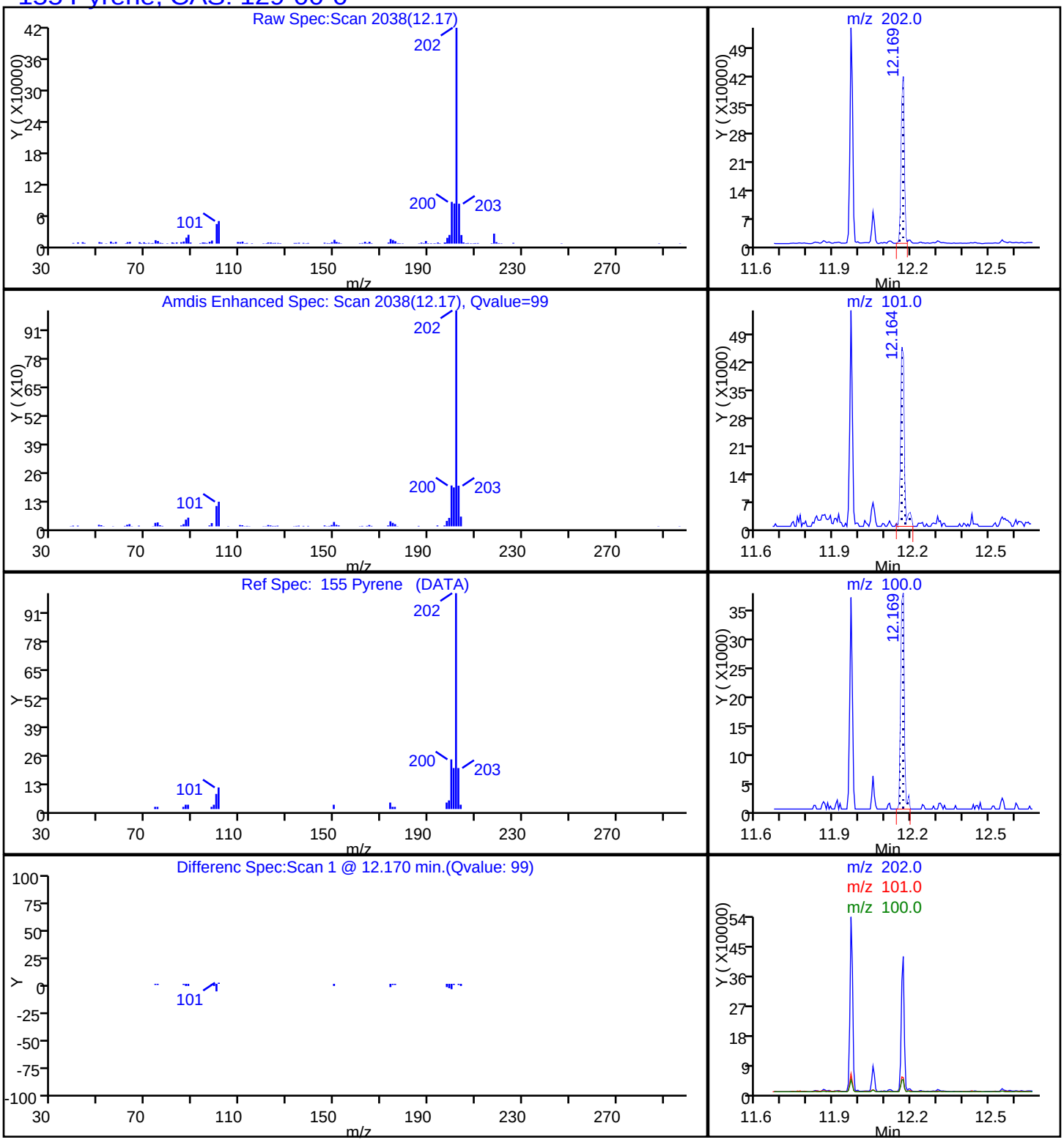
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

141 Phenanthrene, CAS: 85-01-8



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D
Injection Date: 13-Oct-2017 08:02:30 Instrument ID: HP5973X
Lims ID: 480-125579-E-2-A Lab Sample ID: 480-125579-2
Client ID: MW-8 (13-14)
Operator ID: DR ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

155 Pyrene, CAS: 129-00-0



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

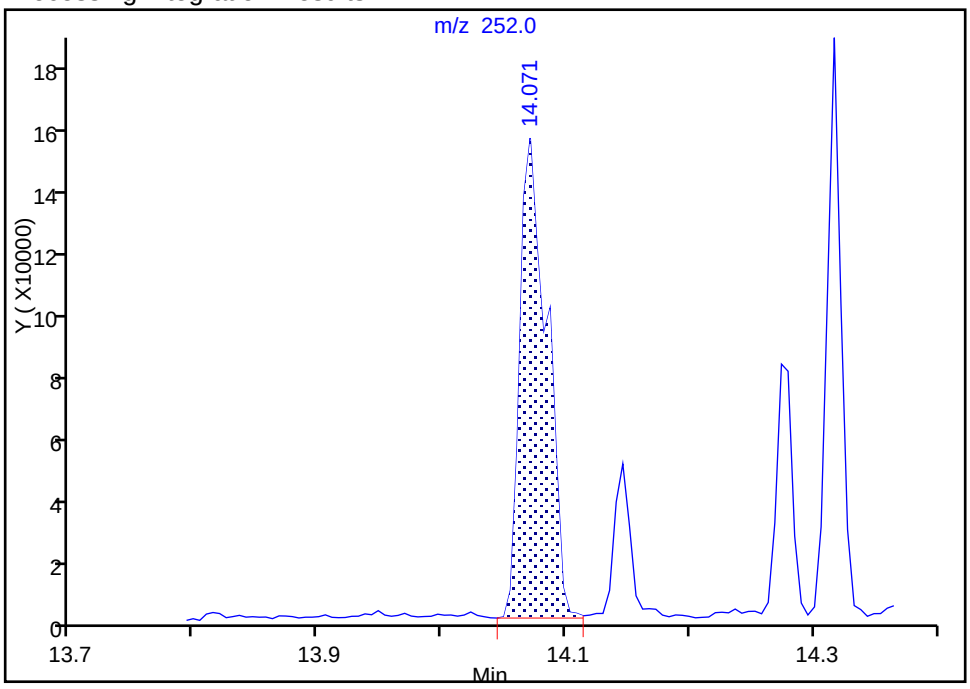
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

174 Benzo[b]fluoranthene, CAS: 205-99-2

Signal: 1

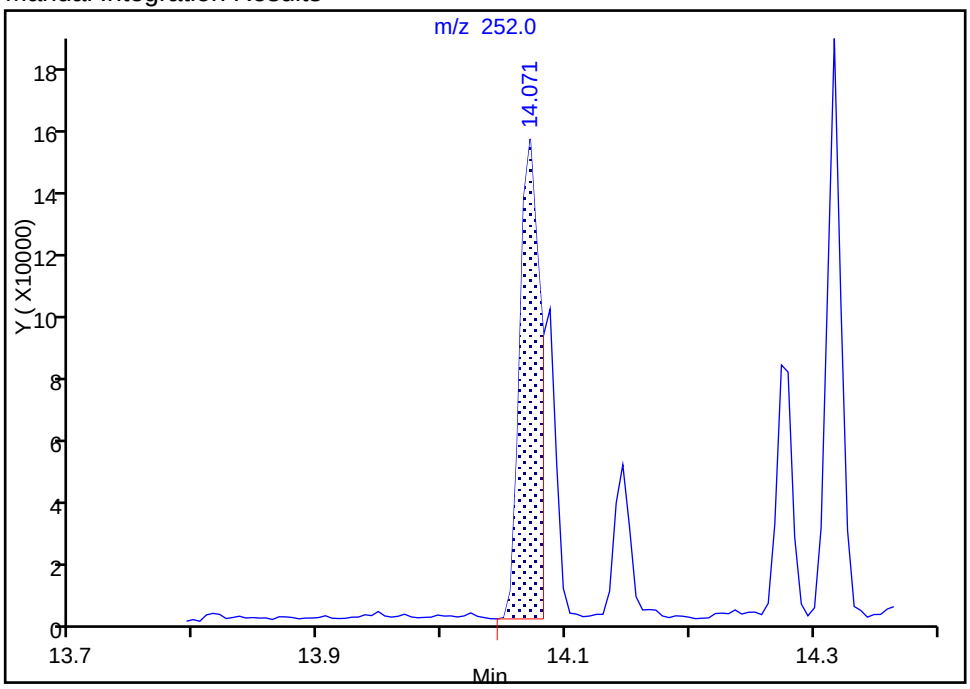
Processing Integration Results

RT: 14.07
Area: 224754
Amount: 10.593377
Amount Units: ng/uL



Manual Integration Results

RT: 14.07
Area: 174401
Amount: 8.220078
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:57:56

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

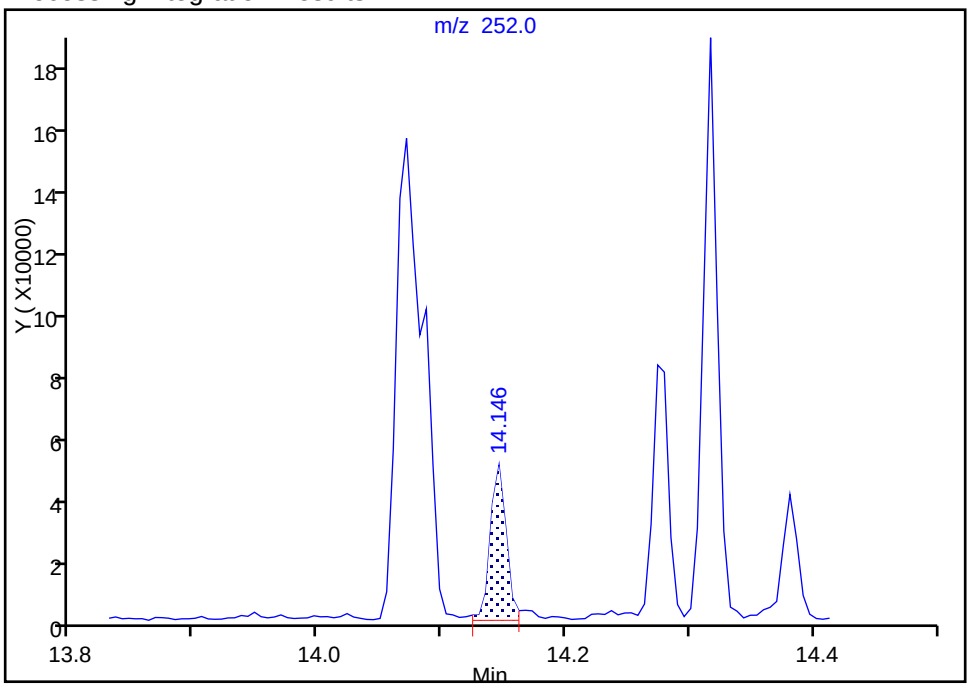
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

175 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

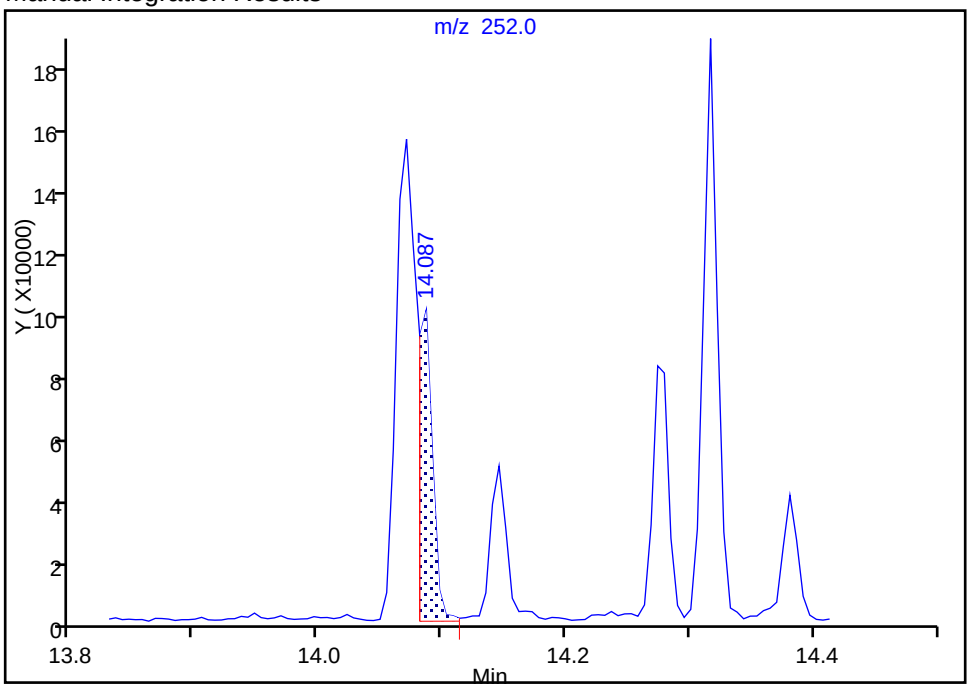
Processing Integration Results

RT: 14.15
Area: 43272
Amount: 1.909986
Amount Units: ng/uL



Manual Integration Results

RT: 14.09
Area: 78958
Amount: 3.485133
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:57:58

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

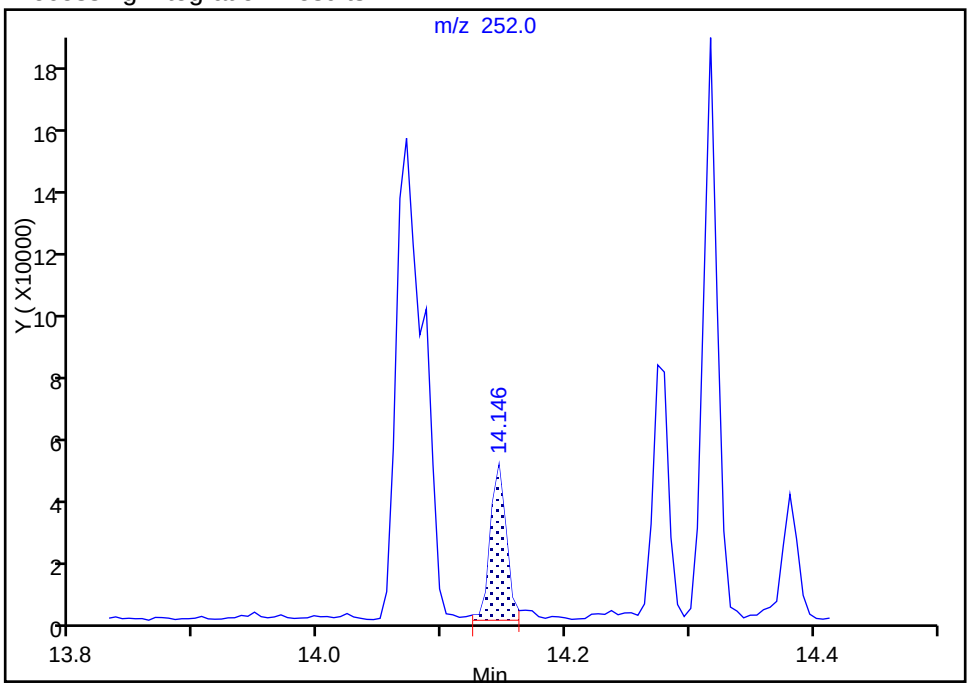
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20526.D				
Injection Date:	13-Oct-2017 08:02:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-2-A	Lab Sample ID:	480-125579-2		
Client ID:	MW-8 (13-14)				
Operator ID:	DR	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

175 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

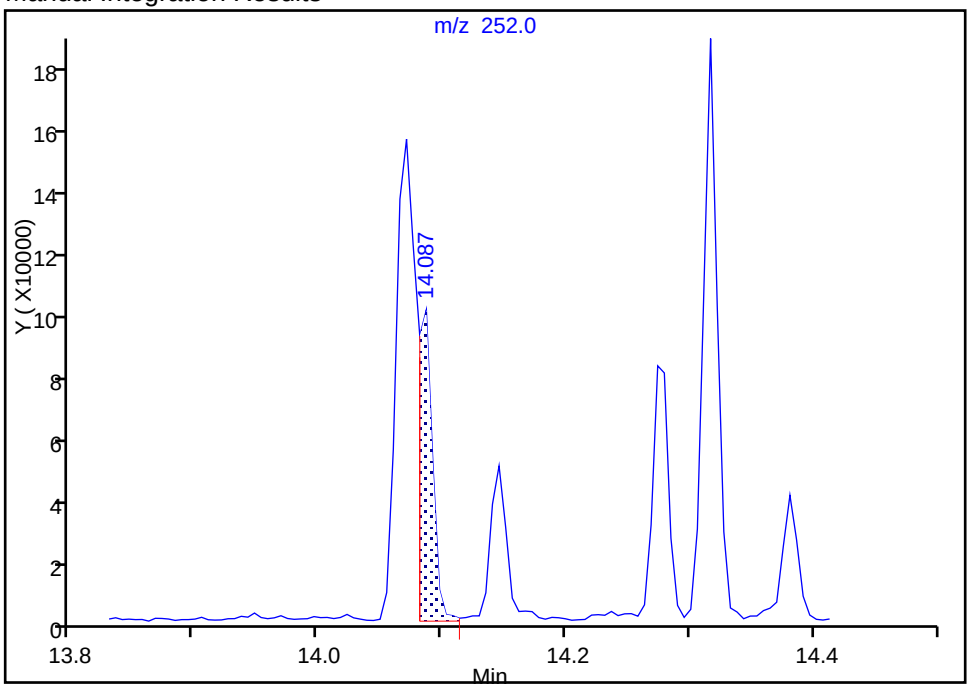
Processing Integration Results

RT: 14.15
Area: 43272
Amount: 1.909986
Amount Units: ng/uL



Manual Integration Results

RT: 14.09
Area: 78958
Amount: 3.485133
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:58:02
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: DUP-100817 | Lab Sample ID: 480-125579-3

Matrix: Solid | Lab File ID: X20527.D

Analysis Method: 8270D | Date Collected: 10/08/2017 00:00

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.60(g) | Date Analyzed: 10/13/2017 08:28

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 381534 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		2000	530
88-06-2	2,4,6-Trichlorophenol	ND		2000	390
120-83-2	2,4-Dichlorophenol	ND		2000	210
105-67-9	2,4-Dimethylphenol	ND		2000	470
51-28-5	2,4-Dinitrophenol	ND		19000	9100
121-14-2	2,4-Dinitrotoluene	ND		2000	410
606-20-2	2,6-Dinitrotoluene	ND		2000	230
91-58-7	2-Chloronaphthalene	ND		2000	320
95-57-8	2-Chlorophenol	ND		2000	360
91-57-6	2-Methylnaphthalene	620	J	2000	390
95-48-7	2-Methylphenol	ND		2000	230
88-74-4	2-Nitroaniline	ND		3800	290
88-75-5	2-Nitrophenol	ND		2000	560
91-94-1	3,3'-Dichlorobenzidine	ND		3800	2300
99-09-2	3-Nitroaniline	ND		3800	540
534-52-1	4,6-Dinitro-2-methylphenol	ND		3800	2000
101-55-3	4-Bromophenyl phenyl ether	ND		2000	280
59-50-7	4-Chloro-3-methylphenol	ND		2000	490
106-47-8	4-Chloroaniline	ND		2000	490
7005-72-3	4-Chlorophenyl phenyl ether	ND		2000	240
106-44-5	4-Methylphenol	ND		3800	230
100-01-6	4-Nitroaniline	ND		3800	1000
100-02-7	4-Nitrophenol	ND		3800	1400
83-32-9	Acenaphthene	810	J	2000	290
208-96-8	Acenaphthylene	2700		2000	250
98-86-2	Acetophenone	ND		2000	270
120-12-7	Anthracene	5000		2000	490
1912-24-9	Atrazine	ND		2000	680
100-52-7	Benzaldehyde	ND		2000	1600
56-55-3	Benzo[a]anthracene	5800		2000	200
50-32-8	Benzo[a]pyrene	4300		2000	290
205-99-2	Benzo[b]fluoranthene	5000		2000	310
191-24-2	Benzo[g,h,i]perylene	2100		2000	210
207-08-9	Benzo[k]fluoranthene	2000		2000	250

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: DUP-100817 | Lab Sample ID: 480-125579-3

Matrix: Solid | Lab File ID: X20527.D

Analysis Method: 8270D | Date Collected: 10/08/2017 00:00

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.60(g) | Date Analyzed: 10/13/2017 08:28

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 381534 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		2000	290
108-60-1	bis (2-chloroisopropyl) ether	ND		2000	390
111-91-1	Bis(2-chloroethoxy)methane	ND		2000	420
111-44-4	Bis(2-chloroethyl)ether	ND		2000	250
117-81-7	Bis(2-ethylhexyl) phthalate	ND		2000	670
85-68-7	Butyl benzyl phthalate	ND		2000	320
105-60-2	Caprolactam	ND		2000	590
86-74-8	Carbazole	630	J	2000	230
218-01-9	Chrysene	4200		2000	440
53-70-3	Dibenz(a,h)anthracene	ND		2000	350
132-64-9	Dibenzofuran	2500		2000	230
84-66-2	Diethyl phthalate	ND		2000	250
131-11-3	Dimethyl phthalate	ND		2000	230
84-74-2	Di-n-butyl phthalate	ND		2000	340
117-84-0	Di-n-octyl phthalate	ND		2000	230
206-44-0	Fluoranthene	12000		2000	210
86-73-7	Fluorene	4300		2000	230
118-74-1	Hexachlorobenzene	ND		2000	270
87-68-3	Hexachlorobutadiene	ND		2000	290
77-47-4	Hexachlorocyclopentadiene	ND		2000	270
67-72-1	Hexachloroethane	ND		2000	250
193-39-5	Indeno[1,2,3-cd]pyrene	2300		2000	240
78-59-1	Isophorone	ND		2000	420
91-20-3	Naphthalene	330	J	2000	250
98-95-3	Nitrobenzene	ND		2000	220
621-64-7	N-Nitrosodi-n-propylamine	ND		2000	340
86-30-6	N-Nitrosodiphenylamine	ND		2000	1600
87-86-5	Pentachlorophenol	ND		3800	2000
85-01-8	Phenanthrene	14000		2000	290
108-95-2	Phenol	ND		2000	300
129-00-0	Pyrene	9000		2000	230

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: DUP-100817 | Lab Sample ID: 480-125579-3

Matrix: Solid | Lab File ID: X20527.D

Analysis Method: 8270D | Date Collected: 10/08/2017 00:00

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.60(g) | Date Analyzed: 10/13/2017 08:28

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 381534 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	119		54-120
321-60-8	2-Fluorobiphenyl	87		60-120
367-12-4	2-Fluorophenol	72		52-120
4165-60-0	Nitrobenzene-d5	78		53-120
4165-62-2	Phenol-d5	59		54-120
1718-51-0	p-Terphenyl-d14	95		65-121

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D
Lims ID: 480-125579-E-3-A
Client ID: DUP-100817
Sample Type: Client
Inject. Date: 13-Oct-2017 08:28:30 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 480-0066346-021
Operator ID: DR Instrument ID: HP5973X

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 13-Oct-2017 12:06:35 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: richardsd Date: 13-Oct-2017 12:00:16

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.561	5.572	-0.011	94	115868	40.0	
* 2 Naphthalene-d8	136	7.110	7.115	-0.005	99	330471	40.0	
* 3 Acenaphthene-d10	164	9.183	9.183	0.000	96	287555	40.0	
* 4 Phenanthrene-d10	188	10.818	10.818	0.000	99	599520	40.0	
* 5 Chrysene-d12	240	13.211	13.211	0.000	99	706315	40.0	
* 6 Perylene-d12	264	14.360	14.365	-0.005	99	656665	40.0	
$ 7 2-Fluorophenol	112	3.836	3.835	0.001	96	11160	2.86	
$ 8 Phenol-d5	99	5.134	5.150	-0.016	92	11353	2.34	
$ 9 Nitrobenzene-d5	82	6.250	6.261	-0.011	96	10914	3.12	
$ 10 2-Fluorobiphenyl	172	8.403	8.408	-0.005	98	41234	3.47	
$ 11 2,4,6-Tribromophenol	330	10.091	10.091	0.000	48	5046	4.74	
$ 12 p-Terphenyl-d14	244	12.314	12.313	0.001	99	51690	3.80	
27 Benzaldehyde	77		5.011				ND	
28 Phenol	94		5.166				ND	
31 Bis(2-chloroethyl)ether	93		5.256				ND	
32 2-Chlorophenol	128		5.310				ND	
40 2-Methylphenol	108		5.924				ND	
42 2,2'-oxybis[1-chloropropan	45		5.940				ND	
45 Acetophenone	105		6.084				ND	
47 N-Nitrosodi-n-propylamine	70		6.100				ND	
46 4-Methylphenol	108		6.122				ND	
50 Hexachloroethane	117		6.197				ND	
52 Nitrobenzene	77		6.282				ND	
56 Isophorone	82		6.581				ND	
58 2-Nitrophenol	139		6.672				ND	
59 2,4-Dimethylphenol	107		6.758				ND	
62 Bis(2-chloroethoxy)methane	93		6.859				ND	
65 2,4-Dichlorophenol	162		6.966				ND	
69 Naphthalene	128	7.137	7.142	-0.005	96	7370	0.8479	
71 4-Chloroaniline	127		7.228				ND	
73 Hexachlorobutadiene	225		7.313				ND	
78 Caprolactam	113		7.644				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
79 4-Chloro-3-methylphenol	107		7.826				ND	
82 2-Methylnaphthalene	142	7.960	7.965	-0.005	95	9597	1.61	
84 Hexachlorocyclopentadiene	237		8.168				ND	
86 2,4,6-Trichlorophenol	196		8.312				ND	
87 2,4,5-Trichlorophenol	196		8.355				ND	
90 1,1'-Biphenyl	154	8.515	8.520	-0.005	95	8299	0.6637	
91 2-Chloronaphthalene	162		8.531				ND	
93 2-Nitroaniline	65		8.665				ND	
96 Dimethyl phthalate	163		8.900				ND	
99 2,6-Dinitrotoluene	165		8.959				ND	
100 Acenaphthylene	152	9.012	9.012	0.000	99	99182	7.01	
101 3-Nitroaniline	138		9.146				ND	
102 Acenaphthene	153	9.215	9.220	-0.005	95	20080	2.10	
103 2,4-Dinitrophenol	184		9.268				ND	
104 4-Nitrophenol	109		9.381				ND	
106 2,4-Dinitrotoluene	165		9.423				ND	
107 Dibenzofuran	168	9.423	9.423	0.000	97	95612	6.60	
112 Diethyl phthalate	149		9.728				ND	
115 Fluorene	166	9.819	9.819	0.000	99	124111	11.1	
116 4-Chlorophenyl phenyl ethe	204		9.835				ND	
118 4-Nitroaniline	138		9.856				ND	
119 4,6-Dinitro-2-methylphenol	198		9.893				ND	
120 N-Nitrosodiphenylamine	169		9.968				ND	
130 4-Bromophenyl phenyl ether	248		10.364				ND	
131 Hexachlorobenzene	284		10.428				ND	
133 Atrazine	200		10.561				ND	
134 Pentachlorophenol	266		10.636				ND	
141 Phenanthrene	178	10.839	10.839	0.000	99	579184	35.9	
142 Anthracene	178	10.893	10.892	0.001	99	212823	12.8	
143 Carbazole	167	11.058	11.058	0.000	99	24473	1.62	
145 Di-n-butyl phthalate	149		11.421				ND	
152 Fluoranthene	202	11.966	11.966	0.000	98	565813	30.4	
155 Pyrene	202	12.169	12.169	0.000	99	466519	23.2	
162 Butyl benzyl phthalate	149		12.741				ND	
166 3,3'-Dichlorobenzidine	252		13.184				ND	
167 Benzo[a]anthracene	228	13.200	13.200	0.000	94	299351	15.1	
172 Bis(2-ethylhexyl) phthalat	149		13.227				ND	
169 Chrysene	228	13.227	13.232	-0.005	97	214526	11.0	
168 Di-n-octyl phthalate	149		13.751				ND	
174 Benzo[b]fluoranthene	252	14.071	14.071	0.000	99	271948	13.0	M
175 Benzo[k]fluoranthene	252	14.082	14.092	-0.010	97	114066	5.10	M
177 Benzo[a]pyrene	252	14.317	14.317	0.000	99	212859	11.1	
180 Indeno[1,2,3-cd]pyrene	276	15.247	15.252	-0.005	97	119062	5.88	
181 Dibenz(a,h)anthracene	278		15.257				ND	
182 Benzo[g,h,i]perylene	276	15.498	15.503	-0.005	99	97390	5.45	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_INTSTD_STK_00039 Amount Added: 20.00 Units: uL Run Reagent

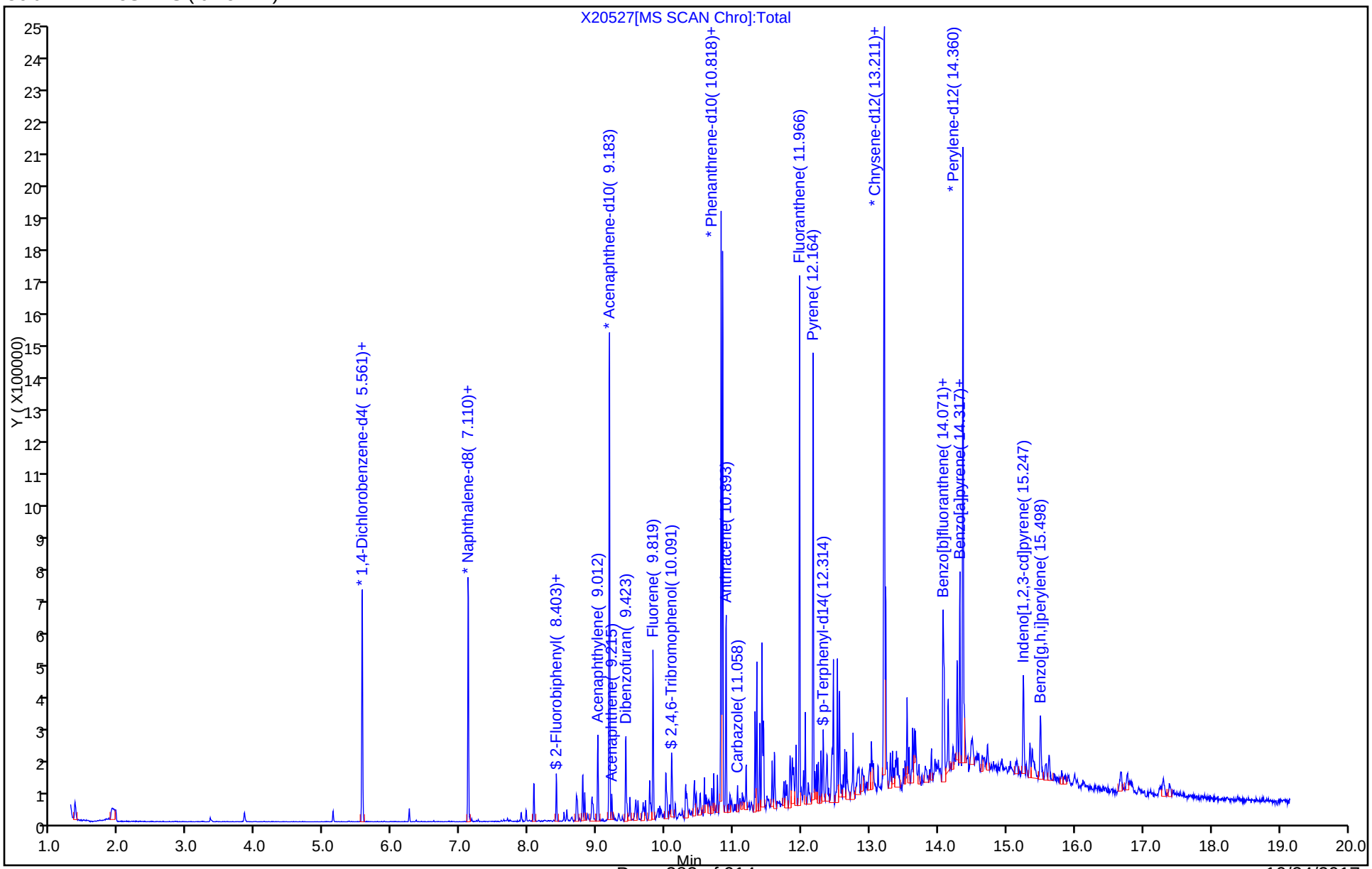
Report Date: 13-Oct-2017 12:07:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D

Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3	Worklist Smp#:	21
Client ID:	DUP-100817				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	21
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

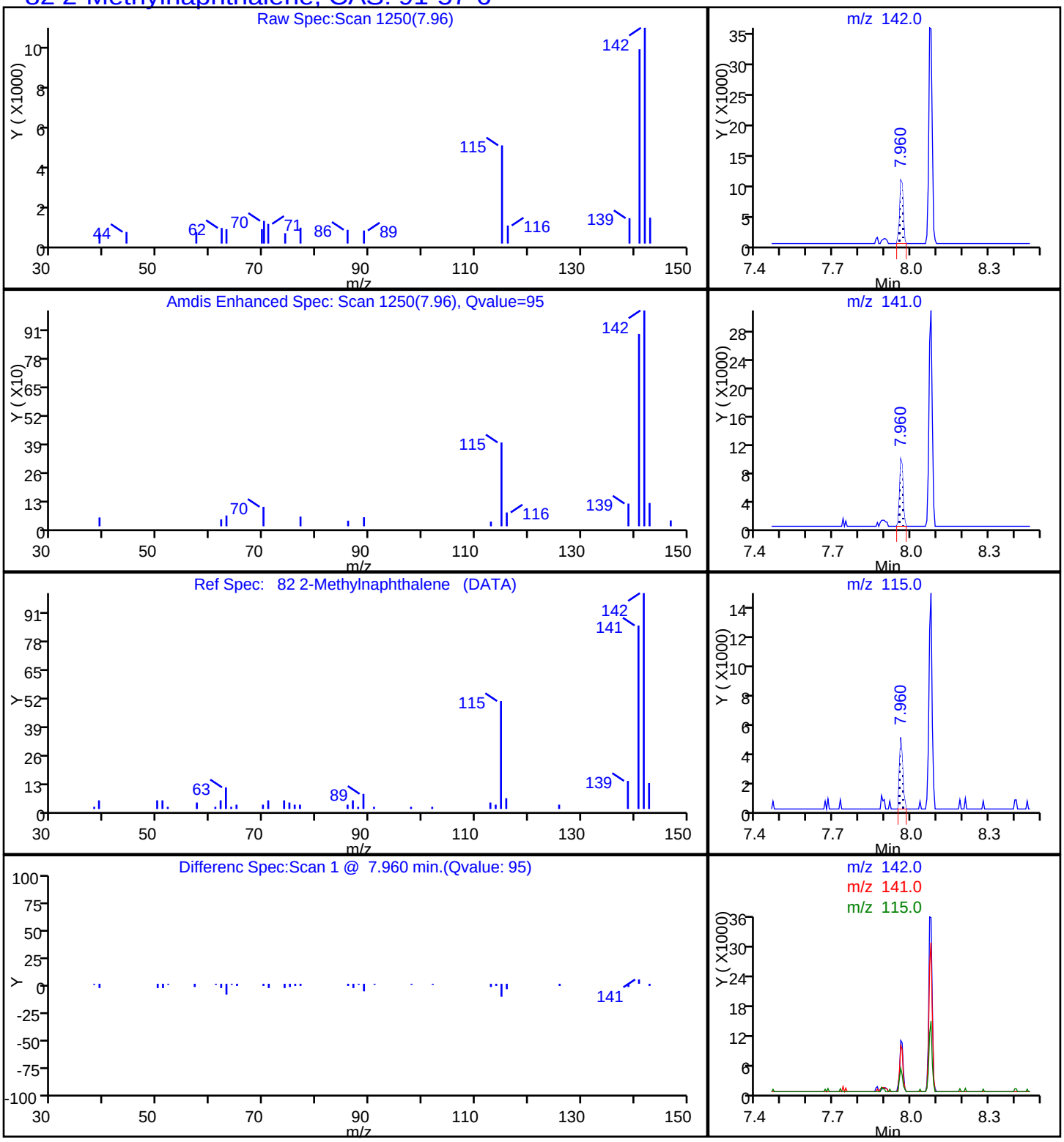
Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

82 2-Methylnaphthalene, CAS: 91-57-6

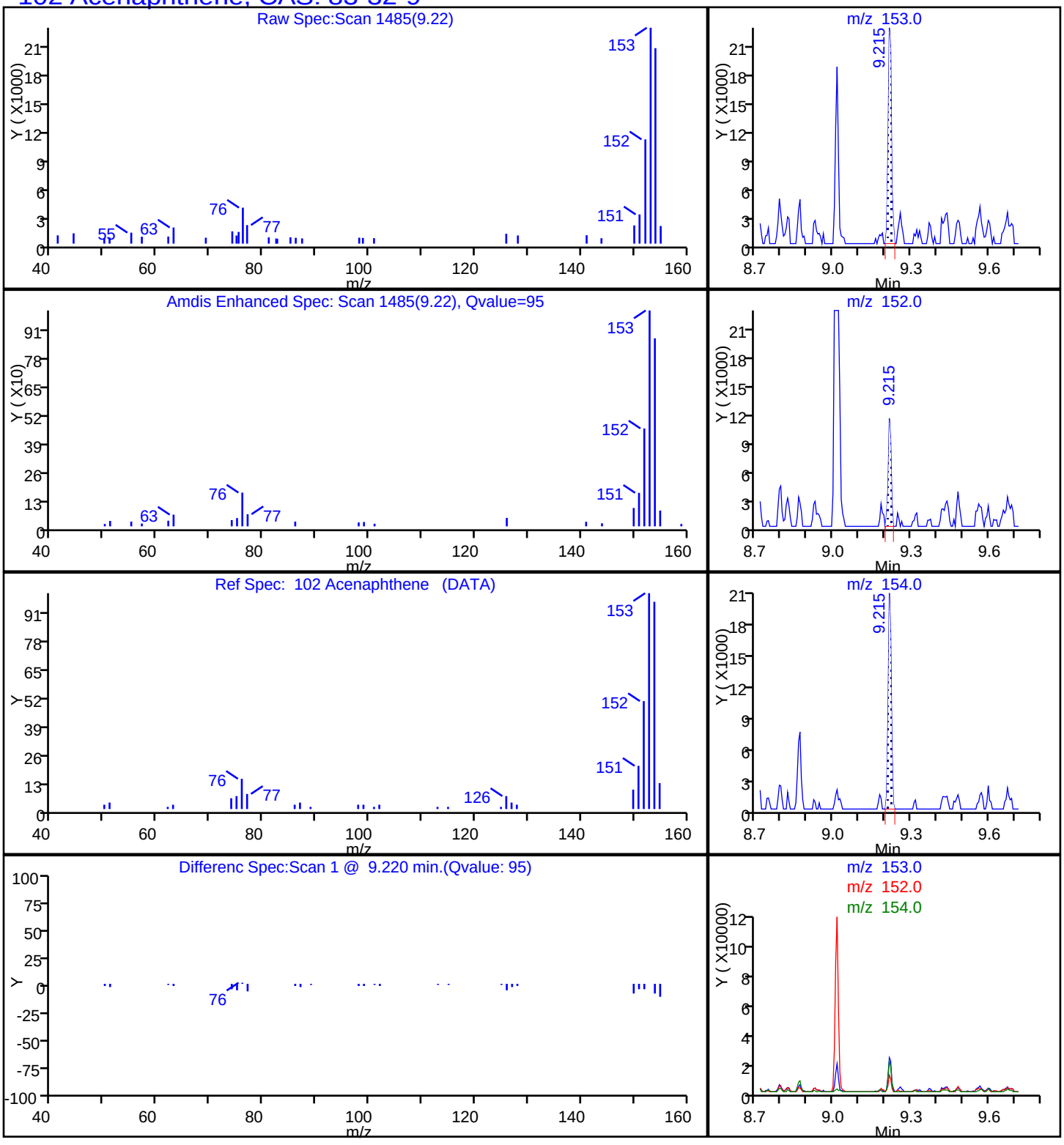


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D

Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

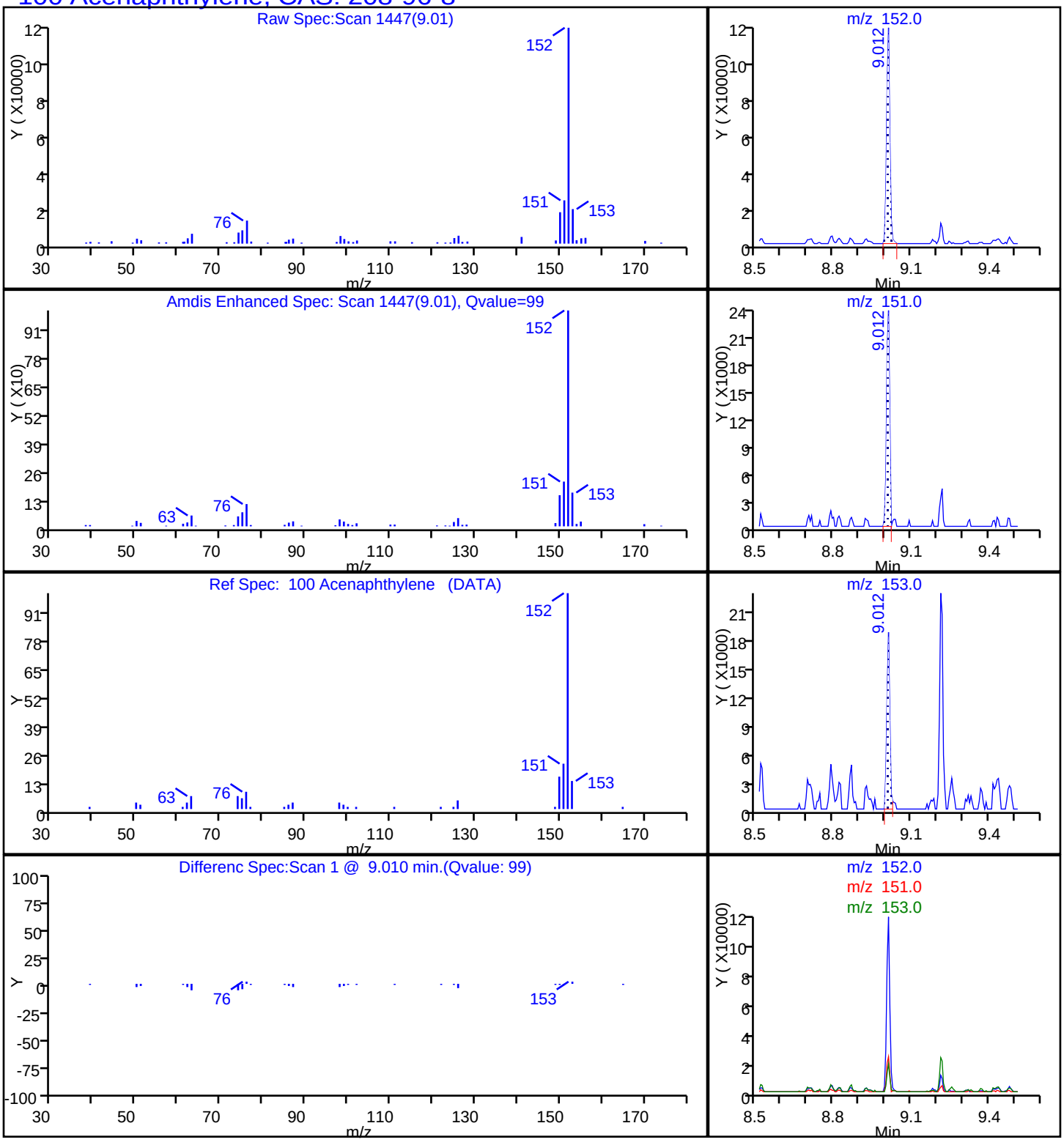
102 Acenaphthene, CAS: 83-32-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

100 Acenaphthylene, CAS: 208-96-8

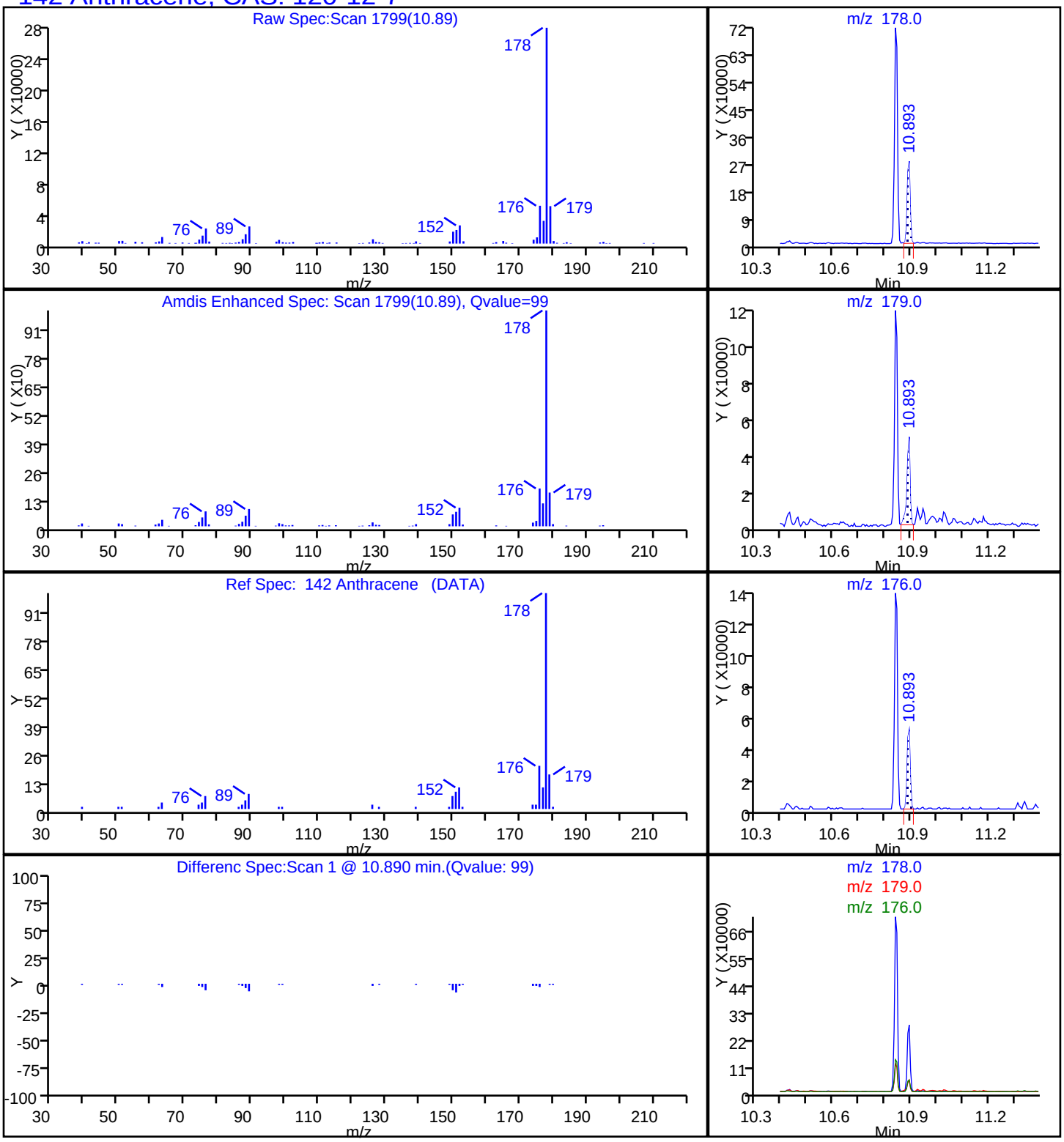


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D

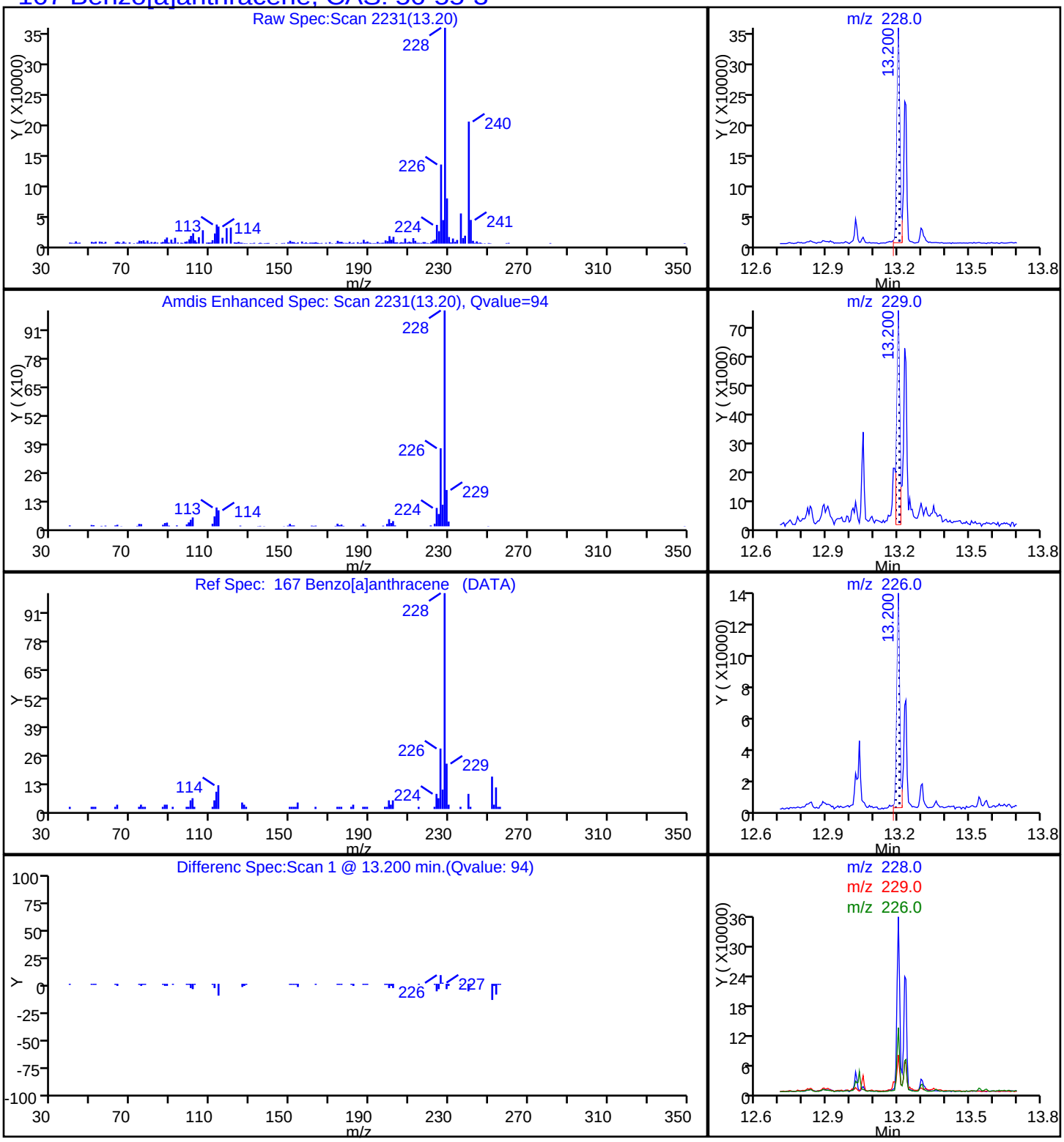
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

142 Anthracene, CAS: 120-12-7



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D
Injection Date: 13-Oct-2017 08:28:30 Instrument ID: HP5973X
Lims ID: 480-125579-E-3-A Lab Sample ID: 480-125579-3
Client ID: DUP-100817
Operator ID: DR ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

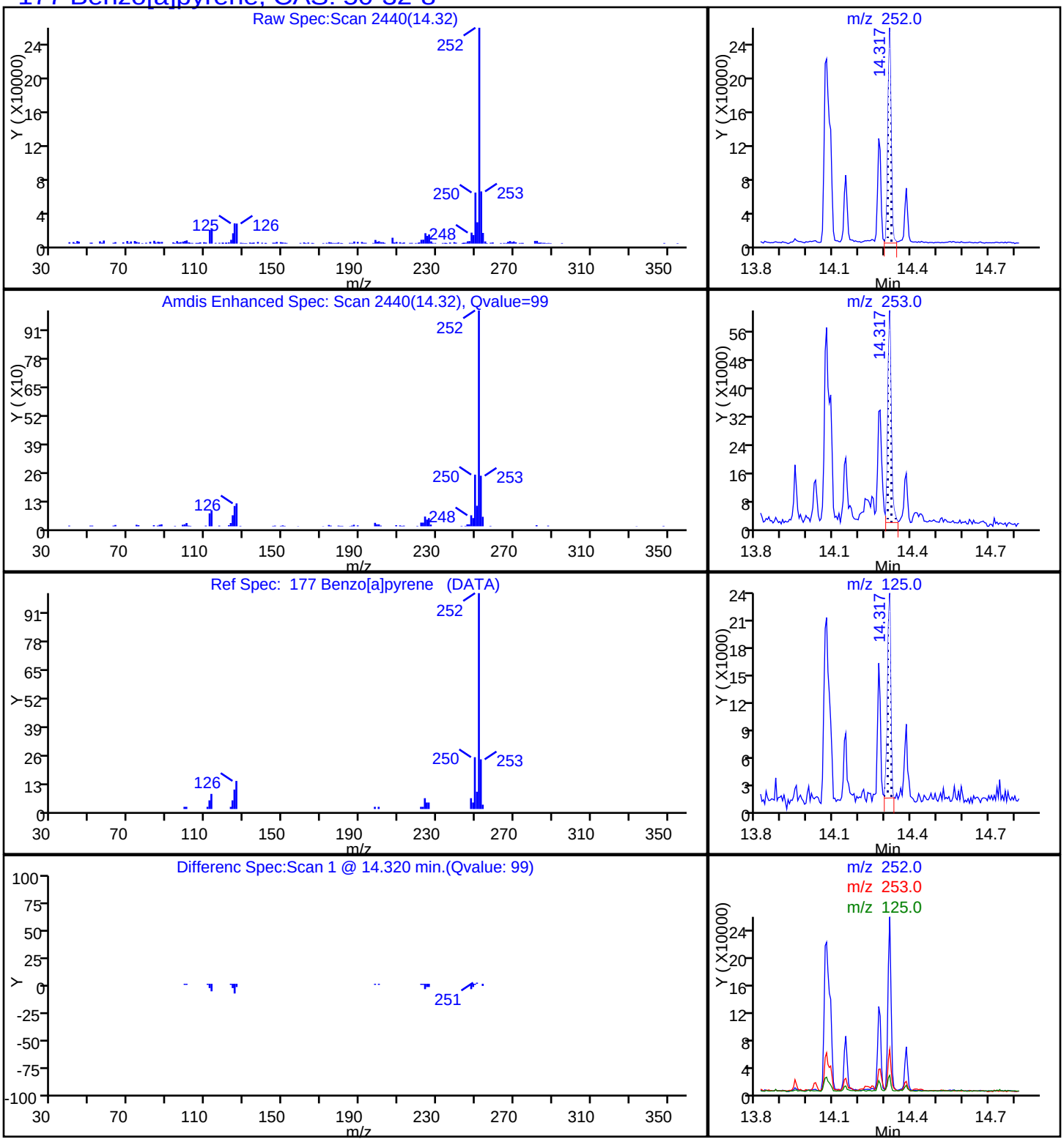
167 Benzo[a]anthracene, CAS: 56-55-3



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

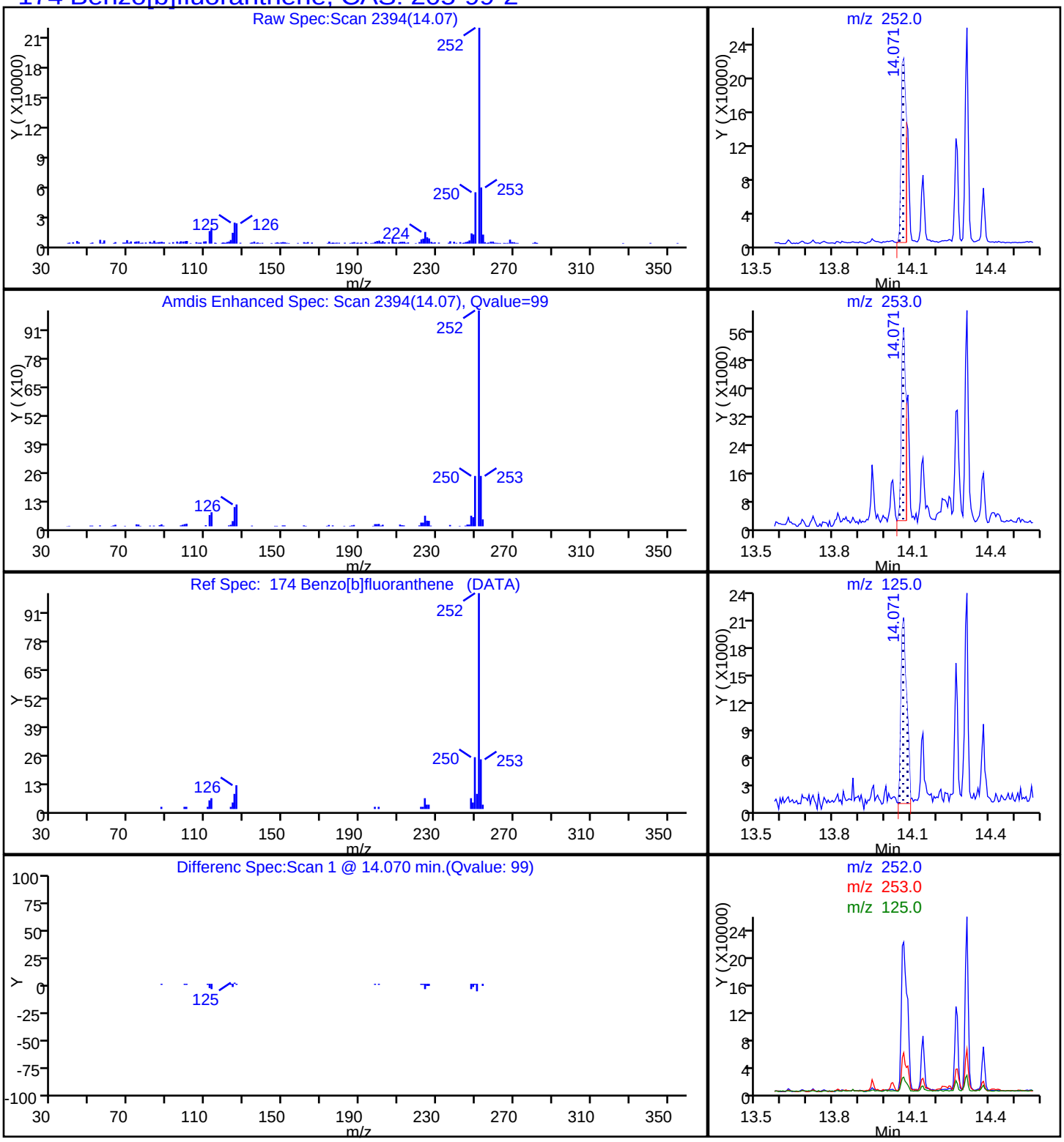
177 Benzo[a]pyrene, CAS: 50-32-8



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

174 Benzo[b]fluoranthene, CAS: 205-99-2



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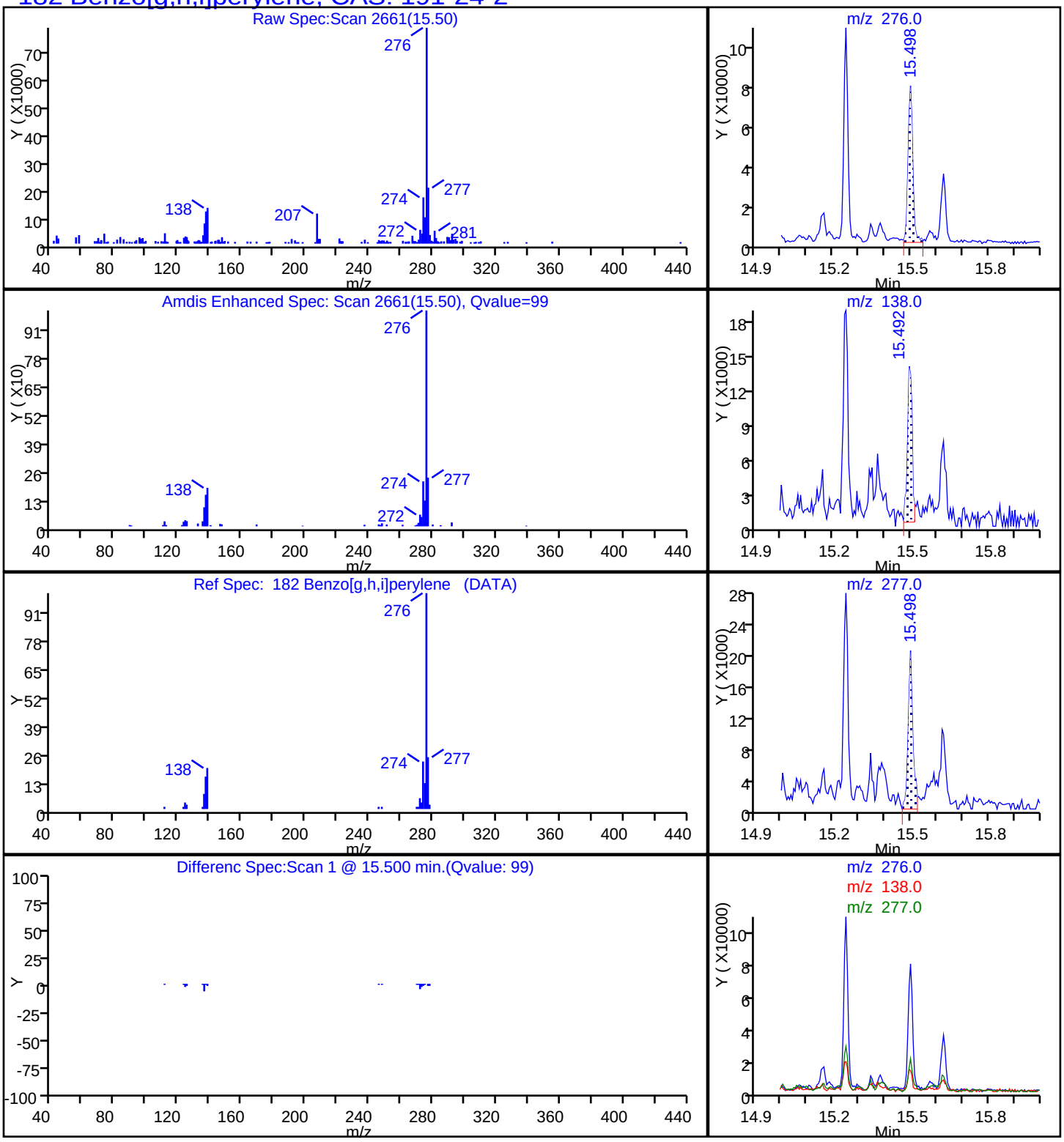
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

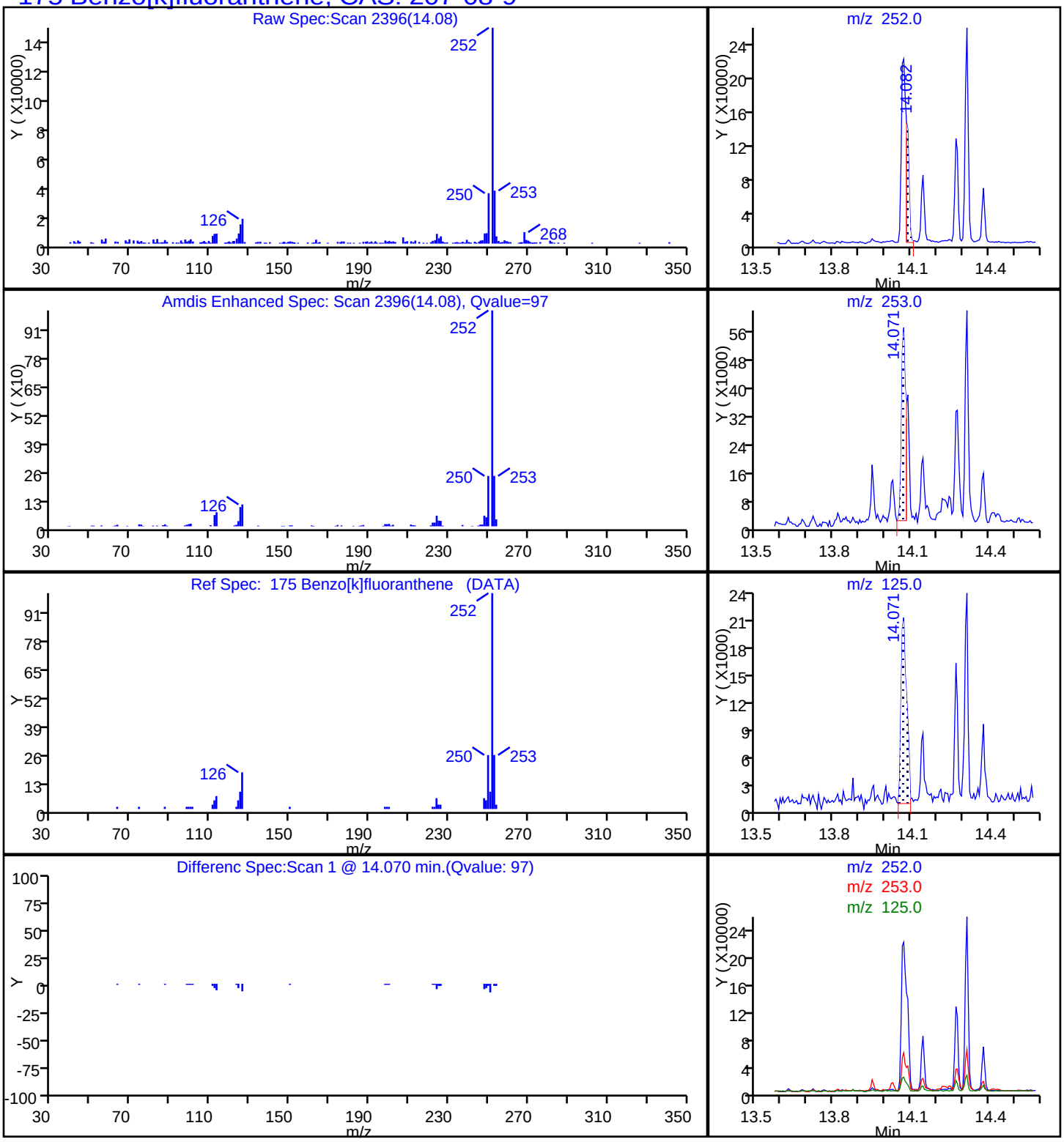
182 Benzo[g,h,i]perylene, CAS: 191-24-2



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

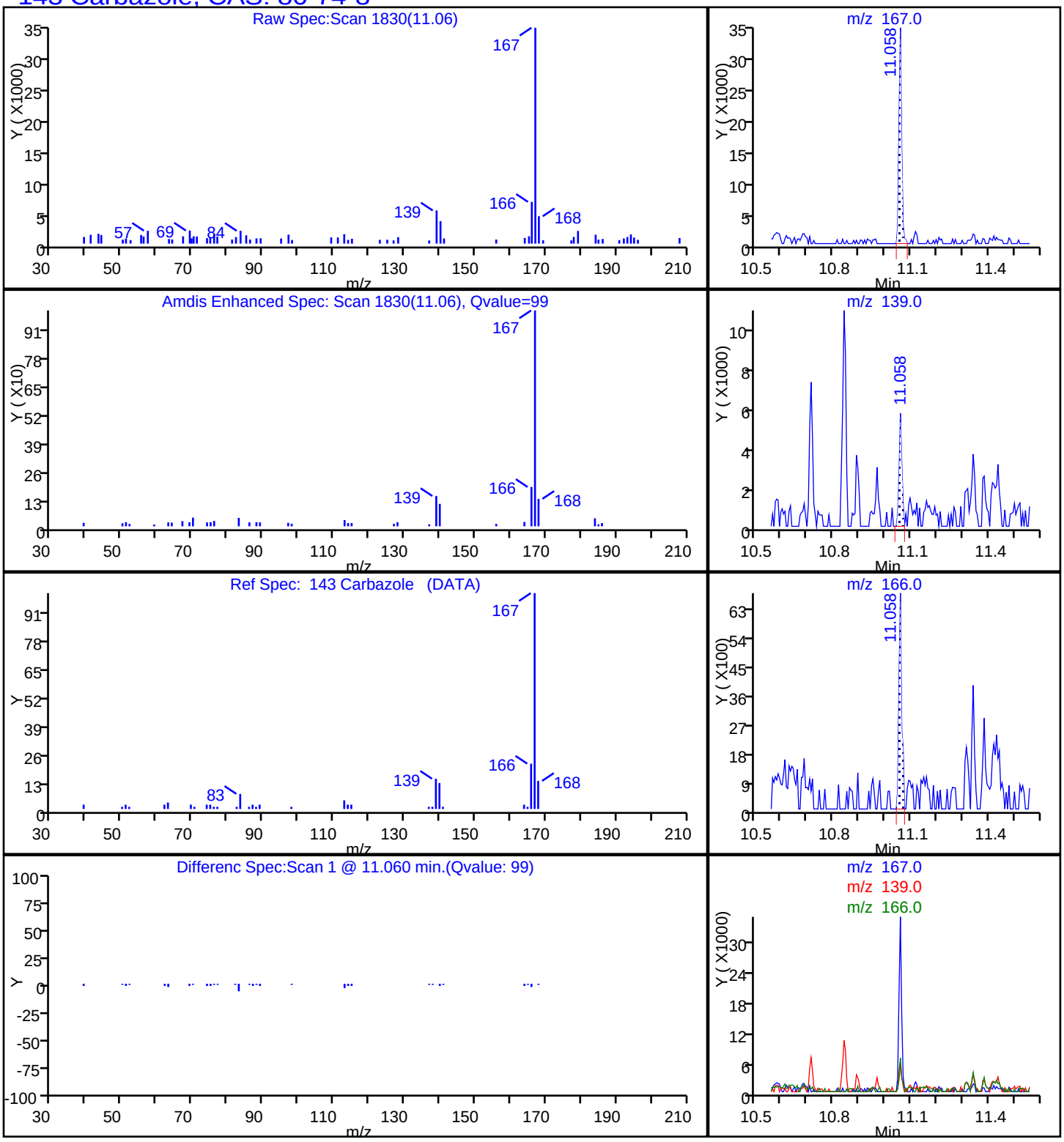
175 Benzo[k]fluoranthene, CAS: 207-08-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

143 Carbazole, CAS: 86-74-8



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
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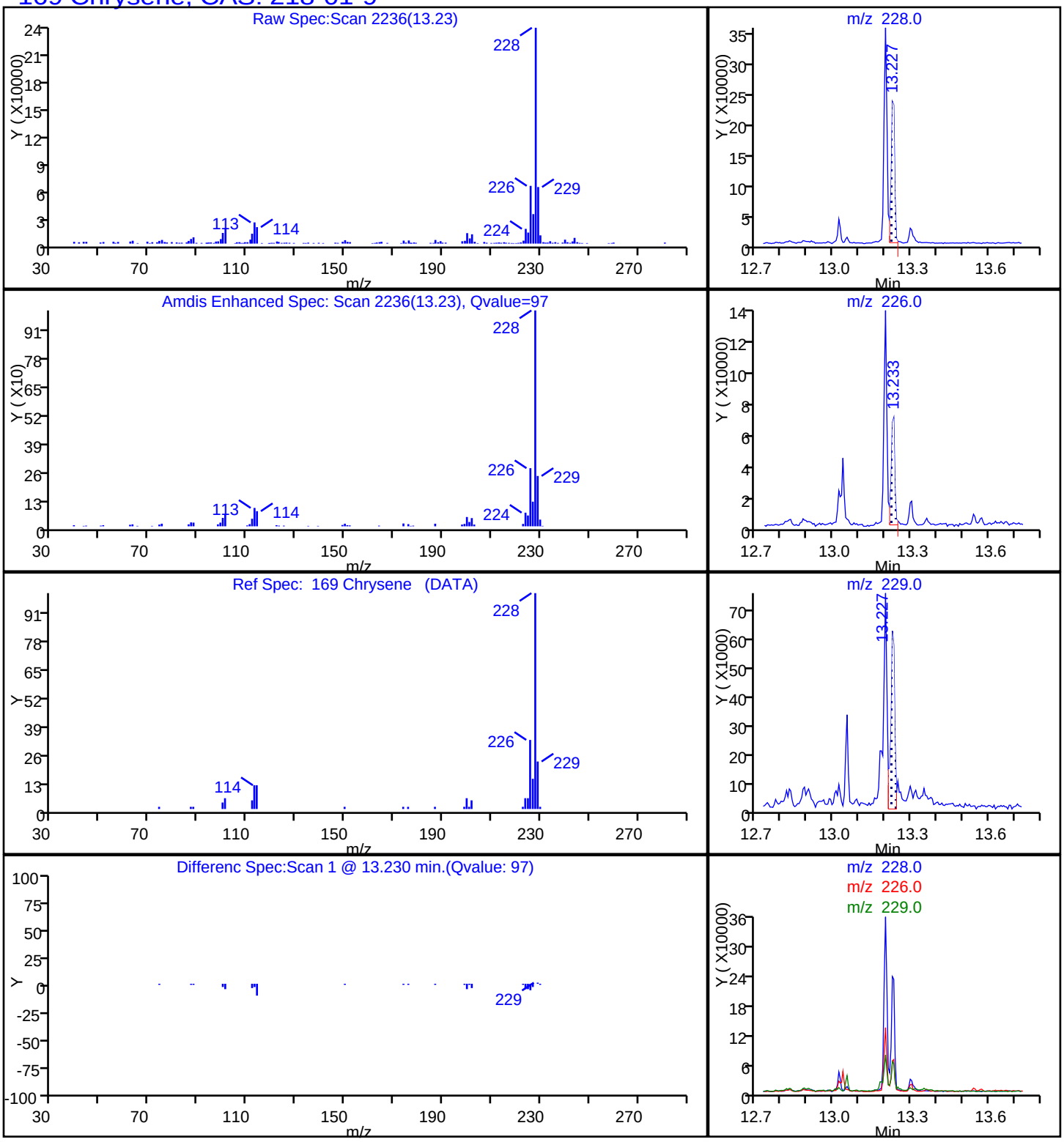
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

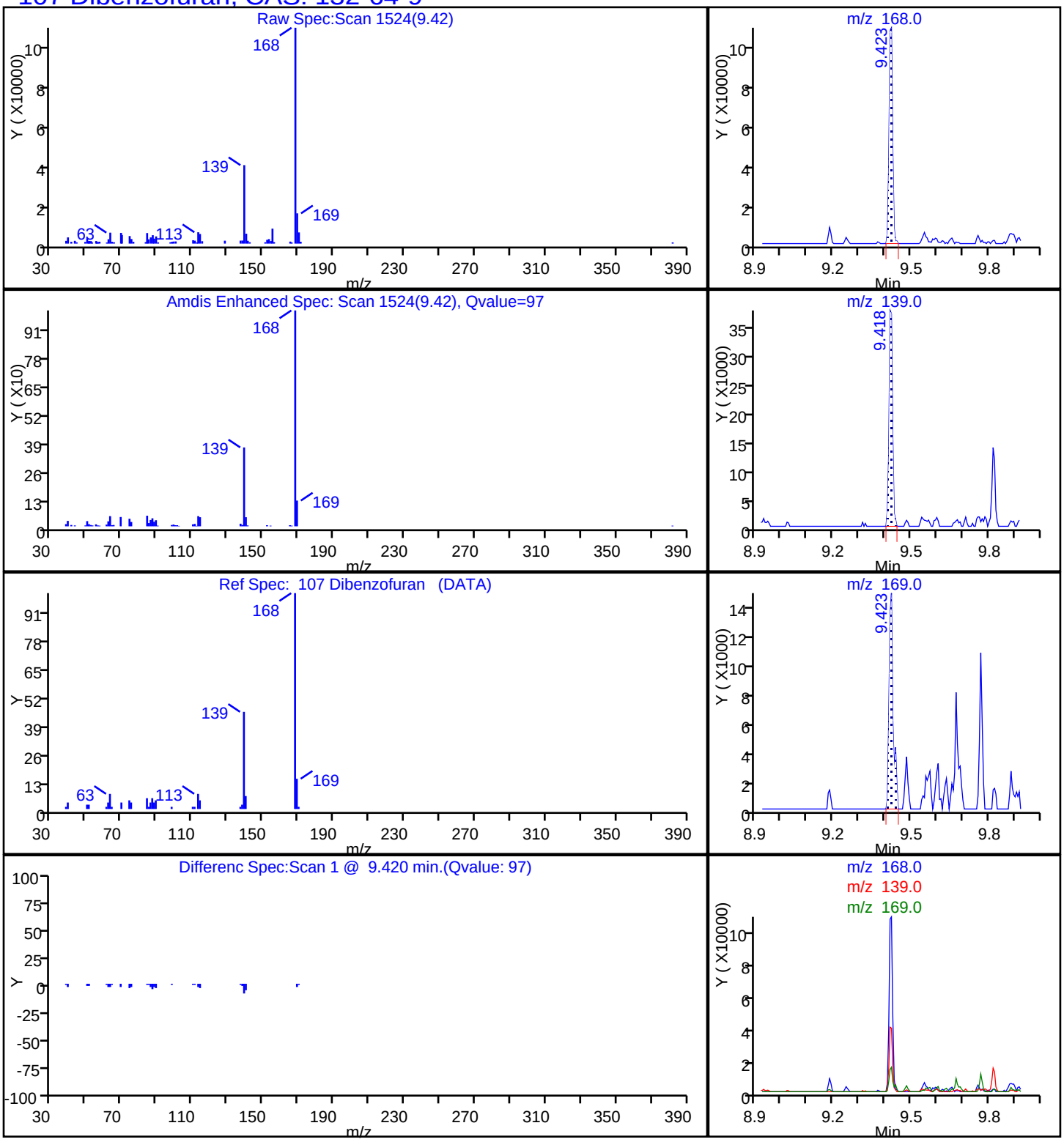
169 Chrysene, CAS: 218-01-9



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

107 Dibenzofuran, CAS: 132-64-9

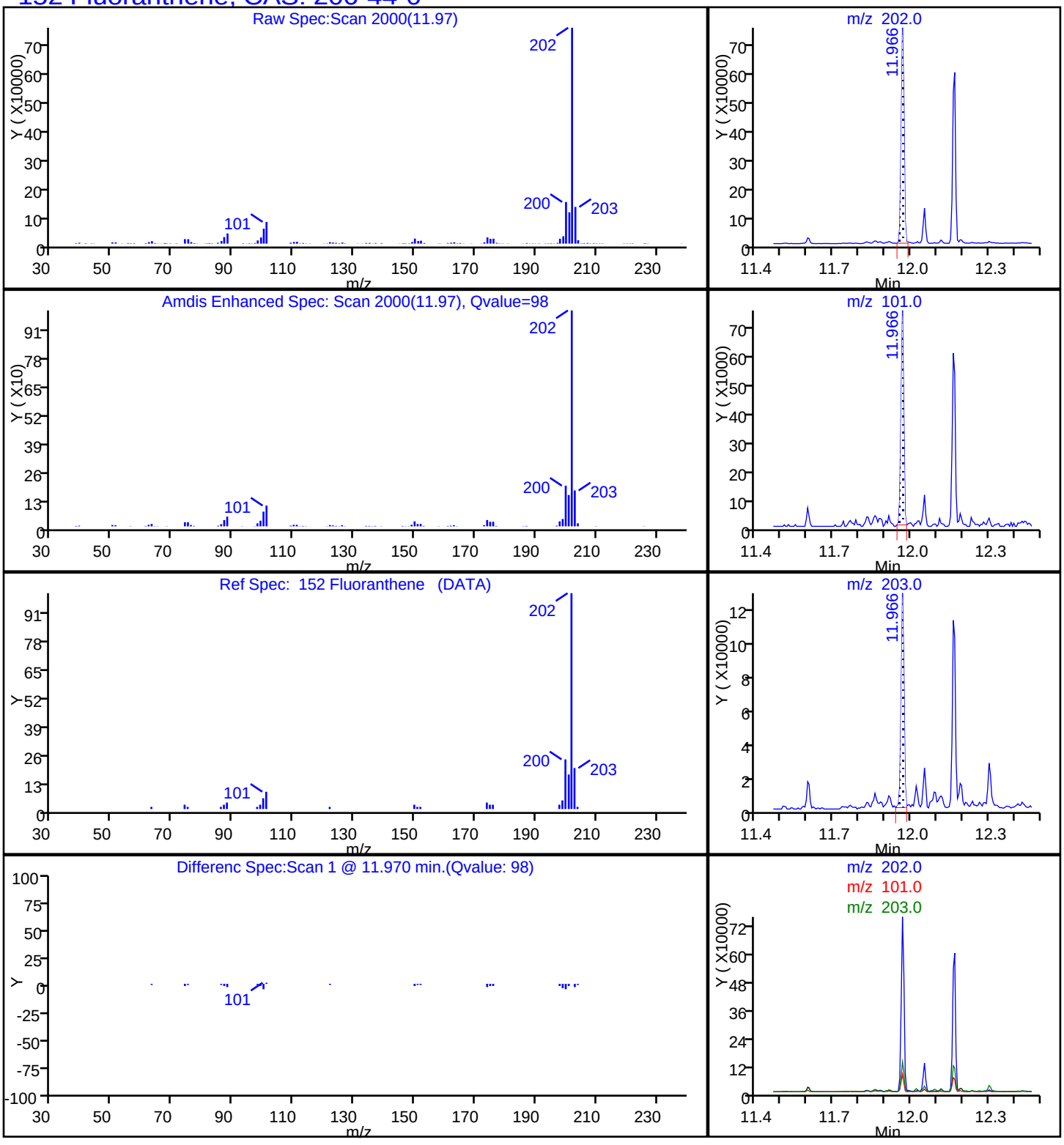


TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D

Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

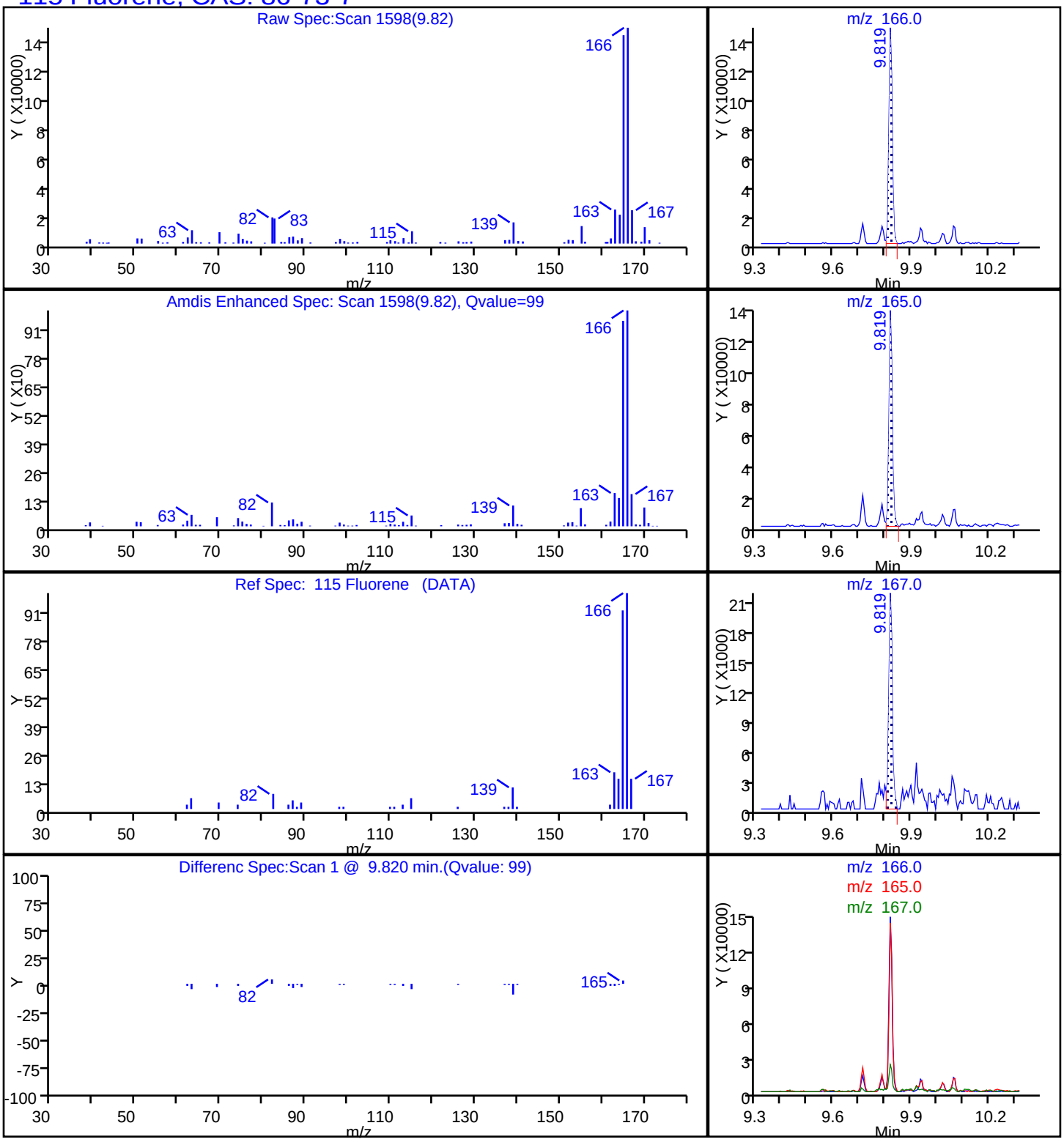
152 Fluoranthene, CAS: 206-44-0



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

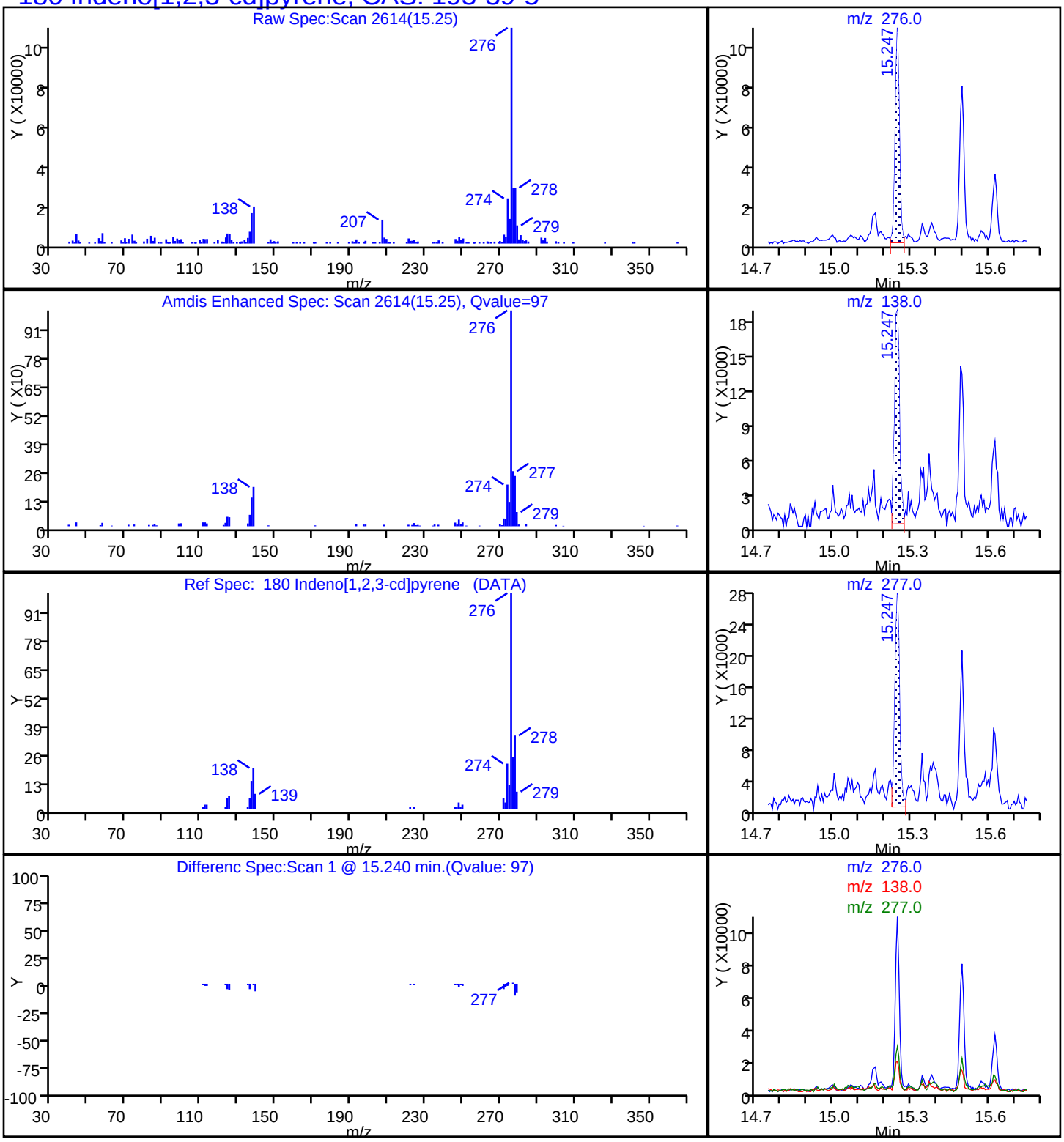
115 Fluorene, CAS: 86-73-7



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

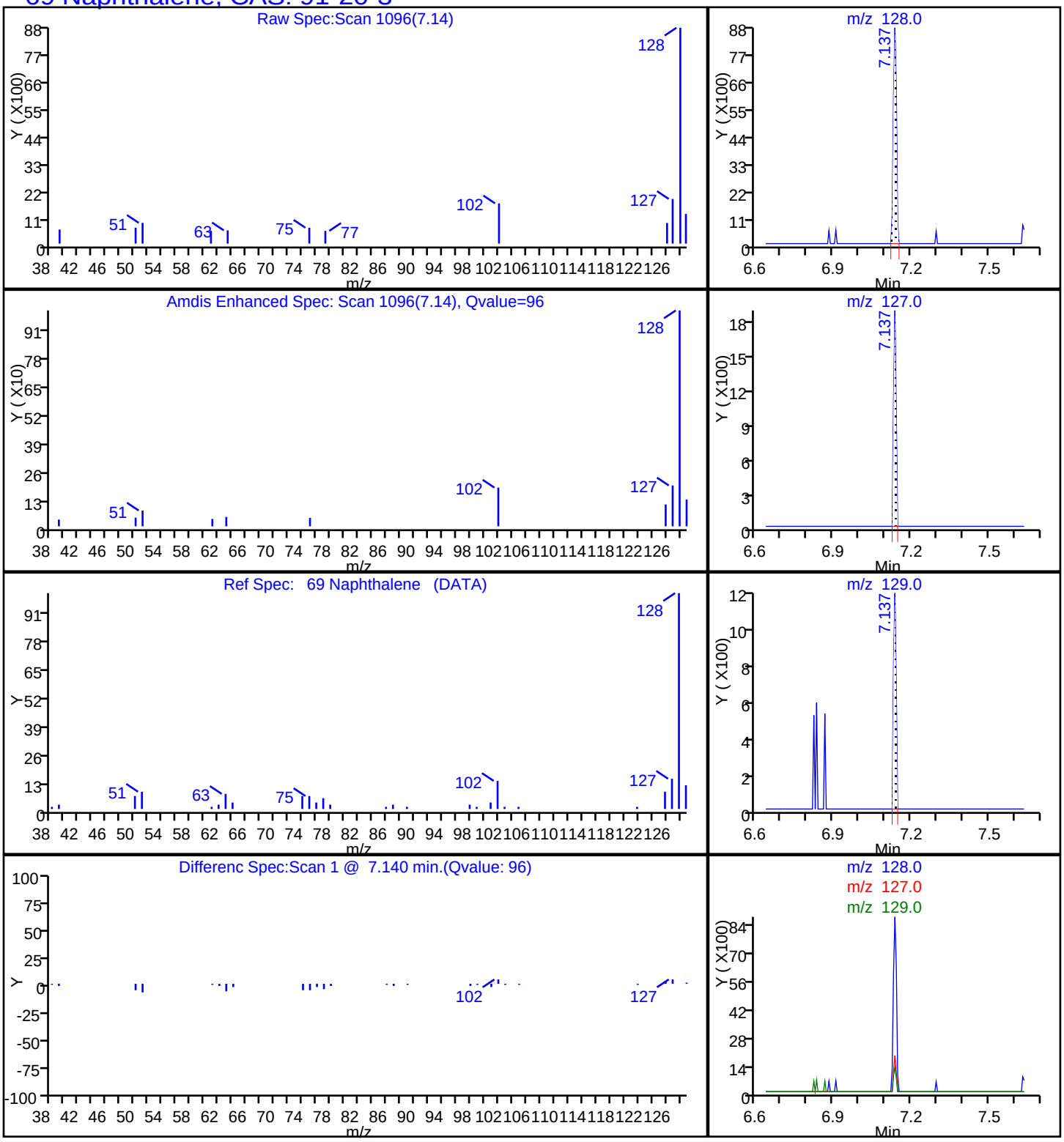
180 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

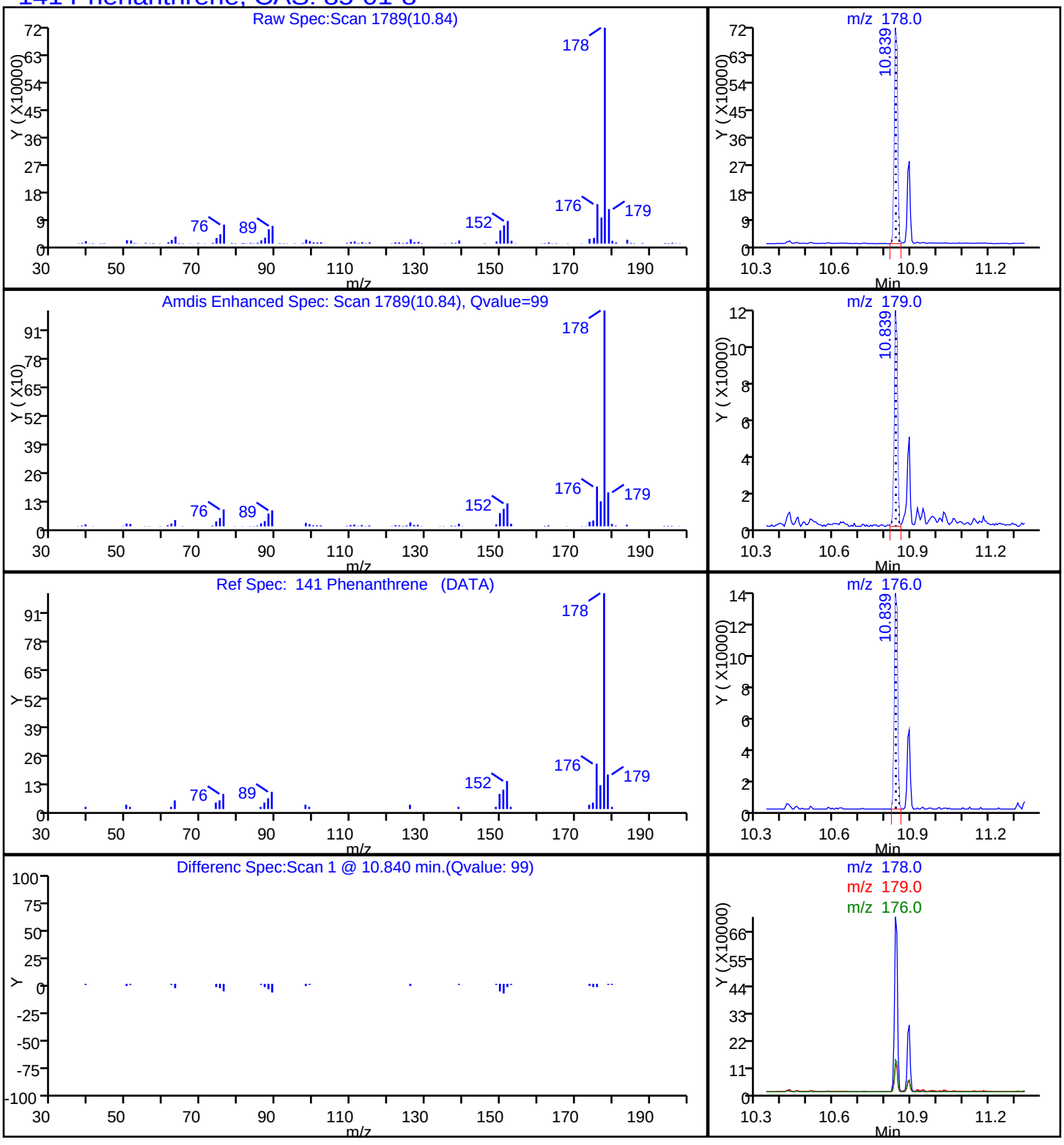
69 Naphthalene, CAS: 91-20-3



Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D

Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

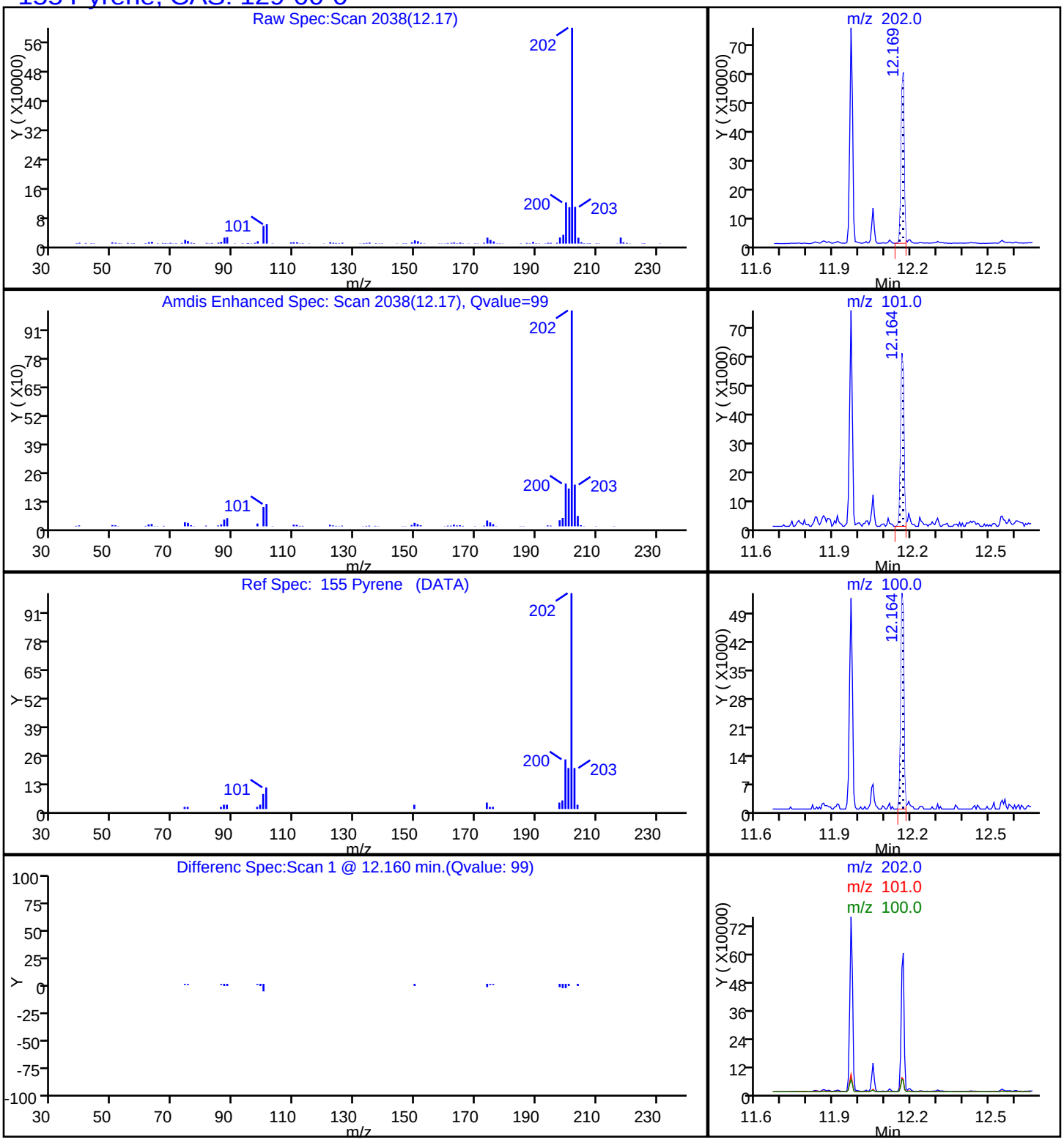
141 Phenanthrene, CAS: 85-01-8



TestAmerica Buffalo

Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

155 Pyrene, CAS: 129-00-0



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

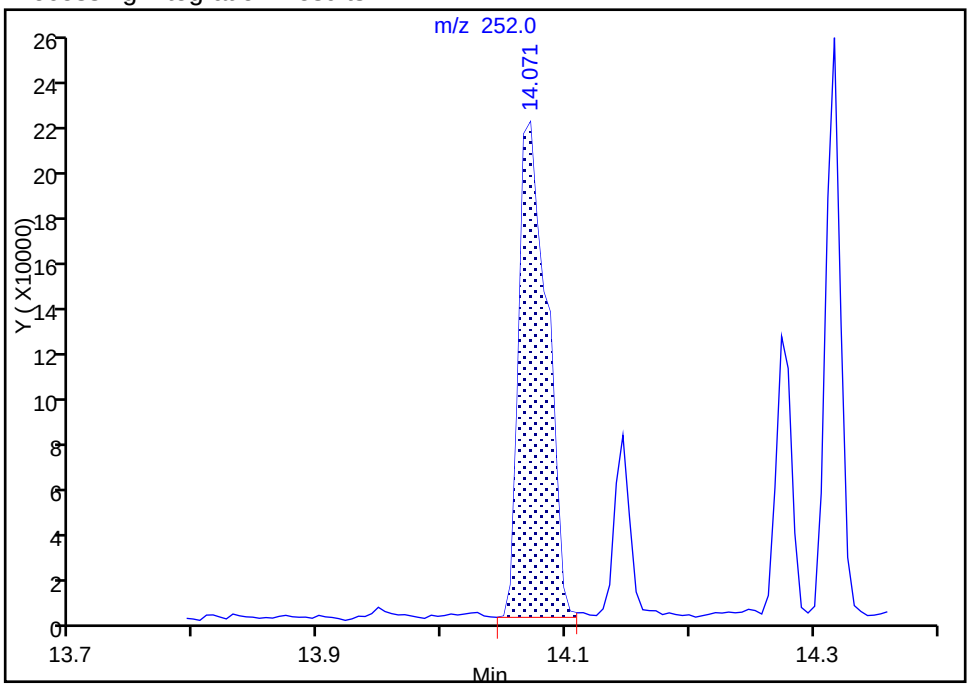
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

174 Benzo[b]fluoranthene, CAS: 205-99-2

Signal: 1

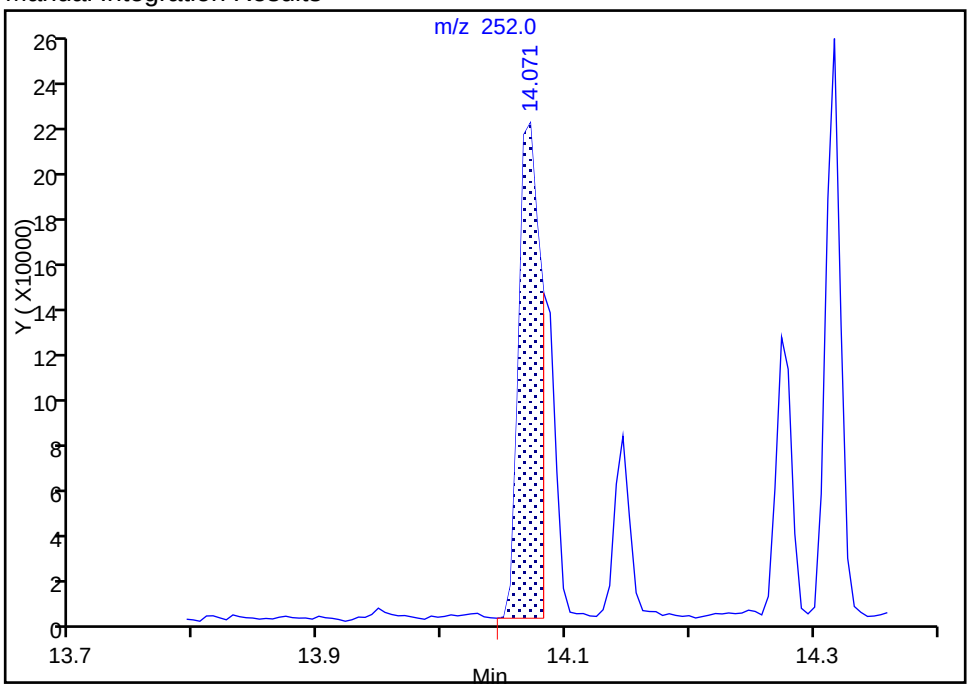
Processing Integration Results

RT: 14.07
Area: 340586
Amount: 16.275737
Amount Units: ng/uL



Manual Integration Results

RT: 14.07
Area: 271948
Amount: 12.995702
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:58:36

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

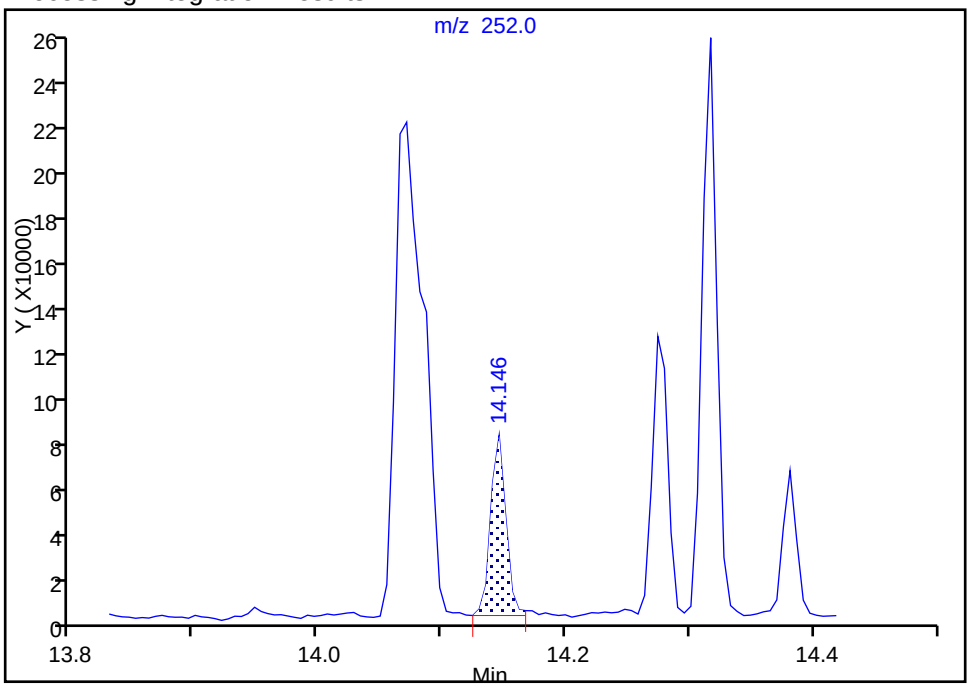
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

175 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

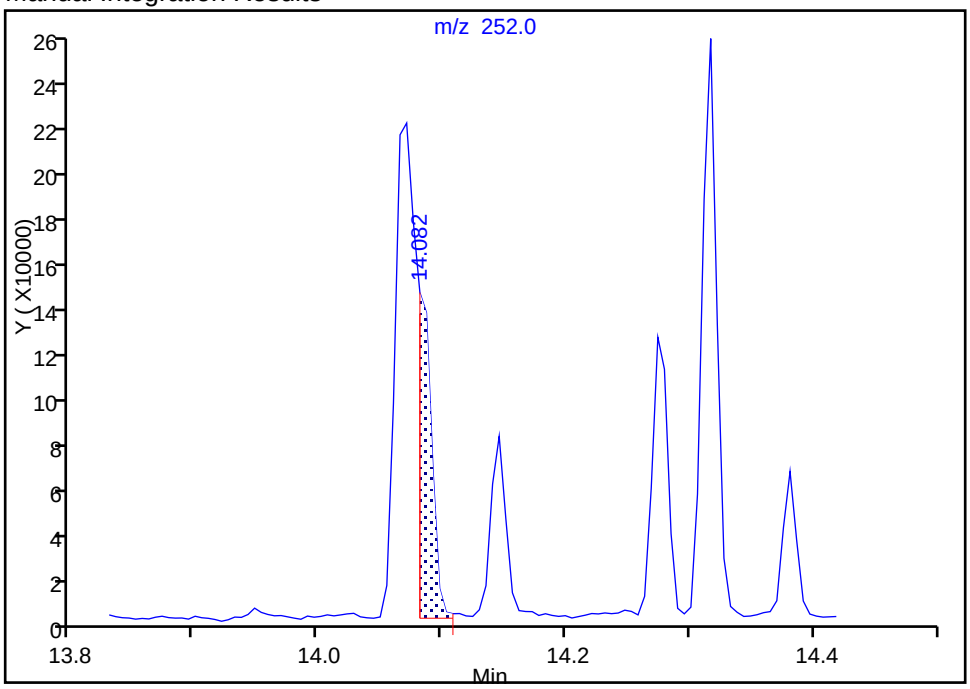
Processing Integration Results

RT: 14.15
Area: 67231
Amount: 3.008705
Amount Units: ng/uL



Manual Integration Results

RT: 14.08
Area: 114066
Amount: 5.104654
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:58:25

Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

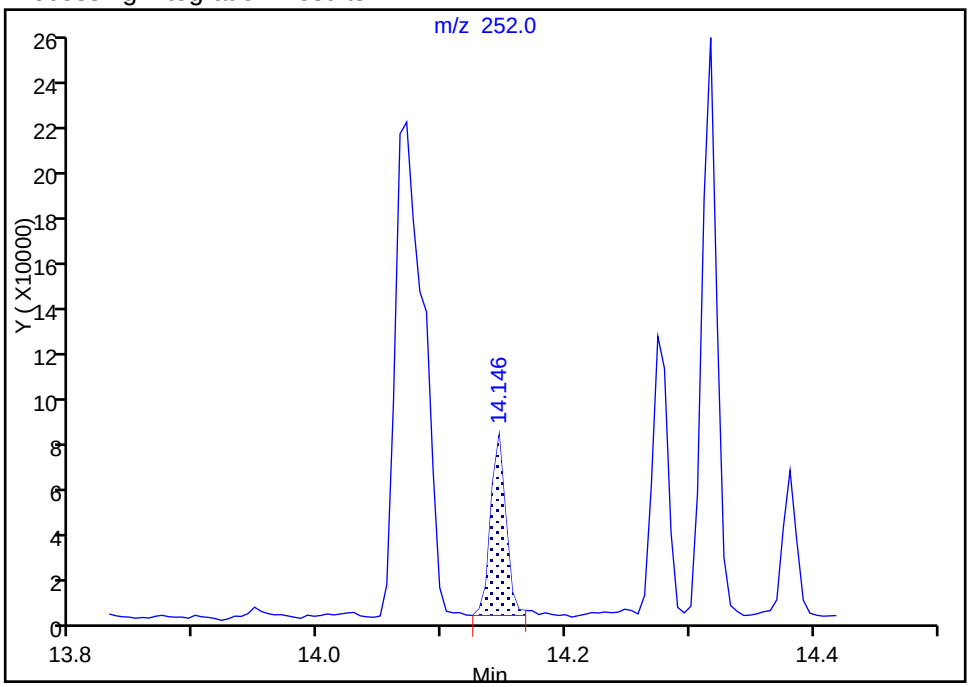
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20527.D				
Injection Date:	13-Oct-2017 08:28:30	Instrument ID:	HP5973X		
Lims ID:	480-125579-E-3-A	Lab Sample ID:	480-125579-3		
Client ID:	DUP-100817				
Operator ID:	DR	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

175 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

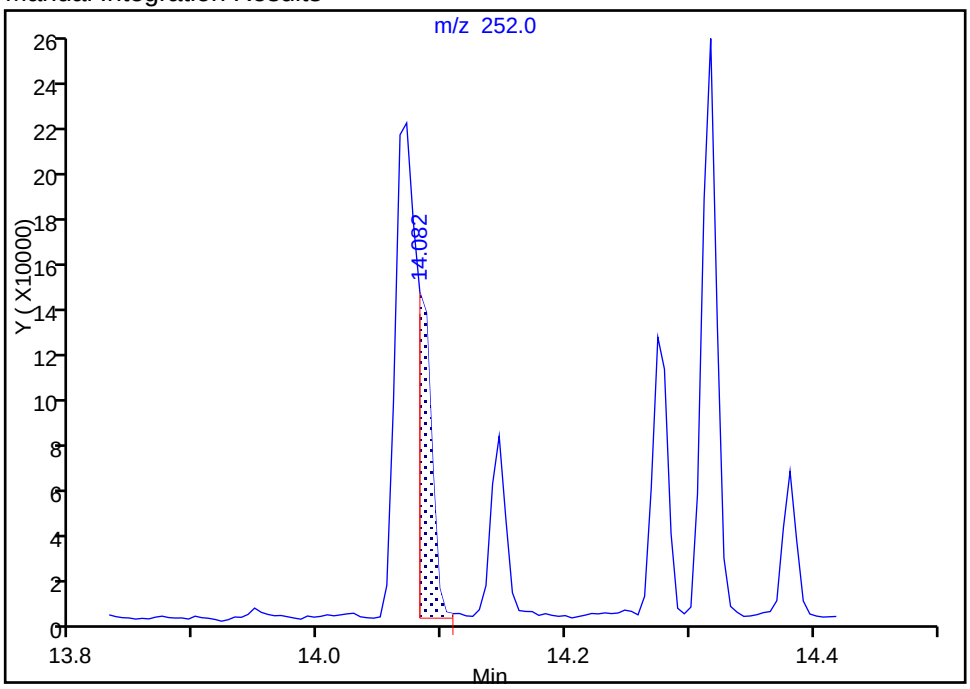
Processing Integration Results

RT: 14.15
Area: 67231
Amount: 3.008705
Amount Units: ng/uL



Manual Integration Results

RT: 14.08
Area: 114066
Amount: 5.104654
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:58:33
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-382005/3	U328217.D
Level 2	IC 480-382005/4	U328218.D
Level 3	ICIS 480-382005/5	U328219.D
Level 4	IC 480-382005/6	U328220.D
Level 5	IC 480-382005/7	U328221.D
Level 6	IC 480-382005/8	U328222.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.4525 0.4327	0.4396	0.4731	0.4549	0.4434	Ave		0.4494				3.2		20.0			
N-Nitrosodimethylamine	0.6774 0.6061	0.6536	0.6664	0.6041	0.6305	Lin1	0.4839	0.6157							0.9990		0.9900
Pyridine	0.9432 0.9258	0.9946	1.0327	0.9406	0.9313	Lin1	0.8775	0.9396							0.9980		0.9900
Benzaldehyde	0.7701 +++++	0.8252	0.7715	0.6564	0.5472	Ave		0.7141			0.0100	15.6		20.0			
Phenol	1.1719 1.1506	1.2296	1.2331	1.1557	1.1677	Ave		1.1848			0.8000	3.1		20.0			
Aniline	1.5252 1.4640	1.5547	1.5385	1.4859	1.4630	Ave		1.5052				2.6		20.0			
Bis(2-chloroethyl)ether	0.9564 0.8843	0.9256	0.9340	0.8703	0.8913	Ave		0.9103			0.7000	3.7		20.0			
2-Chlorophenol	1.1870 1.1309	1.1860	1.1806	1.1536	1.1383	Ave		1.1628			0.8000	2.2		20.0			
n-Decane	1.0366 1.0653	1.2013	1.1924	1.0716	1.0715	Ave		1.1065			0.0100	6.4		20.0			
1,3-Dichlorobenzene	1.4264 1.3819	1.4402	1.4903	1.3886	1.3900	Ave		1.4196				2.9		20.0			
1,4-Dichlorobenzene	1.5459 1.4033	1.4624	1.4973	1.3859	1.3950	Ave		1.4483				4.5		20.0			
Benzyl alcohol	0.6735 0.6914	0.7224	0.7213	0.6775	0.6943	Lin1	0.0686	0.6933							0.9990		0.9900
1,2-Dichlorobenzene	1.3880 1.3257	1.3775	1.4301	1.3168	1.2730	Ave		1.3519				4.2		20.0			
2-Methylphenol	0.9660 0.9319	0.9879	1.0009	0.9324	0.9180	Ave		0.9562			0.7000	3.5		20.0			
bis (2-chloroisopropyl) ether	1.4176 1.1152	1.4145	1.3522	1.2027	1.1637	Ave		1.2776			0.0100	10.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Indene	2.0401 1.8559	1.9625	1.9942	1.8829	1.8424	Ave		1.9297				4.2		20.0			
4-Methylphenol	0.9627 0.9928	1.0171	1.0692	0.9759	0.9835	Ave		1.0002			0.6000	3.8		20.0			
N-Nitrosodi-n-propylamine	0.6674 0.6756	0.6939	0.6803	0.6665	0.6660	Ave		0.6750			0.5000	1.6		20.0			
Acetophenone	1.7349 1.4949	1.5854	1.5882	1.4463	1.5099	Lin1	1.4612	1.4876			0.0100				0.9990		0.9900
Hexachloroethane	0.4969 0.5332	0.5601	0.5708	0.5197	0.5297	Ave		0.5351			0.3000	5.0		20.0			
Nitrobenzene	0.3056 0.3200	0.3176	0.3253	0.3239	0.3108	Ave		0.3172			0.2000	2.4		20.0			
Isophorone	0.5166 0.5340	0.5478	0.5343	0.5442	0.5238	Ave		0.5335			0.4000	2.2		20.0			
2-Nitrophenol	0.1745 0.2012	0.1981	0.1986	0.2013	0.1949	Lin1	-0.111	0.2002			0.1000				1.0000		0.9900
2,4-Dimethylphenol	0.3630 0.3540	0.3609	0.3570	0.3601	0.3508	Ave		0.3576			0.2000	1.3		20.0			
Bis(2-chloroethoxy)methane	0.3231 0.3198	0.3263	0.3317	0.3266	0.3066	Ave		0.3223			0.3000	2.7		20.0			
Benzoic acid	0.1428 0.2476	0.1942	0.2149	0.2307	0.2358	Lin1	-1.915	0.2426							0.9980		0.9900
2,4-Dichlorophenol	0.3178 0.3223	0.3390	0.3453	0.3307	0.3233	Lin1	0.0632	0.3266			0.2000				0.9990		0.9900
1,2,4-Trichlorobenzene	0.3852 0.3797	0.3993	0.3920	0.3826	0.3770	Ave		0.3860				2.2		20.0			
Naphthalene	0.9438 0.9213	0.9555	0.9601	0.9536	0.9043	Ave		0.9398			0.7000	2.4		20.0			
4-Chloroaniline	0.4078 0.3925	0.3991	0.3906	0.4048	0.3886	Ave		0.3973			0.0100	2.0		20.0			
2,6-Dichlorophenol	0.3050 0.3190	0.3290	0.3152	0.3255	0.3145	Ave		0.3180				2.7		20.0			
Hexachlorobutadiene	0.3132 0.3134	0.3129	0.3234	0.3170	0.3052	Ave		0.3142			0.0100	1.9		20.0			
Caprolactam	0.0724 0.0876	0.0911	0.0835	0.0866	0.0869	Lin1	-0.058	0.0876			0.0100				0.9990		0.9900
4-Chloro-3-methylphenol	0.2759 0.2854	0.2801	0.2853	0.3001	0.2807	Lin1	-0.052	0.2872			0.2000				0.9990		0.9900
2-Methylnaphthalene	0.7097 0.6987	0.7128	0.6992	0.7122	0.6875	Ave		0.7033			0.4000	1.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.6843 0.6585	0.6673	0.6669	0.6610	0.6518	Ave		0.6650			0.0100	1.7		20.0			
Hexachlorocyclopentadiene	0.6611 0.7833	0.7353	0.7511	0.7660	0.7626	Lin1	-0.668	0.7763			0.0500				1.0000		0.9900
1,2,4,5-Tetrachlorobenzene	0.8608 0.8621	0.8335	0.8556	0.8438	0.8462	Ave		0.8503			0.0100	1.3		20.0			
2,4,6-Trichlorophenol	0.4685 0.5154	0.5156	0.5214	0.4990	0.5097	Lin1	-0.169	0.5133			0.2000				1.0000		0.9900
2,4,5-Trichlorophenol	0.4686 0.5429	0.5376	0.5575	0.5308	0.5447	Lin1	-0.319	0.5462			0.2000				1.0000		0.9900
Biphenyl	1.7548 1.6895	1.7583	1.7558	1.7122	1.6441	Ave		1.7191			0.0100	2.7		20.0			
2-Chloronaphthalene	1.4007 1.3034	1.3638	1.3504	1.3183	1.2936	Ave		1.3384			0.8000	3.0		20.0			
2-Nitroaniline	0.3338 0.3379	0.3275	0.3414	0.3304	0.3323	Lin1	-0.027	0.3352			0.0100				1.0000		0.9900
Dimethyl phthalate	1.5316 1.5170	1.6115	1.5921	1.5499	1.5101	Ave		1.5520			0.0100	2.7		20.0			
1,3-Dinitrobenzene	0.1064 0.1486	0.1393	0.1423	0.1418	0.1442	Lin1	-0.207	0.1474							1.0000		0.9900
2,6-Dinitrotoluene	0.3057 0.3587	0.3635	0.3582	0.3537	0.3578	Lin1	-0.209	0.3600							1.0000		0.9900
Acenaphthylene	1.9225 1.9158	2.0125	2.0300	1.9423	1.9273	Ave		1.9584			0.9000	2.5		20.0			
3-Nitroaniline	0.3596 0.3666	0.3633	0.3594	0.3685	0.3566	Lin1	-0.022	0.3635			0.0100				1.0000		0.9900
2,4-Dinitrophenol	0.1454 0.2991	0.2310	0.2602	0.2664	0.2876	Lin1	-1.806	0.2930			0.0100				0.9980		0.9900
Acenaphthene	1.4071 1.3420	1.4094	1.3915	1.3299	1.3209	Ave		1.3668			0.9000	3.0		20.0			
4-Nitrophenol	0.2624 0.3221	0.3088	0.3346	0.3263	0.3220	Lin1	-0.576	0.3270			0.0100				1.0000		0.9900
2,4-Dinitrotoluene	0.4181 0.4838	0.4687	0.4853	0.4899	0.4741	Lin1	-0.307	0.4852			0.2000				1.0000		0.9900
Dibenzofuran	2.0714 1.9210	2.1112	1.9897	1.9673	1.9070	Ave		1.9946			0.8000	4.1		20.0			
2,3,4,6-Tetrachlorophenol	0.4342 0.5394	0.4755	0.5437	0.5218	0.5430	Lin1	-0.669	0.5427			0.0100				0.9990		0.9900
Diethyl phthalate	1.6826 1.6441	1.7289	1.6948	1.6418	1.6053	Ave		1.6663			0.0100	2.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Hexadecane	0.7625 0.6957	0.7567	0.7521	0.7228	0.6897	Ave		0.7299			0.0100	4.4		20.0			
4-Chlorophenyl phenyl ether	0.9667 0.8896	0.9195	0.9269	0.8979	0.8924	Ave		0.9155			0.4000	3.2		20.0			
4-Nitroaniline	0.4051 0.3986	0.3842	0.3907	0.3933	0.3818	Lin1	0.0219	0.3912			0.0100				1.0000		0.9900
Fluorene	1.6894 1.5885	1.6308	1.6393	1.5647	1.5591	Ave		1.6120			0.9000	3.1		20.0			
4,6-Dinitro-2-methylphenol	0.0958 0.1408	0.1238	0.1385	0.1468	0.1420	Lin1	-0.524	0.1443			0.0100				0.9990		0.9900
Diphenylamine	0.5944 0.5989	0.6358	0.6229	0.6277	0.6132	Ave		0.6155				2.7		20.0			
N-Nitrosodiphenylamine	0.5082 0.5120	0.5436	0.5325	0.5367	0.5243	Ave		0.5262			0.0100	2.7		20.0			
1,2-Diphenylhydrazine	0.5524 0.5406	0.5677	0.5580	0.5782	0.5413	Ave		0.5564				2.7		20.0			
trans-Azobenzene	0.5524 0.5406	0.5677	0.5580	0.5782	0.5413	Ave		0.5564				2.7		20.0			
4-Bromophenyl phenyl ether	0.2510 0.2803	0.2846	0.2833	0.2883	0.2814	Lin1	-0.116	0.2839			0.1000				1.0000		0.9900
Hexachlorobenzene	0.3423 0.3454	0.3364	0.3386	0.3479	0.3375	Ave		0.3414			0.1000	1.4		20.0			
Atrazine	0.4881 0.4759	0.4963	0.5044	0.4930	0.4638	Ave		0.4869			0.0100	3.0		20.0			
Pentachlorophenol	0.1175 0.1971	0.1622	0.1783	0.1926	0.1904	Lin1	-0.937	0.1962			0.0500				0.9990		0.9900
n-Octadecane	0.3237 0.3262	0.3466	0.3568	0.3523	0.3277	Ave		0.3389			0.0100	4.3		20.0			
Phenanthrene	1.0831 0.9923	1.0577	1.0448	1.0392	0.9997	Ave		1.0361			0.7000	3.3		20.0			
Anthracene	1.1124 1.0329	1.0634	1.0820	1.0961	1.0388	Ave		1.0709			0.7000	3.0		20.0			
Carbazole	0.9661 0.9435	1.0065	0.9829	1.0058	0.9358	Ave		0.9734			0.0100	3.1		20.0			
Di-n-butyl phthalate	1.1685 1.1718	1.2083	1.2285	1.2698	1.1866	Lin1	0.0985	1.2007			0.0100				0.9990		0.9900
Fluoranthene	1.3096 1.2592	1.2870	1.3310	1.3308	1.2545	Ave		1.2954			0.6000	2.6		20.0			
Benzidine	0.5800 0.3601	0.6197	0.5517	0.5109	0.4294	Ave		0.5086				19.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Pyrene	1.1591 0.9938	1.1394	1.0439	1.0232	1.0310	Ave		1.0651			0.6000	6.3		20.0			
Butyl benzyl phthalate	0.4416 0.4449	0.4805	0.4621	0.4576	0.4603	Lin1	0.0774	0.4540			0.0100				0.9990		0.9900
Bis(2-ethylhexyl) phthalate	0.5911 0.6140	0.6353	0.6441	0.6248	0.6112	Lin1	0.0191	0.6191			0.0100				1.0000		0.9900
3,3'-Dichlorobenzidine	0.4528 0.4202	0.4523	0.4463	0.4540	0.4274	Lin1	0.2494	0.4298			0.0100				0.9990		0.9900
Benzo[a]anthracene	1.1382 1.0454	1.1736	1.1165	1.1118	1.0743	Ave		1.1100			0.8000	4.1		20.0			
Chrysene	1.1141 0.9897	1.1117	1.0749	1.0506	1.0114	Ave		1.0587			0.7000	4.9		20.0			
Di-n-octyl phthalate	1.0526 1.0091	1.0465	1.0957	1.0876	0.9927	Lin1	0.4529	1.0249			0.0100				0.9980		0.9900
Benzo[b]fluoranthene	1.2153 1.1786	1.2407	1.2595	1.1788	1.2259	Ave		1.2165			0.7000	2.7		20.0			
Benzo[k]fluoranthene	1.3028 1.2203	1.3658	1.2023	1.2186	1.1386	Ave		1.2414			0.7000	6.5		20.0			
Benzo[a]pyrene	1.1229 1.1205	1.1583	1.1379	1.1399	1.1231	Ave		1.1338			0.7000	1.3		20.0			
Dibenz(a,h)anthracene	1.1313 1.1920	1.0945	1.1783	1.1748	1.1422	Lin1	-0.452	1.1746							0.9990		0.9900
Indeno[1,2,3-cd]pyrene	1.2673 1.3991	1.2899	1.3679	1.3991	1.3553	Lin1	-0.853	1.3887			0.5000				1.0000		0.9900
Benzo[g,h,i]perylene	1.0072 1.1668	1.0628	1.1520	1.1729	1.1309	Lin1	-0.959	1.1629			0.5000				1.0000		0.9900
2-Fluorophenol	1.0471 1.0889	1.0550	1.1241	1.0658	1.0681	Ave		1.0748				2.6		20.0			
Phenol-d5	1.2365 1.2173	1.2421	1.2449	1.1860	1.1949	Ave		1.2203				2.1		20.0			
Nitrobenzene-d5	0.3425 0.3533	0.3448	0.3454	0.3550	0.3431	Ave		0.3474				1.5		20.0			
2-Fluorobiphenyl	1.7888 1.6331	1.7231	1.7211	1.6490	1.6167	Ave		1.6886				3.9		20.0			
2,4,6-Tribromophenol	0.1356 0.1938	0.1722	0.1736	0.1823	0.1862	Lin1	-0.327	0.1901							0.9990		0.9900
p-Terphenyl-d14	0.8273 0.7731	0.8664	0.8239	0.7929	0.8017	Ave		0.8142				4.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-382005/3	U328217.D
Level 2	IC 480-382005/4	U328218.D
Level 3	ICIS 480-382005/5	U328219.D
Level 4	IC 480-382005/6	U328220.D
Level 5	IC 480-382005/7	U328221.D
Level 6	IC 480-382005/8	U328222.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,4-Dioxane	DCBd 4	Ave	6679 187639	29078	58043	100945	152456	5.00 160	20.0	50.0	80.0	120
N-Nitrosodimethylamine	DCBd 4	Lin1	9998 262810	43236	81747	134036	216793	5.00 160	20.0	50.0	80.0	120
Pyridine	DCBd 4	Lin1	27842 802931	131593	253367	417426	640428	10.0 320	40.0	100	160	240
Benzaldehyde	DCBd 4	Ave	11367 +++++	54587	94645	145657	188169	5.00 +++++	20.0	50.0	80.0	120
Phenol	DCBd 4	Ave	17297 498933	81343	151268	256442	401511	5.00 160	20.0	50.0	80.0	120
Aniline	DCBd 4	Ave	22512 634864	102848	188736	329704	503052	5.00 160	20.0	50.0	80.0	120
Bis(2-chloroethyl)ether	DCBd 4	Ave	14116 383488	61228	114585	193106	306460	5.00 160	20.0	50.0	80.0	120
2-Chlorophenol	DCBd 4	Ave	17520 490424	78460	144831	255977	391415	5.00 160	20.0	50.0	80.0	120
n-Decane	DCBd 4	Ave	15300 461960	79467	146281	237781	368437	5.00 160	20.0	50.0	80.0	120
1,3-Dichlorobenzene	DCBd 4	Ave	21053 599245	95276	182822	308111	477945	5.00 160	20.0	50.0	80.0	120
1,4-Dichlorobenzene	DCBd 4	Ave	22817 608533	96743	183683	307509	479651	5.00 160	20.0	50.0	80.0	120
Benzyl alcohol	DCBd 4	Lin1	9941 299798	47790	88484	150321	238717	5.00 160	20.0	50.0	80.0	120
1,2-Dichlorobenzene	DCBd 4	Ave	20486 574893	91126	175445	292178	437729	5.00 160	20.0	50.0	80.0	120
2-Methylphenol	DCBd 4	Ave	14258 404120	65350	122782	206877	315651	5.00 160	20.0	50.0	80.0	120
bis (2-chloroisopropyl) ether	DCBd 4	Ave	20923 483600	93571	165881	266871	400144	5.00 160	20.0	50.0	80.0	120
Indene	DCBd 4	Ave	90336 2414329	389485	733915	1253353	1900518	15.0 480	60.0	150	240	360

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4-Methylphenol	DCBd 4	Ave	14210 430533	67284	131164	216530	338185	5.00 160	20.0	50.0	80.0	120
N-Nitrosodi-n-propylamine	DCBd 4	Ave	9851 292958	45906	83462	147893	229007	5.00 160	20.0	50.0	80.0	120
Acetophenone	DCBd 4	Lin1	25607 648242	104878	194829	320921	519155	5.00 160	20.0	50.0	80.0	120
Hexachloroethane	DCBd 4	Ave	7334 231238	37049	70020	115314	182121	5.00 160	20.0	50.0	80.0	120
Nitrobenzene	NPT	Ave	15257 450182	72069	136728	228448	353606	5.00 160	20.0	50.0	80.0	120
Isophorone	NPT	Ave	25793 751265	124306	224574	383814	595879	5.00 160	20.0	50.0	80.0	120
2-Nitrophenol	NPT	Lin1	8712 283011	44941	83480	141930	221755	5.00 160	20.0	50.0	80.0	120
2,4-Dimethylphenol	NPT	Ave	18122 498032	81885	150046	253943	399066	5.00 160	20.0	50.0	80.0	120
Bis(2-chloroethoxy)methane	NPT	Ave	16132 449911	74038	139398	230325	348768	5.00 160	20.0	50.0	80.0	120
Benzoic acid	NPT	Lin1	21386 1044885	132180	271010	488191	804633	15.0 480	60.0	150	240	360
2,4-Dichlorophenol	NPT	Lin1	15867 453475	76916	145144	233208	367778	5.00 160	20.0	50.0	80.0	120
1,2,4-Trichlorobenzene	NPT	Ave	19230 534186	90602	164739	269848	428936	5.00 160	20.0	50.0	80.0	120
Naphthalene	NPT	Ave	47119 1296233	216809	403521	672497	1028770	5.00 160	20.0	50.0	80.0	120
4-Chloroaniline	NPT	Ave	20360 552253	90565	164183	285489	442151	5.00 160	20.0	50.0	80.0	120
2,6-Dichlorophenol	NPT	Ave	15225 448856	74655	132484	229554	357742	5.00 160	20.0	50.0	80.0	120
Hexachlorobutadiene	NPT	Ave	15634 440896	70991	135936	223535	347213	5.00 160	20.0	50.0	80.0	120
Caprolactam	NPT	Lin1	3613 123303	20663	35095	61096	98906	5.00 160	20.0	50.0	80.0	120
4-Chloro-3-methylphenol	NPT	Lin1	13772 401488	63549	119912	211626	319392	5.00 160	20.0	50.0	80.0	120
2-Methylnaphthalene	NPT	Ave	35431 982977	161740	293887	502276	782142	5.00 160	20.0	50.0	80.0	120
1-Methylnaphthalene	NPT	Ave	34164 926532	151409	280278	466154	741531	5.00 160	20.0	50.0	80.0	120
Hexachlorocyclopentadiene	ANT	Lin1	16499 574261	86466	161143	285305	449502	5.00 160	20.0	50.0	80.0	120

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,4,5-Tetrachlorobenzene	ANT	Ave	21482 632055	98008	183554	314292	498773	5.00 160	20.0	50.0	80.0	120
2,4,6-Trichlorophenol	ANT	Lin1	11692 377867	60628	111865	185870	300399	5.00 160	20.0	50.0	80.0	120
2,4,5-Trichlorophenol	ANT	Lin1	11694 398021	63218	119600	197730	321028	5.00 160	20.0	50.0	80.0	120
Biphenyl	ANT	Ave	43793 1238603	206760	376696	637770	969043	5.00 160	20.0	50.0	80.0	120
2-Chloronaphthalene	ANT	Ave	34955 955571	160374	289724	491061	762434	5.00 160	20.0	50.0	80.0	120
2-Nitroaniline	ANT	Lin1	8330 247691	38506	73240	123086	195843	5.00 160	20.0	50.0	80.0	120
Dimethyl phthalate	ANT	Ave	38221 1112157	189506	341575	577325	890049	5.00 160	20.0	50.0	80.0	120
1,3-Dinitrobenzene	NPT	Lin1	5311 209088	31606	59810	100017	164037	5.00 160	20.0	50.0	80.0	120
2,6-Dinitrotoluene	ANT	Lin1	7630 262984	42749	76844	131731	210893	5.00 160	20.0	50.0	80.0	120
Acenaphthylene	ANT	Ave	47978 1404535	236654	435525	723489	1135992	5.00 160	20.0	50.0	80.0	120
3-Nitroaniline	ANT	Lin1	8973 268759	42725	77115	137256	210202	5.00 160	20.0	50.0	80.0	120
2,4-Dinitrophenol	ANT	Lin1	7255 438566	54337	111650	198496	338997	10.0 320	40.0	100	160	240
Acenaphthene	ANT	Ave	35116 983815	165730	298524	495348	778548	5.00 160	20.0	50.0	80.0	120
4-Nitrophenol	ANT	Lin1	13097 472262	72623	143551	243103	379629	10.0 320	40.0	100	160	240
2,4-Dinitrotoluene	ANT	Lin1	10435 354649	55118	104126	182495	279416	5.00 160	20.0	50.0	80.0	120
Dibenzofuran	ANT	Ave	51694 1408292	248267	426874	732780	1123991	5.00 160	20.0	50.0	80.0	120
2,3,4,6-Tetrachlorophenol	ANT	Lin1	10837 395409	55916	116649	194345	320051	5.00 160	20.0	50.0	80.0	120
Diethyl phthalate	ANT	Ave	41991 1205323	203310	363600	611551	946191	5.00 160	20.0	50.0	80.0	120
Hexadecane	ANT	Ave	19028 510038	88988	161347	269224	406496	5.00 160	20.0	50.0	80.0	120
4-Chlorophenyl phenyl ether	ANT	Ave	24125 652153	108129	198856	334469	525991	5.00 160	20.0	50.0	80.0	120
4-Nitroaniline	ANT	Lin1	10109 292219	45174	83823	146481	225033	5.00 160	20.0	50.0	80.0	120

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Fluorene	ANT	Ave	42159 1164531	191771	351698	582830	918965	5.00 160	20.0	50.0	80.0	120
4,6-Dinitro-2-methylphenol	PHN	Lin1	10642 458892	64248	133795	234551	364282	10.0 320	40.0	100	160	240
Diphenylamine	PHN	Ave	28212 834573	141018	257141	428671	672591	4.28 137	17.1	42.8	68.4	103
N-Nitrosodiphenylamine	PHN	Ave	28212 834573	141018	257141	428671	672591	5.00 160	20.0	50.0	80.0	120
1,2-Diphenylhydrazine	PHN	Ave	30668 881132	147271	269454	461865	694459	5.00 160	20.0	50.0	80.0	120
trans-Azobenzene	PHN	Ave	30668 881132	147271	269454	461865	694459	5.00 160	20.0	50.0	80.0	120
4-Bromophenyl phenyl ether	PHN	Lin1	13933 456944	73822	136771	230275	360930	5.00 160	20.0	50.0	80.0	120
Hexachlorobenzene	PHN	Ave	19003 563046	87278	163499	277875	432972	5.00 160	20.0	50.0	80.0	120
Atrazine	ANT	Ave	12181 348865	58364	108214	183637	273344	5.00 160	20.0	50.0	80.0	120
Pentachlorophenol	PHN	Lin1	13044 642536	84152	172166	307624	488501	10.0 320	40.0	100	160	240
n-Octadecane	PHN	Ave	17969 531712	89915	172306	281390	420432	5.00 160	20.0	50.0	80.0	120
Phenanthrene	PHN	Ave	60129 1617351	274396	504504	830110	1282417	5.00 160	20.0	50.0	80.0	120
Anthracene	PHN	Ave	61756 1683633	275860	522440	875484	1332632	5.00 160	20.0	50.0	80.0	120
Carbazole	PHN	Ave	53634 1537783	261091	474608	803394	1200420	5.00 160	20.0	50.0	80.0	120
Di-n-butyl phthalate	PHN	Lin1	64870 1910030	313460	593185	1014232	1522167	5.00 160	20.0	50.0	80.0	120
Fluoranthene	PHN	Ave	72703 2052351	333877	642707	1062995	1609335	5.00 160	20.0	50.0	80.0	120
Benzidine	CRY	Ave	37905 759973	189425	341983	546187	681547	5.00 160	20.0	50.0	80.0	120
Pyrene	CRY	Ave	75753 2097220	348280	647109	1093778	1636492	5.00 160	20.0	50.0	80.0	120
Butyl benzyl phthalate	CRY	Lin1	28857 938881	146891	286420	489204	730669	5.00 160	20.0	50.0	80.0	120
Bis(2-ethylhexyl) phthalate	CRY	Lin1	38627 1295748	194200	399253	667937	970162	5.00 160	20.0	50.0	80.0	120
3,3'-Dichlorobenzidine	CRY	Lin1	29592 886817	138260	276649	485362	678363	5.00 160	20.0	50.0	80.0	120

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 382005

SDG No.:

Instrument ID: HP5973U GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/16/2017 12:07 Calibration End Date: 10/16/2017 14:19 Calibration ID: 31736

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Benzo[a]anthracene	CRY	Ave	74385 2206157	358748	692095	1188534	1705245	5.00 160	20.0	50.0	80.0	120
Chrysene	CRY	Ave	72809 2088585	339813	666322	1123032	1605383	5.00 160	20.0	50.0	80.0	120
Di-n-octyl phthalate	CRY	Lin1	68792 2129479	319889	679167	1162583	1575722	5.00 160	20.0	50.0	80.0	120
Benzo[b]fluoranthene	PRY	Ave	71368 2324181	330655	752011	1241915	1810863	5.00 160	20.0	50.0	80.0	120
Benzo[k]fluoranthene	PRY	Ave	76506 2406450	363992	717810	1283839	1681884	5.00 160	20.0	50.0	80.0	120
Benzo[a]pyrene	PRY	Ave	65943 2209732	308679	679386	1200876	1659049	5.00 160	20.0	50.0	80.0	120
Dibenz(a,h)anthracene	PRY	Lin1	66439 2350717	291690	703518	1237617	1687235	5.00 160	20.0	50.0	80.0	120
Indeno[1,2,3-cd]pyrene	PRY	Lin1	74423 2759131	343765	816722	1473985	2002058	5.00 160	20.0	50.0	80.0	120
Benzo[g,h,i]perylene	PRY	Lin1	59152 2300944	283223	687830	1235621	1670512	5.00 160	20.0	50.0	80.0	120
2-Fluorophenol	DCBd 4	Ave	15455 472211	69791	137899	236489	367264	5.00 160	20.0	50.0	80.0	120
Phenol-d5	DCBd 4	Ave	18251 527891	82167	152714	263158	410850	5.00 160	20.0	50.0	80.0	120
Nitrobenzene-d5	NPT	Ave	17101 497034	78242	145189	250338	390285	5.00 160	20.0	50.0	80.0	120
2-Fluorobiphenyl	ANT	Ave	44641 1197242	202627	369246	614225	952866	5.00 160	20.0	50.0	80.0	120
2,4,6-Tribromophenol	PHN	Lin1	7526 315899	44674	83809	145633	238872	5.00 160	20.0	50.0	80.0	120
p-Terphenyl-d14	CRY	Ave	54064 1631518	264856	510689	847550	1272543	5.00 160	20.0	50.0	80.0	120

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328217.D
Lims ID: IC - List1 5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 16-Oct-2017 12:07:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC - LIST1 5
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-U-8270*sub56

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 16-Oct-2017 16:51:08 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: richardsd Date: 16-Oct-2017 13:12:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	94	118079	40.0	40.0	
* 2 Naphthalene-d8	136	8.226	8.231	-0.005	99	399397	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	96	199646	40.0	40.0	
* 4 Phenanthrene-d10	188	11.811	11.811	0.000	96	444128	40.0	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	96	522821	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	99	469811	40.0	40.0	
$ 7 2-Fluorophenol	112	5.095	5.095	0.000	93	15455	5.00	4.87	
$ 8 Phenol-d5	99	6.228	6.228	0.000	94	18251	5.00	5.07	
$ 9 Nitrobenzene-d5	82	7.355	7.355	0.000	92	17101	5.00	4.93	
$ 10 2-Fluorobiphenyl	172	9.492	9.492	0.000	98	44641	5.00	5.30	
$ 11 2,4,6-Tribromophenol	330	11.121	11.121	0.000	89	7526	5.00	5.28	
$ 12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	54064	5.00	5.08	
23 1,4-Dioxane	88	2.611	2.606	0.005	96	6679	5.00	5.03	
24 N-Nitrosodimethylamine	42	3.087	3.087	0.000	80	9998	5.00	4.71	
25 Pyridine	52	3.183	3.188	-0.005	88	27842	10.0	9.10	
32 Benzaldehyde	77	6.175	6.174	0.000	89	11367	5.00	5.39	
33 Phenol	94	6.244	6.249	-0.005	95	17297	5.00	4.95	
34 Aniline	93	6.297	6.303	-0.006	98	22512	5.00	5.07	
35 Bis(2-chloroethyl)ether	93	6.356	6.361	-0.005	99	14116	5.00	5.25	
37 2-Chlorophenol	128	6.458	6.458	0.000	91	17520	5.00	5.10	
38 n-Decane	57	6.506	6.506	0.000	90	15300	5.00	4.68	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	96	21053	5.00	5.02	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	94	22817	5.00	5.34	
41 Benzyl alcohol	108	6.848	6.848	0.000	88	9941	5.00	4.76	
42 1,2-Dichlorobenzene	146	6.917	6.917	0.000	94	20486	5.00	5.13	
43 2-Methylphenol	108	6.971	6.976	-0.006	95	14258	5.00	5.05	
44 2,2'-oxybis[1-chloropropan	45	7.008	7.008	0.000	50	20923	5.00	5.55	
45 Indene	115	7.024	7.024	0.000	89	90336	15.0	15.9	
46 4-Methylphenol	108	7.152	7.152	0.000	88	14210	5.00	4.81	
47 N-Nitrosodi-n-propylamine	70	7.157	7.163	-0.006	93	9851	5.00	4.94	
49 Acetophenone	105	7.168	7.168	0.000	95	25607	5.00	4.85	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
53 Hexachloroethane	117	7.328	7.334	-0.006	83	7334	5.00	4.64	
54 Nitrobenzene	77	7.377	7.376	0.000	90	15257	5.00	4.82	
56 Isophorone	82	7.654	7.654	0.000	96	25793	5.00	4.84	
59 2-Nitrophenol	139	7.761	7.761	0.000	92	8712	5.00	4.91	
60 2,4-Dimethylphenol	107	7.788	7.788	0.000	96	18122	5.00	5.08	
62 Bis(2-chloroethoxy)methane	93	7.895	7.895	0.000	98	16132	5.00	5.01	
64 Benzoic acid	105	7.847	7.900	-0.053	68	21386	15.0	16.7	M
67 2,4-Dichlorophenol	162	8.044	8.044	0.000	89	15867	5.00	4.67	
68 1,2,4-Trichlorobenzene	180	8.156	8.156	0.000	92	19230	5.00	4.99	
70 Naphthalene	128	8.253	8.253	0.000	97	47119	5.00	5.02	
72 4-Chloroaniline	127	8.290	8.295	-0.005	95	20360	5.00	5.13	
73 2,6-Dichlorophenol	162	8.311	8.317	-0.006	93	15225	5.00	4.79	
74 Hexachlorobutadiene	225	8.402	8.408	-0.006	92	15634	5.00	4.98	
76 Caprolactam	113	8.648	8.675	-0.027	1	3613	5.00	4.80	M
80 4-Chloro-3-methylphenol	107	8.851	8.856	-0.005	93	13772	5.00	4.99	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	92	35431	5.00	5.05	
85 1-Methylnaphthalene	142	9.188	9.193	-0.005	90	34164	5.00	5.15	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	89	16499	5.00	5.12	
87 1,2,4,5-Tetrachlorobenzene	216	9.278	9.278	0.000	97	21482	5.00	5.06	
89 2,4,6-Trichlorophenol	196	9.396	9.401	-0.005	88	11692	5.00	4.89	
91 2,4,5-Trichlorophenol	196	9.439	9.444	-0.005	95	11694	5.00	4.87	
94 1,1'-Biphenyl	154	9.615	9.620	-0.005	94	43793	5.00	5.10	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	96	34955	5.00	5.23	
98 2-Nitroaniline	65	9.748	9.748	0.000	87	8330	5.00	5.06	
102 Dimethyl phthalate	163	9.946	9.946	0.000	98	38221	5.00	4.93	
103 1,3-Dinitrobenzene	168	9.984	9.984	0.000	86	5311	5.00	5.02	
104 2,6-Dinitrotoluene	165	10.016	10.021	-0.005	92	7630	5.00	4.83	
105 Acenaphthylene	152	10.133	10.133	0.000	96	47978	5.00	4.91	
106 3-Nitroaniline	138	10.208	10.213	-0.005	89	8973	5.00	5.01	
107 2,4-Dinitrophenol	184	10.325	10.325	0.000	69	7255	10.0	11.1	
108 Acenaphthene	153	10.325	10.331	-0.006	91	35116	5.00	5.15	
109 4-Nitrophenol	109	10.374	10.379	-0.005	88	13097	10.0	9.79	
111 2,4-Dinitrotoluene	165	10.464	10.470	-0.006	93	10435	5.00	4.94	
112 Dibenzofuran	168	10.512	10.512	0.000	94	51694	5.00	5.19	
116 2,3,4,6-Tetrachlorophenol	232	10.641	10.641	0.000	67	10837	5.00	5.23	
118 Diethyl phthalate	149	10.715	10.721	-0.006	98	41991	5.00	5.05	
119 Hexadecane	57	10.737	10.737	0.000	90	19028	5.00	5.22	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	87	24125	5.00	5.28	
122 4-Nitroaniline	138	10.865	10.870	-0.005	81	10109	5.00	5.12	
123 Fluorene	166	10.876	10.876	0.000	97	42159	5.00	5.24	
125 4,6-Dinitro-2-methylphenol	198	10.908	10.908	0.000	84	10642	10.0	10.3	
128 Diphenylamine	169	10.972	10.977	-0.005	94	28212	4.28	4.13	
127 N-Nitrosodiphenylamine	169	10.972	10.977	-0.005	61	28212	5.00	4.83	
130 Azobenzene	77	11.020	11.025	-0.005	94	30668	5.00	4.96	
129 1,2-Diphenylhydrazine	77	11.020	11.025	-0.005	95	30668	5.00	4.96	
137 4-Bromophenyl phenyl ether	248	11.356	11.356	0.000	61	13933	5.00	4.83	
139 Hexachlorobenzene	284	11.447	11.453	-0.006	93	19003	5.00	5.01	
141 Atrazine	200	11.485	11.485	0.000	91	12181	5.00	5.01	
143 Pentachlorophenol	266	11.624	11.629	-0.005	92	13044	10.0	10.8	
144 n-Octadecane	57	11.645	11.650	-0.005	94	17969	5.00	4.78	
150 Phenanthrene	178	11.832	11.832	0.000	96	60129	5.00	5.23	
151 Anthracene	178	11.880	11.880	0.000	96	61756	5.00	5.19	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
152 Carbazole	167	12.014	12.014	0.000	95	53634	5.00	4.96	
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	99	64870	5.00	4.78	
162 Fluoranthene	202	12.922	12.922	0.000	94	72703	5.00	5.05	
164 Benzidine	184	12.997	12.997	0.000	98	37905	5.00	5.70	
165 Pyrene	202	13.130	13.125	0.005	98	75753	5.00	5.44	
172 Butyl benzyl phthalate	149	13.616	13.616	0.000	93	28857	5.00	4.69	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	94	38627	5.00	4.74	
179 3,3'-Dichlorobenzidine	252	14.124	14.124	0.000	71	29592	5.00	4.69	
181 Benzo[a]anthracene	228	14.183	14.183	0.001	95	74385	5.00	5.13	
182 Chrysene	228	14.215	14.215	0.000	94	72809	5.00	5.26	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	97	68792	5.00	4.69	
185 Benzo[b]fluoranthene	252	15.240	15.240	0.000	94	71368	5.00	5.00	
187 Benzo[k]fluoranthene	252	15.267	15.267	0.000	96	76506	5.00	5.25	
190 Benzo[a]pyrene	252	15.625	15.625	0.000	74	65943	5.00	4.95	
193 Dibenz(a,h)anthracene	278	17.169	17.174	-0.005	78	66439	5.00	5.20	
194 Indeno[1,2,3-cd]pyrene	276	17.174	17.180	-0.006	94	74423	5.00	5.18	
195 Benzo[g,h,i]perylene	276	17.634	17.639	-0.005	95	59152	5.00	5.16	
S 257 3 & 4 Methylphenol	108				0			4.81	
S 254 Total Cresols	1				0			9.86	
S 256 3-Methylphenol	1				0			4.81	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LIST1_WRK_00520	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

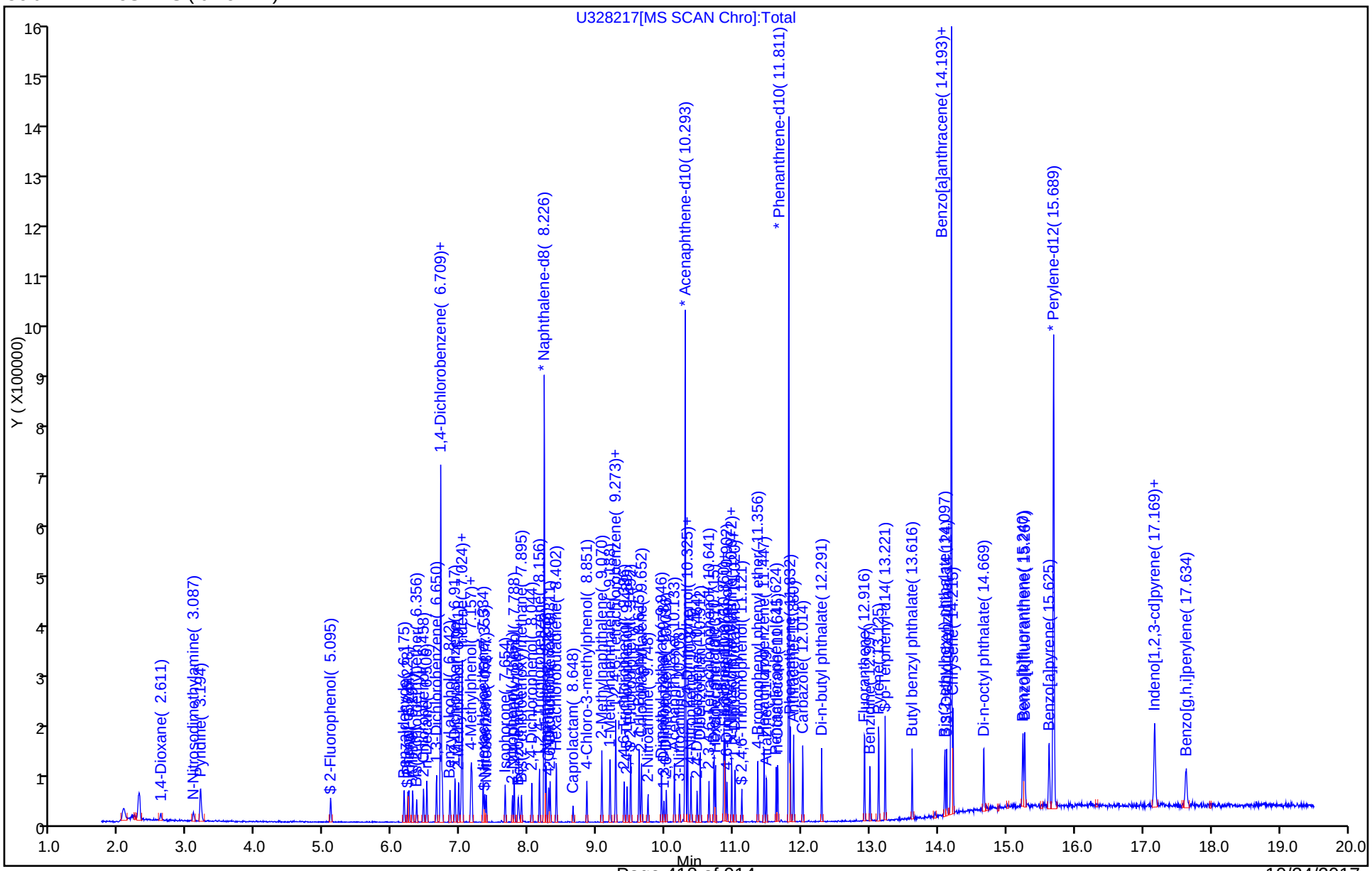
Report Date: 16-Oct-2017 16:51:09 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328217.D

Injection Date:	16-Oct-2017 12:07:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - List1 5			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

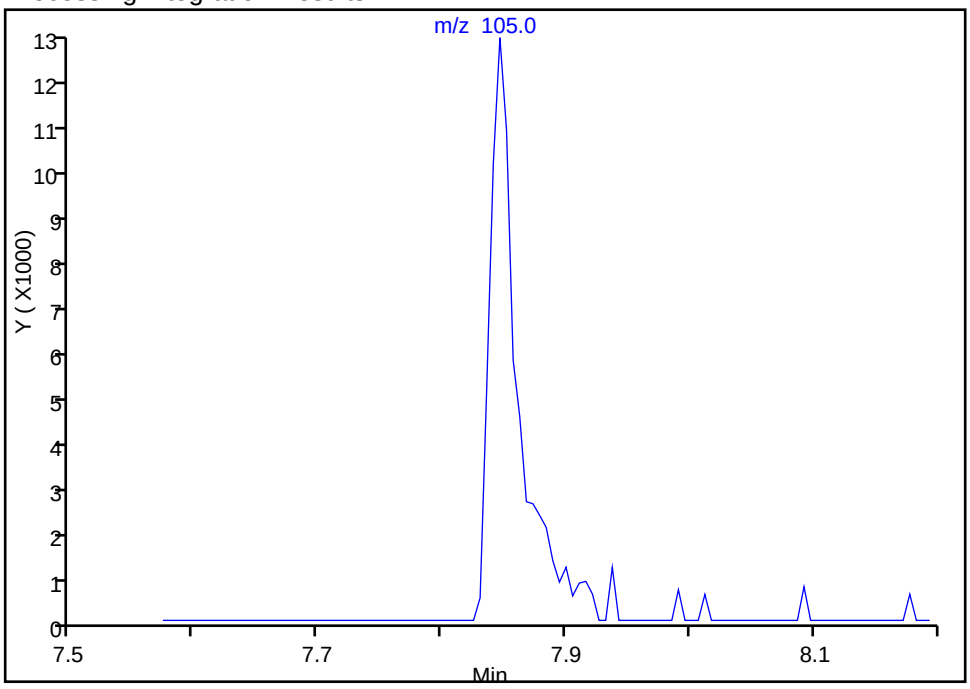
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328217.D
Injection Date: 16-Oct-2017 12:07:30 Instrument ID: HP5973U
Lims ID: IC - List1 5
Client ID:
Operator ID: DR ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

64 Benzoic acid, CAS: 65-85-0

Signal: 1

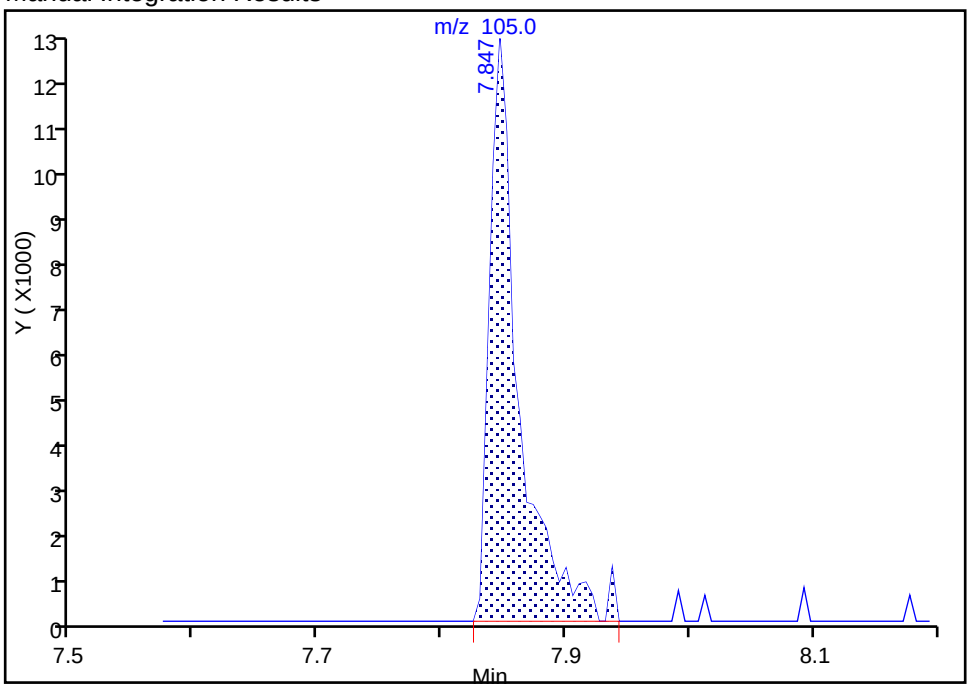
Not Detected
Expected RT: 7.90

Processing Integration Results



Manual Integration Results

RT: 7.85
Area: 21386
Amount: 16.723780
Amount Units: ng/uL



Reviewer: richardsd, 16-Oct-2017 13:13:45
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328217.D

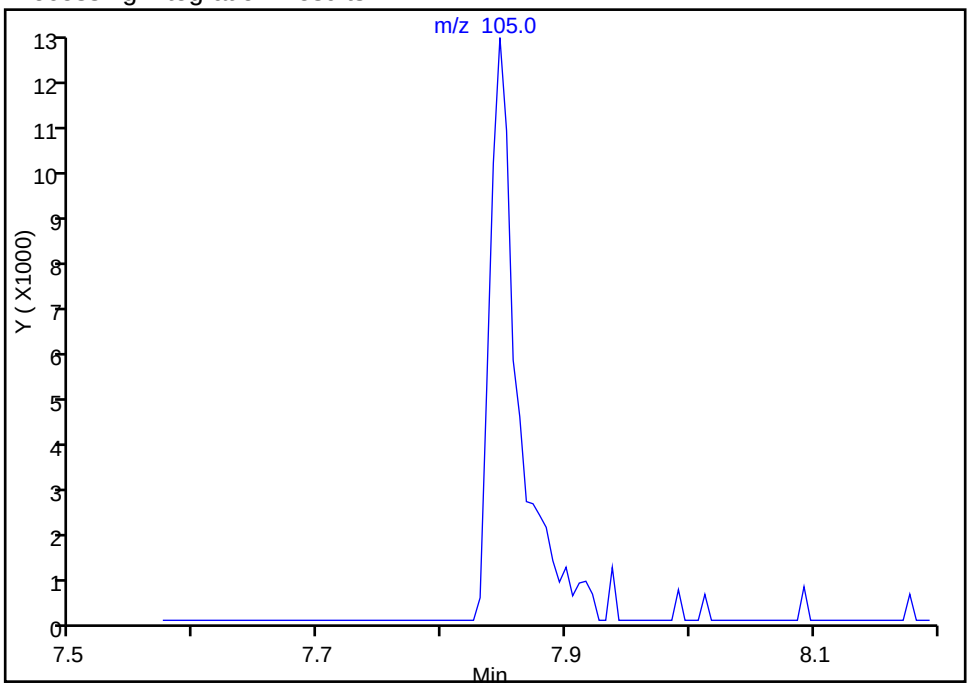
Injection Date:	16-Oct-2017 12:07:30	Instrument ID:	HP5973U		
Lims ID:	IC - List1 5				
Client ID:					
Operator ID:	DR	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

64 Benzoic acid, CAS: 65-85-0

Signal: 1

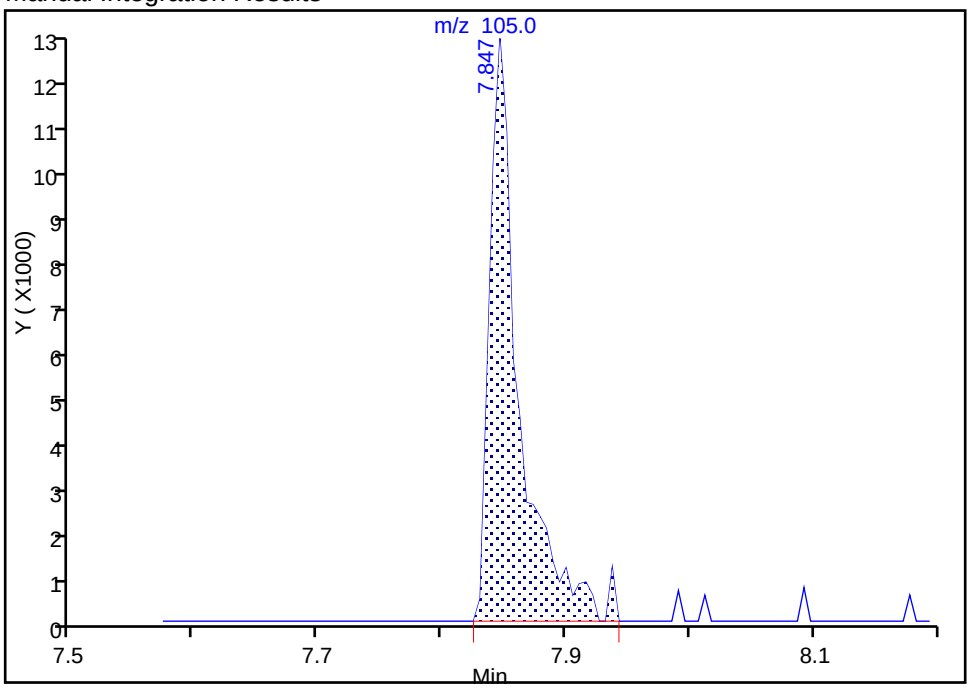
Processing Integration Results

Not Detected
Expected RT: 7.90



Manual Integration Results

RT: 7.85
Area: 21386
Amount: 16.723780
Amount Units: ng/uL



Reviewer: richardsd, 16-Oct-2017 13:13:52
Audit Action: Manually Integrated Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

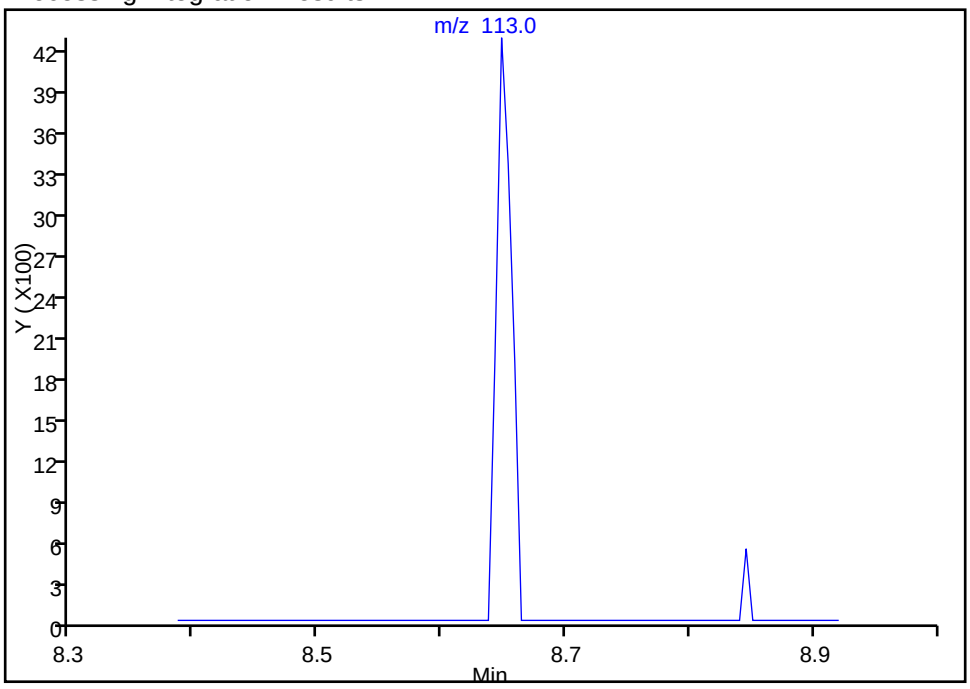
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328217.D
Injection Date: 16-Oct-2017 12:07:30 Instrument ID: HP5973U
Lims ID: IC - List1 5
Client ID:
Operator ID: DR ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

76 Caprolactam, CAS: 105-60-2

Signal: 1

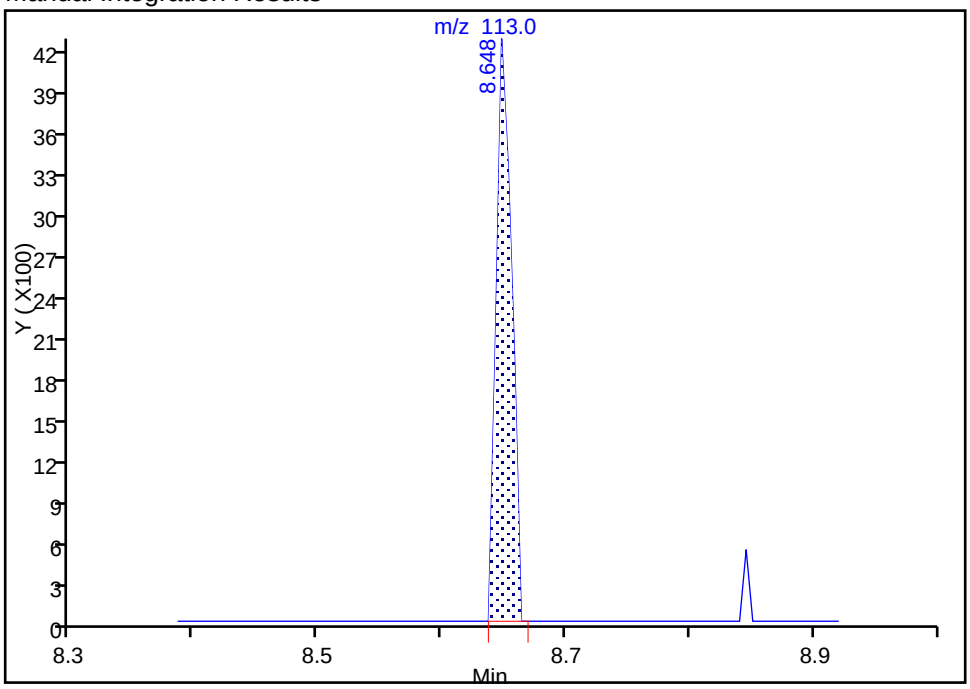
Not Detected
Expected RT: 8.67

Processing Integration Results



Manual Integration Results

RT: 8.65
Area: 3613
Amount: 4.795874
Amount Units: ng/uL



Reviewer: richardsd, 16-Oct-2017 13:13:30
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328217.D

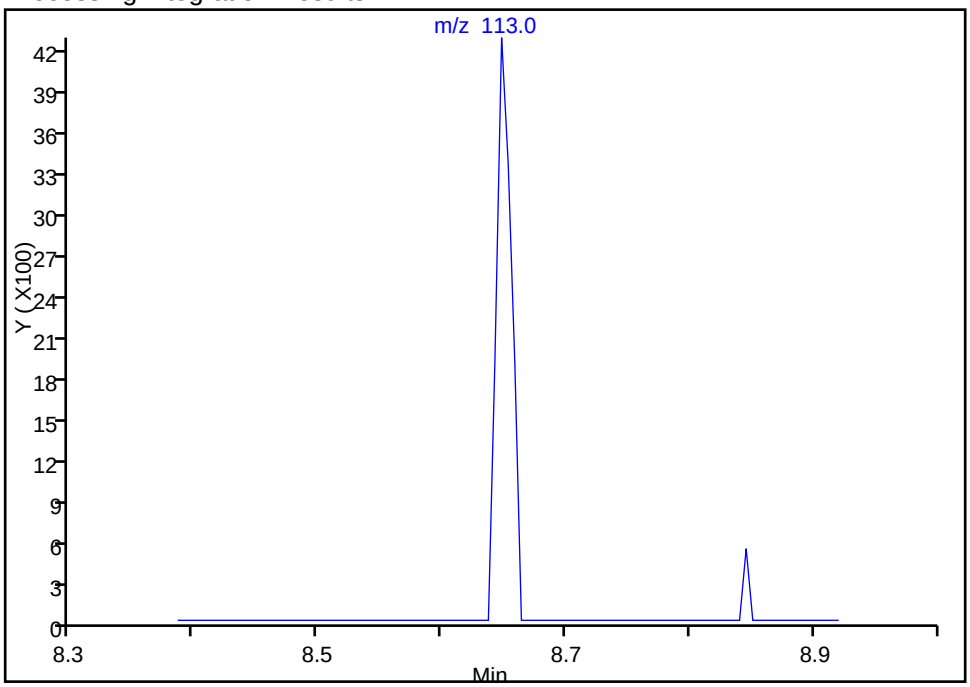
Injection Date:	16-Oct-2017 12:07:30	Instrument ID:	HP5973U		
Lims ID:	IC - List1 5				
Client ID:					
Operator ID:	DR	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

76 Caprolactam, CAS: 105-60-2

Signal: 1

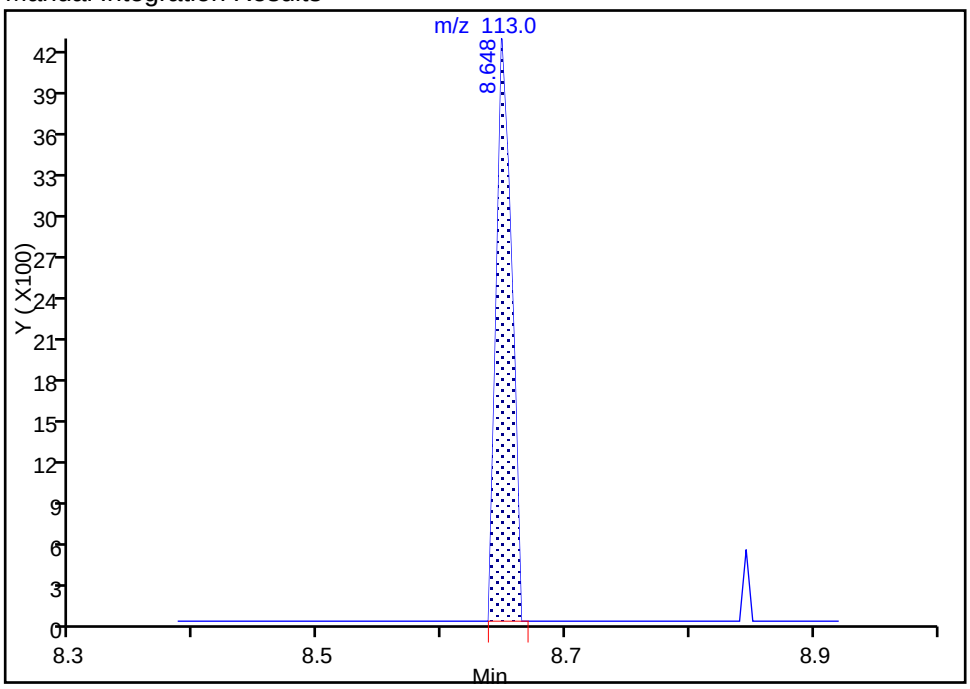
Not Detected
Expected RT: 8.67

Processing Integration Results



Manual Integration Results

RT: 8.65
Area: 3613
Amount: 4.795874
Amount Units: ng/uL



Reviewer: richardsd, 16-Oct-2017 13:13:37
Audit Action: Manually Integrated Audit Reason: Assign Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328218.D
Lims ID: IC - List1 20
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 16-Oct-2017 12:34:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC - LIST1 20
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-U-8270*sub56

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 16-Oct-2017 16:51:11 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: richardsd Date: 16-Oct-2017 13:13:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	95	132306	40.0	40.0	
* 2 Naphthalene-d8	136	8.226	8.231	-0.005	99	453818	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	95	235185	40.0	40.0	
* 4 Phenanthrene-d10	188	11.811	11.811	0.000	96	518831	40.0	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	96	611359	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	98	532997	40.0	40.0	
$ 7 2-Fluorophenol	112	5.095	5.095	0.000	92	69791	20.0	19.6	
$ 8 Phenol-d5	99	6.228	6.228	0.000	95	82167	20.0	20.4	
$ 9 Nitrobenzene-d5	82	7.355	7.355	0.000	92	78242	20.0	19.9	
$ 10 2-Fluorobiphenyl	172	9.492	9.492	0.000	99	202627	20.0	20.4	
$ 11 2,4,6-Tribromophenol	330	11.121	11.121	0.000	90	44674	20.0	19.8	
$ 12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	264856	20.0	21.3	
23 1,4-Dioxane	88	2.606	2.606	0.000	96	29078	20.0	19.6	
24 N-Nitrosodimethylamine	42	3.087	3.087	0.000	85	43236	20.0	20.4	
25 Pyridine	52	3.188	3.188	0.000	80	131593	40.0	41.4	
32 Benzaldehyde	77	6.174	6.174	0.000	92	54587	20.0	23.1	
33 Phenol	94	6.244	6.249	-0.005	95	81343	20.0	20.8	
34 Aniline	93	6.303	6.303	0.000	97	102848	20.0	20.7	
35 Bis(2-chloroethyl)ether	93	6.356	6.361	-0.005	95	61228	20.0	20.3	
37 2-Chlorophenol	128	6.458	6.458	0.000	94	78460	20.0	20.4	
38 n-Decane	57	6.506	6.506	0.000	90	79467	20.0	21.7	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	96	95276	20.0	20.3	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	94	96743	20.0	20.2	
41 Benzyl alcohol	108	6.848	6.848	0.000	91	47790	20.0	20.7	
42 1,2-Dichlorobenzene	146	6.917	6.917	0.000	96	91126	20.0	20.4	
43 2-Methylphenol	108	6.976	6.976	0.000	96	65350	20.0	20.7	
44 2,2'-oxybis[1-chloropropan	45	7.013	7.008	0.005	92	93571	20.0	22.1	
45 Indene	115	7.024	7.024	0.000	90	389485	60.0	61.0	
46 4-Methylphenol	108	7.152	7.152	0.000	95	67284	20.0	20.3	
47 N-Nitrosodi-n-propylamine	70	7.157	7.163	-0.006	92	45906	20.0	20.6	
49 Acetophenone	105	7.168	7.168	0.000	95	104878	20.0	20.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
53 Hexachloroethane	117	7.328	7.334	-0.006	84	37049	20.0	20.9	
54 Nitrobenzene	77	7.376	7.376	0.000	88	72069	20.0	20.0	
56 Isophorone	82	7.654	7.654	0.000	97	124306	20.0	20.5	
59 2-Nitrophenol	139	7.761	7.761	0.000	94	44941	20.0	20.3	
60 2,4-Dimethylphenol	107	7.788	7.788	0.000	96	81885	20.0	20.2	
62 Bis(2-chloroethoxy)methane	93	7.895	7.895	0.000	99	74038	20.0	20.2	
64 Benzoic acid	105	7.879	7.900	-0.021	88	132180	60.0	55.9	
67 2,4-Dichlorophenol	162	8.044	8.044	0.000	92	76916	20.0	20.6	
68 1,2,4-Trichlorobenzene	180	8.156	8.156	0.000	94	90602	20.0	20.7	
70 Naphthalene	128	8.253	8.253	0.000	97	216809	20.0	20.3	
72 4-Chloroaniline	127	8.290	8.295	-0.005	96	90565	20.0	20.1	
73 2,6-Dichlorophenol	162	8.317	8.317	0.000	97	74655	20.0	20.7	
74 Hexachlorobutadiene	225	8.402	8.408	-0.006	93	70991	20.0	19.9	
76 Caprolactam	113	8.664	8.675	-0.011	63	20663	20.0	21.5	
80 4-Chloro-3-methylphenol	107	8.851	8.856	-0.005	93	63549	20.0	19.7	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	91	161740	20.0	20.3	
85 1-Methylnaphthalene	142	9.193	9.193	0.000	90	151409	20.0	20.1	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	92	86466	20.0	19.8	
87 1,2,4,5-Tetrachlorobenzene	216	9.278	9.278	0.000	96	98008	20.0	19.6	
89 2,4,6-Trichlorophenol	196	9.396	9.401	-0.005	91	60628	20.0	20.4	
91 2,4,5-Trichlorophenol	196	9.444	9.444	0.000	96	63218	20.0	20.3	
94 1,1'-Biphenyl	154	9.615	9.620	-0.005	95	206760	20.0	20.5	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	96	160374	20.0	20.4	
98 2-Nitroaniline	65	9.748	9.748	0.000	88	38506	20.0	19.6	
102 Dimethyl phthalate	163	9.946	9.946	0.000	99	189506	20.0	20.8	
103 1,3-Dinitrobenzene	168	9.983	9.984	-0.001	93	31606	20.0	20.3	
104 2,6-Dinitrotoluene	165	10.016	10.021	-0.005	94	42749	20.0	20.8	
105 Acenaphthylene	152	10.133	10.133	0.000	97	236654	20.0	20.6	
106 3-Nitroaniline	138	10.213	10.213	0.000	95	42725	20.0	20.1	
107 2,4-Dinitrophenol	184	10.325	10.325	0.000	89	54337	40.0	37.7	
108 Acenaphthene	153	10.331	10.331	0.000	93	165730	20.0	20.6	
109 4-Nitrophenol	109	10.379	10.379	0.000	86	72623	40.0	39.5	
111 2,4-Dinitrotoluene	165	10.470	10.470	0.000	93	55118	20.0	20.0	
112 Dibenzofuran	168	10.512	10.512	0.000	95	248267	20.0	21.2	
116 2,3,4,6-Tetrachlorophenol	232	10.641	10.641	0.000	69	55916	20.0	18.8	
118 Diethyl phthalate	149	10.715	10.721	-0.006	98	203310	20.0	20.8	
119 Hexadecane	57	10.737	10.737	0.000	93	88988	20.0	20.7	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	89	108129	20.0	20.1	
122 4-Nitroaniline	138	10.865	10.870	-0.005	83	45174	20.0	19.6	
123 Fluorene	166	10.876	10.876	0.000	97	191771	20.0	20.2	
125 4,6-Dinitro-2-methylphenol	198	10.902	10.908	-0.006	89	64248	40.0	38.0	
127 N-Nitrosodiphenylamine	169	10.972	10.977	-0.005	61	141018	20.0	20.7	
128 Diphenylamine	169	10.972	10.977	-0.005	94	141018	17.1	17.7	
129 1,2-Diphenylhydrazine	77	11.020	11.025	-0.005	96	147271	20.0	20.4	
130 Azobenzene	77	11.020	11.025	-0.005	97	147271	20.0	20.4	
137 4-Bromophenyl phenyl ether	248	11.356	11.356	0.000	60	73822	20.0	20.5	
139 Hexachlorobenzene	284	11.447	11.453	-0.006	95	87278	20.0	19.7	
141 Atrazine	200	11.485	11.485	0.000	95	58364	20.0	20.4	
143 Pentachlorophenol	266	11.624	11.629	-0.005	92	84152	40.0	37.8	
144 n-Octadecane	57	11.650	11.650	0.000	93	89915	20.0	20.5	
150 Phenanthrene	178	11.832	11.832	0.000	96	274396	20.0	20.4	
151 Anthracene	178	11.880	11.880	0.000	96	275860	20.0	19.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
152 Carbazole	167	12.014	12.014	0.000	96	261091	20.0	20.7	
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	100	313460	20.0	20.0	
162 Fluoranthene	202	12.922	12.922	0.000	94	333877	20.0	19.9	
164 Benzidine	184	12.996	12.997	-0.001	98	189425	20.0	24.4	
165 Pyrene	202	13.125	13.125	0.000	99	348280	20.0	21.4	
172 Butyl benzyl phthalate	149	13.616	13.616	0.000	93	146891	20.0	21.0	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	92	194200	20.0	20.5	
179 3,3'-Dichlorobenzidine	252	14.124	14.124	0.000	72	138260	20.0	20.5	
181 Benzo[a]anthracene	228	14.182	14.183	0.000	96	358748	20.0	21.1	
182 Chrysene	228	14.215	14.215	0.000	94	339813	20.0	21.0	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	98	319889	20.0	20.0	
185 Benzo[b]fluoranthene	252	15.240	15.240	0.000	94	330655	20.0	20.4	
187 Benzo[k]fluoranthene	252	15.267	15.267	0.000	96	363992	20.0	22.0	
190 Benzo[a]pyrene	252	15.625	15.625	0.000	73	308679	20.0	20.4	
193 Dibenz(a,h)anthracene	278	17.169	17.174	-0.005	85	291690	20.0	19.0	
194 Indeno[1,2,3-cd]pyrene	276	17.174	17.180	-0.006	95	343765	20.0	19.2	
195 Benzo[g,h,i]perylene	276	17.634	17.639	-0.005	95	283223	20.0	19.1	
S 254 Total Cresols	1				0			41.0	
S 256 3-Methylphenol	1				0			20.3	
S 257 3 & 4 Methylphenol	108				0			20.3	

Reagents:

MB_LIST1_WRK_00521	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

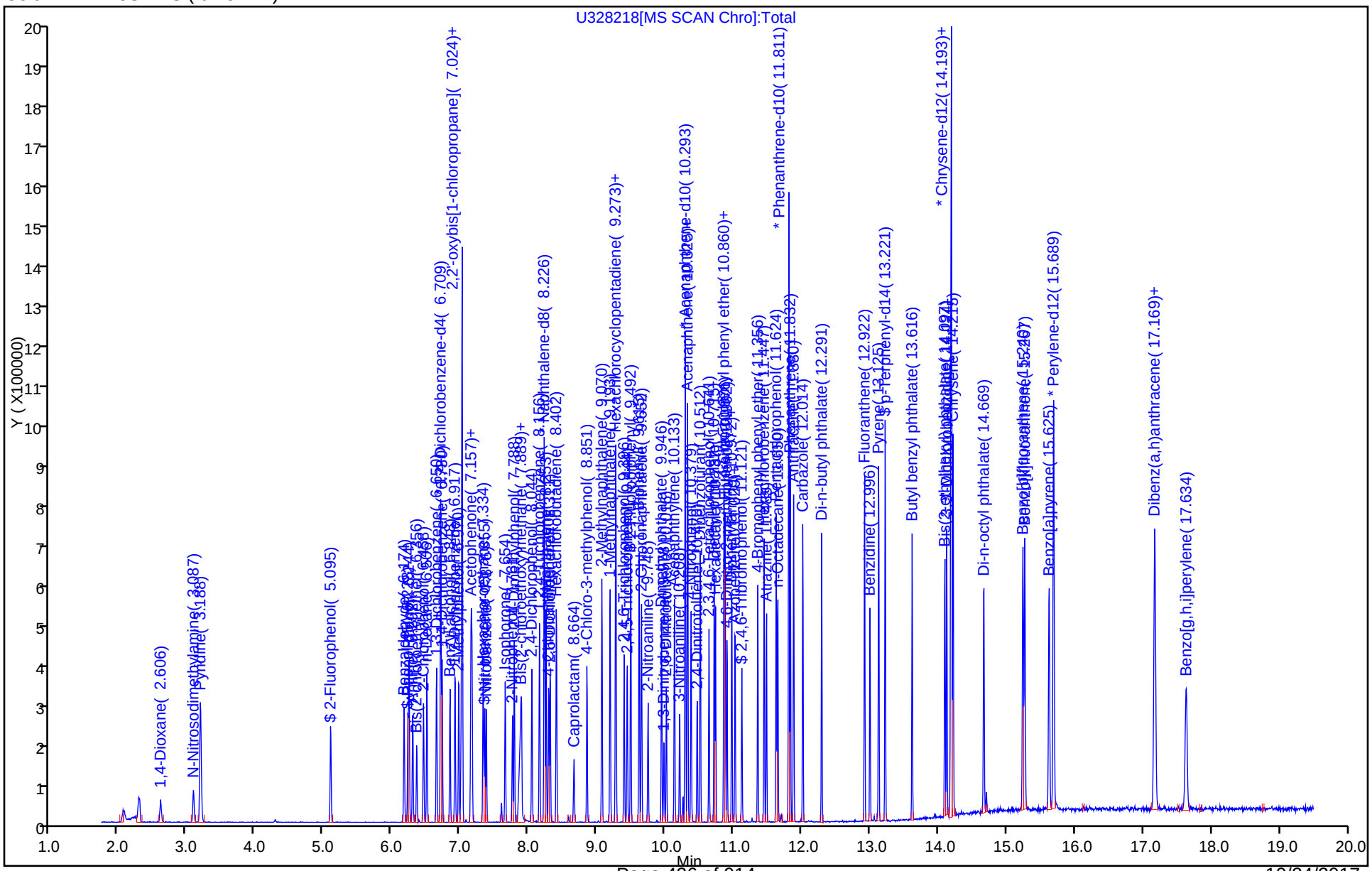
Report Date: 16-Oct-2017 16:51:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328218.D

Injection Date:	16-Oct-2017 12:34:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - List1 20			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328219.D
Lims ID: ICIS - List1 50
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 16-Oct-2017 13:00:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICIS - LIST1 50
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-U-8270*sub56

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 16-Oct-2017 16:51:15 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: richardsd Date: 16-Oct-2017 16:42:14

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	95	98141	40.0	40.0	
* 2 Naphthalene-d8	136	8.231	8.231	0.000	99	336235	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	95	171632	40.0	40.0	
* 4 Phenanthrene-d10	188	11.811	11.811	0.000	96	386287	40.0	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	95	495900	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	99	477639	40.0	40.0	
$ 7 2-Fluorophenol	112	5.095	5.095	0.000	91	137899	50.0	52.3	
$ 8 Phenol-d5	99	6.228	6.228	0.000	96	152714	50.0	51.0	
$ 9 Nitrobenzene-d5	82	7.355	7.355	0.000	91	145189	50.0	49.7	
$ 10 2-Fluorobiphenyl	172	9.492	9.492	0.000	99	369246	50.0	51.0	
$ 11 2,4,6-Tribromophenol	330	11.121	11.121	0.000	91	83809	50.0	47.4	
$ 12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	510689	50.0	50.6	
23 1,4-Dioxane	88	2.606	2.606	0.000	98	58043	50.0	52.6	
24 N-Nitrosodimethylamine	42	3.087	3.087	0.000	83	81747	50.0	53.3	
25 Pyridine	52	3.188	3.188	0.000	82	253367	100.0	109.0	
32 Benzaldehyde	77	6.174	6.174	0.000	90	94645	50.0	54.0	
33 Phenol	94	6.249	6.249	0.000	95	151268	50.0	52.0	
34 Aniline	93	6.303	6.303	0.000	96	188736	50.0	51.1	
35 Bis(2-chloroethyl)ether	93	6.361	6.361	0.000	96	114585	50.0	51.3	
37 2-Chlorophenol	128	6.458	6.458	0.000	94	144831	50.0	50.8	
38 n-Decane	57	6.506	6.506	0.000	91	146281	50.0	53.9	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	97	182822	50.0	52.5	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	94	183683	50.0	51.7	
41 Benzyl alcohol	108	6.848	6.848	0.000	90	88484	50.0	51.9	
42 1,2-Dichlorobenzene	146	6.917	6.917	0.000	95	175445	50.0	52.9	
43 2-Methylphenol	108	6.976	6.976	0.000	97	122782	50.0	52.3	
44 2,2'-oxybis[1-chloropropan	45	7.008	7.008	0.000	93	165881	50.0	52.9	
45 Indene	115	7.024	7.024	0.000	89	733915	150.0	155.0	
46 4-Methylphenol	108	7.152	7.152	0.000	90	131164	50.0	53.4	
47 N-Nitrosodi-n-propylamine	70	7.163	7.163	0.000	90	83462	50.0	50.4	
49 Acetophenone	105	7.168	7.168	0.000	96	194829	50.0	52.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
53 Hexachloroethane	117	7.334	7.334	0.000	85	70020	50.0	53.3	
54 Nitrobenzene	77	7.376	7.376	0.000	88	136728	50.0	51.3	
56 Isophorone	82	7.654	7.654	0.000	97	224574	50.0	50.1	
59 2-Nitrophenol	139	7.761	7.761	0.000	93	83480	50.0	50.1	
60 2,4-Dimethylphenol	107	7.788	7.788	0.000	96	150046	50.0	49.9	
62 Bis(2-chloroethoxy)methane	93	7.895	7.895	0.000	100	139398	50.0	51.4	
64 Benzoic acid	105	7.900	7.900	0.000	87	271010	150.0	140.8	
67 2,4-Dichlorophenol	162	8.044	8.044	0.000	92	145144	50.0	52.7	
68 1,2,4-Trichlorobenzene	180	8.156	8.156	0.000	94	164739	50.0	50.8	
70 Naphthalene	128	8.253	8.253	0.000	98	403521	50.0	51.1	
72 4-Chloroaniline	127	8.295	8.295	0.000	96	164183	50.0	49.2	
73 2,6-Dichlorophenol	162	8.317	8.317	0.000	96	132484	50.0	49.6	
74 Hexachlorobutadiene	225	8.408	8.408	0.000	93	135936	50.0	51.5	
76 Caprolactam	113	8.675	8.675	0.000	80	35095	50.0	48.3	
80 4-Chloro-3-methylphenol	107	8.856	8.856	0.000	93	119912	50.0	49.9	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	90	293887	50.0	49.7	
85 1-Methylnaphthalene	142	9.193	9.193	0.000	91	280278	50.0	50.1	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	95	161143	50.0	49.2	
87 1,2,4,5-Tetrachlorobenzene	216	9.278	9.278	0.000	97	183554	50.0	50.3	
89 2,4,6-Trichlorophenol	196	9.401	9.401	0.000	91	111865	50.0	51.1	
91 2,4,5-Trichlorophenol	196	9.444	9.444	0.000	94	119600	50.0	51.6	
94 1,1'-Biphenyl	154	9.620	9.620	0.000	94	376696	50.0	51.1	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	96	289724	50.0	50.5	
98 2-Nitroaniline	65	9.748	9.748	0.000	86	73240	50.0	51.0	
102 Dimethyl phthalate	163	9.946	9.946	0.000	99	341575	50.0	51.3	
103 1,3-Dinitrobenzene	168	9.984	9.984	0.000	94	59810	50.0	49.7	
104 2,6-Dinitrotoluene	165	10.021	10.021	0.000	94	76844	50.0	50.3	
105 Acenaphthylene	152	10.133	10.133	0.000	97	435525	50.0	51.8	
106 3-Nitroaniline	138	10.213	10.213	0.000	92	77115	50.0	49.5	
107 2,4-Dinitrophenol	184	10.325	10.325	0.000	68	111650	100.0	95.0	
108 Acenaphthene	153	10.331	10.331	0.000	86	298524	50.0	50.9	
109 4-Nitrophenol	109	10.379	10.379	0.000	85	143551	100.0	104.1	
111 2,4-Dinitrotoluene	165	10.470	10.470	0.000	94	104126	50.0	50.6	
112 Dibenzofuran	168	10.512	10.512	0.000	94	426874	50.0	49.9	
116 2,3,4,6-Tetrachlorophenol	232	10.641	10.641	0.000	69	116649	50.0	51.3	
118 Diethyl phthalate	149	10.721	10.721	0.000	98	363600	50.0	50.9	
119 Hexadecane	57	10.737	10.737	0.000	93	161347	50.0	51.5	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	89	198856	50.0	50.6	
122 4-Nitroaniline	138	10.870	10.870	0.000	82	83823	50.0	49.9	
123 Fluorene	166	10.876	10.876	0.000	95	351698	50.0	50.8	
125 4,6-Dinitro-2-methylphenol	198	10.908	10.908	0.000	90	133795	100.0	99.7	
128 Diphenylamine	169	10.977	10.977	0.000	93	257141	42.8	43.3	
127 N-Nitrosodiphenylamine	169	10.977	10.977	0.000	63	257141	50.0	50.6	
130 Azobenzene	77	11.025	11.025	0.000	97	269454	50.0	50.1	
129 1,2-Diphenylhydrazine	77	11.025	11.025	0.000	97	269454	50.0	50.1	
137 4-Bromophenyl phenyl ether	248	11.356	11.356	0.000	59	136771	50.0	50.3	
139 Hexachlorobenzene	284	11.453	11.453	0.000	94	163499	50.0	49.6	
141 Atrazine	200	11.485	11.485	0.000	95	108214	50.0	51.8	
143 Pentachlorophenol	266	11.629	11.629	0.000	92	172166	100.0	95.6	
144 n-Octadecane	57	11.650	11.650	0.000	93	172306	50.0	52.6	
150 Phenanthrene	178	11.832	11.832	0.000	96	504504	50.0	50.4	
151 Anthracene	178	11.880	11.880	0.000	96	522440	50.0	50.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
152 Carbazole	167	12.014	12.014	0.000	96	474608	50.0	50.5	
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	100	593185	50.0	51.1	
162 Fluoranthene	202	12.922	12.922	0.000	95	642707	50.0	51.4	
164 Benzidine	184	12.997	12.997	0.000	98	341983	50.0	54.2	
165 Pyrene	202	13.125	13.125	0.000	98	647109	50.0	49.0	
172 Butyl benzyl phthalate	149	13.616	13.616	0.000	94	286420	50.0	50.7	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	93	399253	50.0	52.0	
179 3,3'-Dichlorobenzidine	252	14.124	14.124	0.000	72	276649	50.0	51.3	
181 Benzo[a]anthracene	228	14.183	14.183	0.000	96	692095	50.0	50.3	
182 Chrysene	228	14.215	14.215	0.000	94	666322	50.0	50.8	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	98	679167	50.0	53.0	
185 Benzo[b]fluoranthene	252	15.240	15.240	0.000	94	752011	50.0	51.8	
187 Benzo[k]fluoranthene	252	15.267	15.267	0.000	97	717810	50.0	48.4	
190 Benzo[a]pyrene	252	15.625	15.625	0.000	73	679386	50.0	50.2	
193 Dibenz(a,h)anthracene	278	17.174	17.174	0.000	86	703518	50.0	50.5	
194 Indeno[1,2,3-cd]pyrene	276	17.180	17.180	0.000	96	816722	50.0	49.9	
195 Benzo[g,h,i]perylene	276	17.639	17.639	0.000	95	687830	50.0	50.4	

Reagents:

MB_LIST1_WRK_00522	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

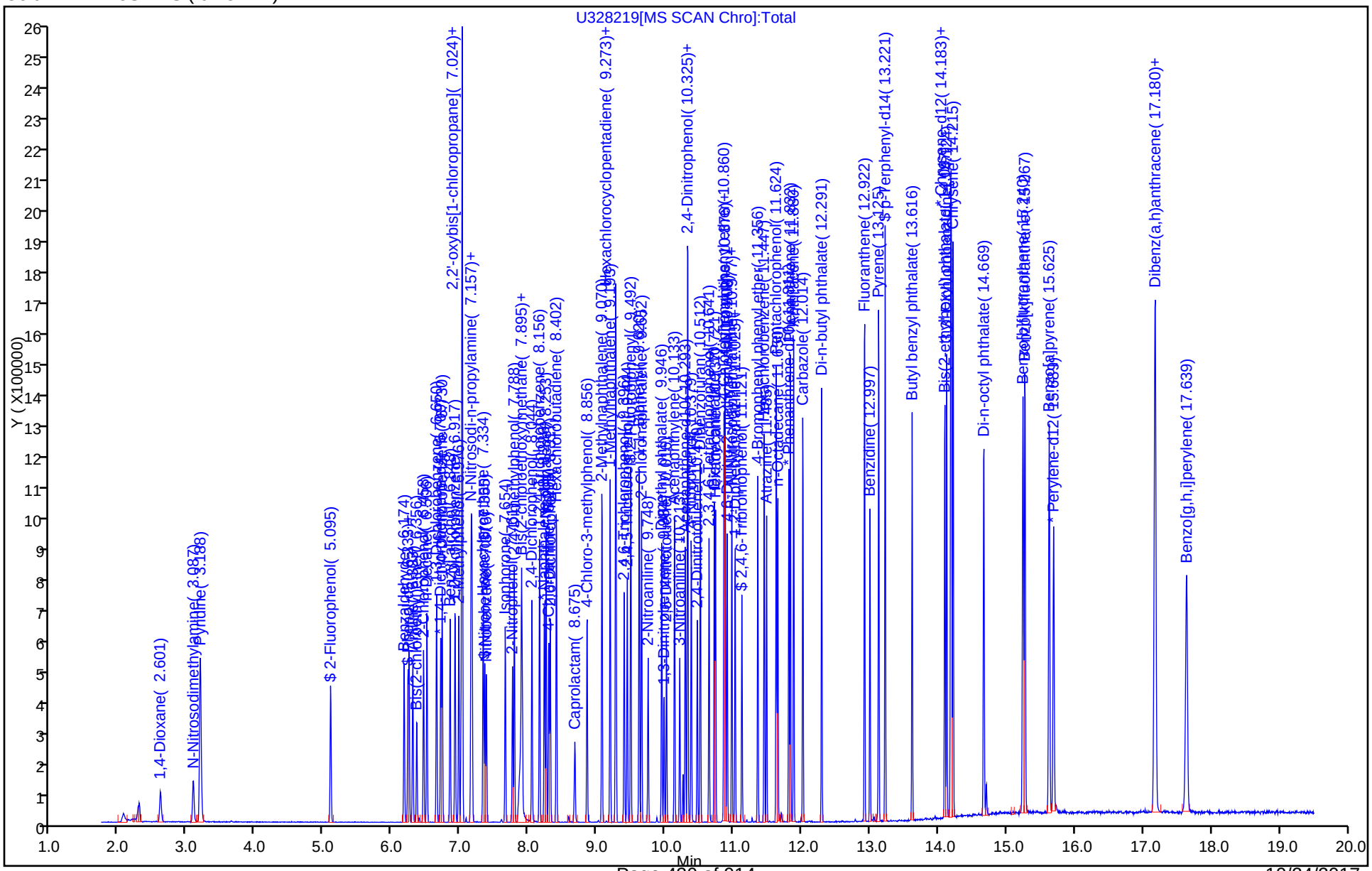
Report Date: 16-Oct-2017 16:51:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328219.D

Injection Date:	16-Oct-2017 13:00:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	ICIS - List1 50			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328220.D
Lims ID: IC - List1 80
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 16-Oct-2017 13:26:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC - LIST1 80
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-U-8270*sub56

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 16-Oct-2017 16:51:19 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK028

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	94	110943	40.0	40.0	
* 2 Naphthalene-d8	136	8.231	8.231	0.000	99	352613	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	93	186242	40.0	40.0	
* 4 Phenanthrene-d10	188	11.810	11.811	-0.001	96	399381	40.0	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	95	534494	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	98	526754	40.0	40.0	
$ 7 2-Fluorophenol	112	5.095	5.095	0.000	92	236489	80.0	79.3	
$ 8 Phenol-d5	99	6.233	6.228	0.005	96	263158	80.0	77.8	
$ 9 Nitrobenzene-d5	82	7.355	7.355	0.000	90	250338	80.0	81.8	
$ 10 2-Fluorobiphenyl	172	9.497	9.492	0.005	99	614225	80.0	78.1	
$ 11 2,4,6-Tribromophenol	330	11.127	11.121	0.006	90	145633	80.0	78.4	
$ 12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	847550	80.0	77.9	
23 1,4-Dioxane	88	2.606	2.606	0.000	99	100945	80.0	81.0	
24 N-Nitrosodimethylamine	42	3.087	3.087	0.000	88	134036	80.0	77.7	
25 Pyridine	52	3.188	3.188	0.000	84	417426	160.0	159.2	
32 Benzaldehyde	77	6.174	6.174	0.000	90	145657	80.0	73.5	
33 Phenol	94	6.249	6.249	0.000	95	256442	80.0	78.0	
34 Aniline	93	6.303	6.303	0.000	98	329704	80.0	79.0	
35 Bis(2-chloroethyl)ether	93	6.361	6.361	0.000	97	193106	80.0	76.5	
37 2-Chlorophenol	128	6.458	6.458	0.000	94	255977	80.0	79.4	
38 n-Decane	57	6.506	6.506	0.000	87	237781	80.0	77.5	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	97	308111	80.0	78.3	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	94	307509	80.0	76.6	
41 Benzyl alcohol	108	6.848	6.848	0.000	90	150321	80.0	78.1	
42 1,2-Dichlorobenzene	146	6.922	6.917	0.005	97	292178	80.0	77.9	
43 2-Methylphenol	108	6.976	6.976	0.000	96	206877	80.0	78.0	
44 2,2'-oxybis[1-chloropropan	45	7.008	7.008	0.000	92	266871	80.0	75.3	
45 Indene	115	7.029	7.024	0.005	88	1253353	240.0	234.2	
46 4-Methylphenol	108	7.157	7.152	0.005	93	216530	80.0	78.1	
47 N-Nitrosodi-n-propylamine	70	7.163	7.163	0.000	89	147893	80.0	79.0	
49 Acetophenone	105	7.173	7.168	0.005	98	320921	80.0	76.8	
53 Hexachloroethane	117	7.334	7.334	0.000	85	115314	80.0	77.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
54 Nitrobenzene	77	7.382	7.376	0.006	88	228448	80.0	81.7	
56 Isophorone	82	7.660	7.654	0.006	97	383814	80.0	81.6	
59 2-Nitrophenol	139	7.761	7.761	0.000	95	141930	80.0	81.0	
60 2,4-Dimethylphenol	107	7.788	7.788	0.000	97	253943	80.0	80.6	
62 Bis(2-chloroethoxy)methane	93	7.895	7.895	0.000	98	230325	80.0	81.1	
64 Benzoic acid	105	7.932	7.900	0.032	87	488191	240.0	236.2	
67 2,4-Dichlorophenol	162	8.050	8.044	0.006	92	233208	80.0	80.8	
68 1,2,4-Trichlorobenzene	180	8.156	8.156	0.000	95	269848	80.0	79.3	
70 Naphthalene	128	8.253	8.253	0.000	98	672497	80.0	81.2	
72 4-Chloroaniline	127	8.295	8.295	0.000	96	285489	80.0	81.5	
73 2,6-Dichlorophenol	162	8.317	8.317	0.000	97	229554	80.0	81.9	
74 Hexachlorobutadiene	225	8.407	8.408	-0.001	94	223535	80.0	80.7	
76 Caprolactam	113	8.691	8.675	0.016	80	61096	80.0	79.8	
80 4-Chloro-3-methylphenol	107	8.856	8.856	0.000	94	211626	80.0	83.8	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	90	502276	80.0	81.0	
85 1-Methylnaphthalene	142	9.193	9.193	0.000	91	466154	80.0	79.5	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	95	285305	80.0	79.8	
87 1,2,4,5-Tetrachlorobenzene	216	9.278	9.278	0.000	97	314292	80.0	79.4	
89 2,4,6-Trichlorophenol	196	9.401	9.401	0.000	90	185870	80.0	78.1	
91 2,4,5-Trichlorophenol	196	9.444	9.444	0.000	95	197730	80.0	78.3	
94 1,1'-Biphenyl	154	9.620	9.620	0.000	94	637770	80.0	79.7	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	96	491061	80.0	78.8	
98 2-Nitroaniline	65	9.748	9.748	0.000	87	123086	80.0	78.9	
102 Dimethyl phthalate	163	9.951	9.946	0.005	99	577325	80.0	79.9	
103 1,3-Dinitrobenzene	168	9.983	9.984	-0.001	93	100017	80.0	78.4	
104 2,6-Dinitrotoluene	165	10.021	10.021	0.000	94	131731	80.0	79.2	
105 Acenaphthylene	152	10.138	10.133	0.005	97	723489	80.0	79.3	
106 3-Nitroaniline	138	10.213	10.213	0.000	93	137256	80.0	81.2	
107 2,4-Dinitrophenol	184	10.331	10.325	0.006	69	198496	160.0	151.7	
108 Acenaphthene	153	10.331	10.331	0.000	85	495348	80.0	77.8	
109 4-Nitrophenol	109	10.384	10.379	0.005	85	243103	160.0	161.4	
111 2,4-Dinitrotoluene	165	10.470	10.470	0.000	94	182495	80.0	81.4	
112 Dibenzofuran	168	10.518	10.512	0.006	95	732780	80.0	78.9	
116 2,3,4,6-Tetrachlorophenol	232	10.641	10.641	0.000	70	194345	80.0	78.1	
118 Diethyl phthalate	149	10.721	10.721	0.000	98	611551	80.0	78.8	
119 Hexadecane	57	10.737	10.737	0.000	93	269224	80.0	79.2	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	89	334469	80.0	78.5	
122 4-Nitroaniline	138	10.870	10.870	0.000	82	146481	80.0	80.4	
123 Fluorene	166	10.881	10.876	0.005	95	582830	80.0	77.7	
125 4,6-Dinitro-2-methylphenol	198	10.913	10.908	0.005	91	234551	160.0	166.4	
127 N-Nitrosodiphenylamine	169	10.977	10.977	0.000	62	428671	80.0	81.6	
128 Diphenylamine	169	10.977	10.977	0.000	93	428671	68.4	69.8	
129 1,2-Diphenylhydrazine	77	11.025	11.025	0.000	96	461865	80.0	83.1	
130 Azobenzene	77	11.025	11.025	0.000	96	461865	80.0	83.1	
137 4-Bromophenyl phenyl ether	248	11.356	11.356	0.000	59	230275	80.0	81.7	
139 Hexachlorobenzene	284	11.453	11.453	0.000	95	277875	80.0	81.5	
141 Atrazine	200	11.490	11.485	0.005	94	183637	80.0	81.0	
143 Pentachlorophenol	266	11.629	11.629	0.000	91	307624	160.0	161.8	
144 n-Octadecane	57	11.650	11.650	0.000	92	281390	80.0	83.2	
150 Phenanthrene	178	11.837	11.832	0.005	97	830110	80.0	80.2	
151 Anthracene	178	11.880	11.880	0.000	97	875484	80.0	81.9	
152 Carbazole	167	12.019	12.014	0.005	96	803394	80.0	82.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	100	1014232	80.0	84.5	
162 Fluoranthene	202	12.922	12.922	0.000	96	1062995	80.0	82.2	
164 Benzidine	184	13.002	12.997	0.005	98	546187	80.0	80.4	
165 Pyrene	202	13.130	13.125	0.005	98	1093778	80.0	76.9	
172 Butyl benzyl phthalate	149	13.616	13.616	0.000	94	489204	80.0	80.5	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	92	667937	80.0	80.7	
179 3,3'-Dichlorobenzidine	252	14.124	14.124	0.000	72	485362	80.0	83.9	
181 Benzo[a]anthracene	228	14.182	14.183	0.000	97	1188534	80.0	80.1	
182 Chrysene	228	14.220	14.215	0.005	94	1123032	80.0	79.4	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	98	1162583	80.0	84.4	
185 Benzo[b]fluoranthene	252	15.246	15.240	0.006	94	1241915	80.0	77.5	
187 Benzo[k]fluoranthene	252	15.272	15.267	0.005	96	1283839	80.0	78.5	
190 Benzo[a]pyrene	252	15.630	15.625	0.005	73	1200876	80.0	80.4	
193 Dibenz(a,h)anthracene	278	17.179	17.174	0.005	88	1237617	80.0	80.4	
194 Indeno[1,2,3-cd]pyrene	276	17.185	17.180	0.005	96	1473985	80.0	81.2	
195 Benzo[g,h,i]perylene	276	17.644	17.639	0.005	95	1235621	80.0	81.5	
S 254 Total Cresols	1				0			156.1	
S 256 3-Methylphenol	1				0			78.1	
S 257 3 & 4 Methylphenol	108				0			78.1	

Reagents:

MB_LIST1_WRK_00523	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

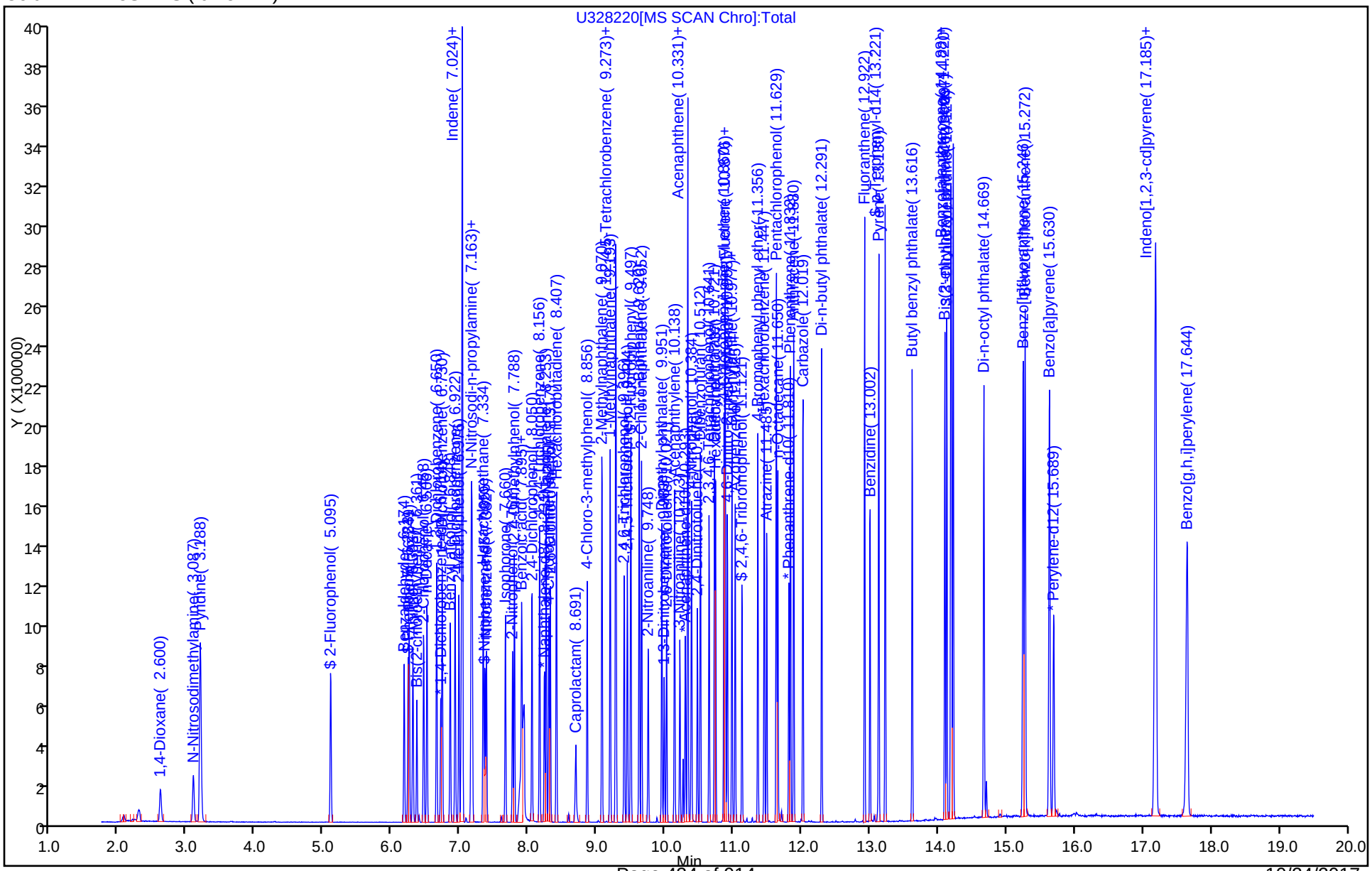
Report Date: 16-Oct-2017 16:51:20 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328220.D

Injection Date:	16-Oct-2017 13:26:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - List1 80			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328221.D
Lims ID: IC - List1 120
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 16-Oct-2017 13:53:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC - LIST1 120
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-U-8270*sub56

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 16-Oct-2017 16:51:22 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: richardsd Date: 16-Oct-2017 16:13:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.714	6.709	0.005	93	114615	40.0	40.0	
* 2 Naphthalene-d8	136	8.231	8.231	0.000	99	379221	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	94	196469	40.0	40.0	
* 4 Phenanthrene-d10	188	11.811	11.811	0.000	96	427612	40.0	40.0	
* 5 Chrysene-d12	240	14.199	14.193	0.006	95	529085	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	98	492386	40.0	40.0	
$ 7 2-Fluorophenol	112	5.095	5.095	0.000	92	367264	120.0	119.2	
$ 8 Phenol-d5	99	6.233	6.228	0.005	95	410850	120.0	117.5	
$ 9 Nitrobenzene-d5	82	7.361	7.355	0.005	90	390285	120.0	118.5	
$ 10 2-Fluorobiphenyl	172	9.497	9.492	0.005	99	952866	120.0	114.9	
$ 11 2,4,6-Tribromophenol	330	11.127	11.121	0.006	90	238872	120.0	119.3	
$ 12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	1272543	120.0	118.2	
23 1,4-Dioxane	88	2.606	2.606	0.000	97	152456	120.0	118.4	
24 N-Nitrosodimethylamine	42	3.087	3.087	0.000	86	216793	120.0	122.1	
25 Pyridine	52	3.188	3.188	0.000	84	640428	240.0	236.9	
32 Benzaldehyde	77	6.175	6.174	0.001	91	188169	120.0	92.0	
33 Phenol	94	6.255	6.249	0.006	94	401511	120.0	118.3	
34 Aniline	93	6.303	6.303	0.000	97	503052	120.0	116.6	
35 Bis(2-chloroethyl)ether	93	6.362	6.361	0.001	99	306460	120.0	117.5	
37 2-Chlorophenol	128	6.463	6.458	0.005	94	391415	120.0	117.5	
38 n-Decane	57	6.511	6.506	0.005	88	368437	120.0	116.2	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	97	477945	120.0	117.5	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	93	479651	120.0	115.6	
41 Benzyl alcohol	108	6.853	6.848	0.005	91	238717	120.0	120.1	
42 1,2-Dichlorobenzene	146	6.922	6.917	0.005	96	437729	120.0	113.0	
43 2-Methylphenol	108	6.976	6.976	0.000	96	315651	120.0	115.2	
44 2,2'-oxybis[1-chloropropan	45	7.013	7.008	0.005	91	400144	120.0	109.3	
45 Indene	115	7.029	7.024	0.005	89	1900518	360.0	343.7	
46 4-Methylphenol	108	7.158	7.152	0.006	95	338185	120.0	118.0	
47 N-Nitrosodi-n-propylamine	70	7.168	7.163	0.005	88	229007	120.0	118.4	
49 Acetophenone	105	7.174	7.168	0.006	96	519155	120.0	120.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
53 Hexachloroethane	117	7.334	7.334	0.000	84	182121	120.0	118.8	
54 Nitrobenzene	77	7.382	7.376	0.006	89	353606	120.0	117.6	
56 Isophorone	82	7.660	7.654	0.006	97	595879	120.0	117.8	
59 2-Nitrophenol	139	7.767	7.761	0.006	93	221755	120.0	117.4	
60 2,4-Dimethylphenol	107	7.793	7.788	0.005	98	399066	120.0	117.7	
62 Bis(2-chloroethoxy)methane	93	7.900	7.895	0.005	100	348768	120.0	114.1	
64 Benzoic acid	105	7.964	7.900	0.064	87	804633	360.0	357.7	
67 2,4-Dichlorophenol	162	8.050	8.044	0.006	92	367778	120.0	118.6	
68 1,2,4-Trichlorobenzene	180	8.162	8.156	0.006	95	428936	120.0	117.2	
70 Naphthalene	128	8.258	8.253	0.005	98	1028770	120.0	115.5	
72 4-Chloroaniline	127	8.295	8.295	0.000	96	442151	120.0	117.4	
73 2,6-Dichlorophenol	162	8.317	8.317	0.000	97	357742	120.0	118.7	
74 Hexachlorobutadiene	225	8.408	8.408	0.000	94	347213	120.0	116.6	
76 Caprolactam	113	8.707	8.675	0.032	79	98906	120.0	119.8	
80 4-Chloro-3-methylphenol	107	8.856	8.856	0.000	94	319392	120.0	117.5	
83 2-Methylnaphthalene	142	9.075	9.070	0.005	90	782142	120.0	117.3	
85 1-Methylnaphthalene	142	9.193	9.193	0.000	91	741531	120.0	117.6	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	94	449502	120.0	118.7	
87 1,2,4,5-Tetrachlorobenzene	216	9.278	9.278	0.000	97	498773	120.0	119.4	
89 2,4,6-Trichlorophenol	196	9.401	9.401	0.000	90	300399	120.0	119.5	
91 2,4,5-Trichlorophenol	196	9.444	9.444	0.000	95	321028	120.0	120.3	
94 1,1'-Biphenyl	154	9.620	9.620	0.000	95	969043	120.0	114.8	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	97	762434	120.0	116.0	
98 2-Nitroaniline	65	9.754	9.748	0.006	87	195843	120.0	119.0	
102 Dimethyl phthalate	163	9.951	9.946	0.005	98	890049	120.0	116.8	
103 1,3-Dinitrobenzene	168	9.989	9.984	0.005	95	164037	120.0	118.8	
104 2,6-Dinitrotoluene	165	10.021	10.021	0.000	94	210893	120.0	119.9	
105 Acenaphthylene	152	10.138	10.133	0.005	97	1135992	120.0	118.1	
106 3-Nitroaniline	138	10.219	10.213	0.006	95	210202	120.0	117.8	
107 2,4-Dinitrophenol	184	10.336	10.325	0.011	70	338997	240.0	241.7	
108 Acenaphthene	153	10.331	10.331	0.000	86	778548	120.0	116.0	
109 4-Nitrophenol	109	10.390	10.379	0.011	86	379629	240.0	238.1	
111 2,4-Dinitrotoluene	165	10.475	10.470	0.005	94	279416	120.0	117.9	
112 Dibenzofuran	168	10.518	10.512	0.006	94	1123991	120.0	114.7	
116 2,3,4,6-Tetrachlorophenol	232	10.646	10.641	0.005	70	320051	120.0	121.3	
118 Diethyl phthalate	149	10.726	10.721	0.005	98	946191	120.0	115.6	
119 Hexadecane	57	10.737	10.737	0.000	93	406496	120.0	113.4	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	90	525991	120.0	117.0	
122 4-Nitroaniline	138	10.881	10.870	0.011	81	225033	120.0	117.1	
123 Fluorene	166	10.881	10.876	0.005	96	918965	120.0	116.1	
125 4,6-Dinitro-2-methylphenol	198	10.913	10.908	0.005	90	364282	240.0	239.8	
128 Diphenylamine	169	10.977	10.977	0.000	93	672591	102.6	102.2	
127 N-Nitrosodiphenylamine	169	10.977	10.977	0.000	63	672591	120.0	119.6	
130 Azobenzene	77	11.025	11.025	0.000	96	694459	120.0	116.8	
129 1,2-Diphenylhydrazine	77	11.025	11.025	0.000	96	694459	120.0	116.8	
137 4-Bromophenyl phenyl ether	248	11.357	11.356	0.000	59	360930	120.0	119.3	
139 Hexachlorobenzene	284	11.453	11.453	0.000	95	432972	120.0	118.6	
141 Atrazine	200	11.490	11.485	0.005	95	273344	120.0	114.3	
143 Pentachlorophenol	266	11.629	11.629	0.000	91	488501	240.0	237.7	
144 n-Octadecane	57	11.650	11.650	0.000	94	420432	120.0	116.0	
150 Phenanthrene	178	11.837	11.832	0.005	97	1282417	120.0	115.8	
151 Anthracene	178	11.885	11.880	0.005	97	1332632	120.0	116.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
152 Carbazole	167	12.019	12.014	0.005	96	1200420	120.0	115.4	
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	100	1522167	120.0	118.5	
162 Fluoranthene	202	12.922	12.922	0.000	96	1609335	120.0	116.2	
164 Benzidine	184	13.002	12.997	0.005	99	681547	120.0	101.3	
165 Pyrene	202	13.130	13.125	0.005	98	1636492	120.0	116.2	
172 Butyl benzyl phthalate	149	13.616	13.616	0.000	95	730669	120.0	121.5	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	92	970162	120.0	118.4	
179 3,3'-Dichlorobenzidine	252	14.129	14.124	0.005	72	678363	120.0	118.7	
181 Benzo[a]anthracene	228	14.188	14.183	0.006	96	1705245	120.0	116.1	
182 Chrysene	228	14.220	14.215	0.005	94	1605383	120.0	114.6	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	98	1575722	120.0	115.8	
185 Benzo[b]fluoranthene	252	15.246	15.240	0.006	94	1810863	120.0	120.9	
187 Benzo[k]fluoranthene	252	15.272	15.267	0.005	96	1681884	120.0	110.1	
190 Benzo[a]pyrene	252	15.630	15.625	0.005	73	1659049	120.0	118.9	
193 Dibenz(a,h)anthracene	278	17.185	17.174	0.011	86	1687235	120.0	117.1	
194 Indeno[1,2,3-cd]pyrene	276	17.196	17.180	0.016	95	2002058	120.0	117.7	
195 Benzo[g,h,i]perylene	276	17.650	17.639	0.011	95	1670512	120.0	117.5	
S 257 3 & 4 Methylphenol	108				0			118.0	
S 254 Total Cresols	1				0			233.2	
S 256 3-Methylphenol	1				0			118.0	

Reagents:

MB_LIST1_WRK_00524	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

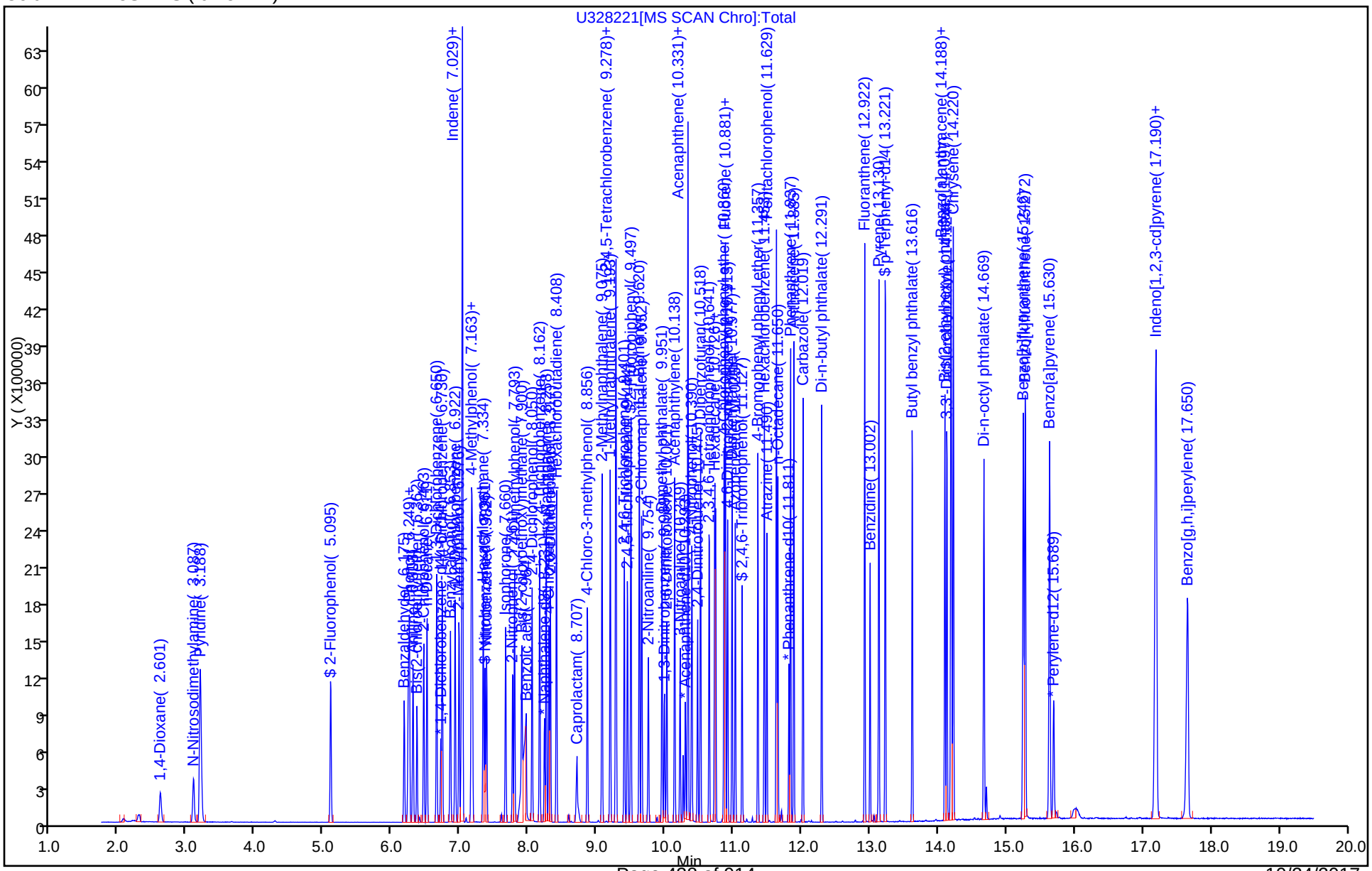
Report Date: 16-Oct-2017 16:51:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328221.D

Injection Date:	16-Oct-2017 13:53:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - List1 120			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D
Lims ID: IC - List1 160
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 16-Oct-2017 14:19:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: IC - LIST1 160
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-U-8270*sub56

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 16-Oct-2017 16:51:25 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: richardsd Date: 16-Oct-2017 16:04:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.714	6.709	0.005	94	108410	40.0	40.0	
* 2 Naphthalene-d8	136	8.231	8.231	0.000	99	351741	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	95	183279	40.0	40.0	
* 4 Phenanthrene-d10	188	11.811	11.811	0.000	96	407484	40.0	40.0	
* 5 Chrysene-d12	240	14.199	14.193	0.006	96	527572	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	98	493009	40.0	40.0	
$ 7 2-Fluorophenol	112	5.101	5.095	0.006	91	472211	160.0	162.1	
$ 8 Phenol-d5	99	6.239	6.228	0.011	95	527891	160.0	159.6	
$ 9 Nitrobenzene-d5	82	7.361	7.355	0.006	90	497034	160.0	162.7	
$ 10 2-Fluorobiphenyl	172	9.497	9.492	0.005	99	1197242	160.0	154.7	
$ 11 2,4,6-Tribromophenol	330	11.127	11.121	0.006	90	315899	160.0	164.8	
$ 12 p-Terphenyl-d14	244	13.226	13.221	0.005	98	1631518	160.0	151.9	
23 1,4-Dioxane	88	2.606	2.606	0.000	97	187639	160.0	154.1	
24 N-Nitrosodimethylamine	42	3.092	3.087	0.005	87	262810	160.0	156.7	
25 Pyridine	52	3.188	3.188	0.000	86	802931	320.0	314.4	
32 Benzaldehyde	77	6.175	6.174	0.001	91	196657	160.0	101.6	
33 Phenol	94	6.255	6.249	0.006	95	498933	160.0	155.4	
34 Aniline	93	6.303	6.303	0.000	97	634864	160.0	155.6	
35 Bis(2-chloroethyl)ether	93	6.362	6.361	0.001	98	383488	160.0	155.4	
37 2-Chlorophenol	128	6.463	6.458	0.005	94	490424	160.0	155.6	
38 n-Decane	57	6.511	6.506	0.005	86	461960	160.0	154.0	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	97	599245	160.0	155.8	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	93	608533	160.0	155.0	
41 Benzyl alcohol	108	6.853	6.848	0.005	91	299798	160.0	159.4	
42 1,2-Dichlorobenzene	146	6.923	6.917	0.005	96	574893	160.0	156.9	
43 2-Methylphenol	108	6.981	6.976	0.005	96	404120	160.0	155.9	
44 2,2'-oxybis[1-chloropropan	45	7.013	7.008	0.005	90	483600	160.0	139.7	
45 Indene	115	7.029	7.024	0.005	89	2414329	480.0	461.6	
46 4-Methylphenol	108	7.163	7.152	0.011	92	430533	160.0	158.8	
47 N-Nitrosodi-n-propylamine	70	7.168	7.163	0.005	87	292958	160.0	160.1	
49 Acetophenone	105	7.179	7.168	0.011	97	648242	160.0	159.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
53 Hexachloroethane	117	7.334	7.334	0.000	84	231238	160.0	159.5	
54 Nitrobenzene	77	7.387	7.376	0.011	88	450182	160.0	161.4	
56 Isophorone	82	7.665	7.654	0.011	97	751265	160.0	160.2	
59 2-Nitrophenol	139	7.767	7.761	0.006	94	283011	160.0	161.3	
60 2,4-Dimethylphenol	107	7.793	7.788	0.005	97	498032	160.0	158.4	
62 Bis(2-chloroethoxy)methane	93	7.900	7.895	0.005	99	449911	160.0	158.7	
64 Benzoic acid	105	7.980	7.900	0.080	87	1044885	480.0	497.7	
67 2,4-Dichlorophenol	162	8.050	8.044	0.006	92	453475	160.0	157.7	
68 1,2,4-Trichlorobenzene	180	8.162	8.156	0.006	95	534186	160.0	157.4	
70 Naphthalene	128	8.258	8.253	0.005	98	1296233	160.0	156.9	
72 4-Chloroaniline	127	8.295	8.295	0.000	96	552253	160.0	158.1	
73 2,6-Dichlorophenol	162	8.317	8.317	0.000	97	448856	160.0	160.5	
74 Hexachlorobutadiene	225	8.408	8.408	0.000	93	440896	160.0	159.6	
76 Caprolactam	113	8.718	8.675	0.043	80	123303	160.0	160.8	
80 4-Chloro-3-methylphenol	107	8.862	8.856	0.006	93	401488	160.0	159.2	
83 2-Methylnaphthalene	142	9.075	9.070	0.005	90	982977	160.0	158.9	
85 1-Methylnaphthalene	142	9.193	9.193	0.000	90	926532	160.0	158.5	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	95	574261	160.0	162.3	
87 1,2,4,5-Tetrachlorobenzene	216	9.284	9.278	0.006	96	632055	160.0	162.2	
89 2,4,6-Trichlorophenol	196	9.401	9.401	0.000	91	377867	160.0	161.0	
91 2,4,5-Trichlorophenol	196	9.449	9.444	0.005	95	398021	160.0	159.6	
94 1,1'-Biphenyl	154	9.620	9.620	0.000	95	1238603	160.0	157.2	
95 2-Chloronaphthalene	162	9.658	9.652	0.006	97	955571	160.0	155.8	
98 2-Nitroaniline	65	9.754	9.748	0.006	86	247691	160.0	161.3	
102 Dimethyl phthalate	163	9.957	9.946	0.011	99	1112157	160.0	156.4	
103 1,3-Dinitrobenzene	168	9.989	9.984	0.005	96	209088	160.0	162.8	
104 2,6-Dinitrotoluene	165	10.026	10.021	0.005	95	262984	160.0	160.0	
105 Acenaphthylene	152	10.139	10.133	0.006	97	1404535	160.0	156.5	
106 3-Nitroaniline	138	10.219	10.213	0.006	94	268759	160.0	161.4	
107 2,4-Dinitrophenol	184	10.336	10.325	0.011	90	438566	320.0	332.8	
108 Acenaphthene	153	10.331	10.331	0.000	93	983815	160.0	157.1	
109 4-Nitrophenol	109	10.395	10.379	0.016	85	472262	320.0	317.0	
111 2,4-Dinitrotoluene	165	10.475	10.470	0.005	94	354649	160.0	160.2	
112 Dibenzofuran	168	10.518	10.512	0.006	95	1408292	160.0	154.1	
116 2,3,4,6-Tetrachlorophenol	232	10.646	10.641	0.005	69	395409	160.0	160.2	
118 Diethyl phthalate	149	10.726	10.721	0.005	98	1205323	160.0	157.9	
119 Hexadecane	57	10.742	10.737	0.005	93	510038	160.0	152.5	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	91	652153	160.0	155.5	
122 4-Nitroaniline	138	10.881	10.870	0.011	58	292219	160.0	163.0	
123 Fluorene	166	10.881	10.876	0.005	95	1164531	160.0	157.7	
125 4,6-Dinitro-2-methylphenol	198	10.919	10.908	0.010	89	458892	320.0	315.8	
127 N-Nitrosodiphenylamine	169	10.983	10.977	0.006	63	834573	160.0	155.7	
128 Diphenylamine	169	10.983	10.977	0.006	93	834573	136.8	133.1	
129 1,2-Diphenylhydrazine	77	11.025	11.025	0.000	97	881132	160.0	155.5	
130 Azobenzene	77	11.025	11.025	0.000	96	881132	160.0	155.5	
137 4-Bromophenyl phenyl ether	248	11.357	11.356	0.001	59	456944	160.0	158.4	
139 Hexachlorobenzene	284	11.453	11.453	0.000	95	563046	160.0	161.9	
141 Atrazine	200	11.490	11.485	0.005	94	348865	160.0	156.4	
143 Pentachlorophenol	266	11.629	11.629	0.000	92	642536	320.0	326.3	
144 n-Octadecane	57	11.650	11.650	0.000	94	531712	160.0	154.0	
150 Phenanthrene	178	11.837	11.832	0.005	97	1617351	160.0	153.2	
151 Anthracene	178	11.885	11.880	0.005	97	1683633	160.0	154.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
152 Carbazole	167	12.019	12.014	0.005	97	1537783	160.0	155.1	
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	100	1910030	160.0	156.1	
162 Fluoranthene	202	12.922	12.922	0.000	96	2052351	160.0	155.5	
164 Benzidine	184	13.002	12.997	0.005	98	759973	160.0	113.3	M
165 Pyrene	202	13.130	13.125	0.005	97	2097220	160.0	149.3	
172 Butyl benzyl phthalate	149	13.622	13.616	0.006	95	938881	160.0	156.6	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	92	1295748	160.0	158.6	
179 3,3'-Dichlorobenzidine	252	14.129	14.124	0.005	72	886817	160.0	155.8	
181 Benzo[a]anthracene	228	14.188	14.183	0.006	96	2206157	160.0	150.7	
182 Chrysene	228	14.225	14.215	0.010	93	2088585	160.0	149.6	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	98	2129479	160.0	157.1	
185 Benzo[b]fluoranthene	252	15.251	15.240	0.011	94	2324181	160.0	155.0	
187 Benzo[k]fluoranthene	252	15.278	15.267	0.011	96	2406450	160.0	157.3	
190 Benzo[a]pyrene	252	15.636	15.625	0.011	74	2209732	160.0	158.1	
193 Dibenz(a,h)anthracene	278	17.196	17.174	0.022	89	2350717	160.0	162.8	
194 Indeno[1,2,3-cd]pyrene	276	17.201	17.180	0.021	96	2759131	160.0	161.8	
195 Benzo[g,h,i]perylene	276	17.660	17.639	0.021	95	2300944	160.0	161.4	
S 254 Total Cresols	1				0			314.8	
S 256 3-Methylphenol	1				0			158.8	
S 257 3 & 4 Methylphenol	108				0			158.8	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LIST1_WRK_00525	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

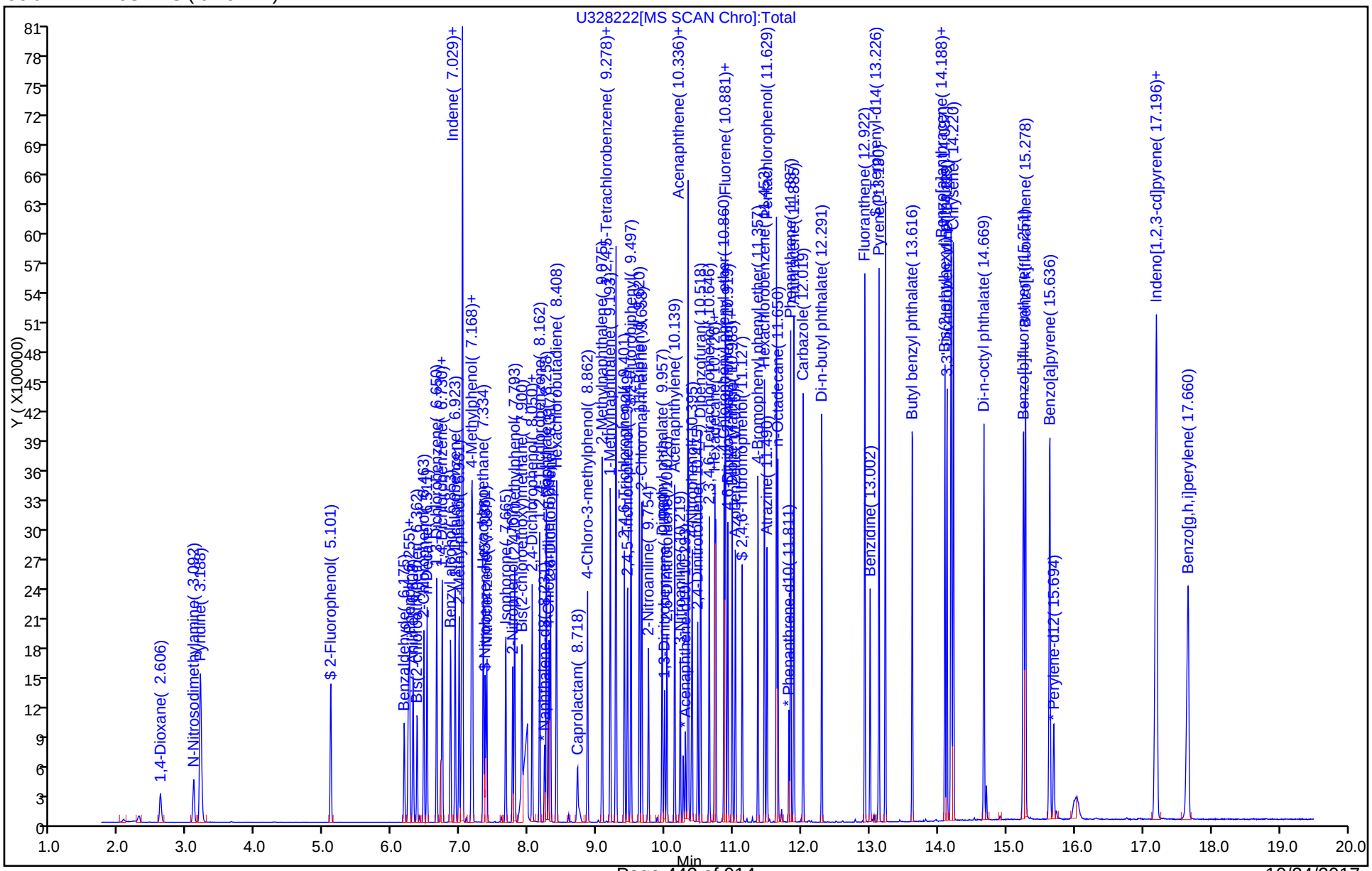
Report Date: 16-Oct-2017 16:51:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Injection Date:	16-Oct-2017 14:19:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	IC - List1 160			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

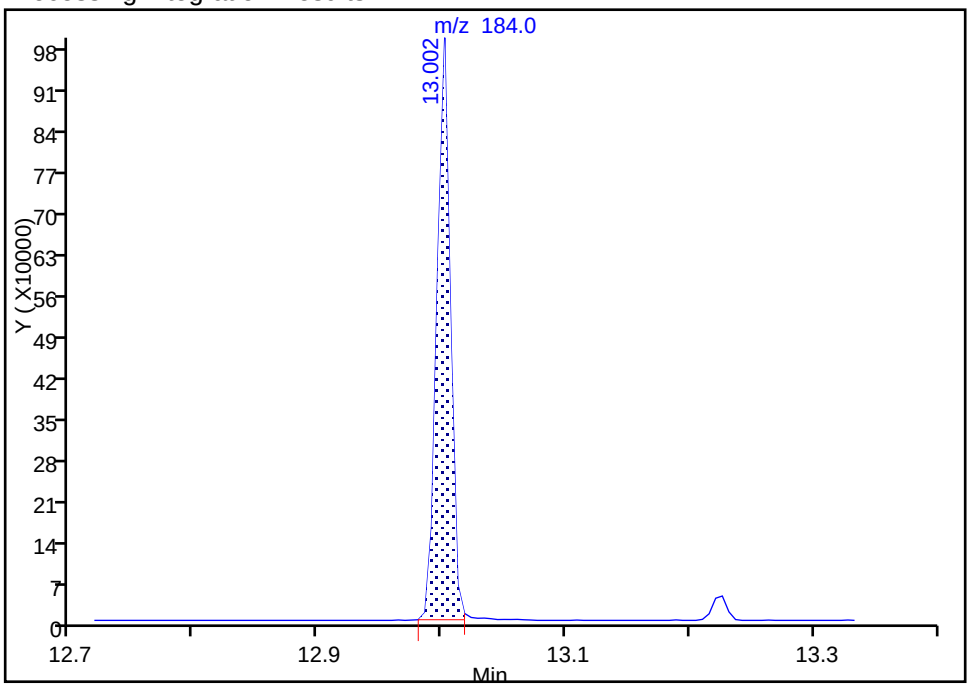
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D
Injection Date: 16-Oct-2017 14:19:30 Instrument ID: HP5973U
Lims ID: IC - List1 160
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

164 Benzidine, CAS: 92-87-5

Signal: 1

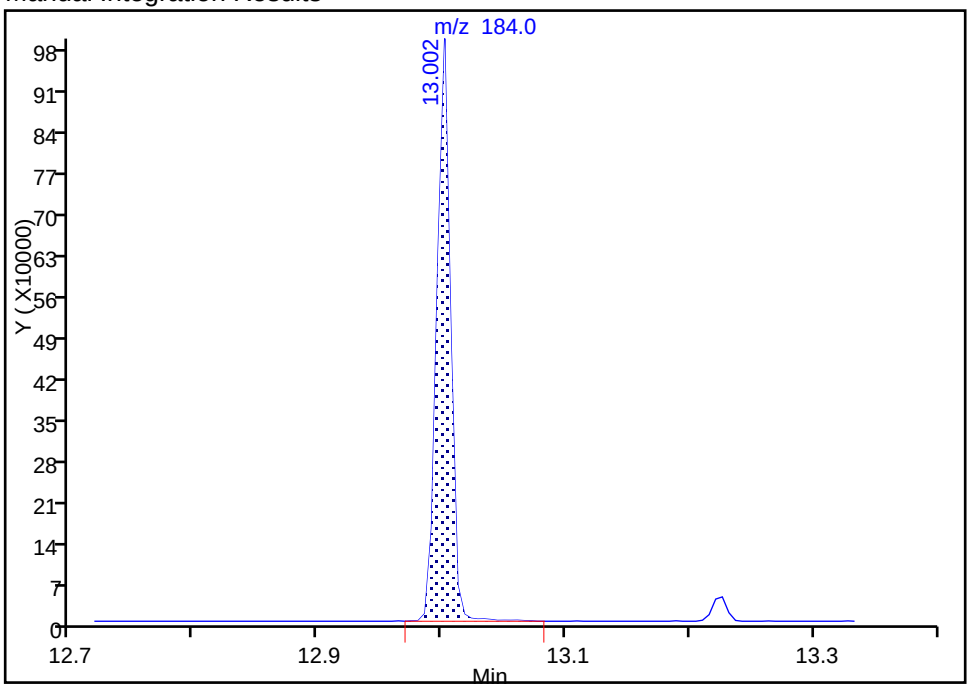
Processing Integration Results

RT: 13.00
Area: 749632
Amount: 132.1427
Amount Units: ng/uL



Manual Integration Results

RT: 13.00
Area: 759973
Amount: 113.2832
Amount Units: ng/uL



Reviewer: richardsd, 16-Oct-2017 16:03:11
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-379526/3	X20237.D
Level 2	IC 480-379526/4	X20238.D
Level 3	ICIS 480-379526/5	X20239.D
Level 4	IC 480-379526/6	X20240.D
Level 5	IC 480-379526/7	X20241.D
Level 6	IC 480-379526/8	X20242.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.8328 0.8052	0.8510	0.8411	0.8415	0.7095	Ave		0.8135				6.6		20.0			
N-Nitrosodimethylamine	0.7103 0.7369	0.7606	0.7020	0.7404	0.7269	Ave		0.7295				2.9		20.0			
Pyridine	0.9155 1.0903	1.0513	0.9895	1.0214	1.0351	Lin1	-1.514	1.0551							0.9990		0.9900
Benzaldehyde	1.0719 1.0716	1.2093	1.1879	1.1142	1.1212	Ave		1.1293			0.0100	5.1		20.0			
Phenol	1.8160 1.8453	2.0087	1.9516	1.8791	1.9101	Ave		1.9018			0.8000	3.7		20.0			
Aniline	2.2169 2.2124	2.3166	2.2402	2.2392	2.2704	Ave		2.2493				1.7		20.0			
Bis(2-chloroethyl)ether	1.4296 1.3862	1.4773	1.4108	1.3982	1.4270	Ave		1.4215			0.7000	2.3		20.0			
2-Chlorophenol	1.2176 1.3230	1.3512	1.3391	1.3132	1.3628	Ave		1.3178			0.8000	4.0		20.0			
n-Decane	1.3366 1.3618	1.4443	1.4032	1.3870	1.3850	Ave		1.3863			0.0100	2.6		20.0			
1,3-Dichlorobenzene	1.5284 1.5366	1.5984	1.5559	1.5163	1.5249	Ave		1.5434				1.9		20.0			
1,4-Dichlorobenzene	1.5763 1.5407	1.6298	1.5560	1.5029	1.5587	Ave		1.5607				2.7		20.0			
Benzyl alcohol	0.7240 0.9332	0.8708	0.8996	0.9277	0.9395	Lin1	-1.190	0.9422							1.0000		0.9900
1,2-Dichlorobenzene	1.4915 1.4545	1.4598	1.4449	1.4051	1.4526	Ave		1.4514				1.9		20.0			
Indene	0.6188 0.6146	0.6674	0.6329	0.5981	0.6159	Ave		0.6246				3.8		20.0			
2-Methylphenol	1.1602 1.2555	1.2397	1.2705	1.2171	1.2566	Ave		1.2333			0.7000	3.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
bis (2-chloroisopropyl) ether	1.3886 1.4463	1.5714	1.4767	1.4416	1.4625	Ave		1.4645			0.0100	4.1		20.0			
Acetophenone	1.8971 1.9812	1.9765	1.9900	1.9145	1.9210	Ave		1.9467			0.0100	2.1		20.0			
N-Nitrosodi-n-propylamine	0.9111 1.0585	1.0139	1.0352	1.0007	1.0222	Ave		1.0069			0.5000	5.1		20.0			
4-Methylphenol	1.1885 1.3532	1.3322	1.3212	1.2777	1.2963	Ave		1.2948			0.6000	4.5		20.0			
Hexachloroethane	0.6059 0.6225	0.6035	0.6212	0.6124	0.6108	Ave		0.6127			0.3000	1.3		20.0			
Nitrobenzene	0.4119 0.4375	0.4527	0.4446	0.4498	0.4382	Ave		0.4391			0.2000	3.3		20.0			
Isophorone	0.6715 0.7339	0.7470	0.7509	0.7762	0.7500	Lin1	-0.325	0.7546			0.4000				0.9990		0.9900
2-Nitrophenol	0.1544 0.2040	0.1804	0.1934	0.2032	0.2063	Lin1	-0.317	0.2062			0.1000				0.9990		0.9900
2,4-Dimethylphenol	0.3767 0.4030	0.4221	0.4080	0.4165	0.4141	Lin1	-0.101	0.4118			0.2000				1.0000		0.9900
Bis(2-chloroethoxy)methane	0.4466 0.4635	0.4906	0.4698	0.4644	0.4688	Ave		0.4673			0.3000	3.0		20.0			
Benzoic acid	0.1361 0.3309	0.2278	0.2884	0.3215	0.3349	Lin1	-3.772	0.3363							0.9970		0.9900
2,4-Dichlorophenol	0.2905 0.3387	0.3462	0.3415	0.3423	0.3420	Lin1	-0.204	0.3437			0.2000				1.0000		0.9900
1,2,4-Trichlorobenzene	0.3975 0.3842	0.3989	0.3979	0.4019	0.3910	Ave		0.3952				1.6		20.0			
Naphthalene	1.0299 1.0224	1.1314	1.0505	1.0568	1.0214	Ave		1.0521			0.7000	4.0		20.0			
4-Chloroaniline	0.4233 0.4476	0.4697	0.4533	0.4639	0.4511	Lin1	-0.063	0.4546			0.0100				1.0000		0.9900
2,6-Dichlorophenol	0.3130 0.3256	0.3381	0.3267	0.3450	0.3325	Lin1	-0.061	0.3332							0.9990		0.9900
Hexachlorobutadiene	0.2693 0.2487	0.2616	0.2504	0.2702	0.2524	Ave		0.2588			0.0100	3.7		20.0			
Caprolactam	0.0742 0.1146	0.1096	0.1132	0.1186	0.1115	Lin1	-0.196	0.1168			0.0100				0.9990		0.9900
4-Chloro-3-methylphenol	0.2924 0.3269	0.3381	0.3352	0.3462	0.3409	Lin1	-0.177	0.3389			0.2000				0.9990		0.9900
2-Methylnaphthalene	0.6974 0.6838	0.7667	0.7158	0.7522	0.7088	Ave		0.7208			0.4000	4.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1-Methylnaphthalene	0.6678 0.6442	0.7346	0.6787	0.7089	0.6802	Ave		0.6857			0.0100	4.6		20.0			
Hexachlorocyclopentadiene	0.5376 0.6506	0.6119	0.6446	0.6306	0.6282	Lin1	-0.549	0.6448			0.0500				1.0000		0.9900
1,2,4,5-Tetrachlorobenzene	0.8168 0.8055	0.8252	0.8306	0.7928	0.7930	Ave		0.8107			0.0100	2.0		20.0			
2,4,6-Trichlorophenol	0.4194 0.5197	0.4799	0.5062	0.5043	0.5024	Lin1	-0.524	0.5149			0.2000				1.0000		0.9900
2,4,5-Trichlorophenol	0.4153 0.5442	0.5139	0.5461	0.5385	0.5481	Lin1	-0.681	0.5518			0.2000				1.0000		0.9900
Biphenyl	1.7668 1.6855	1.7641	1.8207	1.7369	1.6626	Ave		1.7394			0.0100	3.3		20.0			
2-Chloronaphthalene	1.4114 1.3419	1.4273	1.4056	1.3500	1.3196	Ave		1.3760			0.8000	3.2		20.0			
2-Nitroaniline	0.3506 0.4410	0.3821	0.4326	0.4275	0.4184	Lin1	-0.525	0.4350			0.0100				0.9990		0.9900
Dimethyl phthalate	1.4566 1.5678	1.5772	1.6191	1.5722	1.5492	Ave		1.5570			0.0100	3.5		20.0			
1,3-Dinitrobenzene	0.1124 0.1484	0.1297	0.1405	0.1557	0.1533	Lin1	-0.256	0.1528							0.9980		0.9900
2,6-Dinitrotoluene	0.2966 0.3776	0.3448	0.3664	0.3750	0.3715	Lin1	-0.462	0.3785							1.0000		0.9900
Acenaphthylene	1.8264 1.9919	2.0393	2.0175	1.9839	1.9425	Ave		1.9669			0.9000	3.9		20.0			
3-Nitroaniline	0.2947 0.3898	0.3653	0.3789	0.3924	0.3862	Lin1	-0.512	0.3936			0.0100				1.0000		0.9900
Acenaphthene	1.2982 1.3223	1.3782	1.3455	1.3339	1.2894	Ave		1.3279			0.9000	2.4		20.0			
2,4-Dinitrophenol	0.1339 0.2838	0.2133	0.2601	0.2765	0.2801	Lin1	-1.820	0.2869			0.0100				0.9990		0.9900
4-Nitrophenol	0.1991 0.2813	0.2543	0.2776	0.2708	0.2735	Lin1	-0.850	0.2807			0.0100				1.0000		0.9900
2,4-Dinitrotoluene	0.3490 0.5183	0.4688	0.5006	0.5053	0.4966	Lin1	-0.860	0.5162			0.2000				1.0000		0.9900
Dibenzofuran	2.0633 1.9767	2.0856	2.0521	1.9883	1.9173	Ave		2.0139			0.8000	3.2		20.0			
2,3,4,6-Tetrachlorophenol	0.3251 0.4855	0.4251	0.4689	0.4758	0.4665	Lin1	-0.868	0.4847			0.0100				1.0000		0.9900
Diethyl phthalate	1.4570 1.5637	1.5834	1.6030	1.5835	1.5461	Ave		1.5561			0.0100	3.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Hexadecane	0.7946 0.8272	0.8718	0.8492	0.8658	0.8169	Ave		0.8376			0.0100	3.6		20.0			
Fluorene	1.4684 1.5376	1.5986	1.6022	1.5821	1.5472	Ave		1.5560			0.9000	3.2		20.0			
4-Chlorophenyl phenyl ether	0.8832 0.8664	0.8872	0.8891	0.8874	0.8589	Ave		0.8787			0.4000	1.5		20.0			
4-Nitroaniline	0.3326 0.3989	0.3854	0.4056	0.4014	0.3865	Lin1	-0.303	0.4003			0.0100				1.0000		0.9900
4,6-Dinitro-2-methylphenol	0.0823 0.1527	0.1225	0.1321	0.1448	0.1510	Lin1	-0.842	0.1520			0.0100				0.9980		0.9900
Diphenylamine	0.6264 0.6439	0.6477	0.6314	0.6448	0.6440	Ave		0.6397				1.3		20.0			
N-Nitrosodiphenylamine	0.5356 0.5506	0.5537	0.5399	0.5513	0.5507	Ave		0.5470			0.0100	1.3		20.0			
1,2-Diphenylhydrazine	0.7699 0.7720	0.7682	0.7560	0.7675	0.7626	Ave		0.7660				0.8		20.0			
trans-Azobenzene	0.7699 0.7720	0.7682	0.7560	0.7675	0.7626	Ave		0.7660				0.8		20.0			
4-Bromophenyl phenyl ether	0.2201 0.2488	0.2459	0.2385	0.2425	0.2475	Ave		0.2405			0.1000	4.5		20.0			
Hexachlorobenzene	0.2402 0.2460	0.2526	0.2429	0.2445	0.2499	Ave		0.2460			0.1000	1.9		20.0			
Atrazine	0.3682 0.4371	0.4647	0.4803	0.4589	0.4483	Lin1	-0.239	0.4549			0.0100				0.9980		0.9900
Pentachlorophenol	0.0840 0.1724	0.1511	0.1525	0.1674	0.1728	Lin1	-0.963	0.1742			0.0500				0.9990		0.9900
n-Octadecane	0.3537 +++++	0.4300	0.3914	0.4058	0.4181	Lin1	-0.228	0.4132			0.0100				0.9990		0.9900
Phenanthrene	1.0798 1.0588	1.1236	1.0640	1.0719	1.0573	Ave		1.0759			0.7000	2.3		20.0			
Anthracene	1.0435 1.1053	1.1592	1.0905	1.1186	1.1149	Ave		1.1053			0.7000	3.4		20.0			
Carbazole	0.9115 1.0046	1.0769	1.0172	1.0119	1.0259	Ave		1.0080			0.0100	5.3		20.0			
Di-n-butyl phthalate	0.9688 1.1832	1.1704	1.1748	1.1991	1.2136	Lin1	-1.124	1.2080			0.0100				1.0000		0.9900
Fluoranthene	1.1464 1.2252	1.2946	1.2356	1.2590	1.2794	Ave		1.2400			0.6000	4.2		20.0			
Benzidine	0.4598 0.5854	0.6484	0.6357	0.6271	0.5988	Lin1	-0.402	0.6127							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Pyrene	1.0609 +++++	1.2051	1.1340	1.1433	1.1453	Ave		1.1377			0.6000	4.5		20.0			
Butyl benzyl phthalate	0.3597 0.4802	0.4530	0.4696	0.5042	0.4997	Lin1	-0.732	0.4977			0.0100				0.9990		0.9900
3,3'-Dichlorobenzidine	0.2932 0.4477	0.4039	0.4191	0.4542	0.4475	Lin1	-0.876	0.4548			0.0100				0.9990		0.9900
Benzo[a]anthracene	1.0135 1.1210	1.1822	1.1368	1.1794	1.1330	Lin1	-0.379	1.1467			0.8000				0.9990		0.9900
Bis(2-ethylhexyl) phthalate	0.5032 0.6920	0.6649	0.6918	0.7248	0.7174	Lin1	-1.057	0.7187			0.0100				0.9990		0.9900
Chrysene	1.1379 1.0585	1.1843	1.0883	1.0894	1.0720	Ave		1.1051			0.7000	4.3		20.0			
Di-n-octyl phthalate	0.7577 1.1416	1.0500	1.1469	1.2040	1.1930	Lin1	-2.259	1.1955			0.0100				0.9990		0.9900
Benzo[b]fluoranthene	1.1584 1.2984	1.3205	1.3707	1.2515	1.2487	Ave		1.2747			0.7000	5.7		20.0			
Benzo[k]fluoranthene	1.2791 +++++	1.4476	1.3060	1.4400	1.3330	Ave		1.3612			0.7000	5.7		20.0			
Benzo[a]pyrene	1.0324 +++++	1.2538	1.2191	1.2123	1.2531	Lin1	-0.906	1.2471			0.7000				1.0000		0.9900
Indeno[1,2,3-cd]pyrene	1.1990 1.4083	1.3849	1.3728	1.3905	1.4254	Lin1	-1.078	1.4175			0.5000				1.0000		0.9900
Dibenz(a,h)anthracene	1.0180 1.1903	1.1963	1.1674	1.1892	1.2015	Lin1	-0.808	1.2009							1.0000		0.9900
Benzo[g,h,i]perylene	1.0592 1.1999	1.2096	1.1767	1.1796	1.2117	Lin1	-0.629	1.2043			0.5000				1.0000		0.9900
2-Fluorophenol	1.2664 1.3614	1.3405	1.4116	1.3507	1.3394	Ave		1.3450				3.5		20.0			
Phenol-d5	1.5641 1.6561	1.7137	1.6826	1.6944	1.7277	Ave		1.6731				3.5		20.0			
Nitrobenzene-d5	0.3827 0.4251	0.4276	0.4344	0.4420	0.4317	Ave		0.4239				5.0		20.0			
2-Fluorobiphenyl	1.6519 1.6132	1.6908	1.7313	1.6361	1.6038	Ave		1.6545				2.9		20.0			
2,4,6-Tribromophenol	0.0828 0.1155	0.0981	0.1042	0.1113	0.1151	Lin1	-0.209	0.1150							0.9990		0.9900
p-Terphenyl-d14	0.7138 0.7620	0.7970	0.7843	0.7832	0.7788	Ave		0.7698				3.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-379526/3	X20237.D
Level 2	IC 480-379526/4	X20238.D
Level 3	ICIS 480-379526/5	X20239.D
Level 4	IC 480-379526/6	X20240.D
Level 5	IC 480-379526/7	X20241.D
Level 6	IC 480-379526/8	X20242.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,4-Dioxane	DCBd 4	Ave	17069 469654	76960	183915	314748	392717	5.00 120	20.0	50.0	80.0	100
N-Nitrosodimethylamine	DCBd 4	Ave	14557 429787	68789	153494	276917	402316	5.00 120	20.0	50.0	80.0	100
Pyridine	DCBd 4	Lin1	37528 1271890	190149	432707	764057	1145830	10.0 240	40.0	100	160	200
Benzaldehyde	DCBd 4	Ave	21968 625016	109366	259742	416729	620578	5.00 120	20.0	50.0	80.0	100
Phenol	DCBd 4	Ave	37219 1076313	181654	426715	702826	1057225	5.00 120	20.0	50.0	80.0	100
Aniline	DCBd 4	Ave	45436 1290451	209506	489815	837512	1256625	5.00 120	20.0	50.0	80.0	100
Bis(2-chloroethyl)ether	DCBd 4	Ave	29300 808532	133603	308466	522984	789815	5.00 120	20.0	50.0	80.0	100
2-Chlorophenol	DCBd 4	Ave	24954 771659	122196	292781	491170	754280	5.00 120	20.0	50.0	80.0	100
n-Decane	DCBd 4	Ave	27394 794290	130619	306798	518777	766598	5.00 120	20.0	50.0	80.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	31324 896268	144548	340189	567134	844027	5.00 120	20.0	50.0	80.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	32307 898670	147393	340213	562145	862702	5.00 120	20.0	50.0	80.0	100
Benzyl alcohol	DCBd 4	Lin1	14838 544288	78754	196694	346986	520019	5.00 120	20.0	50.0	80.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	30568 848372	132020	315925	525543	804003	5.00 120	20.0	50.0	80.0	100
Indene	PHN	Ave	141244 3989248	676564	1586989	2591227	3816966	15.0 360	60.0	150	240	300
2-Methylphenol	DCBd 4	Ave	23778 732292	112113	277792	455216	695490	5.00 120	20.0	50.0	80.0	100
bis (2-chloroisopropyl) ether	DCBd 4	Ave	28460 843583	142109	322869	539194	809475	5.00 120	20.0	50.0	80.0	100

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Acetophenone	DCBd 4	Ave	38882 1155580	178746	435105	716069	1063222	5.00 120	20.0	50.0	80.0	100
N-Nitrosodi-n-propylamine	DCBd 4	Ave	18672 617404	91693	226352	374303	565762	5.00 120	20.0	50.0	80.0	100
4-Methylphenol	DCBd 4	Ave	24358 789284	120475	288882	477895	717486	5.00 120	20.0	50.0	80.0	100
Hexachloroethane	DCBd 4	Ave	12417 363066	54582	135823	229043	338082	5.00 120	20.0	50.0	80.0	100
Nitrobenzene	NPT	Ave	27452 910715	139294	338306	557002	829979	5.00 120	20.0	50.0	80.0	100
Isophorone	NPT	Lin1	44749 1527736	229839	571371	961158	1420450	5.00 120	20.0	50.0	80.0	100
2-Nitrophenol	NPT	Lin1	10290 424634	55503	147156	251647	390648	5.00 120	20.0	50.0	80.0	100
2,4-Dimethylphenol	NPT	Lin1	25105 839009	129881	310451	515790	784340	5.00 120	20.0	50.0	80.0	100
Bis(2-chloroethoxy)methane	NPT	Ave	29764 964851	150935	357512	575008	887872	5.00 120	20.0	50.0	80.0	100
Benzoic acid	NPT	Lin1	27214 2066181	210285	658303	1194257	1902895	15.0 360	60.0	150	240	300
2,4-Dichlorophenol	NPT	Lin1	19356 705057	106514	259897	423830	647806	5.00 120	20.0	50.0	80.0	100
1,2,4-Trichlorobenzene	NPT	Ave	26489 799773	122734	302758	497696	740470	5.00 120	20.0	50.0	80.0	100
Naphthalene	NPT	Ave	68632 2128351	348124	799407	1308667	1934365	5.00 120	20.0	50.0	80.0	100
4-Chloroaniline	NPT	Lin1	28211 931677	144516	344938	574470	854416	5.00 120	20.0	50.0	80.0	100
2,6-Dichlorophenol	NPT	Lin1	20855 677895	104038	248564	427242	629640	5.00 120	20.0	50.0	80.0	100
Hexachlorobutadiene	NPT	Ave	17949 517736	80483	190527	334537	477998	5.00 120	20.0	50.0	80.0	100
Caprolactam	NPT	Lin1	4942 238554	33723	86102	146877	211165	5.00 120	20.0	50.0	80.0	100
4-Chloro-3-methylphenol	NPT	Lin1	19483 680554	104028	255080	428682	645724	5.00 120	20.0	50.0	80.0	100
2-Methylnaphthalene	NPT	Ave	46475 1423466	235900	544688	931482	1342331	5.00 120	20.0	50.0	80.0	100
1-Methylnaphthalene	NPT	Ave	44505 1340962	226018	516448	877835	1288270	5.00 120	20.0	50.0	80.0	100
Hexachlorocyclopentadiene	ANT	Lin1	18974 670396	98967	245120	424720	625121	5.00 120	20.0	50.0	80.0	100

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2,4,5-Tetrachlorobenzene	ANT	Ave	28828 830066	133466	315844	533961	789023	5.00 120	20.0	50.0	80.0	100
2,4,6-Trichlorophenol	ANT	Lin1	14803 535555	77610	192490	339677	499908	5.00 120	20.0	50.0	80.0	100
2,4,5-Trichlorophenol	ANT	Lin1	14658 560818	83110	207640	362667	545332	5.00 120	20.0	50.0	80.0	100
Biphenyl	ANT	Ave	62353 1736870	285306	692295	1169831	1654317	5.00 120	20.0	50.0	80.0	100
2-Chloronaphthalene	ANT	Ave	49811 1382801	230842	534473	909277	1313036	5.00 120	20.0	50.0	80.0	100
2-Nitroaniline	ANT	Lin1	12374 454413	61796	164477	287932	416350	5.00 120	20.0	50.0	80.0	100
Dimethyl phthalate	ANT	Ave	51408 1615576	255075	615652	1058955	1541522	5.00 120	20.0	50.0	80.0	100
1,3-Dinitrobenzene	NPT	Lin1	7487 309019	39891	106915	192768	290272	5.00 120	20.0	50.0	80.0	100
2,6-Dinitrotoluene	ANT	Lin1	10469 389105	55760	139322	252552	369686	5.00 120	20.0	50.0	80.0	100
Acenaphthylene	ANT	Ave	64458 2052693	329826	767145	1336240	1932868	5.00 120	20.0	50.0	80.0	100
3-Nitroaniline	ANT	Lin1	10402 401693	59084	144070	264315	384329	5.00 120	20.0	50.0	80.0	100
Acenaphthene	ANT	Ave	45816 1362662	222895	511606	898407	1283021	5.00 120	20.0	50.0	80.0	100
2,4-Dinitrophenol	ANT	Lin1	9450 584994	69003	197836	372412	557443	10.0 240	40.0	100	160	200
4-Nitrophenol	ANT	Lin1	14056 579663	82241	211111	364750	544209	10.0 240	40.0	100	160	200
2,4-Dinitrotoluene	ANT	Lin1	12318 534124	75824	190351	340314	494117	5.00 120	20.0	50.0	80.0	100
Dibenzofuran	ANT	Ave	72820 2037011	337313	780297	1339155	1907807	5.00 120	20.0	50.0	80.0	100
2,3,4,6-Tetrachlorophenol	ANT	Lin1	11475 500288	68745	178312	320434	464184	5.00 120	20.0	50.0	80.0	100
Diethyl phthalate	ANT	Ave	51420 1611395	256090	609524	1066561	1538452	5.00 120	20.0	50.0	80.0	100
Hexadecane	ANT	Ave	28045 852475	140991	322906	583136	812831	5.00 120	20.0	50.0	80.0	100
Fluorene	ANT	Ave	51823 1584476	258539	609215	1065567	1539534	5.00 120	20.0	50.0	80.0	100
4-Chlorophenyl phenyl ether	ANT	Ave	31170 892876	143487	338061	597712	854624	5.00 120	20.0	50.0	80.0	100

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4-Nitroaniline	ANT	Lin1	11737 411114	62337	154207	270371	384538	5.00 120	20.0	50.0	80.0	100
4,6-Dinitro-2-methylphenol	PHN	Lin1	12520 660918	82776	220796	418290	623743	10.0 240	40.0	100	160	200
Diphenylamine	PHN	Ave	40748 1191207	187104	451228	796105	1137499	4.28 103	17.1	42.8	68.4	85.5
N-Nitrosodiphenylamine	PHN	Ave	40748 1191207	187104	451228	796105	1137499	5.00 120	20.0	50.0	80.0	100
1,2-Diphenylhydrazine	PHN	Ave	58575 1670334	259554	631897	1108293	1575313	5.00 120	20.0	50.0	80.0	100
trans-Azobenzene	PHN	Ave	58575 1670334	259554	631897	1108293	1575313	5.00 120	20.0	50.0	80.0	100
4-Bromophenyl phenyl ether	PHN	Ave	16742 538286	83091	199312	350245	511297	5.00 120	20.0	50.0	80.0	100
Hexachlorobenzene	PHN	Ave	18275 532181	85367	203002	353012	516151	5.00 120	20.0	50.0	80.0	100
Atrazine	ANT	Lin1	12993 450450	75151	182620	309083	446110	5.00 120	20.0	50.0	80.0	100
Pentachlorophenol	PHN	Lin1	12786 746134	102080	254941	483504	713797	10.0 240	40.0	100	160	200
n-Octadecane	PHN	Lin1	26909 +++++	145309	327132	585993	863696	5.00 +++++	20.0	50.0	80.0	100
Phenanthrene	PHN	Ave	82154 2290868	379662	889244	1547941	2184046	5.00 120	20.0	50.0	80.0	100
Anthracene	PHN	Ave	79389 2391587	391688	911446	1615394	2303001	5.00 120	20.0	50.0	80.0	100
Carbazole	PHN	Ave	69346 2173617	363864	850165	1461283	2119153	5.00 120	20.0	50.0	80.0	100
Di-n-butyl phthalate	PHN	Lin1	73709 2560080	395477	981910	1731582	2506957	5.00 120	20.0	50.0	80.0	100
Fluoranthene	PHN	Ave	87223 2650881	437425	1032677	1818068	2642946	5.00 120	20.0	50.0	80.0	100
Benzidine	CRY	Lin1	40158 1467718	246663	603072	1025911	1417943	5.00 120	20.0	50.0	80.0	100
Pyrene	CRY	Ave	92658 +++++	458448	1075861	1870445	2712197	5.00 +++++	20.0	50.0	80.0	100
Butyl benzyl phthalate	CRY	Lin1	31412 1203914	172333	445485	824888	1183260	5.00 120	20.0	50.0	80.0	100
3,3'-Dichlorobenzidine	CRY	Lin1	25611 1122560	153643	397607	743081	1059761	5.00 120	20.0	50.0	80.0	100
Benzo[a]anthracene	CRY	Lin1	88520 2810670	449725	1078561	1929622	2683148	5.00 120	20.0	50.0	80.0	100

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1 Analy Batch No.: 379526

SDG No.:

Instrument ID: HP5973X GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/29/2017 19:33 Calibration End Date: 09/29/2017 21:44 Calibration ID: 31634

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Bis(2-ethylhexyl) phthalate	CRY	Lin1	43953 1734937	252918	656381	1185901	1698933	5.00 120	20.0	50.0	80.0	100
Chrysene	CRY	Ave	99384 2653885	450533	1032466	1782333	2538644	5.00 120	20.0	50.0	80.0	100
Di-n-octyl phthalate	CRY	Lin1	66174 2862181	399422	1088066	1969900	2825186	5.00 120	20.0	50.0	80.0	100
Benzo[b]fluoranthene	PRY	Ave	94275 2910211	455850	1203820	1884788	2759843	5.00 120	20.0	50.0	80.0	100
Benzo[k]fluoranthene	PRY	Ave	104097 +++++	499747	1147004	2168666	2946292	5.00 +++++	20.0	50.0	80.0	100
Benzo[a]pyrene	PRY	Lin1	84019 +++++	432821	1070720	1825712	2769615	5.00 +++++	20.0	50.0	80.0	100
Indeno[1,2,3-cd]pyrene	PRY	Lin1	97582 3156558	478085	1205652	2094027	3150512	5.00 120	20.0	50.0	80.0	100
Dibenz(a,h)anthracene	PRY	Lin1	82850 2668060	412967	1025260	1790949	2655601	5.00 120	20.0	50.0	80.0	100
Benzo[g,h,i]perylene	PRY	Lin1	86201 2689570	417581	1033485	1776474	2678145	5.00 120	20.0	50.0	80.0	100
2-Fluorophenol	DCBd 4	Ave	25954 794086	121231	308636	505195	741313	5.00 120	20.0	50.0	80.0	100
Phenol-d5	DCBd 4	Ave	32056 965950	154974	367904	633750	956251	5.00 120	20.0	50.0	80.0	100
Nitrobenzene-d5	NPT	Ave	25504 884906	131563	330535	547267	817621	5.00 120	20.0	50.0	80.0	100
2-Fluorobiphenyl	ANT	Ave	58301 1662390	273461	658292	1101936	1595812	5.00 120	20.0	50.0	80.0	100
2,4,6-Tribromophenol	PHN	Lin1	6298 249877	33157	87055	160744	237830	5.00 120	20.0	50.0	80.0	100
p-Terphenyl-d14	CRY	Ave	62340 1910536	303172	744098	1281427	1844273	5.00 120	20.0	50.0	80.0	100

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20237.D
Lims ID: IC - List1 5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 29-Sep-2017 19:33:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066023-003
Operator ID: DR Instrument ID: HP5973X
Sublist: chrom-X-8270*sub83

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 03-Oct-2017 11:56:11 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: pagem Date: 02-Oct-2017 10:26:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.761	5.750	0.011	94	163960	40.0	40.0	
* 2 Naphthalene-d8	136	7.251	7.300	-0.049	98	533114	40.0	40.0	
* 3 Acenaphthene-d10	164	9.313	9.356	-0.043	98	282339	40.0	40.0	
* 4 Phenanthrene-d10	188	10.954	10.959	-0.005	99	608655	40.0	40.0	
* 5 Chrysene-d12	240	13.331	13.336	-0.005	99	698712	40.0	40.0	
* 6 Perylene-d12	264	14.501	14.501	0.000	99	651070	40.0	40.0	
$ 7 2-Fluorophenol	112	4.003	3.961	0.042	95	25954	5.00	4.71	
$ 8 Phenol-d5	99	5.312	5.296	0.016	89	32056	5.00	4.67	
$ 9 Nitrobenzene-d5	82	6.418	6.440	-0.022	95	25504	5.00	4.51	
$ 10 2-Fluorobiphenyl	172	8.528	8.582	-0.054	98	58301	5.00	4.99	
$ 11 2,4,6-Tribromophenol	330	10.227	10.249	-0.022	95	6298	5.00	5.42	
$ 12 p-Terphenyl-d14	244	12.439	12.439	0.000	99	62340	5.00	4.64	
15 1,4-Dioxane	88	1.663	1.658	0.005	94	17069	5.00	5.12	
16 N-Nitrosodimethylamine	42	1.957	1.941	0.016	75	14557	5.00	4.87	
17 Pyridine	52	2.011	1.995	0.016	87	37528	10.0	10.1	
27 Benzaldehyde	77	5.195	5.173	0.022	87	21968	5.00	4.75	
28 Phenol	94	5.328	5.318	0.010	85	37219	5.00	4.77	
29 Aniline	93	5.339	5.323	0.016	97	45436	5.00	4.93	
31 Bis(2-chloroethyl)ether	93	5.435	5.425	0.010	89	29300	5.00	5.03	
32 2-Chlorophenol	128	5.494	5.478	0.016	97	24954	5.00	4.62	
35 n-Decane	57	5.595	5.585	0.010	94	27394	5.00	4.82	
36 1,3-Dichlorobenzene	146	5.686	5.676	0.010	96	31324	5.00	4.95	
37 1,4-Dichlorobenzene	146	5.777	5.772	0.005	95	32307	5.00	5.05	
38 Benzyl alcohol	108	5.932	5.932	0.000	94	14838	5.00	5.11	
39 1,2-Dichlorobenzene	146	5.964	5.964	0.000	95	30568	5.00	5.14	
229 Indene	115	6.071	6.076	-0.005	84	141244	15.0	14.9	
40 2-Methylphenol	108	6.081	6.087	-0.006	94	23778	5.00	4.70	
42 2,2'-oxybis[1-chloropropan	45	6.108	6.119	-0.011	96	28460	5.00	4.74	
45 Acetophenone	105	6.247	6.258	-0.011	90	38882	5.00	4.87	
47 N-Nitrosodi-n-propylamine	70	6.258	6.274	-0.016	86	18672	5.00	4.52	
46 4-Methylphenol	108	6.274	6.285	-0.011	92	24358	5.00	4.59	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
50 Hexachloroethane	117	6.365	6.381	-0.016	91	12417	5.00	4.94	
52 Nitrobenzene	77	6.439	6.461	-0.022	92	27452	5.00	4.69	
56 Isophorone	82	6.723	6.755	-0.033	97	44749	5.00	4.88	
58 2-Nitrophenol	139	6.819	6.851	-0.032	90	10290	5.00	5.28	
59 2,4-Dimethylphenol	107	6.888	6.926	-0.038	97	25105	5.00	4.82	
62 Bis(2-chloroethoxy)methane	93	6.995	7.038	-0.043	97	29764	5.00	4.78	
64 Benzoic acid	105	6.974	7.118	-0.144	55	27214	15.0	17.3	M
65 2,4-Dichlorophenol	162	7.096	7.139	-0.043	96	19356	5.00	4.82	
67 1,2,4-Trichlorobenzene	180	7.193	7.241	-0.048	95	26489	5.00	5.03	
69 Naphthalene	128	7.278	7.326	-0.048	99	68632	5.00	4.89	
71 4-Chloroaniline	127	7.348	7.401	-0.053	96	28211	5.00	4.79	
70 2,6-Dichlorophenol	162	7.358	7.412	-0.054	96	20855	5.00	4.88	
73 Hexachlorobutadiene	225	7.444	7.497	-0.053	96	17949	5.00	5.20	
78 Caprolactam	113	7.700	7.807	-0.107	72	4942	5.00	4.85	
79 4-Chloro-3-methylphenol	107	7.930	7.989	-0.059	96	19483	5.00	4.84	
82 2-Methylnaphthalene	142	8.085	8.144	-0.059	97	46475	5.00	4.84	
83 1-Methylnaphthalene	142	8.202	8.261	-0.059	96	44505	5.00	4.87	
85 1,2,4,5-Tetrachlorobenzene	216	8.288	8.347	-0.059	96	28828	5.00	5.04	
84 Hexachlorocyclopentadiene	237	8.288	8.347	-0.059	83	18974	5.00	5.02	
86 2,4,6-Trichlorophenol	196	8.427	8.486	-0.059	92	14803	5.00	5.09	
87 2,4,5-Trichlorophenol	196	8.464	8.523	-0.059	96	14658	5.00	5.00	
90 1,1'-Biphenyl	154	8.640	8.694	-0.054	98	62353	5.00	5.08	
91 2-Chloronaphthalene	162	8.656	8.710	-0.054	97	49811	5.00	5.13	
93 2-Nitroaniline	65	8.779	8.833	-0.054	95	12374	5.00	5.24	
96 Dimethyl phthalate	163	9.014	9.063	-0.049	99	51408	5.00	4.68	
97 1,3-Dinitrobenzene	168	9.025	9.079	-0.054	86	7487	5.00	5.35	
99 2,6-Dinitrotoluene	165	9.073	9.121	-0.048	86	10469	5.00	5.14	
100 Acenaphthylene	152	9.143	9.185	-0.042	99	64458	5.00	4.64	
101 3-Nitroaniline	138	9.265	9.314	-0.049	95	10402	5.00	5.05	
102 Acenaphthene	153	9.351	9.394	-0.043	95	45816	5.00	4.89	
103 2,4-Dinitrophenol	184	9.388	9.431	-0.043	88	9450	10.0	11.0	
104 4-Nitrophenol	109	9.484	9.527	-0.043	90	14056	10.0	10.1	
106 2,4-Dinitrotoluene	165	9.549	9.586	-0.037	89	12318	5.00	5.05	
107 Dibenzofuran	168	9.559	9.597	-0.038	96	72820	5.00	5.12	
110 2,3,4,6-Tetrachlorophenol	232	9.714	9.746	-0.032	95	11475	5.00	5.15	
112 Diethyl phthalate	149	9.858	9.885	-0.027	99	51420	5.00	4.68	
138 Hexadecane	57	9.901	9.923	-0.022	96	28045	5.00	4.74	
115 Fluorene	166	9.960	9.981	-0.021	99	51823	5.00	4.72	
116 4-Chlorophenyl phenyl ethe	204	9.971	9.992	-0.021	94	31170	5.00	5.03	
118 4-Nitroaniline	138	9.981	10.014	-0.033	85	11737	5.00	4.91	
119 4,6-Dinitro-2-methylphenol	198	10.019	10.046	-0.027	94	12520	10.0	11.0	
121 Diphenylamine	169	10.104	10.126	-0.022	98	40748	4.28	4.19	
120 N-Nitrosodiphenylamine	169	10.104	10.126	-0.022	98	40748	5.00	4.90	
122 Azobenzene	77	10.147	10.168	-0.021	94	58575	5.00	5.03	
123 1,2-Diphenylhydrazine	77	10.147	10.168	-0.021	98	58575	5.00	5.03	
130 4-Bromophenyl phenyl ether	248	10.505	10.516	-0.011	94	16742	5.00	4.57	
131 Hexachlorobenzene	284	10.564	10.580	-0.016	95	18275	5.00	4.88	
133 Atrazine	200	10.686	10.703	-0.017	94	12993	5.00	4.57	
134 Pentachlorophenol	266	10.767	10.783	-0.016	94	12786	10.0	10.4	
113 n-Octadecane	57	10.889	10.895	-0.006	89	26909	5.00	4.83	
141 Phenanthrene	178	10.975	10.986	-0.011	98	82154	5.00	5.02	
142 Anthracene	178	11.023	11.034	-0.011	99	79389	5.00	4.72	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
143 Carbazole	167	11.189	11.194	-0.005	99	69346	5.00	4.52	
145 Di-n-butyl phthalate	149	11.541	11.547	-0.006	100	73709	5.00	4.94	
152 Fluoranthene	202	12.091	12.097	-0.006	99	87223	5.00	4.62	
154 Benzidine	184	12.214	12.220	-0.006	99	40158	5.00	4.41	
155 Pyrene	202	12.294	12.295	-0.001	98	92658	5.00	4.66	
162 Butyl benzyl phthalate	149	12.855	12.856	-0.001	98	31412	5.00	5.08	
166 3,3'-Dichlorobenzidine	252	13.299	13.304	-0.005	86	25611	5.00	5.15	
167 Benzo[a]anthracene	228	13.326	13.326	0.000	96	88520	5.00	4.75	
172 Bis(2-ethylhexyl) phthalat	149	13.342	13.342	0.000	95	43953	5.00	4.97	
169 Chrysene	228	13.352	13.358	-0.006	98	99384	5.00	5.15	
168 Di-n-octyl phthalate	149	13.860	13.865	-0.005	100	66174	5.00	5.06	
174 Benzo[b]fluoranthene	252	14.191	14.196	-0.005	98	94275	5.00	4.54	
175 Benzo[k]fluoranthene	252	14.212	14.218	-0.006	98	104097	5.00	4.70	
177 Benzo[a]pyrene	252	14.453	14.458	-0.005	99	84019	5.00	4.87	
180 Indeno[1,2,3-cd]pyrene	276	15.430	15.436	-0.006	90	97582	5.00	4.99	
181 Dibenz(a,h)anthracene	278	15.436	15.441	-0.005	90	82850	5.00	4.91	
182 Benzo[g,h,i]perylene	276	15.692	15.703	-0.011	99	86201	5.00	4.92	
S 236 3 & 4 Methylphenol	108				0			4.59	
S 238 3-Methylphenol	1				0			4.59	
S 237 Total Cresols	1				0			9.29	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LIST1_WRK_00513	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

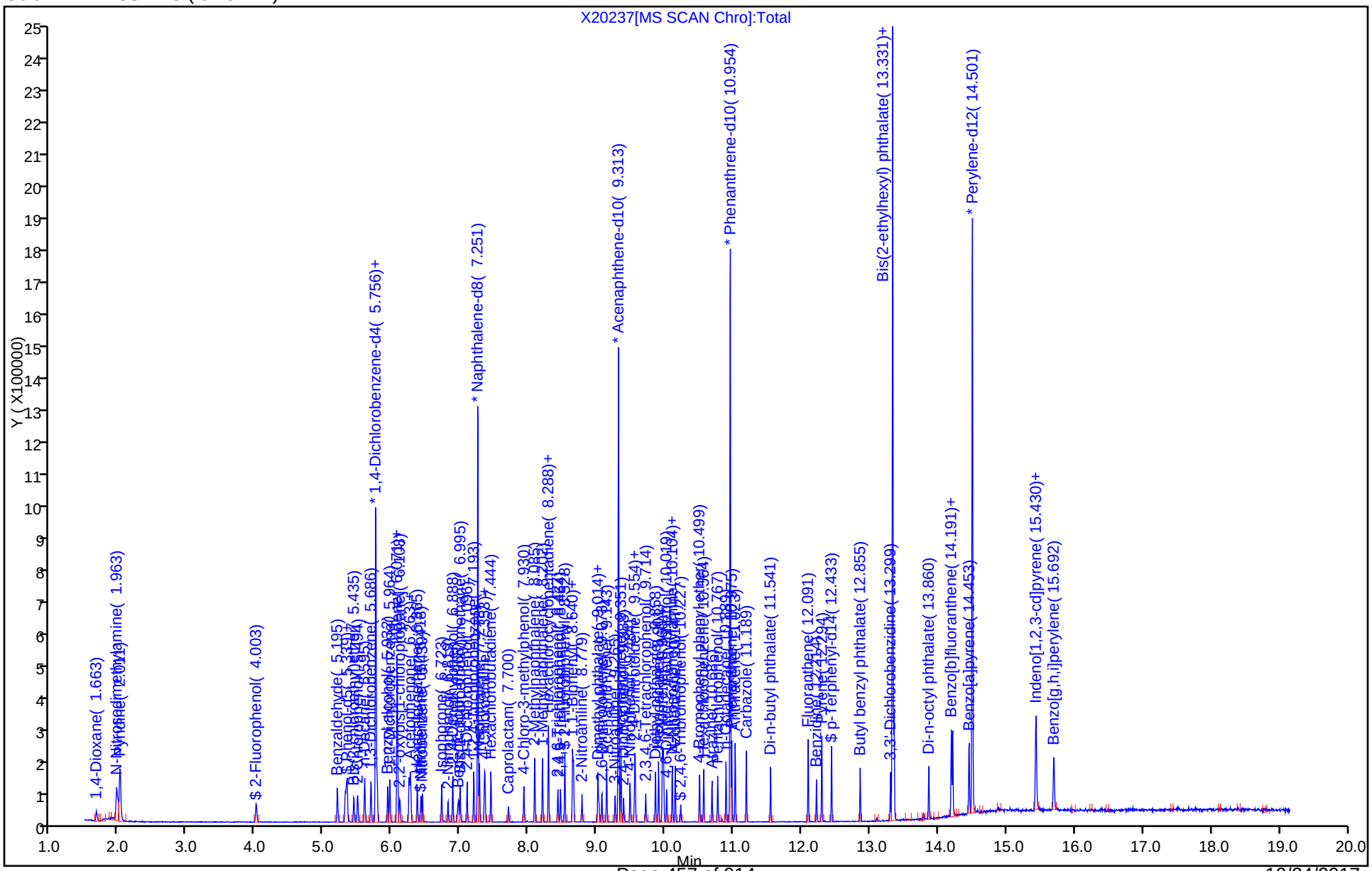
Report Date: 03-Oct-2017 11:56:12 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20237.D

Injection Date:	29-Sep-2017 19:33:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	IC - List1 5			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

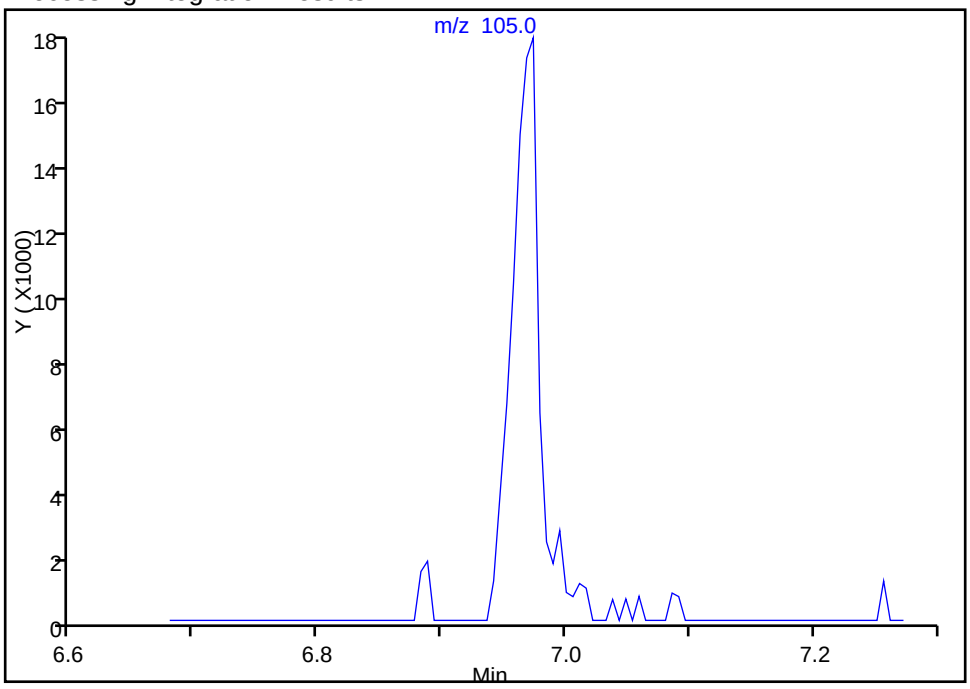
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20237.D
Injection Date: 29-Sep-2017 19:33:30 Instrument ID: HP5973X
Lims ID: IC - List1 5
Client ID:
Operator ID: DR ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

64 Benzoic acid, CAS: 65-85-0

Signal: 1

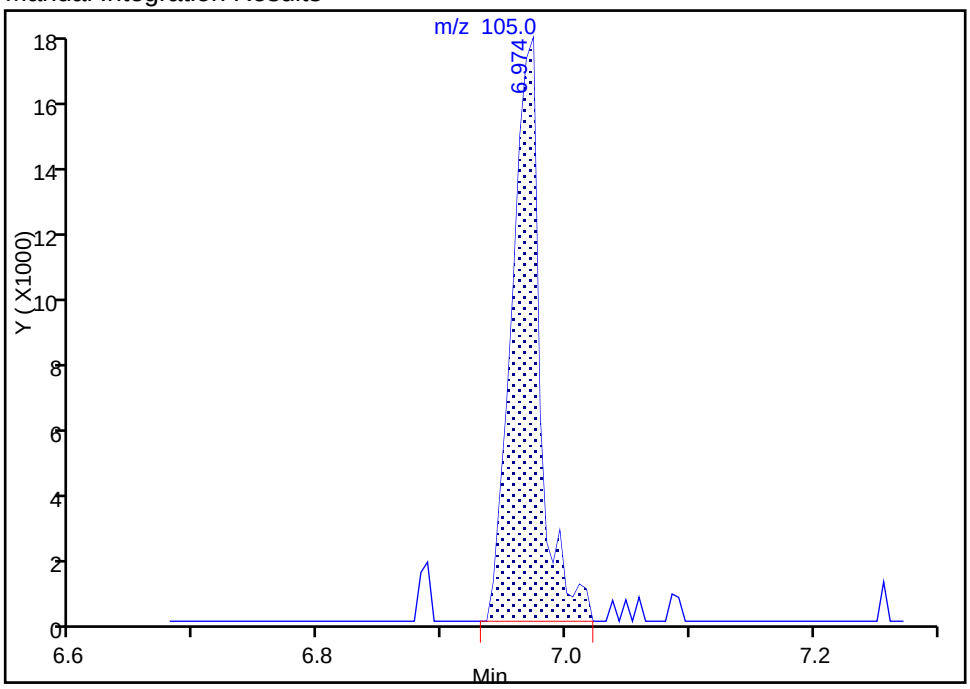
Not Detected
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 6.97
Area: 27214
Amount: 17.287020
Amount Units: ng/uL



Reviewer: pagem, 02-Oct-2017 10:26:11
Audit Action: Assigned Compound ID Audit Reason:

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

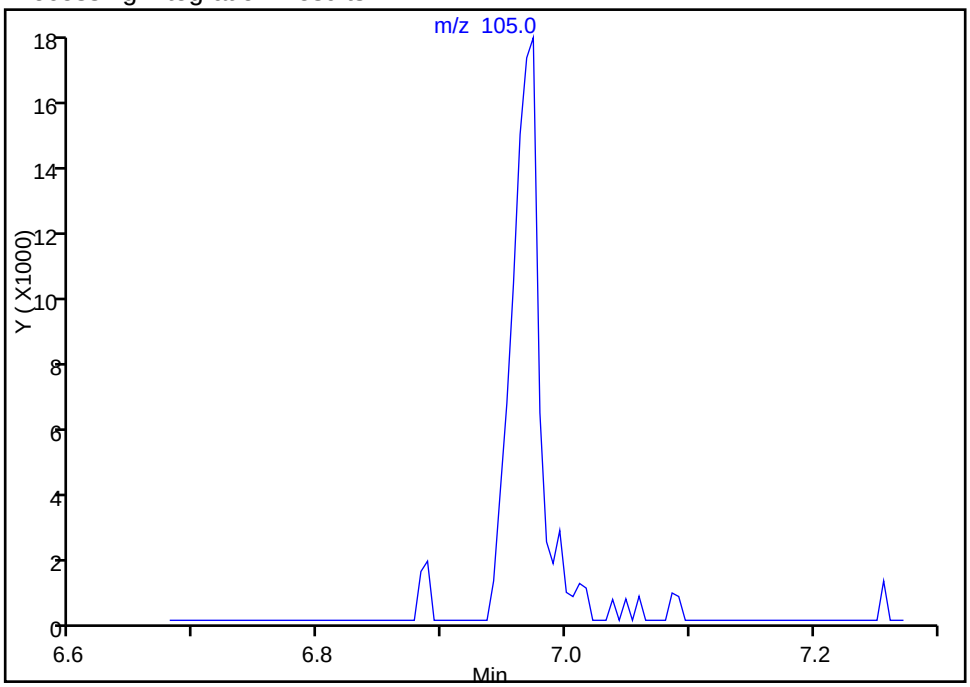
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20237.D
Injection Date: 29-Sep-2017 19:33:30 Instrument ID: HP5973X
Lims ID: IC - List1 5
Client ID:
Operator ID: DR ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

64 Benzoic acid, CAS: 65-85-0

Signal: 1

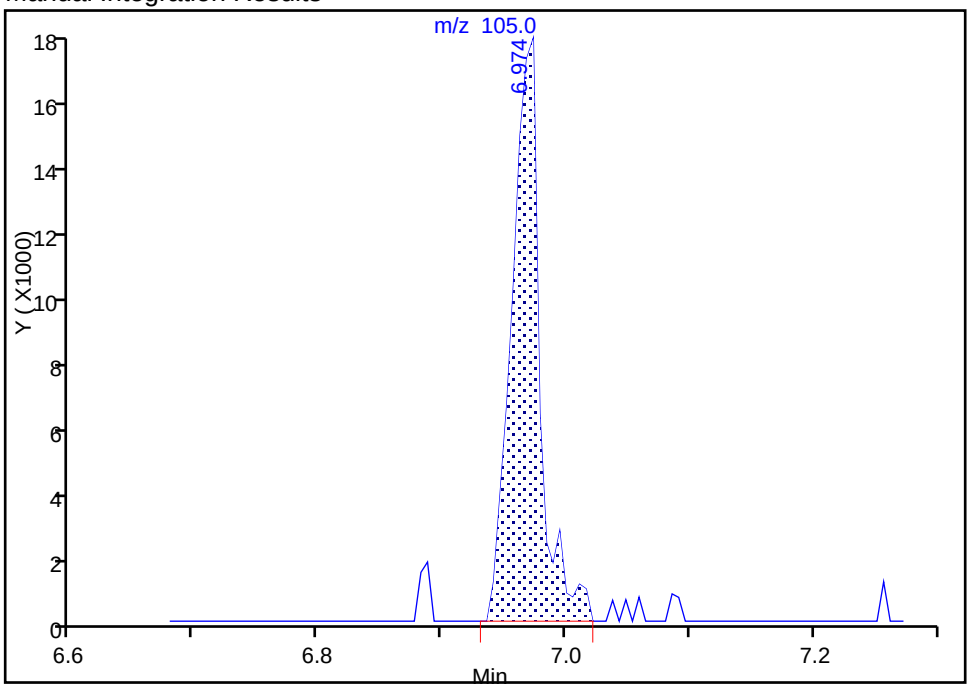
Not Detected
Expected RT: 7.12

Processing Integration Results



Manual Integration Results

RT: 6.97
Area: 27214
Amount: 17.287020
Amount Units: ng/uL



Reviewer: pagem, 02-Oct-2017 10:27:36
Audit Action: Manually Integrated Audit Reason: Missed Peak

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20238.D
Lims ID: IC - List1 20
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 29-Sep-2017 19:59:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066023-004
Operator ID: DR Instrument ID: HP5973X
Sublist: chrom-X-8270*sub83

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 03-Oct-2017 11:56:14 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: pagem Date: 02-Oct-2017 10:26:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.756	5.750	0.006	94	180870	40.0	40.0	
* 2 Naphthalene-d8	136	7.289	7.300	-0.011	98	615364	40.0	40.0	
* 3 Acenaphthene-d10	164	9.340	9.356	-0.016	97	323462	40.0	40.0	
* 4 Phenanthrene-d10	188	10.938	10.959	-0.021	99	675779	40.0	40.0	
* 5 Chrysene-d12	240	13.278	13.336	-0.058	99	760817	40.0	40.0	
* 6 Perylene-d12	264	14.421	14.501	-0.080	99	690426	40.0	40.0	
$ 7 2-Fluorophenol	112	4.041	3.961	0.080	94	121231	20.0	19.9	
$ 8 Phenol-d5	99	5.312	5.296	0.016	90	154974	20.0	20.5	
$ 9 Nitrobenzene-d5	82	6.429	6.440	-0.011	93	131563	20.0	20.2	
$ 10 2-Fluorobiphenyl	172	8.571	8.582	-0.011	99	273461	20.0	20.4	
$ 11 2,4,6-Tribromophenol	330	10.222	10.249	-0.027	97	33157	20.0	18.9	
$ 12 p-Terphenyl-d14	244	12.407	12.439	-0.032	100	303172	20.0	20.7	
15 1,4-Dioxane	88	1.696	1.658	0.038	93	76960	20.0	20.9	
16 N-Nitrosodimethylamine	42	1.995	1.941	0.054	75	68789	20.0	20.9	
17 Pyridine	52	2.043	1.995	0.048	82	190149	40.0	41.3	
27 Benzaldehyde	77	5.195	5.173	0.022	90	109366	20.0	21.4	
28 Phenol	94	5.328	5.318	0.010	83	181654	20.0	21.1	
29 Aniline	93	5.339	5.323	0.016	96	209506	20.0	20.6	
31 Bis(2-chloroethyl)ether	93	5.435	5.425	0.010	92	133603	20.0	20.8	
32 2-Chlorophenol	128	5.489	5.478	0.011	99	122196	20.0	20.5	
35 n-Decane	57	5.590	5.585	0.005	92	130619	20.0	20.8	
36 1,3-Dichlorobenzene	146	5.681	5.676	0.005	97	144548	20.0	20.7	
37 1,4-Dichlorobenzene	146	5.772	5.772	0.000	98	147393	20.0	20.9	
38 Benzyl alcohol	108	5.927	5.932	-0.005	96	78754	20.0	19.7	
39 1,2-Dichlorobenzene	146	5.959	5.964	-0.005	97	132020	20.0	20.1	
229 Indene	115	6.071	6.076	-0.005	85	676564	60.0	64.1	
40 2-Methylphenol	108	6.082	6.087	-0.005	95	112113	20.0	20.1	
42 2,2'-oxybis[1-chloropropan	45	6.108	6.119	-0.011	95	142109	20.0	21.5	
45 Acetophenone	105	6.247	6.258	-0.011	91	178746	20.0	20.3	
47 N-Nitrosodi-n-propylamine	70	6.263	6.274	-0.011	87	91693	20.0	20.1	
46 4-Methylphenol	108	6.274	6.285	-0.011	89	120475	20.0	20.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
50 Hexachloroethane	117	6.370	6.381	-0.011	93	54582	20.0	19.7	
52 Nitrobenzene	77	6.450	6.461	-0.011	92	139294	20.0	20.6	
56 Isophorone	82	6.744	6.755	-0.011	97	229839	20.0	20.2	
58 2-Nitrophenol	139	6.835	6.851	-0.016	89	55503	20.0	19.0	
59 2,4-Dimethylphenol	107	6.910	6.926	-0.016	98	129881	20.0	20.7	
62 Bis(2-chloroethoxy)methane	93	7.016	7.038	-0.022	97	150935	20.0	21.0	
64 Benzoic acid	105	7.048	7.118	-0.070	83	210285	60.0	51.9	
65 2,4-Dichlorophenol	162	7.123	7.139	-0.016	96	106514	20.0	20.7	
67 1,2,4-Trichlorobenzene	180	7.225	7.241	-0.016	97	122734	20.0	20.2	
69 Naphthalene	128	7.310	7.326	-0.016	99	348124	20.0	21.5	
71 4-Chloroaniline	127	7.385	7.401	-0.016	98	144516	20.0	20.8	
70 2,6-Dichlorophenol	162	7.396	7.412	-0.016	96	104038	20.0	20.5	
73 Hexachlorobutadiene	225	7.481	7.497	-0.016	96	80483	20.0	20.2	
78 Caprolactam	113	7.764	7.807	-0.043	93	33723	20.0	20.5	
79 4-Chloro-3-methylphenol	107	7.978	7.989	-0.011	95	104028	20.0	20.5	
82 2-Methylnaphthalene	142	8.133	8.144	-0.011	97	235900	20.0	21.3	
83 1-Methylnaphthalene	142	8.245	8.261	-0.016	99	226018	20.0	21.4	
84 Hexachlorocyclopentadiene	237	8.336	8.347	-0.011	83	98967	20.0	19.8	
85 1,2,4,5-Tetrachlorobenzene	216	8.336	8.347	-0.011	96	133466	20.0	20.4	
86 2,4,6-Trichlorophenol	196	8.469	8.486	-0.017	93	77610	20.0	19.7	
87 2,4,5-Trichlorophenol	196	8.507	8.523	-0.016	94	83110	20.0	19.9	
90 1,1'-Biphenyl	154	8.683	8.694	-0.011	99	285306	20.0	20.3	
91 2-Chloronaphthalene	162	8.694	8.710	-0.016	98	230842	20.0	20.7	
93 2-Nitroaniline	65	8.817	8.833	-0.016	94	61796	20.0	18.8	
96 Dimethyl phthalate	163	9.046	9.063	-0.017	98	255075	20.0	20.3	
97 1,3-Dinitrobenzene	168	9.062	9.079	-0.017	91	39891	20.0	18.6	
99 2,6-Dinitrotoluene	165	9.105	9.121	-0.016	90	55760	20.0	19.4	
100 Acenaphthylene	152	9.169	9.185	-0.016	99	329826	20.0	20.7	
101 3-Nitroaniline	138	9.292	9.314	-0.022	97	59084	20.0	19.9	
102 Acenaphthene	153	9.378	9.394	-0.016	99	222895	20.0	20.8	
103 2,4-Dinitrophenol	184	9.410	9.431	-0.021	87	69003	40.0	36.1	
104 4-Nitrophenol	109	9.501	9.527	-0.026	92	82241	40.0	39.3	
106 2,4-Dinitrotoluene	165	9.565	9.586	-0.021	94	75824	20.0	19.8	
107 Dibenzofuran	168	9.575	9.597	-0.022	98	337313	20.0	20.7	
110 2,3,4,6-Tetrachlorophenol	232	9.725	9.746	-0.021	95	68745	20.0	19.3	
112 Diethyl phthalate	149	9.864	9.885	-0.021	99	256090	20.0	20.4	
138 Hexadecane	57	9.901	9.923	-0.022	95	140991	20.0	20.8	
115 Fluorene	166	9.960	9.981	-0.021	98	258539	20.0	20.5	
116 4-Chlorophenyl phenyl ethe	204	9.971	9.992	-0.021	95	143487	20.0	20.2	
118 4-Nitroaniline	138	9.981	10.014	-0.033	88	62337	20.0	20.0	
119 4,6-Dinitro-2-methylphenol	198	10.019	10.046	-0.027	95	82776	40.0	37.8	
120 N-Nitrosodiphenylamine	169	10.099	10.126	-0.027	98	187104	20.0	20.2	
121 Diphenylamine	169	10.099	10.126	-0.027	99	187104	17.1	17.3	
123 1,2-Diphenylhydrazine	77	10.142	10.168	-0.026	98	259554	20.0	20.1	
122 Azobenzene	77	10.142	10.168	-0.026	94	259554	20.0	20.1	
130 4-Bromophenyl phenyl ether	248	10.494	10.516	-0.022	96	83091	20.0	20.4	
131 Hexachlorobenzene	284	10.553	10.580	-0.027	96	85367	20.0	20.5	
133 Atrazine	200	10.676	10.703	-0.027	94	75151	20.0	21.0	
134 Pentachlorophenol	266	10.756	10.783	-0.027	96	102080	40.0	40.2	
113 n-Octadecane	57	10.874	10.895	-0.021	91	145309	20.0	21.4	
141 Phenanthrene	178	10.959	10.986	-0.027	99	379662	20.0	20.9	
142 Anthracene	178	11.007	11.034	-0.027	99	391688	20.0	21.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
143 Carbazole	167	11.173	11.194	-0.021	100	363864	20.0	21.4	
145 Di-n-butyl phthalate	149	11.525	11.547	-0.022	99	395477	20.0	20.3	
152 Fluoranthene	202	12.070	12.097	-0.027	99	437425	20.0	20.9	
154 Benzidine	184	12.193	12.220	-0.027	99	246663	20.0	21.8	
155 Pyrene	202	12.268	12.295	-0.027	99	458448	20.0	21.2	
162 Butyl benzyl phthalate	149	12.813	12.856	-0.043	99	172333	20.0	19.7	
166 3,3'-Dichlorobenzidine	252	13.251	13.304	-0.053	86	153643	20.0	19.7	
167 Benzo[a]anthracene	228	13.272	13.326	-0.054	96	449725	20.0	21.0	
172 Bis(2-ethylhexyl) phthalat	149	13.288	13.342	-0.054	95	252918	20.0	20.0	
169 Chrysene	228	13.299	13.358	-0.059	99	450533	20.0	21.4	
168 Di-n-octyl phthalate	149	13.801	13.865	-0.064	100	399422	20.0	19.5	
174 Benzo[b]fluoranthene	252	14.122	14.196	-0.074	99	455850	20.0	20.7	
175 Benzo[k]fluoranthene	252	14.143	14.218	-0.075	97	499747	20.0	21.3	
177 Benzo[a]pyrene	252	14.373	14.458	-0.085	99	432821	20.0	20.8	
180 Indeno[1,2,3-cd]pyrene	276	15.318	15.436	-0.118	94	478085	20.0	20.3	
181 Dibenz(a,h)anthracene	278	15.329	15.441	-0.112	92	412967	20.0	20.6	
182 Benzo[g,h,i]perylene	276	15.580	15.703	-0.123	99	417581	20.0	20.6	
S 238 3-Methylphenol	1				0			20.6	
S 237 Total Cresols	1				0			40.7	
S 236 3 & 4 Methylphenol	108				0			20.6	

Reagents:

MB_LIST1_WRK_00514	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

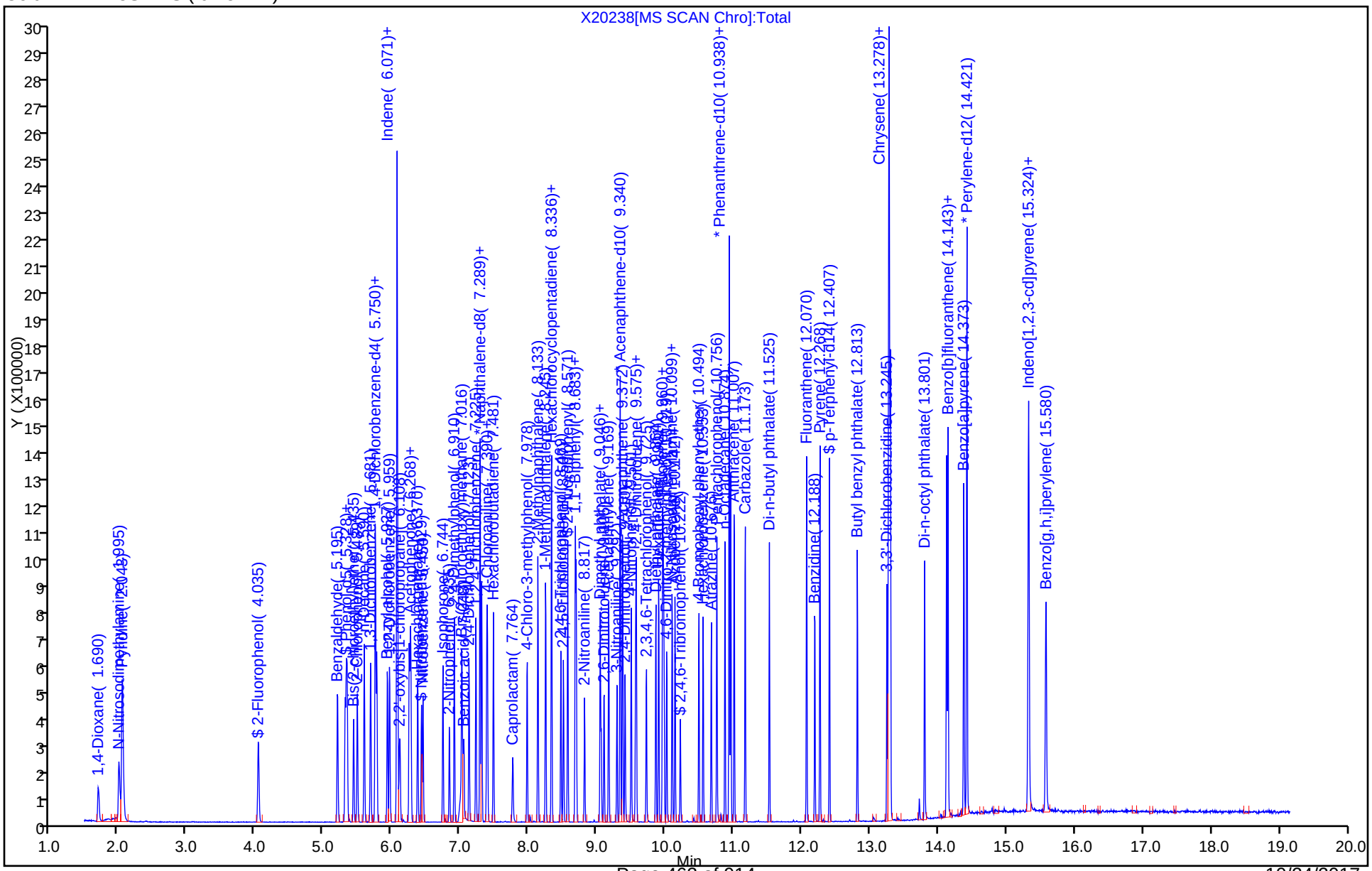
Report Date: 03-Oct-2017 11:56:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20238.D

Injection Date:	29-Sep-2017 19:59:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	IC - List1 20			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20239.D
Lims ID: ICIS - List1 50
Client ID:
Sample Type: ICIS Calib Level: 3
Inject. Date: 29-Sep-2017 20:25:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066023-005
Operator ID: DR Instrument ID: HP5973X
Sublist: chrom-X-8270*sub83

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 03-Oct-2017 11:56:17 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: pagem Date: 02-Oct-2017 09:57:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.750	5.750	0.000	93	174918	40.0	40.0	
* 2 Naphthalene-d8	136	7.300	7.300	0.000	98	608756	40.0	40.0	
* 3 Acenaphthene-d10	164	9.356	9.356	0.000	97	304192	40.0	40.0	
* 4 Phenanthrene-d10	188	10.959	10.959	0.000	99	668632	40.0	40.0	
* 5 Chrysene-d12	240	13.336	13.336	0.000	99	758990	40.0	40.0	
* 6 Perylene-d12	264	14.501	14.501	0.000	99	702616	40.0	40.0	
$ 7 2-Fluorophenol	112	3.961	3.961	0.000	96	308636	50.0	52.5	
$ 8 Phenol-d5	99	5.296	5.296	0.000	92	367904	50.0	50.3	
$ 9 Nitrobenzene-d5	82	6.440	6.440	0.000	93	330535	50.0	51.2	
$ 10 2-Fluorobiphenyl	172	8.582	8.582	0.000	99	658292	50.0	52.3	
$ 11 2,4,6-Tribromophenol	330	10.249	10.249	0.000	96	87055	50.0	47.1	
$ 12 p-Terphenyl-d14	244	12.439	12.439	0.000	99	744098	50.0	50.9	
15 1,4-Dioxane	88	1.658	1.658	0.000	95	183915	50.0	51.7	
16 N-Nitrosodimethylamine	42	1.941	1.941	0.000	77	153494	50.0	48.1	
17 Pyridine	52	1.995	1.995	0.000	83	432707	100.0	95.2	
27 Benzaldehyde	77	5.173	5.173	0.000	87	259742	50.0	52.6	
28 Phenol	94	5.318	5.318	0.000	87	426715	50.0	51.3	
29 Aniline	93	5.323	5.323	0.000	97	489815	50.0	49.8	
31 Bis(2-chloroethyl)ether	93	5.425	5.425	0.000	93	308466	50.0	49.6	
32 2-Chlorophenol	128	5.478	5.478	0.000	99	292781	50.0	50.8	
35 n-Decane	57	5.585	5.585	0.000	93	306798	50.0	50.6	
36 1,3-Dichlorobenzene	146	5.676	5.676	0.000	97	340189	50.0	50.4	
37 1,4-Dichlorobenzene	146	5.772	5.772	0.000	96	340213	50.0	49.8	
38 Benzyl alcohol	108	5.932	5.932	0.000	96	196694	50.0	49.0	
39 1,2-Dichlorobenzene	146	5.964	5.964	0.000	96	315925	50.0	49.8	
229 Indene	115	6.076	6.076	0.000	85	1586989	150.0	152.0	
40 2-Methylphenol	108	6.087	6.087	0.000	97	277792	50.0	51.5	
42 2,2'-oxybis[1-chloropropan	45	6.119	6.119	0.000	95	322869	50.0	50.4	
45 Acetophenone	105	6.258	6.258	0.000	94	435105	50.0	51.1	
47 N-Nitrosodi-n-propylamine	70	6.274	6.274	0.000	87	226352	50.0	51.4	
46 4-Methylphenol	108	6.285	6.285	0.000	96	288882	50.0	51.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
50 Hexachloroethane	117	6.381	6.381	0.000	92	135823	50.0	50.7	
52 Nitrobenzene	77	6.461	6.461	0.000	93	338306	50.0	50.6	
56 Isophorone	82	6.755	6.755	0.000	97	571371	50.0	50.2	
58 2-Nitrophenol	139	6.851	6.851	0.000	87	147156	50.0	48.4	
59 2,4-Dimethylphenol	107	6.926	6.926	0.000	97	310451	50.0	49.8	
62 Bis(2-chloroethoxy)methane	93	7.038	7.038	0.000	95	357512	50.0	50.3	
64 Benzoic acid	105	7.118	7.118	0.000	82	658303	150.0	139.8	
65 2,4-Dichlorophenol	162	7.139	7.139	0.000	94	259897	50.0	50.3	
67 1,2,4-Trichlorobenzene	180	7.241	7.241	0.000	96	302758	50.0	50.3	
69 Naphthalene	128	7.326	7.326	0.000	99	799407	50.0	49.9	
71 4-Chloroaniline	127	7.401	7.401	0.000	99	344938	50.0	50.0	
70 2,6-Dichlorophenol	162	7.412	7.412	0.000	96	248564	50.0	49.2	
73 Hexachlorobutadiene	225	7.497	7.497	0.000	96	190527	50.0	48.4	
78 Caprolactam	113	7.807	7.807	0.000	91	86102	50.0	50.1	
79 4-Chloro-3-methylphenol	107	7.989	7.989	0.000	96	255080	50.0	50.0	
82 2-Methylnaphthalene	142	8.144	8.144	0.000	98	544688	50.0	49.7	
83 1-Methylnaphthalene	142	8.261	8.261	0.000	98	516448	50.0	49.5	
85 1,2,4,5-Tetrachlorobenzene	216	8.347	8.347	0.000	96	315844	50.0	51.2	
84 Hexachlorocyclopentadiene	237	8.347	8.347	0.000	87	245120	50.0	50.8	
86 2,4,6-Trichlorophenol	196	8.486	8.486	0.000	93	192490	50.0	50.2	
87 2,4,5-Trichlorophenol	196	8.523	8.523	0.000	95	207640	50.0	50.7	
90 1,1'-Biphenyl	154	8.694	8.694	0.000	99	692295	50.0	52.3	
91 2-Chloronaphthalene	162	8.710	8.710	0.000	98	534473	50.0	51.1	
93 2-Nitroaniline	65	8.833	8.833	0.000	95	164477	50.0	50.9	
96 Dimethyl phthalate	163	9.063	9.063	0.000	100	615652	50.0	52.0	
97 1,3-Dinitrobenzene	168	9.079	9.079	0.000	92	106915	50.0	47.6	
99 2,6-Dinitrotoluene	165	9.121	9.121	0.000	89	139322	50.0	49.6	
100 Acenaphthylene	152	9.185	9.185	0.000	100	767145	50.0	51.3	
101 3-Nitroaniline	138	9.314	9.314	0.000	96	144070	50.0	49.4	
102 Acenaphthene	153	9.394	9.394	0.000	98	511606	50.0	50.7	
103 2,4-Dinitrophenol	184	9.431	9.431	0.000	87	197836	100.0	97.0	
104 4-Nitrophenol	109	9.527	9.527	0.000	93	211111	100.0	101.9	
106 2,4-Dinitrotoluene	165	9.586	9.586	0.000	97	190351	50.0	50.2	
107 Dibenzofuran	168	9.597	9.597	0.000	97	780297	50.0	50.9	
110 2,3,4,6-Tetrachlorophenol	232	9.746	9.746	0.000	95	178312	50.0	50.2	
112 Diethyl phthalate	149	9.885	9.885	0.000	100	609524	50.0	51.5	
138 Hexadecane	57	9.923	9.923	0.000	96	322906	50.0	50.7	
115 Fluorene	166	9.981	9.981	0.000	98	609215	50.0	51.5	
116 4-Chlorophenyl phenyl ethe	204	9.992	9.992	0.000	96	338061	50.0	50.6	
118 4-Nitroaniline	138	10.014	10.014	0.000	88	154207	50.0	51.4	
119 4,6-Dinitro-2-methylphenol	198	10.046	10.046	0.000	96	220796	100.0	92.4	
121 Diphenylamine	169	10.126	10.126	0.000	99	451228	42.8	42.2	
120 N-Nitrosodiphenylamine	169	10.126	10.126	0.000	98	451228	50.0	49.4	
122 Azobenzene	77	10.168	10.168	0.000	94	631897	50.0	49.3	
123 1,2-Diphenylhydrazine	77	10.168	10.168	0.000	98	631897	50.0	49.3	
130 4-Bromophenyl phenyl ether	248	10.516	10.516	0.000	95	199312	50.0	49.6	
131 Hexachlorobenzene	284	10.580	10.580	0.000	96	203002	50.0	49.4	
133 Atrazine	200	10.703	10.703	0.000	94	182620	50.0	53.3	
134 Pentachlorophenol	266	10.783	10.783	0.000	97	254941	100.0	93.1	
113 n-Octadecane	57	10.895	10.895	0.000	93	327132	50.0	47.9	
141 Phenanthrene	178	10.986	10.986	0.000	99	889244	50.0	49.4	
142 Anthracene	178	11.034	11.034	0.000	99	911446	50.0	49.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
143 Carbazole	167	11.194	11.194	0.000	99	850165	50.0	50.5	
145 Di-n-butyl phthalate	149	11.547	11.547	0.000	99	981910	50.0	49.6	
152 Fluoranthene	202	12.097	12.097	0.000	99	1032677	50.0	49.8	
154 Benzidine	184	12.220	12.220	0.000	100	603072	50.0	52.5	
155 Pyrene	202	12.295	12.295	0.000	99	1075861	50.0	49.8	
162 Butyl benzyl phthalate	149	12.856	12.856	0.000	99	445485	50.0	48.6	
166 3,3'-Dichlorobenzidine	252	13.304	13.304	0.000	87	397607	50.0	48.0	
167 Benzo[a]anthracene	228	13.326	13.326	0.000	96	1078561	50.0	49.9	
172 Bis(2-ethylhexyl) phthalat	149	13.342	13.342	0.000	96	656381	50.0	49.6	
169 Chrysene	228	13.358	13.358	0.000	98	1032466	50.0	49.2	
168 Di-n-octyl phthalate	149	13.865	13.865	0.000	100	1088066	50.0	49.9	
174 Benzo[b]fluoranthene	252	14.196	14.196	0.000	100	1203820	50.0	53.8	
175 Benzo[k]fluoranthene	252	14.218	14.218	0.000	97	1147004	50.0	48.0	
177 Benzo[a]pyrene	252	14.458	14.458	0.000	98	1070720	50.0	49.6	
180 Indeno[1,2,3-cd]pyrene	276	15.436	15.436	0.000	92	1205652	50.0	49.2	
181 Dibenz(a,h)anthracene	278	15.441	15.441	0.000	90	1025260	50.0	49.3	
182 Benzo[g,h,i]perylene	276	15.703	15.703	0.000	100	1033485	50.0	49.4	

Reagents:

MB_LIST1_WRK_00515	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

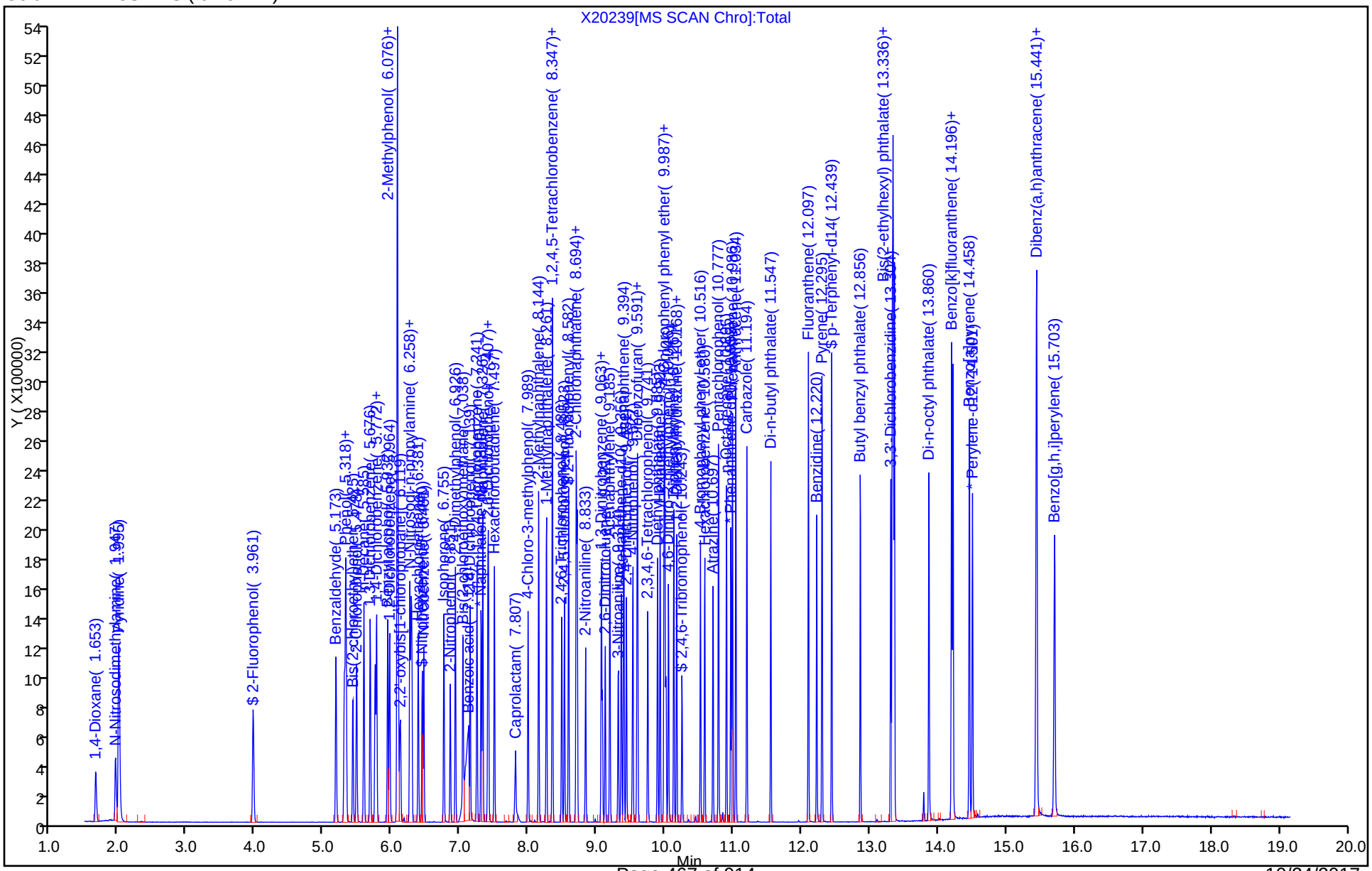
Report Date: 03-Oct-2017 11:56:18 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20239.D

Injection Date:	29-Sep-2017 20:25:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	ICIS - List1 50			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20240.D
Lims ID: IC - List1 80
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 29-Sep-2017 20:52:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066023-006
Operator ID: DR Instrument ID: HP5973X
Sublist: chrom-X-8270*sub83

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 03-Oct-2017 11:56:22 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: pagem Date: 02-Oct-2017 10:26:52

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.756	5.750	0.006	94	187015	40.0	40.0	
* 2 Naphthalene-d8	136	7.305	7.300	0.005	98	619138	40.0	40.0	
* 3 Acenaphthene-d10	164	9.362	9.356	0.006	97	336766	40.0	40.0	
* 4 Phenanthrene-d10	188	10.964	10.959	0.005	98	722032	40.0	40.0	
* 5 Chrysene-d12	240	13.336	13.336	0.000	99	818037	40.0	40.0	
* 6 Perylene-d12	264	14.501	14.501	0.000	99	753001	40.0	40.0	
$ 7 2-Fluorophenol	112	3.982	3.961	0.021	95	505195	80.0	80.3	
$ 8 Phenol-d5	99	5.307	5.296	0.011	93	633750	80.0	81.0	
$ 9 Nitrobenzene-d5	82	6.445	6.440	0.005	94	547267	80.0	83.4	
$ 10 2-Fluorobiphenyl	172	8.587	8.582	0.005	100	1101936	80.0	79.1	
$ 11 2,4,6-Tribromophenol	330	10.254	10.249	0.005	98	160744	80.0	79.3	
$ 12 p-Terphenyl-d14	244	12.439	12.439	0.000	100	1281427	80.0	81.4	
15 1,4-Dioxane	88	1.706	1.658	0.048	95	314748	80.0	82.8	
16 N-Nitrosodimethylamine	42	2.006	1.941	0.065	76	276917	80.0	81.2	
17 Pyridine	52	2.054	1.995	0.059	83	764057	160.0	156.3	
27 Benzaldehyde	77	5.184	5.173	0.011	88	416729	80.0	78.9	
28 Phenol	94	5.323	5.318	0.005	91	702826	80.0	79.0	
29 Aniline	93	5.334	5.323	0.011	96	837512	80.0	79.6	
31 Bis(2-chloroethyl)ether	93	5.430	5.425	0.005	93	522984	80.0	78.7	
32 2-Chlorophenol	128	5.483	5.478	0.005	98	491170	80.0	79.7	
35 n-Decane	57	5.590	5.585	0.005	94	518777	80.0	80.0	
36 1,3-Dichlorobenzene	146	5.681	5.676	0.005	98	567134	80.0	78.6	
37 1,4-Dichlorobenzene	146	5.777	5.772	0.005	97	562145	80.0	77.0	
38 Benzyl alcohol	108	5.943	5.932	0.011	95	346986	80.0	80.0	
39 1,2-Dichlorobenzene	146	5.969	5.964	0.005	96	525543	80.0	77.4	
229 Indene	115	6.082	6.076	0.006	84	2591227	240.0	229.8	
40 2-Methylphenol	108	6.092	6.087	0.005	97	455216	80.0	78.9	
42 2,2'-oxybis[1-chloropropan	45	6.124	6.119	0.005	95	539194	80.0	78.7	
45 Acetophenone	105	6.263	6.258	0.005	94	716069	80.0	78.7	
47 N-Nitrosodi-n-propylamine	70	6.279	6.274	0.005	88	374303	80.0	79.5	
46 4-Methylphenol	108	6.295	6.285	0.010	94	477895	80.0	78.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
50 Hexachloroethane	117	6.386	6.381	0.005	93	229043	80.0	80.0	
52 Nitrobenzene	77	6.466	6.461	0.005	92	557002	80.0	81.9	
56 Isophorone	82	6.765	6.755	0.010	97	961158	80.0	82.7	
58 2-Nitrophenol	139	6.856	6.851	0.005	88	251647	80.0	80.4	
59 2,4-Dimethylphenol	107	6.931	6.926	0.005	97	515790	80.0	81.2	
62 Bis(2-chloroethoxy)methane	93	7.038	7.038	0.000	96	575008	80.0	79.5	
64 Benzoic acid	105	7.161	7.118	0.043	85	1194257	240.0	240.6	
65 2,4-Dichlorophenol	162	7.145	7.139	0.006	96	423830	80.0	80.2	
67 1,2,4-Trichlorobenzene	180	7.246	7.241	0.005	97	497696	80.0	81.4	
69 Naphthalene	128	7.332	7.326	0.006	100	1308667	80.0	80.4	
71 4-Chloroaniline	127	7.407	7.401	0.006	98	574470	80.0	81.8	
70 2,6-Dichlorophenol	162	7.417	7.412	0.005	97	427242	80.0	83.0	
73 Hexachlorobutadiene	225	7.503	7.497	0.006	96	334537	80.0	83.5	
78 Caprolactam	113	7.834	7.807	0.027	91	146877	80.0	82.9	
79 4-Chloro-3-methylphenol	107	7.994	7.989	0.005	97	428682	80.0	82.3	
82 2-Methylnaphthalene	142	8.149	8.144	0.005	97	931482	80.0	83.5	
83 1-Methylnaphthalene	142	8.261	8.261	0.000	99	877835	80.0	82.7	
84 Hexachlorocyclopentadiene	237	8.352	8.347	0.005	96	424720	80.0	79.1	
85 1,2,4,5-Tetrachlorobenzene	216	8.352	8.347	0.005	96	533961	80.0	78.2	
86 2,4,6-Trichlorophenol	196	8.486	8.486	0.000	94	339677	80.0	79.4	
87 2,4,5-Trichlorophenol	196	8.528	8.523	0.005	95	362667	80.0	79.3	
90 1,1'-Biphenyl	154	8.699	8.694	0.005	99	1169831	80.0	79.9	
91 2-Chloronaphthalene	162	8.715	8.710	0.005	99	909277	80.0	78.5	
93 2-Nitroaniline	65	8.838	8.833	0.005	95	287932	80.0	79.8	
96 Dimethyl phthalate	163	9.073	9.063	0.010	99	1058955	80.0	80.8	
97 1,3-Dinitrobenzene	168	9.089	9.079	0.010	83	192768	80.0	83.2	
99 2,6-Dinitrotoluene	165	9.127	9.121	0.006	91	252552	80.0	80.5	
100 Acenaphthylene	152	9.191	9.185	0.006	100	1336240	80.0	80.7	
101 3-Nitroaniline	138	9.319	9.314	0.005	97	264315	80.0	81.1	
102 Acenaphthene	153	9.399	9.394	0.005	99	898407	80.0	80.4	
103 2,4-Dinitrophenol	184	9.442	9.431	0.011	85	372412	160.0	160.5	
104 4-Nitrophenol	109	9.538	9.527	0.011	91	364750	160.0	157.4	
106 2,4-Dinitrotoluene	165	9.597	9.586	0.011	97	340314	80.0	80.0	
107 Dibenzofuran	168	9.602	9.597	0.005	97	1339155	80.0	79.0	
110 2,3,4,6-Tetrachlorophenol	232	9.752	9.746	0.006	95	320434	80.0	80.3	
112 Diethyl phthalate	149	9.896	9.885	0.011	100	1066561	80.0	81.4	
138 Hexadecane	57	9.928	9.923	0.005	95	583136	80.0	82.7	
115 Fluorene	166	9.987	9.981	0.006	98	1065567	80.0	81.3	
116 4-Chlorophenyl phenyl ethe	204	9.998	9.992	0.006	96	597712	80.0	80.8	
118 4-Nitroaniline	138	10.024	10.014	0.010	87	270371	80.0	81.0	
119 4,6-Dinitro-2-methylphenol	198	10.056	10.046	0.010	96	418290	160.0	158.0	
120 N-Nitrosodiphenylamine	169	10.131	10.126	0.005	98	796105	80.0	80.6	
121 Diphenylamine	169	10.131	10.126	0.005	99	796105	68.4	68.9	
123 1,2-Diphenylhydrazine	77	10.174	10.168	0.006	98	1108293	80.0	80.2	
122 Azobenzene	77	10.174	10.168	0.006	95	1108293	80.0	80.2	
130 4-Bromophenyl phenyl ether	248	10.521	10.516	0.005	96	350245	80.0	80.7	
131 Hexachlorobenzene	284	10.585	10.580	0.005	96	353012	80.0	79.5	
133 Atrazine	200	10.708	10.703	0.005	94	309083	80.0	81.2	
134 Pentachlorophenol	266	10.783	10.783	0.000	97	483504	160.0	159.3	
113 n-Octadecane	57	10.900	10.895	0.005	92	585993	80.0	79.1	
141 Phenanthrene	178	10.991	10.986	0.005	99	1547941	80.0	79.7	
142 Anthracene	178	11.039	11.034	0.005	100	1615394	80.0	81.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
143 Carbazole	167	11.200	11.194	0.006	99	1461283	80.0	80.3	
145 Di-n-butyl phthalate	149	11.547	11.547	0.000	100	1731582	80.0	80.3	
152 Fluoranthene	202	12.102	12.097	0.005	99	1818068	80.0	81.2	
154 Benzidine	184	12.220	12.220	0.000	100	1025911	80.0	82.5	
155 Pyrene	202	12.300	12.295	0.005	99	1870445	80.0	80.4	
162 Butyl benzyl phthalate	149	12.861	12.856	0.005	100	824888	80.0	82.5	
166 3,3'-Dichlorobenzidine	252	13.304	13.304	0.000	86	743081	80.0	81.8	
167 Benzo[a]anthracene	228	13.331	13.326	0.005	96	1929622	80.0	82.6	
172 Bis(2-ethylhexyl) phthalat	149	13.342	13.342	0.000	97	1185901	80.0	82.2	
169 Chrysene	228	13.363	13.358	0.005	98	1782333	80.0	78.9	
168 Di-n-octyl phthalate	149	13.865	13.865	0.000	100	1969900	80.0	82.5	
174 Benzo[b]fluoranthene	252	14.202	14.196	0.006	100	1884788	80.0	78.5	
175 Benzo[k]fluoranthene	252	14.223	14.218	0.005	98	2168666	80.0	84.6	
177 Benzo[a]pyrene	252	14.458	14.458	0.000	100	1825712	80.0	78.5	
180 Indeno[1,2,3-cd]pyrene	276	15.447	15.436	0.011	91	2094027	80.0	79.2	
181 Dibenz(a,h)anthracene	278	15.452	15.441	0.011	92	1790949	80.0	79.9	
182 Benzo[g,h,i]perylene	276	15.714	15.703	0.011	100	1776474	80.0	78.9	
S 238 3-Methylphenol	1				0			78.9	
S 237 Total Cresols	1				0			157.9	
S 236 3 & 4 Methylphenol	108				0			78.9	

Reagents:

MB_LIST1_WRK_00516	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

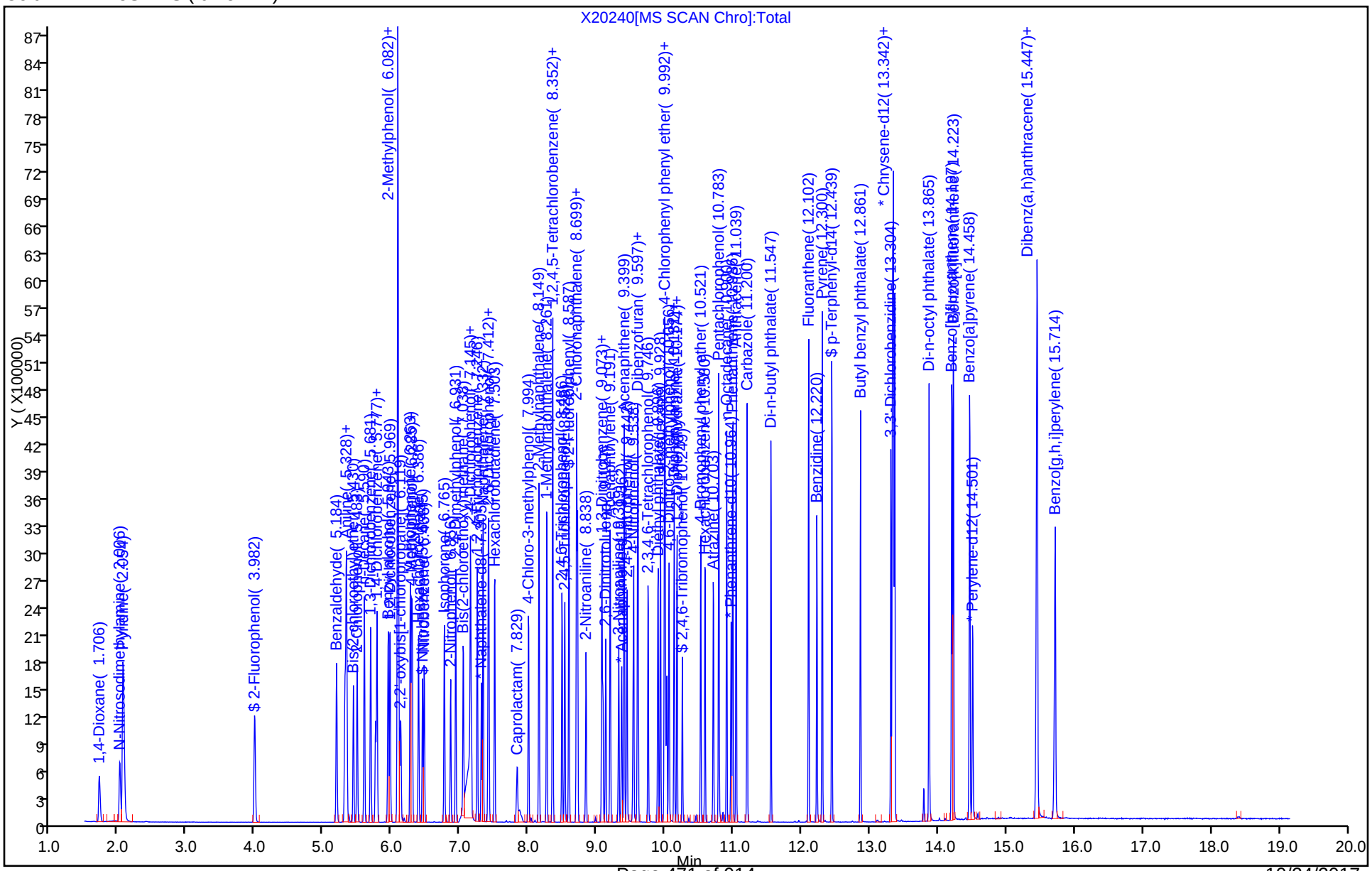
Report Date: 03-Oct-2017 11:56:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20240.D

Injection Date:	29-Sep-2017 20:52:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	IC - List1 80			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20241.D
Lims ID: IC - List1 100
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 29-Sep-2017 21:18:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066023-007
Operator ID: DR Instrument ID: HP5973X
Sublist: chrom-X-8270*sub83

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 03-Oct-2017 11:56:26 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: pagem Date: 02-Oct-2017 10:27:01

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.740	5.750	-0.010	94	221394	40.0	40.0	
* 2 Naphthalene-d8	136	7.305	7.300	0.005	98	757566	40.0	40.0	
* 3 Acenaphthene-d10	164	9.362	9.356	0.006	98	398011	40.0	40.0	
* 4 Phenanthrene-d10	188	10.964	10.959	0.005	99	826294	40.0	40.0	
* 5 Chrysene-d12	240	13.342	13.336	0.006	99	947249	40.0	40.0	
* 6 Perylene-d12	264	14.506	14.501	0.005	99	884097	40.0	40.0	
$ 7 2-Fluorophenol	112	3.982	3.961	0.021	95	741313	100.0	99.6	
$ 8 Phenol-d5	99	5.291	5.296	-0.005	93	956251	100.0	103.3	
$ 9 Nitrobenzene-d5	82	6.440	6.440	0.000	94	817621	100.0	101.8	
$ 10 2-Fluorobiphenyl	172	8.593	8.582	0.010	100	1595812	100.0	96.9	
$ 11 2,4,6-Tribromophenol	330	10.254	10.249	0.005	98	237830	100.0	102.0	
$ 12 p-Terphenyl-d14	244	12.444	12.439	0.005	100	1844273	100.0	101.2	
15 1,4-Dioxane	88	1.706	1.658	0.048	94	392717	100.0	87.2	M
16 N-Nitrosodimethylamine	42	2.011	1.941	0.070	75	402316	100.0	99.6	
17 Pyridine	52	2.059	1.995	0.064	83	1145830	200.0	197.6	
27 Benzaldehyde	77	5.163	5.173	-0.010	87	620578	100.0	99.3	
28 Phenol	94	5.312	5.318	-0.006	86	1057225	100.0	100.4	
29 Aniline	93	5.318	5.323	-0.005	92	1256625	100.0	100.9	
31 Bis(2-chloroethyl)ether	93	5.414	5.425	-0.011	93	789815	100.0	100.4	
32 2-Chlorophenol	128	5.473	5.478	-0.005	99	754280	100.0	103.4	
35 n-Decane	57	5.579	5.585	-0.006	94	766598	100.0	99.9	
36 1,3-Dichlorobenzene	146	5.670	5.676	-0.006	97	844027	100.0	98.8	
37 1,4-Dichlorobenzene	146	5.766	5.772	-0.006	97	862702	100.0	99.9	
38 Benzyl alcohol	108	5.937	5.932	0.005	95	520019	100.0	101.0	
39 1,2-Dichlorobenzene	146	5.959	5.964	-0.005	95	804003	100.0	100.1	
229 Indene	115	6.076	6.076	0.000	84	3816966	300.0	295.8	
40 2-Methylphenol	108	6.087	6.087	0.000	97	695490	100.0	101.9	
42 2,2'-oxybis[1-chloropropan	45	6.114	6.119	-0.005	95	809475	100.0	99.9	
45 Acetophenone	105	6.258	6.258	0.000	93	1063222	100.0	98.7	
47 N-Nitrosodi-n-propylamine	70	6.279	6.274	0.005	86	565762	100.0	101.5	
46 4-Methylphenol	108	6.290	6.285	0.005	95	717486	100.0	100.1	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
50 Hexachloroethane	117	6.381	6.381	0.000	92	338082	100.0	99.7	
52 Nitrobenzene	77	6.466	6.461	0.005	92	829979	100.0	99.8	
56 Isophorone	82	6.765	6.755	0.010	97	1420450	100.0	99.8	
58 2-Nitrophenol	139	6.856	6.851	0.005	88	390648	100.0	101.6	
59 2,4-Dimethylphenol	107	6.931	6.926	0.005	98	784340	100.0	100.8	
62 Bis(2-chloroethoxy)methane	93	7.043	7.038	0.005	95	887872	100.0	100.3	
64 Benzoic acid	105	7.198	7.118	0.080	83	1902895	300.0	310.0	
65 2,4-Dichlorophenol	162	7.145	7.139	0.006	96	647806	100.0	100.1	
67 1,2,4-Trichlorobenzene	180	7.246	7.241	0.005	97	740470	100.0	98.9	
69 Naphthalene	128	7.332	7.326	0.006	100	1934365	100.0	97.1	
71 4-Chloroaniline	127	7.407	7.401	0.006	96	854416	100.0	99.4	
70 2,6-Dichlorophenol	162	7.417	7.412	0.005	96	629640	100.0	100.0	
73 Hexachlorobutadiene	225	7.497	7.497	0.000	98	477998	100.0	97.5	
78 Caprolactam	113	7.855	7.807	0.048	93	211165	100.0	97.2	M
79 4-Chloro-3-methylphenol	107	8.000	7.989	0.011	96	645724	100.0	101.1	
82 2-Methylnaphthalene	142	8.149	8.144	0.005	97	1342331	100.0	98.3	
83 1-Methylnaphthalene	142	8.267	8.261	0.006	99	1288270	100.0	99.2	
85 1,2,4,5-Tetrachlorobenzene	216	8.352	8.347	0.005	97	789023	100.0	97.8	
84 Hexachlorocyclopentadiene	237	8.352	8.347	0.005	95	625121	100.0	98.3	
86 2,4,6-Trichlorophenol	196	8.491	8.486	0.005	94	499908	100.0	98.6	
87 2,4,5-Trichlorophenol	196	8.528	8.523	0.005	96	545332	100.0	100.6	
90 1,1'-Biphenyl	154	8.705	8.694	0.011	99	1654317	100.0	95.6	
91 2-Chloronaphthalene	162	8.715	8.710	0.005	99	1313036	100.0	95.9	
93 2-Nitroaniline	65	8.844	8.833	0.011	93	416350	100.0	97.4	
96 Dimethyl phthalate	163	9.079	9.063	0.016	99	1541522	100.0	99.5	
97 1,3-Dinitrobenzene	168	9.089	9.079	0.010	94	290272	100.0	102.0	
99 2,6-Dinitrotoluene	165	9.132	9.121	0.011	89	369686	100.0	99.4	
100 Acenaphthylene	152	9.196	9.185	0.011	100	1932868	100.0	98.8	
101 3-Nitroaniline	138	9.324	9.314	0.010	97	384329	100.0	99.4	
102 Acenaphthene	153	9.399	9.394	0.005	97	1283021	100.0	97.1	
103 2,4-Dinitrophenol	184	9.447	9.431	0.016	86	557443	200.0	201.6	
104 4-Nitrophenol	109	9.543	9.527	0.016	92	544209	200.0	197.9	
106 2,4-Dinitrotoluene	165	9.597	9.586	0.011	97	494117	100.0	97.9	
107 Dibenzofuran	168	9.602	9.597	0.005	98	1907807	100.0	95.2	
110 2,3,4,6-Tetrachlorophenol	232	9.752	9.746	0.006	96	464184	100.0	98.0	
112 Diethyl phthalate	149	9.896	9.885	0.011	100	1538452	100.0	99.4	
138 Hexadecane	57	9.933	9.923	0.010	96	812831	100.0	97.5	
115 Fluorene	166	9.992	9.981	0.011	99	1539534	100.0	99.4	
116 4-Chlorophenyl phenyl ethe	204	10.003	9.992	0.011	96	854624	100.0	97.7	
118 4-Nitroaniline	138	10.035	10.014	0.021	89	384538	100.0	97.3	
119 4,6-Dinitro-2-methylphenol	198	10.062	10.046	0.016	97	623743	200.0	204.2	
121 Diphenylamine	169	10.136	10.126	0.010	98	1137499	85.5	86.1	
120 N-Nitrosodiphenylamine	169	10.136	10.126	0.010	97	1137499	100.0	100.7	
122 Azobenzene	77	10.174	10.168	0.006	95	1575313	100.0	99.6	
123 1,2-Diphenylhydrazine	77	10.174	10.168	0.006	99	1575313	100.0	99.6	
130 4-Bromophenyl phenyl ether	248	10.521	10.516	0.005	96	511297	100.0	102.9	
131 Hexachlorobenzene	284	10.585	10.580	0.005	97	516151	100.0	101.6	
133 Atrazine	200	10.713	10.703	0.010	94	446110	100.0	99.1	
134 Pentachlorophenol	266	10.788	10.783	0.005	97	713797	200.0	203.9	
113 n-Octadecane	57	10.900	10.895	0.005	92	863696	100.0	101.8	
141 Phenanthrene	178	10.991	10.986	0.005	99	2184046	100.0	98.3	
142 Anthracene	178	11.045	11.034	0.011	100	2303001	100.0	100.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
143 Carbazole	167	11.205	11.194	0.011	99	2119153	100.0	101.8	
145 Di-n-butyl phthalate	149	11.552	11.547	0.005	100	2506957	100.0	101.4	
152 Fluoranthene	202	12.102	12.097	0.005	99	2642946	100.0	103.2	
154 Benzidine	184	12.225	12.220	0.005	100	1417943	100.0	98.4	
155 Pyrene	202	12.305	12.295	0.010	99	2712197	100.0	100.7	
162 Butyl benzyl phthalate	149	12.861	12.856	0.005	99	1183260	100.0	101.9	
166 3,3'-Dichlorobenzidine	252	13.310	13.304	0.006	87	1059761	100.0	100.3	
167 Benzo[a]anthracene	228	13.331	13.326	0.005	96	2683148	100.0	99.1	
172 Bis(2-ethylhexyl) phthalat	149	13.347	13.342	0.005	96	1698933	100.0	101.3	
169 Chrysene	228	13.363	13.358	0.005	99	2538644	100.0	97.0	
168 Di-n-octyl phthalate	149	13.865	13.865	0.000	100	2825186	100.0	101.7	
174 Benzo[b]fluoranthene	252	14.202	14.196	0.006	100	2759843	100.0	98.0	
175 Benzo[k]fluoranthene	252	14.229	14.218	0.011	99	2946292	100.0	97.9	M
177 Benzo[a]pyrene	252	14.469	14.458	0.011	100	2769615	100.0	101.2	M
180 Indeno[1,2,3-cd]pyrene	276	15.452	15.436	0.016	91	3150512	100.0	101.3	
181 Dibenz(a,h)anthracene	278	15.457	15.441	0.016	95	2655601	100.0	100.7	
182 Benzo[g,h,i]perylene	276	15.724	15.703	0.021	100	2678145	100.0	101.1	M
S 236 3 & 4 Methylphenol	108				0			100.1	
S 238 3-Methylphenol	1				0			100.1	
S 237 Total Cresols	1				0			202.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LIST1_WRK_00517	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

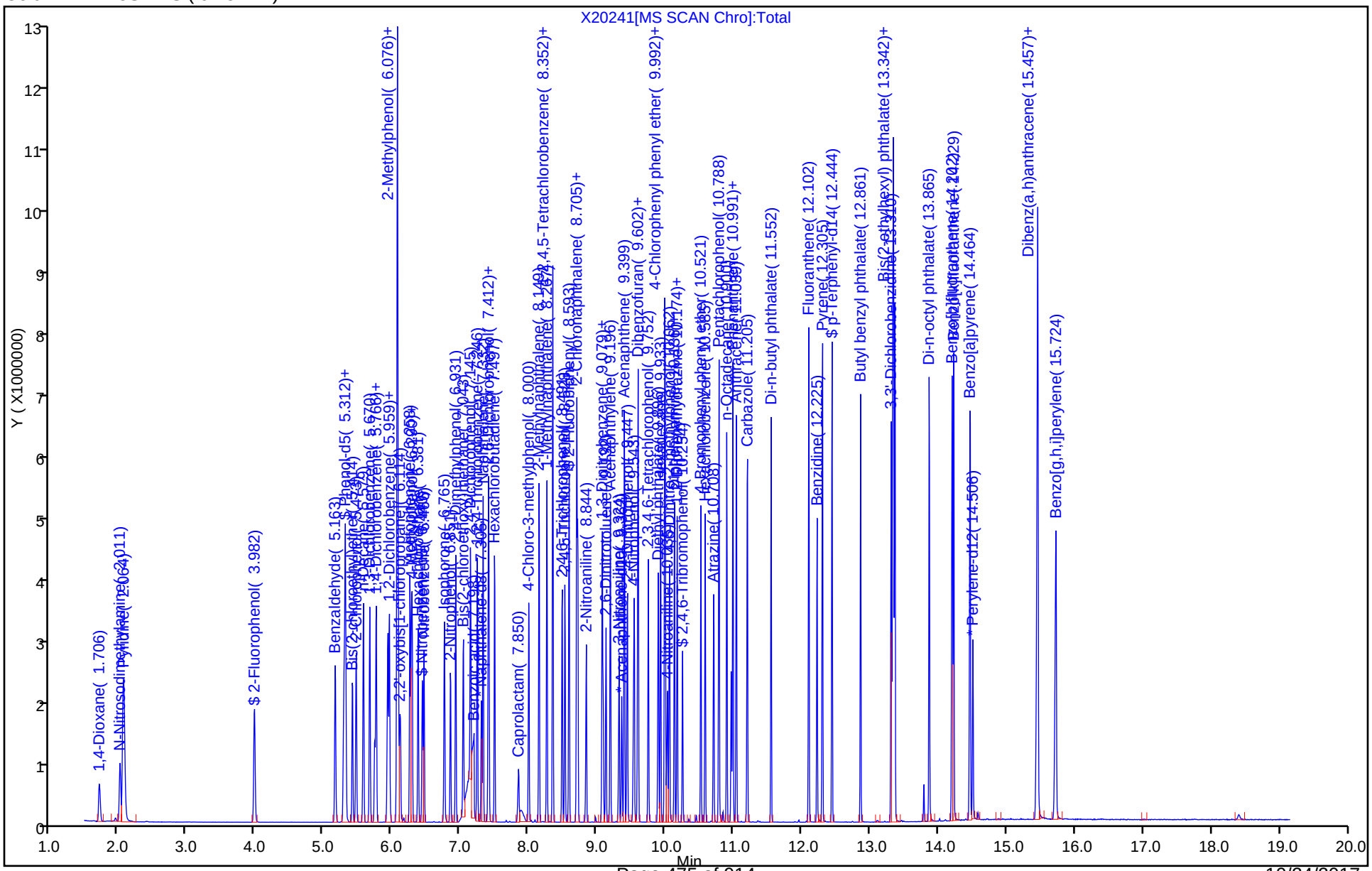
Report Date: 03-Oct-2017 11:56:27 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20241.D

Injection Date:	29-Sep-2017 21:18:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	IC - List1 100			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

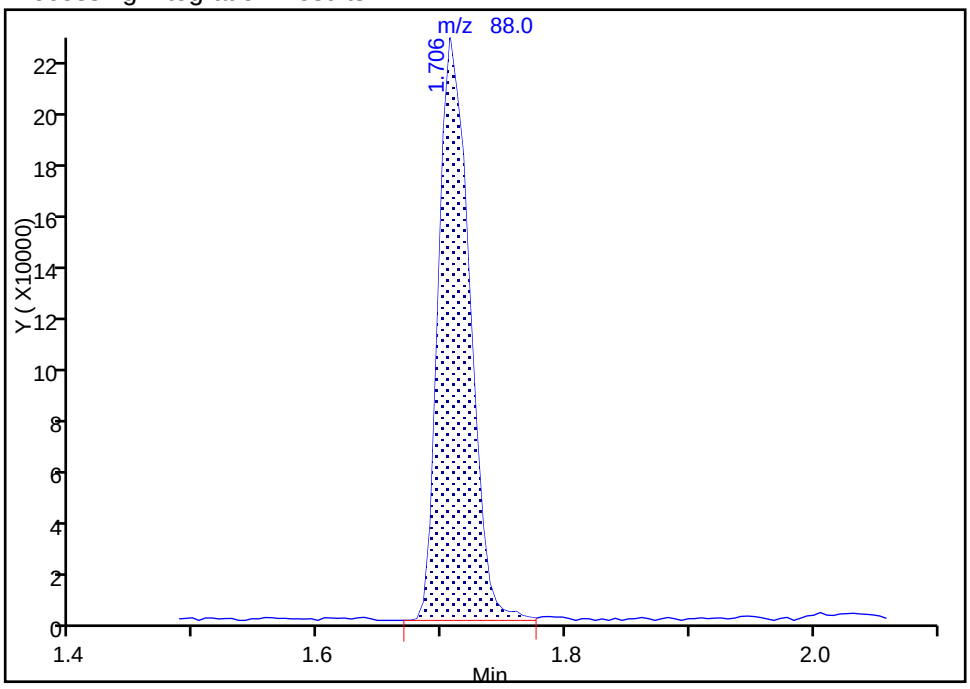
Data File:	\\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20241.D				
Injection Date:	29-Sep-2017 21:18:30	Instrument ID:	HP5973X		
Lims ID:	IC - List1 100				
Client ID:					
Operator ID:	DR	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	X-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

15 1,4-Dioxane, CAS: 123-91-1

Signal: 1

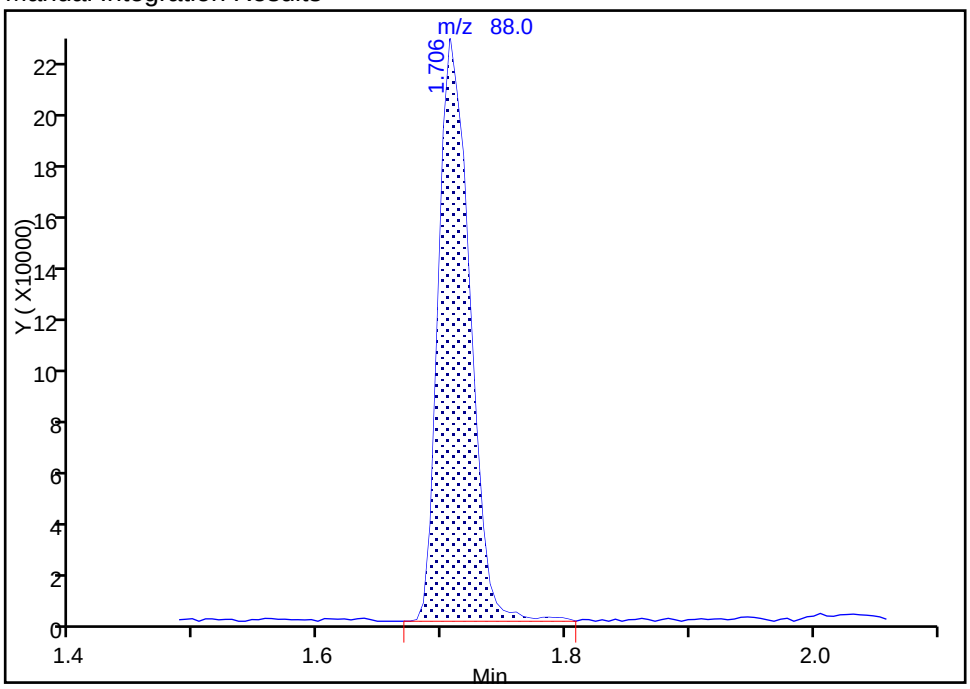
Processing Integration Results

RT: 1.71
Area: 390764
Amount: 86.844996
Amount Units: ng/uL



Manual Integration Results

RT: 1.71
Area: 392717
Amount: 87.215946
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:12:47

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

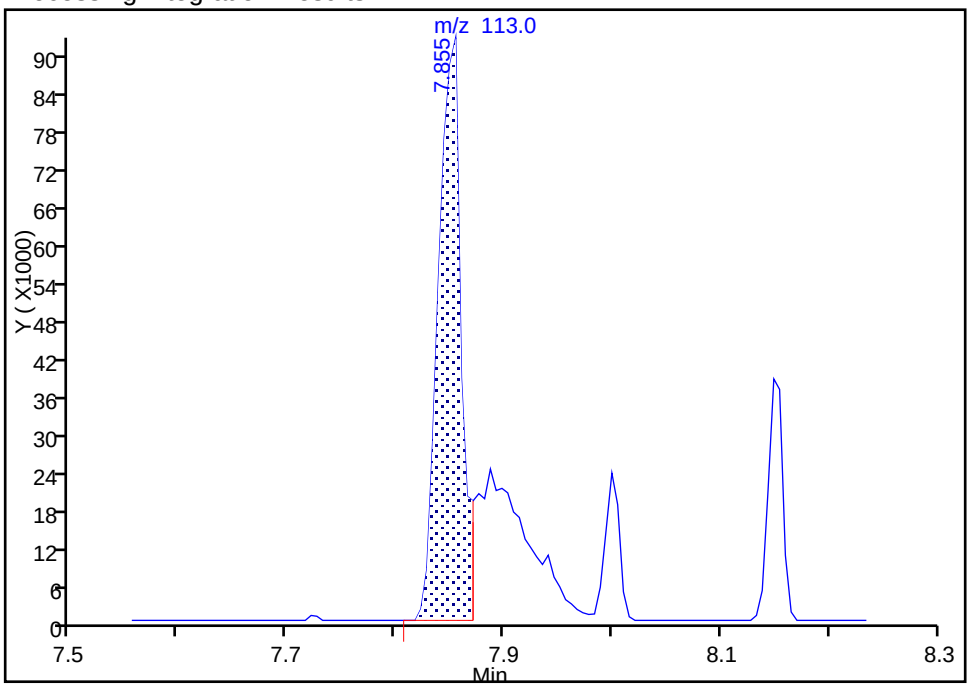
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20241.D
Injection Date: 29-Sep-2017 21:18:30 Instrument ID: HP5973X
Lims ID: IC - List1 100
Client ID:
Operator ID: DR ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

78 Caprolactam, CAS: 105-60-2

Signal: 1

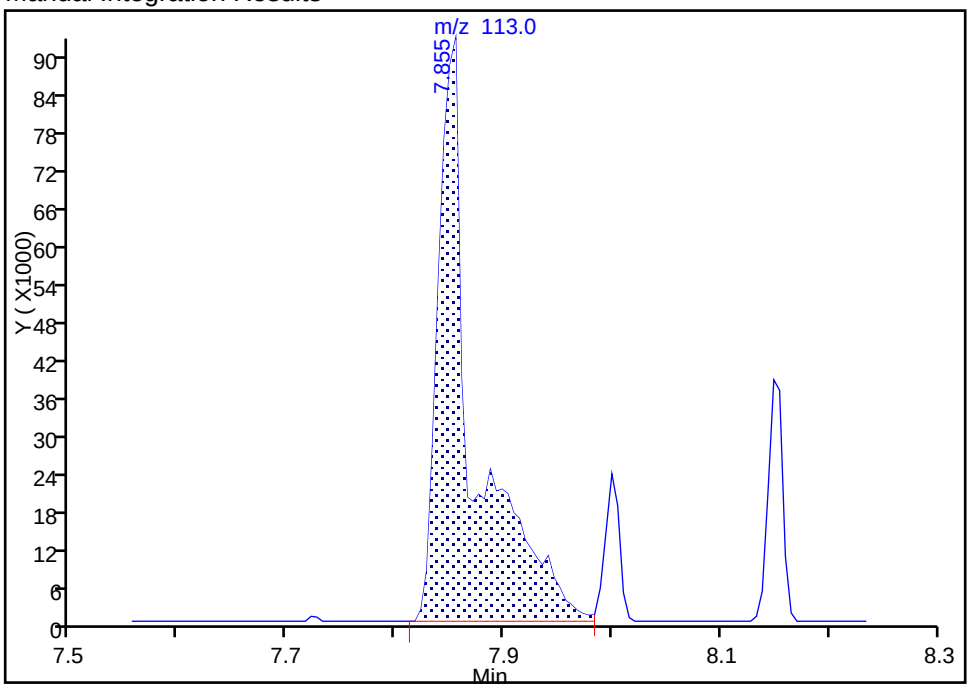
Processing Integration Results

RT: 7.86
Area: 136001
Amount: 78.895144
Amount Units: ng/uL



Manual Integration Results

RT: 7.86
Area: 211165
Amount: 97.166684
Amount Units: ng/uL



Reviewer: pagem, 02-Oct-2017 10:28:16
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

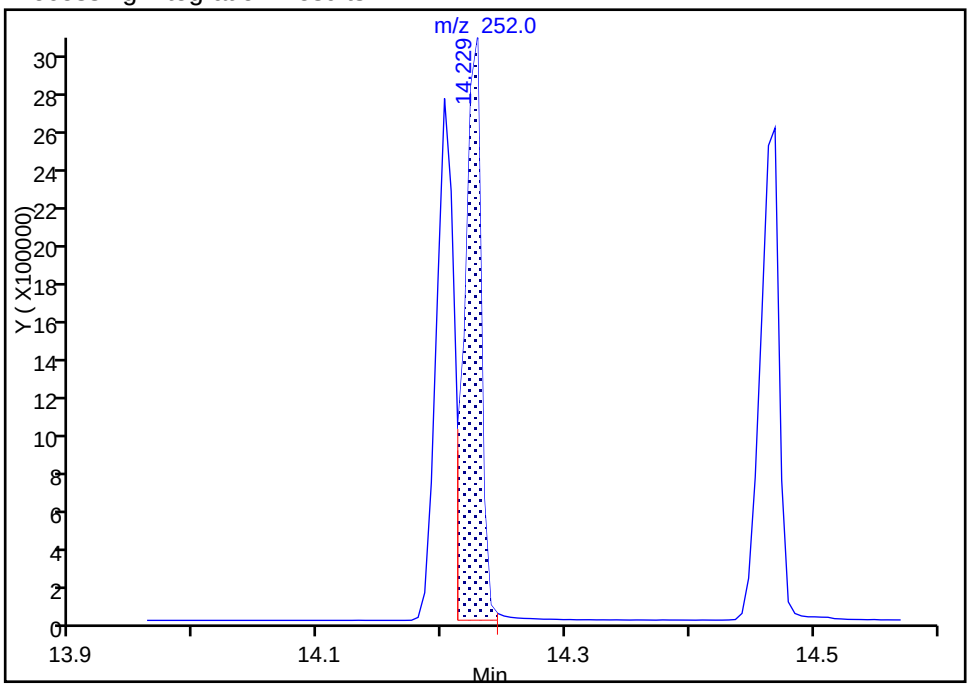
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20241.D
Injection Date: 29-Sep-2017 21:18:30 Instrument ID: HP5973X
Lims ID: IC - List1 100
Client ID:
Operator ID: DR ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

175 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

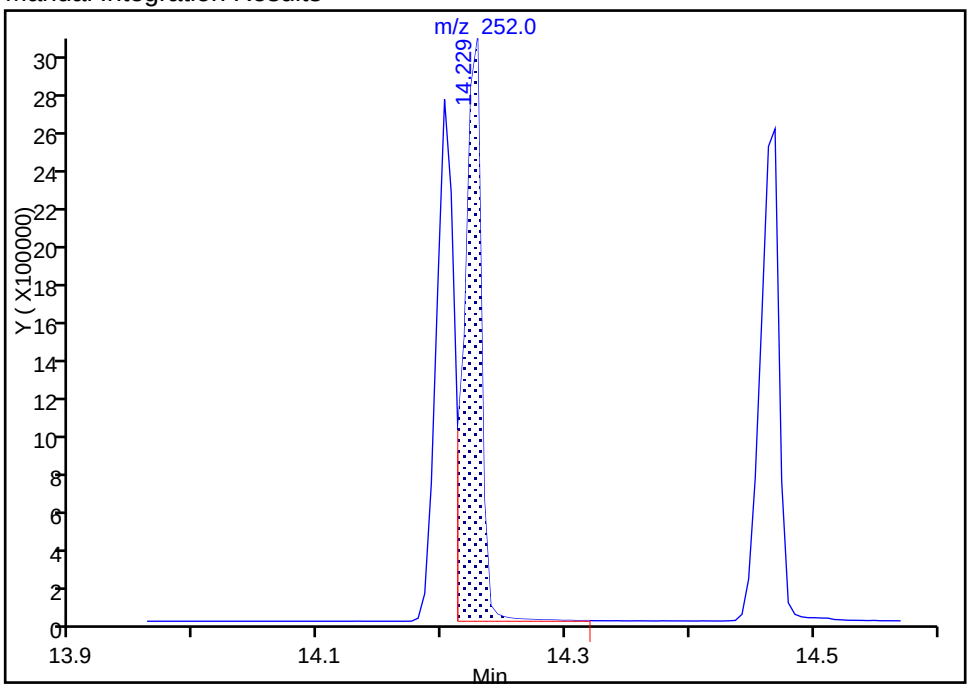
Processing Integration Results

RT: 14.23
Area: 2907347
Amount: 98.006890
Amount Units: ng/uL



Manual Integration Results

RT: 14.23
Area: 2946292
Amount: 97.933177
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:41:30
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

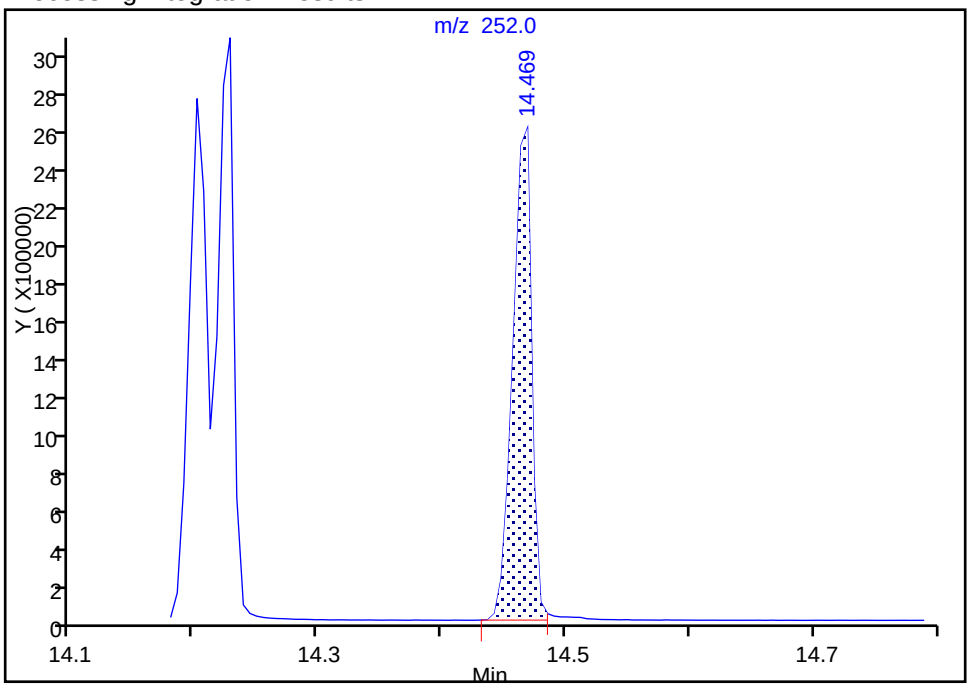
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20241.D
Injection Date: 29-Sep-2017 21:18:30 Instrument ID: HP5973X
Lims ID: IC - List1 100
Client ID:
Operator ID: DR ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

177 Benzo[a]pyrene, CAS: 50-32-8

Signal: 1

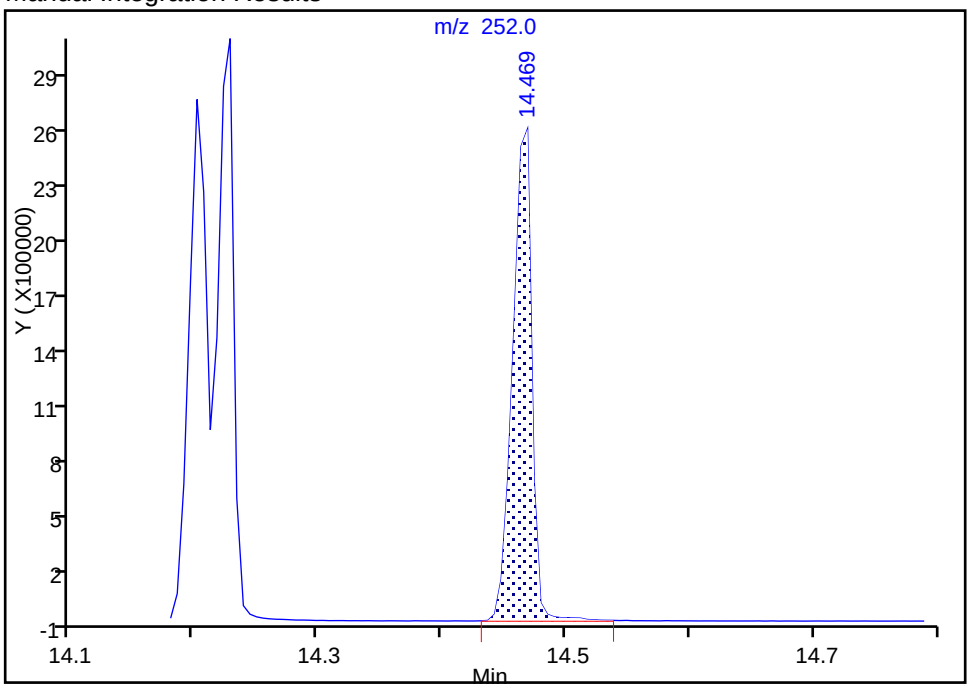
Processing Integration Results

RT: 14.47
Area: 2722305
Amount: 100.2876
Amount Units: ng/uL



Manual Integration Results

RT: 14.47
Area: 2769615
Amount: 101.2050
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:42:07
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

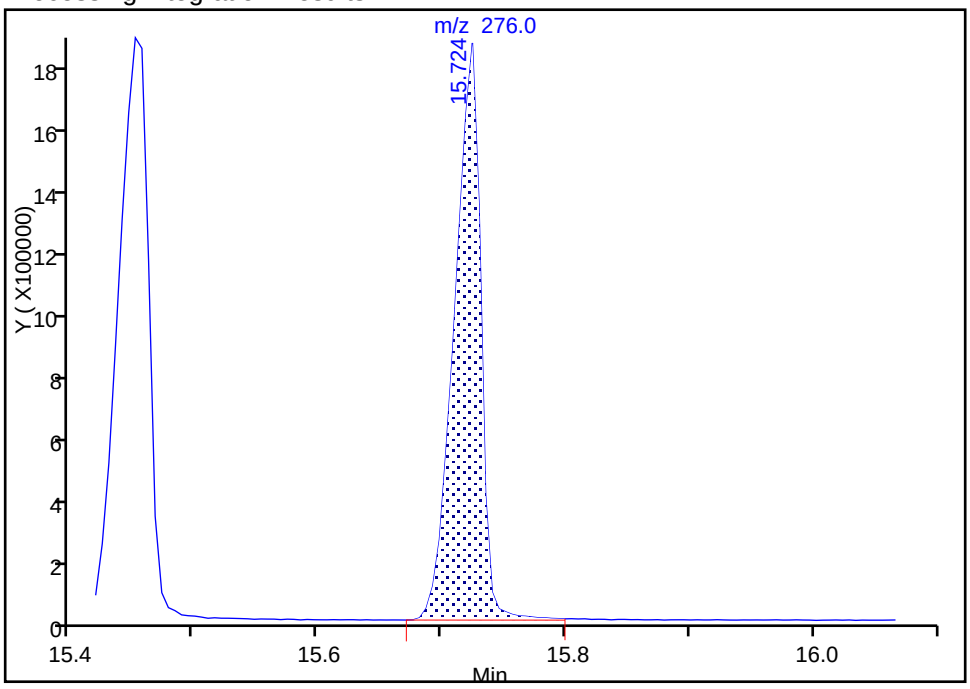
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20241.D
Injection Date: 29-Sep-2017 21:18:30 Instrument ID: HP5973X
Lims ID: IC - List1 100
Client ID:
Operator ID: DR ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

182 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

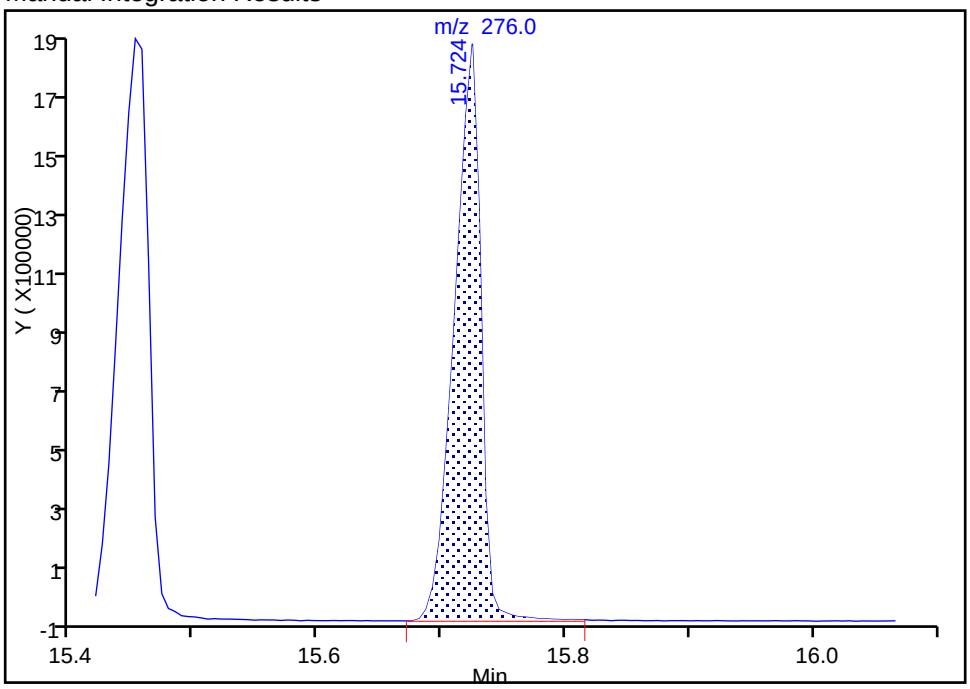
Processing Integration Results

RT: 15.72
Area: 2665908
Amount: 100.8053
Amount Units: ng/uL



Manual Integration Results

RT: 15.72
Area: 2678145
Amount: 101.1332
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:43:00
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Lims ID: IC - List1 120
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 29-Sep-2017 21:44:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066023-008
Operator ID: DR Instrument ID: HP5973X
Sublist: chrom-X-8270*sub83

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 03-Oct-2017 11:56:29 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: pagem Date: 02-Oct-2017 10:27:20

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.707	5.750	-0.043	94	194424	40.0	40.0	
* 2 Naphthalene-d8	136	7.294	7.300	-0.006	99	693896	40.0	40.0	
* 3 Acenaphthene-d10	164	9.362	9.356	0.006	97	343501	40.0	40.0	
* 4 Phenanthrene-d10	188	10.964	10.959	0.005	99	721219	40.0	40.0	
* 5 Chrysene-d12	240	13.315	13.336	-0.021	99	835746	40.0	40.0	
* 6 Perylene-d12	264	14.458	14.501	-0.043	99	747151	40.0	40.0	
$ 7 2-Fluorophenol	112	3.961	3.961	0.000	94	794086	120.0	121.5	
$ 8 Phenol-d5	99	5.248	5.296	-0.048	93	965950	120.0	118.8	
$ 9 Nitrobenzene-d5	82	6.423	6.440	-0.017	94	884906	120.0	120.3	
$ 10 2-Fluorobiphenyl	172	8.587	8.582	0.005	100	1662390	120.0	117.0	
$ 11 2,4,6-Tribromophenol	330	10.254	10.249	0.005	98	249877	120.0	122.4	
$ 12 p-Terphenyl-d14	244	12.423	12.439	-0.016	100	1910536	120.0	118.8	
15 1,4-Dioxane	88	1.685	1.658	0.027	95	469654	120.0	118.8	
16 N-Nitrosodimethylamine	42	1.979	1.941	0.038	75	429787	120.0	121.2	
17 Pyridine	52	2.027	1.995	0.032	83	1271890	240.0	249.4	
27 Benzaldehyde	77	5.120	5.173	-0.053	89	625016	120.0	113.9	
28 Phenol	94	5.269	5.318	-0.049	86	1076313	120.0	116.4	
29 Aniline	93	5.275	5.323	-0.048	91	1290451	120.0	118.0	
31 Bis(2-chloroethyl)ether	93	5.376	5.425	-0.049	92	808532	120.0	117.0	
32 2-Chlorophenol	128	5.430	5.478	-0.048	99	771659	120.0	120.5	
35 n-Decane	57	5.537	5.585	-0.048	93	794290	120.0	117.9	
36 1,3-Dichlorobenzene	146	5.633	5.676	-0.043	98	896268	120.0	119.5	
37 1,4-Dichlorobenzene	146	5.729	5.772	-0.043	98	898670	120.0	118.5	
38 Benzyl alcohol	108	5.905	5.932	-0.027	95	544288	120.0	120.1	
39 1,2-Dichlorobenzene	146	5.927	5.964	-0.038	97	848372	120.0	120.3	
229 Indene	115	6.049	6.076	-0.027	85	3989248	360.0	354.2	
40 2-Methylphenol	108	6.060	6.087	-0.027	96	732292	120.0	122.2	
42 2,2'-oxybis[1-chloropropan	45	6.087	6.119	-0.032	95	843583	120.0	118.5	
45 Acetophenone	105	6.236	6.258	-0.022	93	1155580	120.0	122.1	
47 N-Nitrosodi-n-propylamine	70	6.252	6.274	-0.022	86	617404	120.0	126.1	
46 4-Methylphenol	108	6.268	6.285	-0.017	93	789284	120.0	125.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
50 Hexachloroethane	117	6.354	6.381	-0.027	94	363066	120.0	121.9	
52 Nitrobenzene	77	6.445	6.461	-0.016	92	910715	120.0	119.6	
56 Isophorone	82	6.749	6.755	-0.006	97	1527736	120.0	117.1	
58 2-Nitrophenol	139	6.840	6.851	-0.011	88	424634	120.0	120.3	
59 2,4-Dimethylphenol	107	6.920	6.926	-0.006	97	839009	120.0	117.7	
62 Bis(2-chloroethoxy)methane	93	7.032	7.038	-0.006	95	964851	120.0	119.0	
64 Benzoic acid	105	7.193	7.118	0.075	83	2066181	360.0	365.4	
65 2,4-Dichlorophenol	162	7.139	7.139	0.000	95	705057	120.0	118.8	
67 1,2,4-Trichlorobenzene	180	7.235	7.241	-0.006	97	799773	120.0	116.7	
69 Naphthalene	128	7.321	7.326	-0.005	99	2128351	120.0	116.6	
71 4-Chloroaniline	127	7.401	7.401	0.000	99	931677	120.0	118.3	
70 2,6-Dichlorophenol	162	7.412	7.412	0.000	97	677895	120.0	117.5	
73 Hexachlorobutadiene	225	7.492	7.497	-0.005	97	517736	120.0	115.3	
78 Caprolactam	113	7.850	7.807	0.043	91	238554	120.0	119.5	M
79 4-Chloro-3-methylphenol	107	7.999	7.989	0.010	96	680554	120.0	116.3	
82 2-Methylnaphthalene	142	8.149	8.144	0.005	97	1423466	120.0	113.8	
83 1-Methylnaphthalene	142	8.261	8.261	0.000	100	1340962	120.0	112.7	
84 Hexachlorocyclopentadiene	237	8.347	8.347	0.000	95	670396	120.0	121.9	
85 1,2,4,5-Tetrachlorobenzene	216	8.352	8.347	0.005	96	830066	120.0	119.2	
86 2,4,6-Trichlorophenol	196	8.485	8.486	-0.001	94	535555	120.0	122.1	
87 2,4,5-Trichlorophenol	196	8.528	8.523	0.005	95	560818	120.0	119.6	
90 1,1'-Biphenyl	154	8.699	8.694	0.005	99	1736870	120.0	116.3	
91 2-Chloronaphthalene	162	8.715	8.710	0.005	99	1382801	120.0	117.0	
93 2-Nitroaniline	65	8.843	8.833	0.010	93	454413	120.0	122.8	
96 Dimethyl phthalate	163	9.078	9.063	0.015	99	1615576	120.0	120.8	
97 1,3-Dinitrobenzene	168	9.089	9.079	0.010	91	309019	120.0	118.2	
99 2,6-Dinitrotoluene	165	9.132	9.121	0.011	89	389105	120.0	120.9	
100 Acenaphthylene	152	9.196	9.185	0.011	100	2052693	120.0	121.5	
101 3-Nitroaniline	138	9.324	9.314	0.010	97	401693	120.0	120.1	
102 Acenaphthene	153	9.399	9.394	0.005	96	1362662	120.0	119.5	
103 2,4-Dinitrophenol	184	9.447	9.431	0.016	87	584994	240.0	243.8	
104 4-Nitrophenol	109	9.549	9.527	0.022	92	579663	240.0	243.5	
106 2,4-Dinitrotoluene	165	9.597	9.586	0.011	96	534124	120.0	122.1	
107 Dibenzofuran	168	9.602	9.597	0.005	97	2037011	120.0	117.8	
110 2,3,4,6-Tetrachlorophenol	232	9.752	9.746	0.006	95	500288	120.0	122.0	
112 Diethyl phthalate	149	9.896	9.885	0.011	100	1611395	120.0	120.6	
138 Hexadecane	57	9.933	9.923	0.010	95	852475	120.0	118.5	
115 Fluorene	166	9.992	9.981	0.011	99	1584476	120.0	118.6	
116 4-Chlorophenyl phenyl ethe	204	10.003	9.992	0.011	96	892876	120.0	118.3	
118 4-Nitroaniline	138	10.035	10.014	0.021	89	411114	120.0	120.4	
119 4,6-Dinitro-2-methylphenol	198	10.067	10.046	0.021	96	660918	240.0	246.7	
120 N-Nitrosodiphenylamine	169	10.136	10.126	0.010	97	1191207	120.0	120.8	
121 Diphenylamine	169	10.136	10.126	0.010	98	1191207	102.6	103.3	
123 1,2-Diphenylhydrazine	77	10.174	10.168	0.006	99	1670334	120.0	120.9	
122 Azobenzene	77	10.174	10.168	0.006	95	1670334	120.0	120.9	
130 4-Bromophenyl phenyl ether	248	10.521	10.516	0.005	96	538286	120.0	124.1	
131 Hexachlorobenzene	284	10.585	10.580	0.005	97	532181	120.0	120.0	
133 Atrazine	200	10.713	10.703	0.010	94	450450	120.0	115.8	
134 Pentachlorophenol	266	10.788	10.783	0.005	97	746134	240.0	243.1	
113 n-Octadecane	57	10.900	10.895	0.005	93	852491	120.0	115.0	
141 Phenanthrene	178	10.991	10.986	0.005	99	2290868	120.0	118.1	
142 Anthracene	178	11.044	11.034	0.010	100	2391587	120.0	120.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
143 Carbazole	167	11.205	11.194	0.011	99	2173617	120.0	119.6	
145 Di-n-butyl phthalate	149	11.552	11.547	0.005	100	2560080	120.0	118.5	
152 Fluoranthene	202	12.091	12.097	-0.006	99	2650881	120.0	118.6	
154 Benzidine	184	12.209	12.220	-0.011	100	1467718	120.0	115.3	
155 Pyrene	202	12.284	12.295	-0.011	99	2707171	120.0	113.9	M
162 Butyl benzyl phthalate	149	12.834	12.856	-0.022	99	1203914	120.0	117.2	
166 3,3'-Dichlorobenzidine	252	13.283	13.304	-0.021	86	1122560	120.0	120.0	
167 Benzo[a]anthracene	228	13.304	13.326	-0.022	96	2810670	120.0	117.6	
172 Bis(2-ethylhexyl) phthalat	149	13.320	13.342	-0.022	95	1734937	120.0	117.0	
169 Chrysene	228	13.336	13.358	-0.022	99	2653885	120.0	114.9	
168 Di-n-octyl phthalate	149	13.838	13.865	-0.027	100	2862181	120.0	116.5	
174 Benzo[b]fluoranthene	252	14.164	14.196	-0.032	99	2910211	120.0	122.2	
175 Benzo[k]fluoranthene	252	14.186	14.218	-0.032	99	2834892	120.0	111.5	M
177 Benzo[a]pyrene	252	14.415	14.458	-0.043	100	2753560	120.0	118.9	M
180 Indeno[1,2,3-cd]pyrene	276	15.372	15.436	-0.064	92	3156558	120.0	120.0	M
181 Dibenz(a,h)anthracene	278	15.377	15.441	-0.064	95	2668060	120.0	119.6	M
182 Benzo[g,h,i]perylene	276	15.628	15.703	-0.075	100	2689570	120.0	120.1	M
S 238 3-Methylphenol	1				0			125.4	
S 237 Total Cresols	1				0			247.6	
S 236 3 & 4 Methylphenol	108				0			125.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LIST1_WRK_00518	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

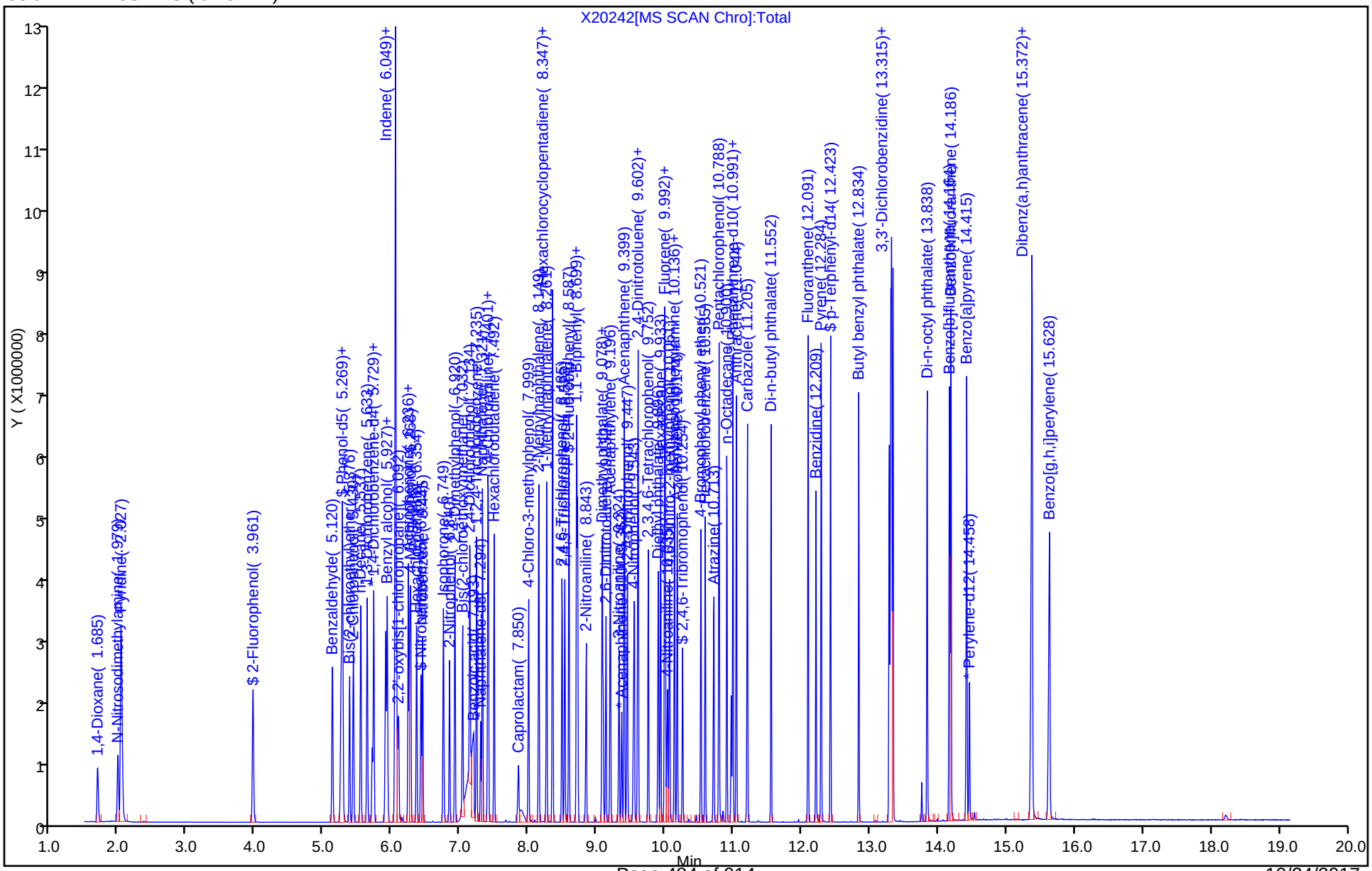
Report Date: 03-Oct-2017 11:56:30 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Injection Date:	29-Sep-2017 21:44:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	IC - List1 120			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

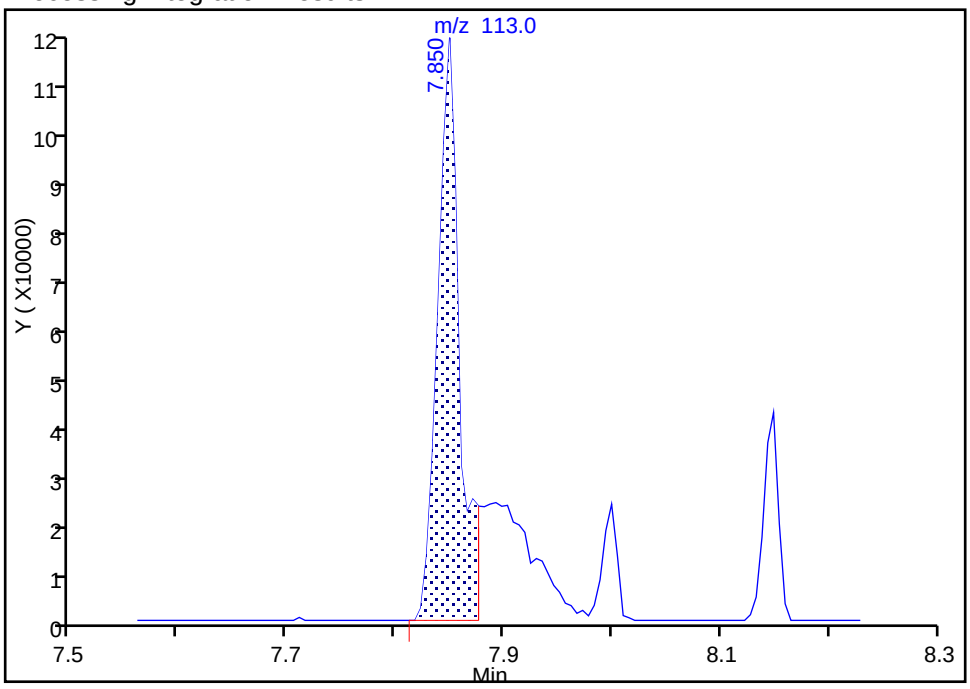
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Injection Date: 29-Sep-2017 21:44:30 Instrument ID: HP5973X
Lims ID: IC - List1 120
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

78 Caprolactam, CAS: 105-60-2

Signal: 1

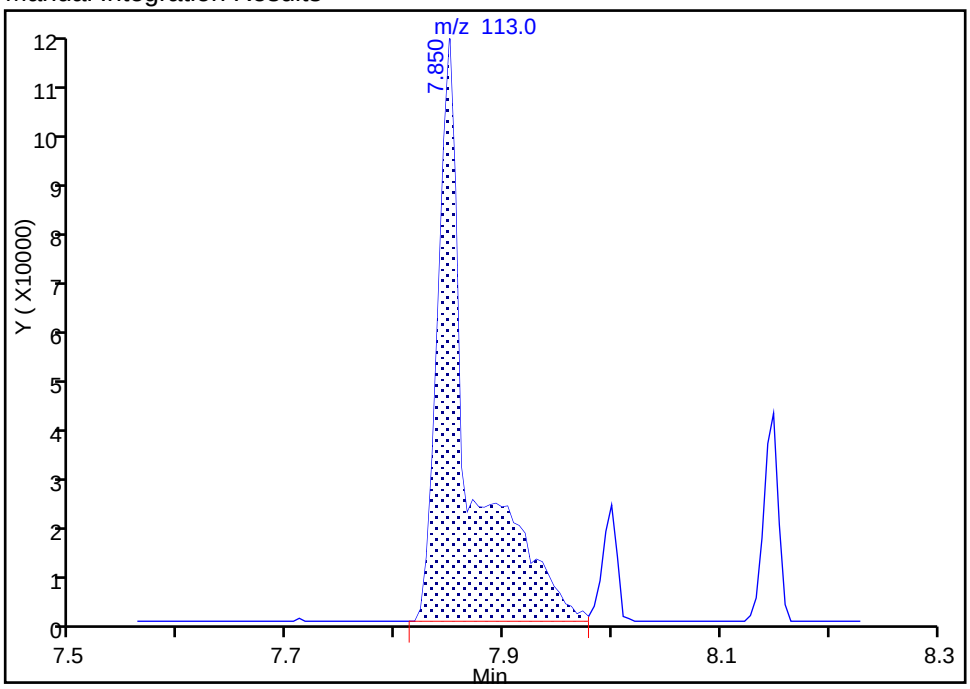
Processing Integration Results

RT: 7.85
Area: 162157
Amount: 91.604375
Amount Units: ng/uL



Manual Integration Results

RT: 7.85
Area: 238554
Amount: 119.4500
Amount Units: ng/uL



Reviewer: pagem, 02-Oct-2017 10:28:32
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

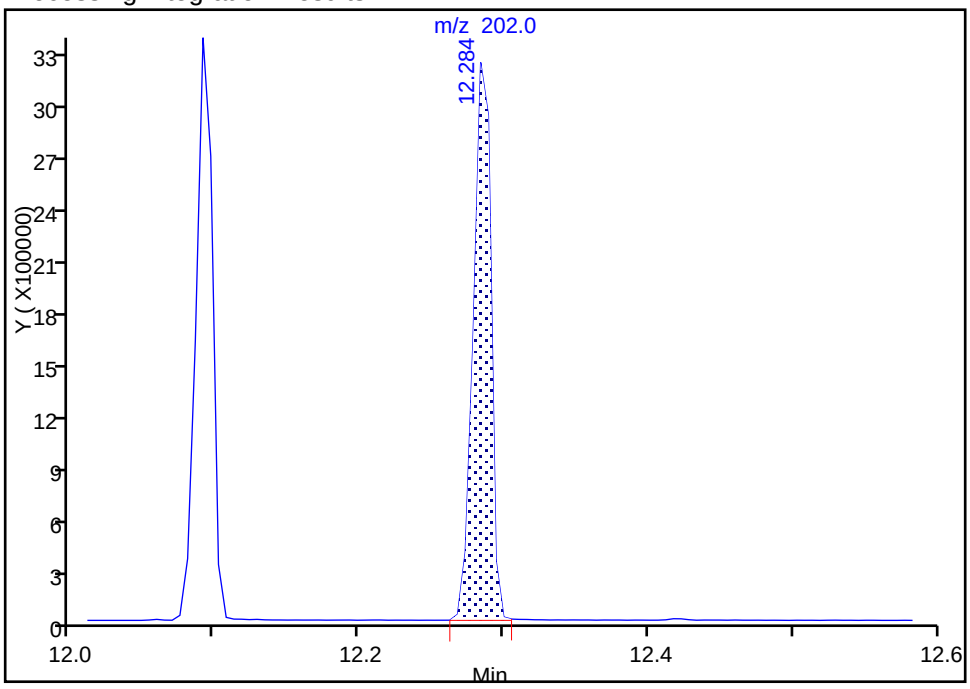
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Injection Date: 29-Sep-2017 21:44:30 Instrument ID: HP5973X
Lims ID: IC - List1 120
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

155 Pyrene, CAS: 129-00-0

Signal: 1

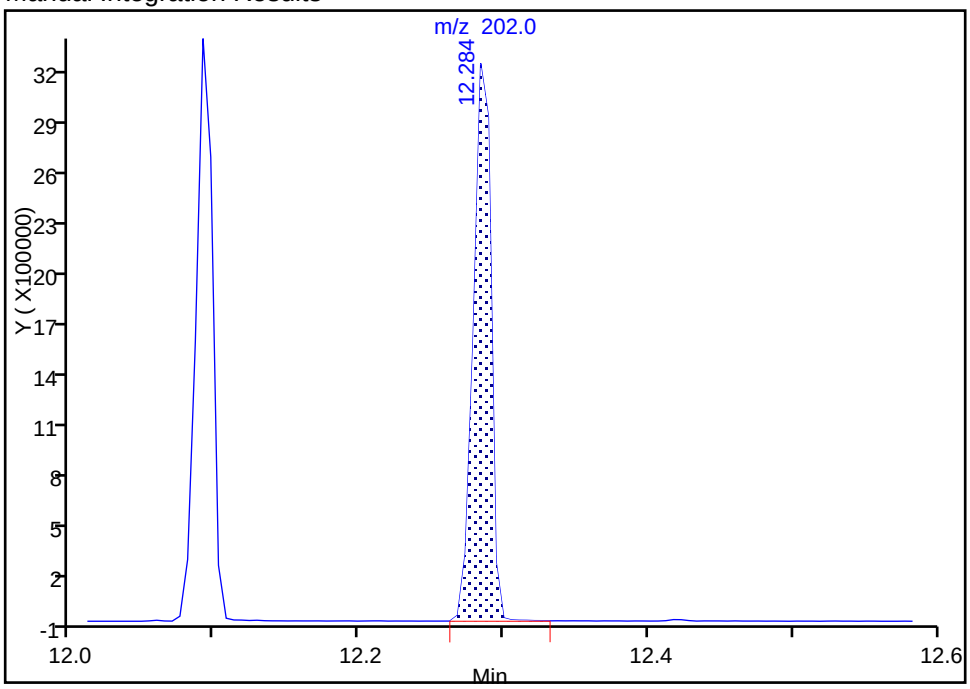
Processing Integration Results

RT: 12.28
Area: 2701570
Amount: 113.6495
Amount Units: ng/uL



Manual Integration Results

RT: 12.28
Area: 2707171
Amount: 113.8851
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:45:06
Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

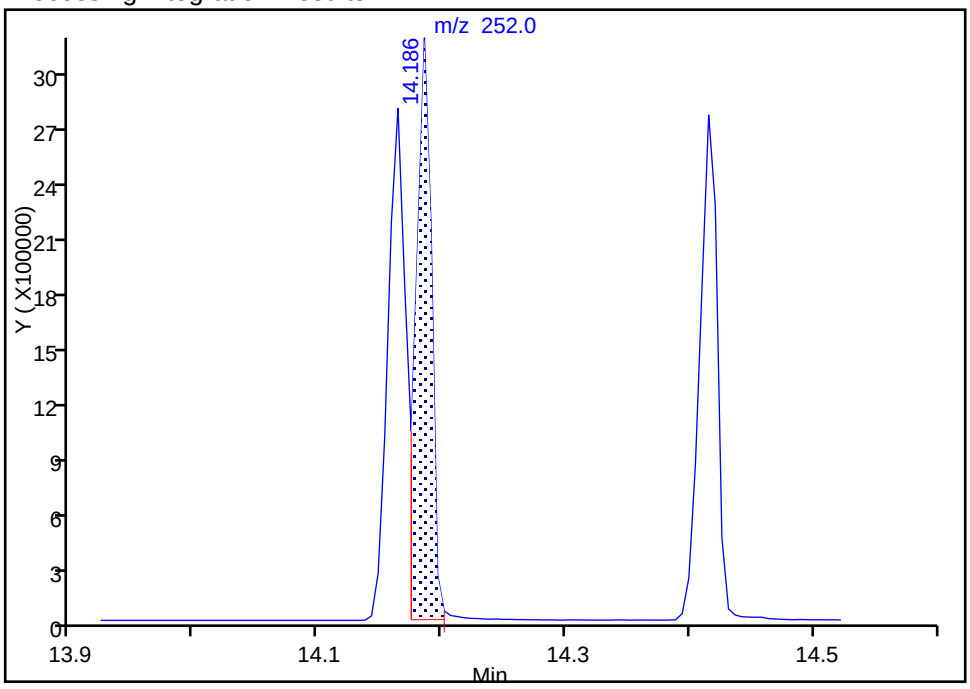
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Injection Date: 29-Sep-2017 21:44:30 Instrument ID: HP5973X
Lims ID: IC - List1 120
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

175 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

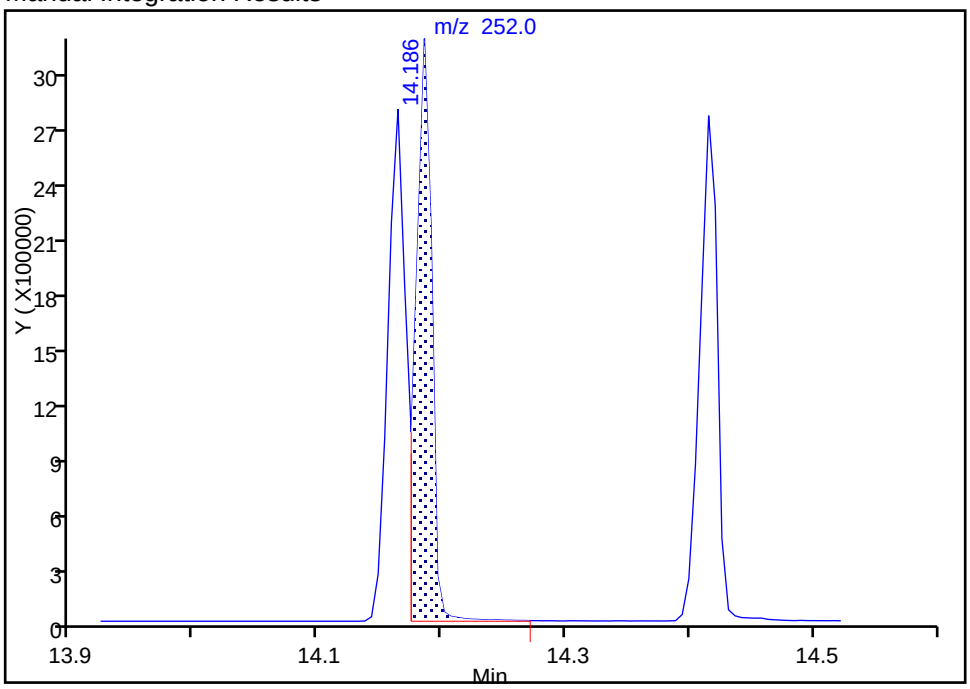
Processing Integration Results

RT: 14.19
Area: 2786510
Amount: 111.4493
Amount Units: ng/uL



Manual Integration Results

RT: 14.19
Area: 2834892
Amount: 111.5019
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:40:54
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

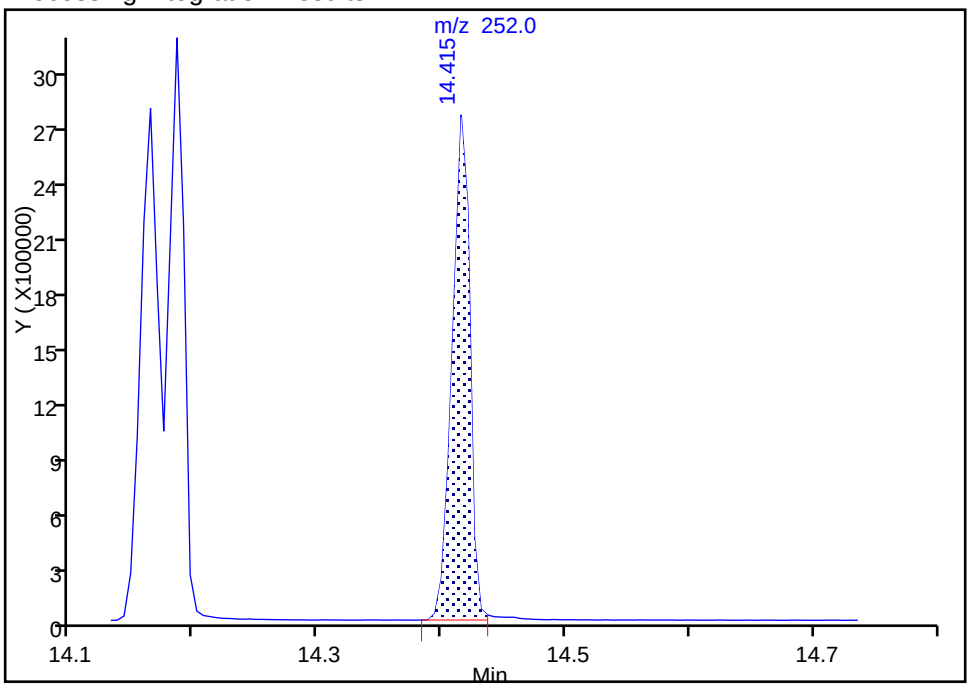
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Injection Date: 29-Sep-2017 21:44:30 Instrument ID: HP5973X
Lims ID: IC - List1 120
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

177 Benzo[a]pyrene, CAS: 50-32-8

Signal: 1

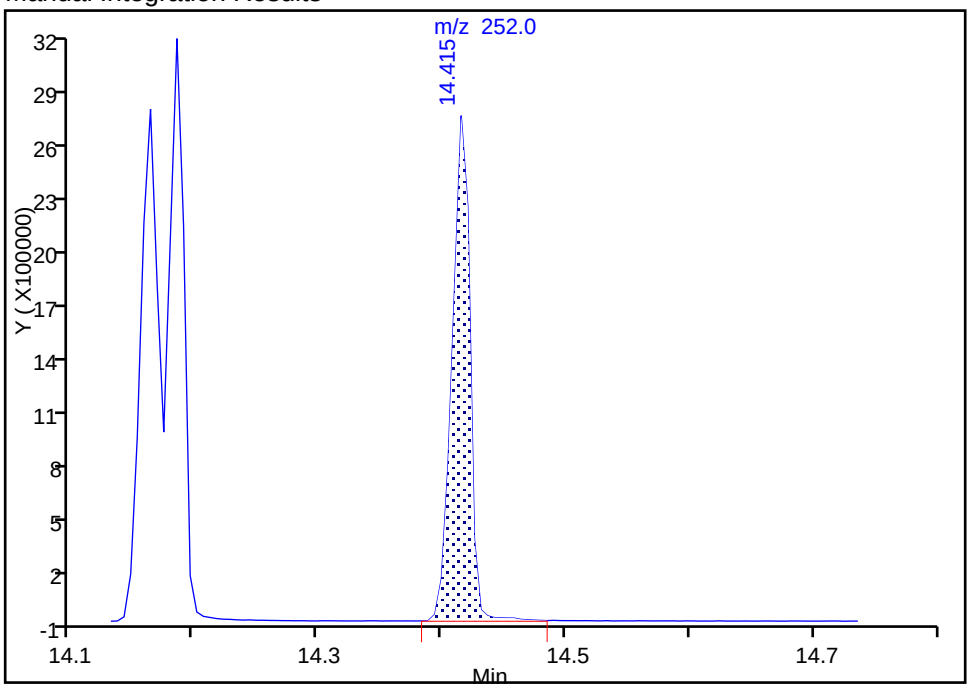
Processing Integration Results

RT: 14.42
Area: 2713395
Amount: 118.7756
Amount Units: ng/uL



Manual Integration Results

RT: 14.42
Area: 2753560
Amount: 118.9326
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:40:25
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

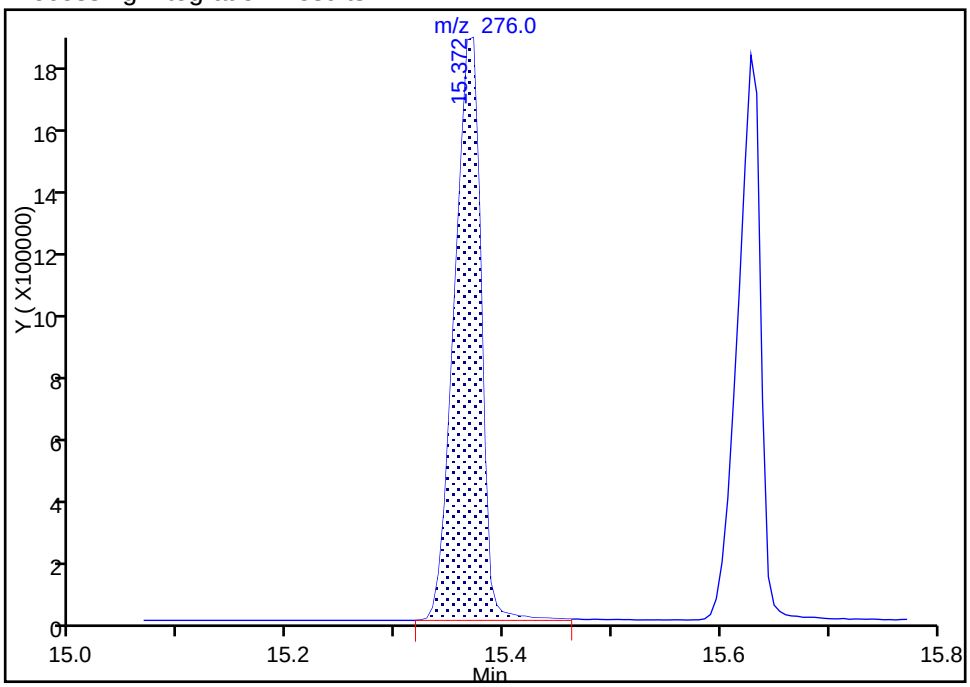
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Injection Date: 29-Sep-2017 21:44:30 Instrument ID: HP5973X
Lims ID: IC - List1 120
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

180 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

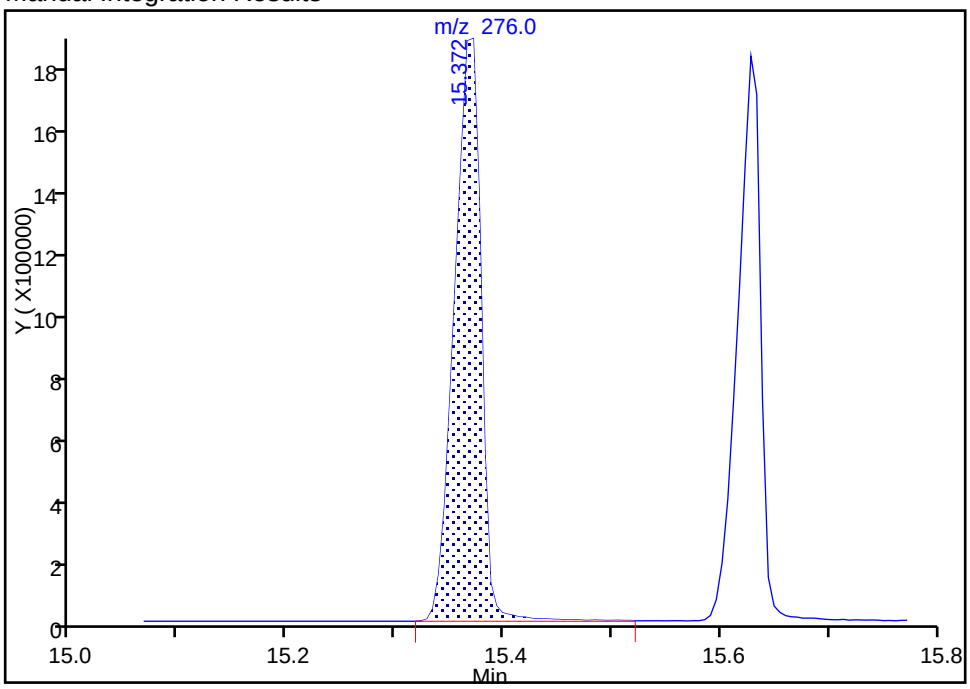
Processing Integration Results

RT: 15.37
Area: 3146497
Amount: 119.5850
Amount Units: ng/uL



Manual Integration Results

RT: 15.37
Area: 3156558
Amount: 119.9773
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:39:37
Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

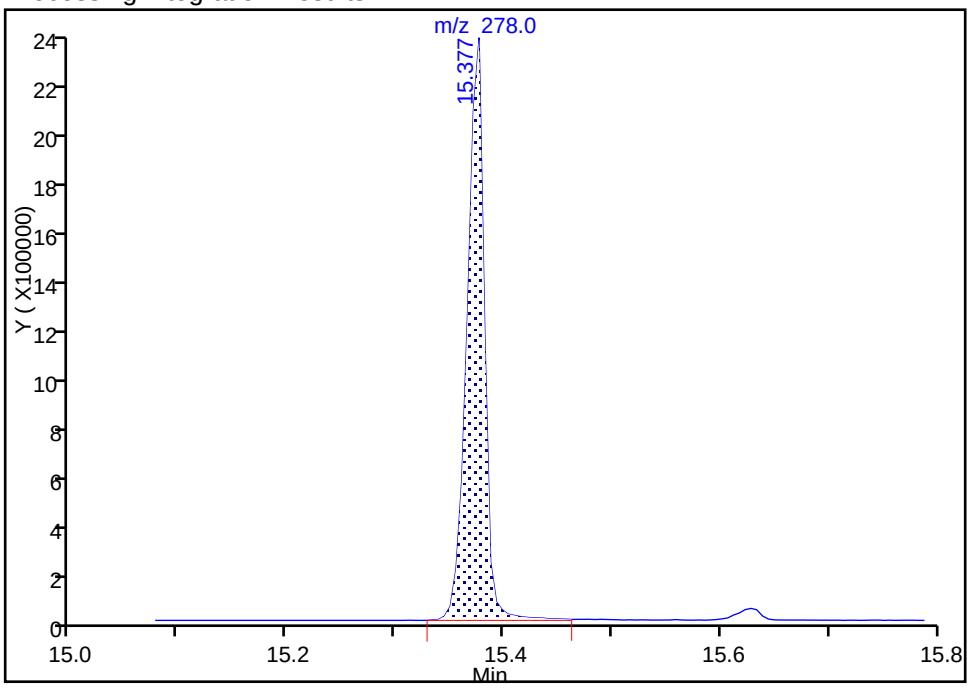
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Injection Date: 29-Sep-2017 21:44:30 Instrument ID: HP5973X
Lims ID: IC - List1 120
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

181 Dibenz(a,h)anthracene, CAS: 53-70-3

Signal: 1

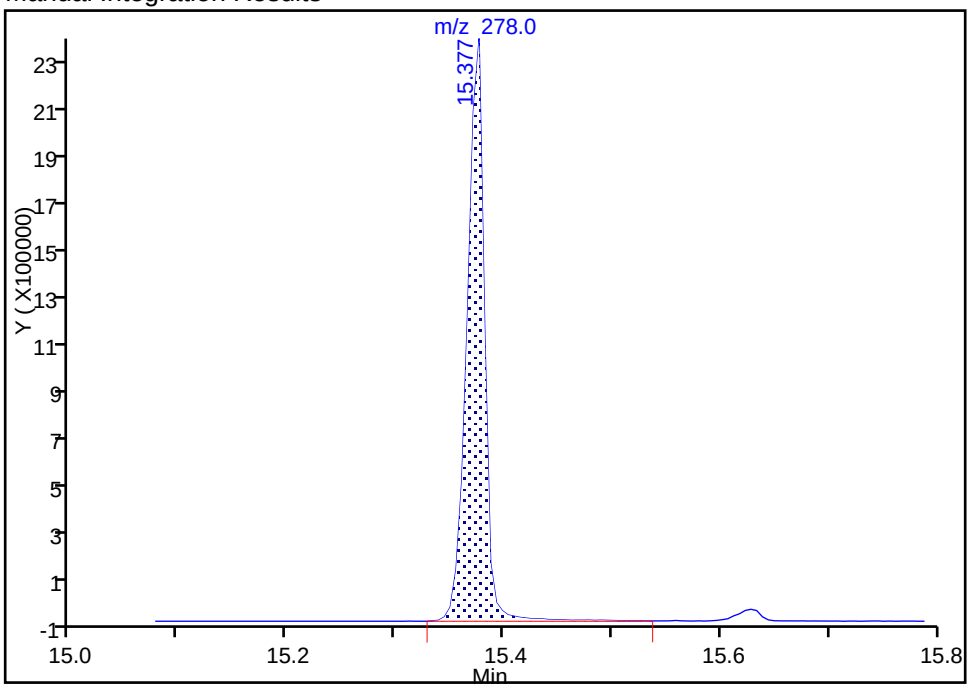
Processing Integration Results

RT: 15.38
Area: 2654977
Amount: 118.8168
Amount Units: ng/uL



Manual Integration Results

RT: 15.38
Area: 2668060
Amount: 119.6112
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:36:41
Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

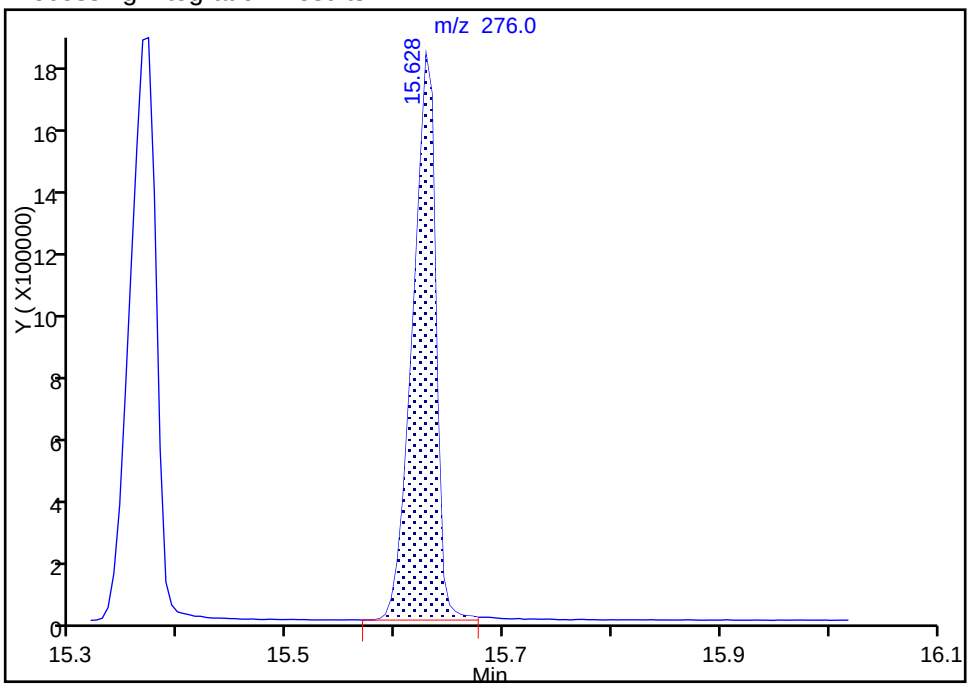
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D
Injection Date: 29-Sep-2017 21:44:30 Instrument ID: HP5973X
Lims ID: IC - List1 120
Client ID:
Operator ID: DR ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

182 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

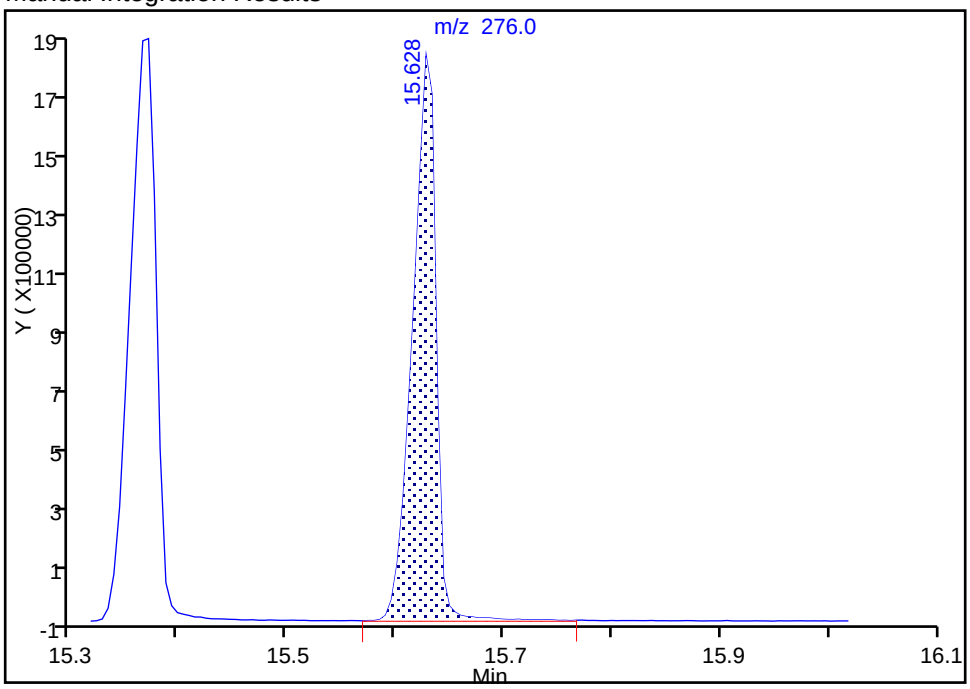
Processing Integration Results

RT: 15.63
Area: 2652474
Amount: 118.7217
Amount Units: ng/uL



Manual Integration Results

RT: 15.63
Area: 2689570
Amount: 120.0821
Amount Units: ng/uL



Reviewer: richardsd, 03-Oct-2017 11:35:57
Audit Action: Manually Integrated Audit Reason: Baseline

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID (1): CCVIS 480-381534/3 Instrument ID (1): HP5973X

GC Column (1): RXI-5Sil MS ID: 0.25(mm) Date Analyzed (1): 10/13/2017 00:32

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol	3.84	100.0
Benzaldehyde	5.01	100.0
Phenol-d5	5.15	100.0
Phenol	5.17	100.0
Bis(2-chloroethyl)ether	5.26	100.0
2-Chlorophenol	5.31	100.0
2-Methylphenol	5.92	100.0
bis (2-chloroisopropyl) ether	5.94	100.0
Acetophenone	6.08	100.0
N-Nitrosodi-n-propylamine	6.10	100.0
4-Methylphenol	6.12	100.0
Hexachloroethane	6.20	100.0
Nitrobenzene-d5	6.26	100.0
Nitrobenzene	6.28	100.0
Isophorone	6.58	100.0
2-Nitrophenol	6.67	100.0
2,4-Dimethylphenol	6.76	100.0
Bis(2-chloroethoxy)methane	6.86	100.0
2,4-Dichlorophenol	6.97	100.0
Naphthalene	7.14	100.0
4-Chloroaniline	7.23	100.0
Hexachlorobutadiene	7.31	100.0
Caprolactam	7.64	100.0
4-Chloro-3-methylphenol	7.83	100.0
2-Methylnaphthalene	7.97	100.0
Hexachlorocyclopentadiene	8.17	100.0
2,4,6-Trichlorophenol	8.31	100.0
2,4,5-Trichlorophenol	8.36	100.0
2-Fluorobiphenyl	8.41	100.0
Biphenyl	8.52	100.0
2-Chloronaphthalene	8.53	100.0
2-Nitroaniline	8.67	100.0
Dimethyl phthalate	8.90	100.0
2,6-Dinitrotoluene	8.96	100.0
Acenaphthylene	9.01	100.0
3-Nitroaniline	9.15	100.0
Acenaphthene	9.22	100.0
2,4-Dinitrophenol	9.27	100.0
4-Nitrophenol	9.38	100.0
2,4-Dinitrotoluene	9.42	100.0
Dibenzofuran	9.42	100.0
Diethyl phthalate	9.73	100.0
Fluorene	9.82	100.0
4-Chlorophenyl phenyl ether	9.84	100.0
4-Nitroaniline	9.86	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID (1): CCVIS 480-381534/3 Instrument ID (1): HP5973X

GC Column (1): RXI-5Sil MS ID: 0.25(mm) Date Analyzed (1): 10/13/2017 00:32

ANALYTE	RT	RESOLUTION (%)
4,6-Dinitro-2-methylphenol	9.89	100.0
N-Nitrosodiphenylamine	9.97	100.0
2,4,6-Tribromophenol	10.09	100.0
4-Bromophenyl phenyl ether	10.36	100.0
Hexachlorobenzene	10.43	100.0
Atrazine	10.56	100.0
Pentachlorophenol	10.64	100.0
Phenanthrene	10.84	100.0
Anthracene	10.89	100.0
Carbazole	11.06	100.0
Di-n-butyl phthalate	11.42	100.0
Fluoranthene	11.97	100.0
Pyrene	12.17	100.0
p-Terphenyl-d14	12.31	100.0
Butyl benzyl phthalate	12.74	100.0
3,3'-Dichlorobenzidine	13.18	100.0
Benzo[a]anthracene	13.20	100.0
Bis(2-ethylhexyl) phthalate	13.23	100.0
Chrysene	13.23	100.0
Di-n-octyl phthalate	13.75	100.0
Benzo[b]fluoranthene	14.07	32.00
Benzo[k]fluoranthene	14.09	100.0
Benzo[a]pyrene	14.32	100.0
Indeno[1,2,3-cd]pyrene	15.25	100.0
Dibenz(a,h)anthracene	15.26	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID (1): CCVIS 480-382085/3 Instrument ID (1): HP5973U

GC Column (1): RXI-5Sil MS(0 ID: 0.25(mm) Date Analyzed (1): 10/16/2017 18:27

ANALYTE	RT	RESOLUTION (%)
2-Fluorophenol	5.10	100.0
Benzaldehyde	6.17	100.0
Phenol-d5	6.23	100.0
Phenol	6.24	100.0
Bis(2-chloroethyl)ether	6.36	100.0
2-Chlorophenol	6.46	100.0
2-Methylphenol	6.98	100.0
bis (2-chloroisopropyl) ether	7.01	100.0
4-Methylphenol	7.15	100.0
N-Nitrosodi-n-propylamine	7.16	100.0
Acetophenone	7.17	100.0
Hexachloroethane	7.33	100.0
Nitrobenzene-d5	7.36	100.0
Nitrobenzene	7.38	100.0
Isophorone	7.65	100.0
2-Nitrophenol	7.76	100.0
2,4-Dimethylphenol	7.79	100.0
Bis(2-chloroethoxy)methane	7.90	100.0
2,4-Dichlorophenol	8.04	100.0
Naphthalene	8.25	100.0
4-Chloroaniline	8.29	100.0
Hexachlorobutadiene	8.40	100.0
Caprolactam	8.68	100.0
4-Chloro-3-methylphenol	8.85	100.0
2-Methylnaphthalene	9.07	100.0
Hexachlorocyclopentadiene	9.27	100.0
2,4,6-Trichlorophenol	9.40	100.0
2,4,5-Trichlorophenol	9.44	100.0
2-Fluorobiphenyl	9.49	100.0
Biphenyl	9.62	100.0
2-Chloronaphthalene	9.65	100.0
2-Nitroaniline	9.75	100.0
Dimethyl phthalate	9.95	100.0
2,6-Dinitrotoluene	10.02	100.0
Acenaphthylene	10.13	100.0
3-Nitroaniline	10.21	100.0
2,4-Dinitrophenol	10.33	100.0
Acenaphthene	10.33	100.0
4-Nitrophenol	10.38	100.0
2,4-Dinitrotoluene	10.47	100.0
Dibenzofuran	10.51	100.0
Diethyl phthalate	10.72	100.0
4-Chlorophenyl phenyl ether	10.86	100.0
4-Nitroaniline	10.87	100.0
Fluorene	10.88	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID (1): CCVIS 480-382085/3 Instrument ID (1): HP5973U

GC Column (1): RXI-5Sil MS(0 ID: 0.25(mm) Date Analyzed (1): 10/16/2017 18:27

ANALYTE	RT	RESOLUTION (%)
4,6-Dinitro-2-methylphenol	10.91	100.0
N-Nitrosodiphenylamine	10.98	100.0
2,4,6-Tribromophenol	11.12	100.0
4-Bromophenyl phenyl ether	11.36	100.0
Hexachlorobenzene	11.45	100.0
Atrazine	11.49	100.0
Pentachlorophenol	11.63	100.0
Phenanthrene	11.83	100.0
Anthracene	11.88	100.0
Carbazole	12.01	100.0
Di-n-butyl phthalate	12.29	100.0
Fluoranthene	12.92	100.0
Pyrene	13.13	100.0
p-Terphenyl-d14	13.22	100.0
Butyl benzyl phthalate	13.62	100.0
Bis(2-ethylhexyl) phthalate	14.10	100.0
3,3'-Dichlorobenzidine	14.12	100.0
Benzo[a]anthracene	14.18	100.0
Chrysene	14.22	100.0
Di-n-octyl phthalate	14.67	100.0
Benzo[b]fluoranthene	15.24	35.10
Benzo[k]fluoranthene	15.27	100.0
Benzo[a]pyrene	15.63	100.0
Indeno[1,2,3-cd]pyrene	17.18	100.0
Dibenz(a,h)anthracene	17.18	100.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382085/3 Calibration Date: 10/16/2017 18:27

Instrument ID: HP5973U Calib Start Date: 10/16/2017 12:07

GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm) Calib End Date: 10/16/2017 14:19

Lab File ID: U328227.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4494	0.4190	0.0100	46600	50000	-6.8	20.0
N-Nitrosodimethylamine	Lin1		0.6797	0.0100	54400	50000	8.8	50.0
Pyridine	Lin1		0.9723	0.0100	103000	100000	2.5	50.0
Benzaldehyde	Ave	0.7141	0.7306	0.0100	51200	50000	2.3	50.0
Phenol	Ave	1.185	1.164	0.8000	49100	50000	-1.8	20.0
Aniline	Ave	1.505	1.477	0.0100	49100	50000	-1.8	20.0
Bis(2-chloroethyl)ether	Ave	0.9103	0.8725	0.7000	47900	50000	-4.2	20.0
2-Chlorophenol	Ave	1.163	1.159	0.8000	49900	50000	-0.3	20.0
n-Decane	Ave	1.106	1.141	0.0100	51600	50000	3.1	20.0
1,3-Dichlorobenzene	Ave	1.420	1.392	0.0100	49000	50000	-2.0	20.0
1,4-Dichlorobenzene	Ave	1.448	1.476	0.0100	50900	50000	1.9	20.0
Benzyl alcohol	Lin1		0.7079	0.0100	51000	50000	1.9	20.0
1,2-Dichlorobenzene	Ave	1.352	1.342	0.0100	49600	50000	-0.7	20.0
2-Methylphenol	Ave	0.9562	0.9867	0.7000	51600	50000	3.2	20.0
bis (2-chloroisopropyl) ether	Ave	1.278	1.371	0.0100	53700	50000	7.3	20.0
Indene	Ave	1.930	1.920	0.0100	149000	150000	-0.5	20.0
4-Methylphenol	Ave	1.000	1.046	0.6000	52300	50000	4.6	20.0
N-Nitrosodi-n-propylamine	Ave	0.6750	0.6385	0.5000	47300	50000	-5.4	20.0
Acetophenone	Lin1		1.479	0.0100	48700	50000	-2.6	20.0
Hexachloroethane	Ave	0.5351	0.5461	0.3000	51000	50000	2.1	20.0
Nitrobenzene	Ave	0.3172	0.3254	0.2000	51300	50000	2.6	20.0
Isophorone	Ave	0.5335	0.5180	0.4000	48500	50000	-2.9	20.0
2-Nitrophenol	Lin1		0.2073	0.1000	52300	50000	4.6	20.0
2,4-Dimethylphenol	Ave	0.3576	0.3421	0.2000	47800	50000	-4.4	20.0
Bis(2-chloroethoxy)methane	Ave	0.3223	0.3194	0.3000	49500	50000	-0.9	20.0
Benzoic acid	Lin1		0.2088	0.0100	137000	150000	-8.7	50.0
2,4-Dichlorophenol	Lin1		0.3283	0.2000	50100	50000	0.1	20.0
1,2,4-Trichlorobenzene	Ave	0.3860	0.3891	0.0100	50400	50000	0.8	20.0
Naphthalene	Ave	0.9398	0.9478	0.7000	50400	50000	0.9	20.0
4-Chloroaniline	Ave	0.3973	0.4030	0.0100	50700	50000	1.4	20.0
2,6-Dichlorophenol	Ave	0.3180	0.3225	0.0100	50700	50000	1.4	20.0
Hexachlorobutadiene	Ave	0.3142	0.3241	0.0100	51600	50000	3.2	20.0
Caprolactam	Lin1		0.0853	0.0100	49400	50000	-1.3	50.0
4-Chloro-3-methylphenol	Lin1		0.2958	0.2000	51700	50000	3.4	20.0
2-Methylnaphthalene	Ave	0.7033	0.7348	0.4000	52200	50000	4.5	20.0
1-Methylnaphthalene	Ave	0.6650	0.6863	0.0100	51600	50000	3.2	20.0
Hexachlorocyclopentadiene	Lin1		0.7273	0.0500	47700	50000	-4.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.8503	0.7945	0.0100	46700	50000	-6.6	20.0
2,4,6-Trichlorophenol	Lin1		0.4758	0.2000	46700	50000	-6.6	20.0
2,4,5-Trichlorophenol	Lin1		0.5312	0.2000	49200	50000	-1.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382085/3 Calibration Date: 10/16/2017 18:27

Instrument ID: HP5973U Calib Start Date: 10/16/2017 12:07

GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm) Calib End Date: 10/16/2017 14:19

Lab File ID: U328227.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.719	1.676	0.0100	48700	50000	-2.5	20.0
2-Chloronaphthalene	Ave	1.338	1.279	0.8000	47800	50000	-4.4	20.0
2-Nitroaniline	Lin1		0.3134	0.0100	46800	50000	-6.4	20.0
Dimethyl phthalate	Ave	1.552	1.561	0.0100	50300	50000	0.6	20.0
1,3-Dinitrobenzene	Lin1		0.1529	0.0100	53300	50000	6.5	20.0
2,6-Dinitrotoluene	Lin1		0.3556	0.2000	50000	50000	-0.0	20.0
Acenaphthylene	Ave	1.958	1.952	0.9000	49800	50000	-0.4	20.0
3-Nitroaniline	Lin1		0.3657	0.0100	50400	50000	0.7	20.0
2,4-Dinitrophenol	Lin1		0.2505	0.0100	91700	100000	-8.3	20.0
Acenaphthene	Ave	1.367	1.322	0.0100	48400	50000	-3.2	20.0
4-Nitrophenol	Lin1		0.3285	0.0100	102000	100000	2.2	20.0
2,4-Dinitrotoluene	Lin1		0.4926	0.0100	51400	50000	2.8	20.0
Dibenzofuran	Ave	1.995	1.966	0.8000	49300	50000	-1.4	20.0
2,3,4,6-Tetrachlorophenol	Lin1		0.5157	0.0100	48700	50000	-2.5	20.0
Diethyl phthalate	Ave	1.666	1.685	0.0100	50600	50000	1.2	20.0
Hexadecane	Ave	0.7299	0.6993	0.0100	47900	50000	-4.2	20.0
4-Chlorophenyl phenyl ether	Ave	0.9155	0.9062	0.4000	49500	50000	-1.0	20.0
4-Nitroaniline	Lin1		0.3957	0.0100	50500	50000	1.0	20.0
Fluorene	Ave	1.612	1.582	0.9000	49100	50000	-1.8	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1377	0.0100	99100	100000	-0.9	20.0
Diphenylamine	Ave	0.6155	0.6197	0.0100	43000	42800	0.7	20.0
N-Nitrosodiphenylamine	Ave	0.5262	0.5299	0.0100	50300	50000	0.7	20.0
1,2-Diphenylhydrazine	Ave	0.5564	0.5557	0.0100	49900	50000	-0.1	20.0
trans-Azobenzene	Ave	0.5564	0.5557	0.0100	49900	50000	-0.1	20.0
4-Bromophenyl phenyl ether	Lin1		0.2863	0.1000	50800	50000	1.7	20.0
Hexachlorobenzene	Ave	0.3414	0.3500	0.1000	51300	50000	2.5	20.0
Atrazine	Ave	0.4869	0.5106	0.0100	52400	50000	4.9	20.0
Pentachlorophenol	Lin1		0.1836	0.0500	98300	100000	-1.7	20.0
n-Octadecane	Ave	0.3389	0.3401	0.0100	50200	50000	0.3	20.0
Phenanthrene	Ave	1.036	1.057	0.7000	51000	50000	2.0	20.0
Anthracene	Ave	1.071	1.105	0.7000	51600	50000	3.2	20.0
Carbazole	Ave	0.9734	1.001	0.0100	51400	50000	2.9	20.0
Di-n-butyl phthalate	Lin1		1.300	0.0100	54100	50000	8.1	20.0
Fluoranthene	Ave	1.295	1.361	0.6000	52500	50000	5.1	20.0
Benzidine	Ave	0.5086	0.5488	0.0100	53900	50000	7.9	50.0
Pyrene	Ave	1.065	1.034	0.6000	48500	50000	-2.9	20.0
Butyl benzyl phthalate	Lin1		0.4586	0.0100	50300	50000	0.7	20.0
Bis(2-ethylhexyl) phthalate	Lin1		0.6255	0.0100	50500	50000	1.0	20.0
3,3'-Dichlorobenzidine	Lin1		0.4505	0.0100	51800	50000	3.7	50.0
Benzo[a]anthracene	Ave	1.110	1.115	0.8000	50200	50000	0.4	20.0
Chrysene	Ave	1.059	1.085	0.7000	51200	50000	2.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-382085/3 Calibration Date: 10/16/2017 18:27

Instrument ID: HP5973U Calib Start Date: 10/16/2017 12:07

GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm) Calib End Date: 10/16/2017 14:19

Lab File ID: U328227.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Lin1		1.085	0.0100	52500	50000	5.0	20.0
Benzo[b]fluoranthene	Ave	1.216	1.259	0.7000	51700	50000	3.5	20.0
Benzo[k]fluoranthene	Ave	1.241	1.208	0.7000	48600	50000	-2.7	20.0
Benzo[a]pyrene	Ave	1.134	1.155	0.7000	51000	50000	1.9	20.0
Dibenz(a,h)anthracene	Lin1		1.194	0.4000	51200	50000	2.4	20.0
Indeno[1,2,3-cd]pyrene	Lin1		1.403	0.5000	51100	50000	2.2	20.0
Benzo[g,h,i]perylene	Lin1		1.186	0.5000	51800	50000	3.7	20.0
2-Fluorophenol	Ave	1.075	1.071	0.0100	49800	50000	-0.3	20.0
Phenol-d5	Ave	1.220	1.214	0.0100	49800	50000	-0.5	20.0
Nitrobenzene-d5	Ave	0.3474	0.3330	0.0100	47900	50000	-4.1	20.0
2-Fluorobiphenyl	Ave	1.689	1.637	0.0100	48500	50000	-3.1	20.0
2,4,6-Tribromophenol	Lin1		0.1845	0.0100	50200	50000	0.5	20.0
p-Terphenyl-d14	Ave	0.8142	0.7925	0.0100	48700	50000	-2.7	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328227.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Oct-2017 18:27:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066446-003
Operator ID: DR Instrument ID: HP5973U
Sublist: chrom-U-8270*sub56

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Oct-2017 11:38:22 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: richardsd Date: 16-Oct-2017 19:05:07

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	94	96571	40.0	40.0	
* 2 Naphthalene-d8	136	8.226	8.226	0.000	99	327306	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	95	183173	40.0	40.0	
* 4 Phenanthrene-d10	188	11.810	11.810	0.000	96	406535	40.0	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	95	559245	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	99	541112	40.0	40.0	
$ 7 2-Fluorophenol	112	5.095	5.095	0.000	91	129301	50.0	49.8	
$ 8 Phenol-d5	99	6.228	6.228	0.000	95	146586	50.0	49.8	
$ 9 Nitrobenzene-d5	82	7.355	7.355	0.000	92	136253	50.0	47.9	
$ 10 2-Fluorobiphenyl	172	9.492	9.492	0.000	99	374800	50.0	48.5	
$ 11 2,4,6-Tribromophenol	330	11.121	11.121	0.000	90	93732	50.0	50.2	
$ 12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	553985	50.0	48.7	
23 1,4-Dioxane	88	2.600	2.600	0.000	98	50578	50.0	46.6	
24 N-Nitrosodimethylamine	42	3.081	3.081	0.000	83	82051	50.0	54.4	
25 Pyridine	52	3.183	3.183	0.000	84	234749	100.0	102.5	
32 Benzaldehyde	77	6.174	6.174	0.000	90	88191	50.0	51.2	
33 Phenol	94	6.244	6.244	0.000	95	140482	50.0	49.1	
34 Aniline	93	6.297	6.297	0.000	98	178349	50.0	49.1	
35 Bis(2-chloroethyl)ether	93	6.356	6.356	0.000	96	105322	50.0	47.9	
37 2-Chlorophenol	128	6.458	6.458	0.000	94	139945	50.0	49.9	
38 n-Decane	57	6.506	6.506	0.000	91	137715	50.0	51.6	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	97	167988	50.0	49.0	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	94	178125	50.0	50.9	
41 Benzyl alcohol	108	6.848	6.848	0.000	90	85450	50.0	51.0	
42 1,2-Dichlorobenzene	146	6.917	6.917	0.000	96	161968	50.0	49.6	
43 2-Methylphenol	108	6.976	6.976	0.000	96	119106	50.0	51.6	
44 2,2'-oxybis[1-chloropropan	45	7.013	7.013	0.000	93	165513	50.0	53.7	
45 Indene	115	7.024	7.024	0.000	89	695482	150.0	149.3	
46 4-Methylphenol	108	7.152	7.152	0.000	95	126302	50.0	52.3	
47 N-Nitrosodi-n-propylamine	70	7.157	7.157	0.000	93	77081	50.0	47.3	
49 Acetophenone	105	7.168	7.168	0.000	95	178497	50.0	48.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
53 Hexachloroethane	117	7.328	7.328	0.000	84	65922	50.0	51.0	
54 Nitrobenzene	77	7.376	7.376	0.000	89	133121	50.0	51.3	
56 Isophorone	82	7.654	7.654	0.000	97	211925	50.0	48.5	
59 2-Nitrophenol	139	7.761	7.761	0.000	93	84797	50.0	52.3	
60 2,4-Dimethylphenol	107	7.788	7.788	0.000	96	139944	50.0	47.8	
62 Bis(2-chloroethoxy)methane	93	7.895	7.895	0.000	99	130660	50.0	49.5	
64 Benzoic acid	105	7.911	7.911	0.000	92	256264	150.0	137.0	
67 2,4-Dichlorophenol	162	8.044	8.044	0.000	92	134305	50.0	50.1	
68 1,2,4-Trichlorobenzene	180	8.156	8.156	0.000	93	159203	50.0	50.4	
70 Naphthalene	128	8.253	8.253	0.000	98	387759	50.0	50.4	
72 4-Chloroaniline	127	8.290	8.290	0.000	95	164861	50.0	50.7	
73 2,6-Dichlorophenol	162	8.311	8.311	0.000	97	131932	50.0	50.7	
74 Hexachlorobutadiene	225	8.402	8.402	0.000	92	132607	50.0	51.6	
76 Caprolactam	113	8.680	8.680	0.000	78	34893	50.0	49.4	
80 4-Chloro-3-methylphenol	107	8.851	8.851	0.000	93	121020	50.0	51.7	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	90	300626	50.0	52.2	
85 1-Methylnaphthalene	142	9.193	9.193	0.000	90	280801	50.0	51.6	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	95	166519	50.0	47.7	
87 1,2,4,5-Tetrachlorobenzene	216	9.278	9.278	0.000	97	181906	50.0	46.7	
89 2,4,6-Trichlorophenol	196	9.396	9.396	0.000	90	108942	50.0	46.7	
91 2,4,5-Trichlorophenol	196	9.444	9.444	0.000	94	121635	50.0	49.2	
94 1,1'-Biphenyl	154	9.615	9.615	0.000	94	383719	50.0	48.7	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	97	292906	50.0	47.8	
98 2-Nitroaniline	65	9.748	9.748	0.000	87	71749	50.0	46.8	
102 Dimethyl phthalate	163	9.946	9.946	0.000	99	357356	50.0	50.3	
103 1,3-Dinitrobenzene	168	9.983	9.983	0.000	93	62536	50.0	53.3	
104 2,6-Dinitrotoluene	165	10.016	10.016	0.000	95	81424	50.0	50.0	
105 Acenaphthylene	152	10.133	10.133	0.000	97	446844	50.0	49.8	
106 3-Nitroaniline	138	10.213	10.213	0.000	94	83722	50.0	50.4	
107 2,4-Dinitrophenol	184	10.331	10.331	0.000	69	114715	100.0	91.7	
108 Acenaphthene	153	10.331	10.331	0.000	87	302779	50.0	48.4	
109 4-Nitrophenol	109	10.379	10.379	0.000	85	150428	100.0	102.2	
111 2,4-Dinitrotoluene	165	10.470	10.470	0.000	94	112787	50.0	51.4	
112 Dibenzofuran	168	10.512	10.512	0.000	95	450198	50.0	49.3	
116 2,3,4,6-Tetrachlorophenol	232	10.641	10.641	0.000	69	118071	50.0	48.7	
118 Diethyl phthalate	149	10.721	10.721	0.000	98	385918	50.0	50.6	
119 Hexadecane	57	10.737	10.737	0.000	93	160107	50.0	47.9	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	89	207480	50.0	49.5	
122 4-Nitroaniline	138	10.870	10.870	0.000	83	90599	50.0	50.5	
123 Fluorene	166	10.876	10.876	0.000	96	362293	50.0	49.1	
125 4,6-Dinitro-2-methylphenol	198	10.908	10.908	0.000	90	139983	100.0	99.1	
128 Diphenylamine	169	10.977	10.977	0.000	94	269265	42.8	43.0	
127 N-Nitrosodiphenylamine	169	10.977	10.977	0.000	62	269265	50.0	50.3	
130 Azobenzene	77	11.025	11.025	0.000	95	282410	50.0	49.9	
129 1,2-Diphenylhydrazine	77	11.025	11.025	0.000	95	282410	50.0	49.9	
137 4-Bromophenyl phenyl ether	248	11.356	11.356	0.000	59	145466	50.0	50.8	
139 Hexachlorobenzene	284	11.447	11.447	0.000	95	177865	50.0	51.3	
141 Atrazine	200	11.485	11.485	0.000	94	116906	50.0	52.4	
143 Pentachlorophenol	266	11.629	11.629	0.000	92	186578	100.0	98.3	
144 n-Octadecane	57	11.650	11.650	0.000	93	172809	50.0	50.2	
150 Phenanthrene	178	11.832	11.832	0.000	97	536894	50.0	51.0	
151 Anthracene	178	11.880	11.880	0.000	97	561759	50.0	51.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
152 Carbazole	167	12.014	12.014	0.000	96	508787	50.0	51.4	
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	100	660792	50.0	54.1	
162 Fluoranthene	202	12.922	12.922	0.000	95	691577	50.0	52.5	
164 Benzidine	184	13.002	13.002	0.000	99	383651	50.0	53.9	
165 Pyrene	202	13.130	13.130	0.000	98	722672	50.0	48.5	
172 Butyl benzyl phthalate	149	13.616	13.616	0.000	94	320583	50.0	50.3	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	92	437241	50.0	50.5	
179 3,3'-Dichlorobenzidine	252	14.124	14.124	0.000	72	314941	50.0	51.8	
181 Benzo[a]anthracene	228	14.182	14.182	0.000	96	779192	50.0	50.2	
182 Chrysene	228	14.220	14.220	0.000	94	758332	50.0	51.2	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	98	758686	50.0	52.5	
185 Benzo[b]fluoranthene	252	15.240	15.240	0.000	94	851356	50.0	51.7	
187 Benzo[k]fluoranthene	252	15.272	15.272	0.000	96	816807	50.0	48.6	
190 Benzo[a]pyrene	252	15.625	15.625	0.000	74	781494	50.0	51.0	
193 Dibenz(a,h)anthracene	278	17.179	17.179	0.000	87	807742	50.0	51.2	
194 Indeno[1,2,3-cd]pyrene	276	17.179	17.179	0.000	96	948835	50.0	51.1	
195 Benzo[g,h,i]perylene	276	17.639	17.639	0.000	95	802465	50.0	51.8	

Reagents:

MB_LIST1_WRK_00515	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

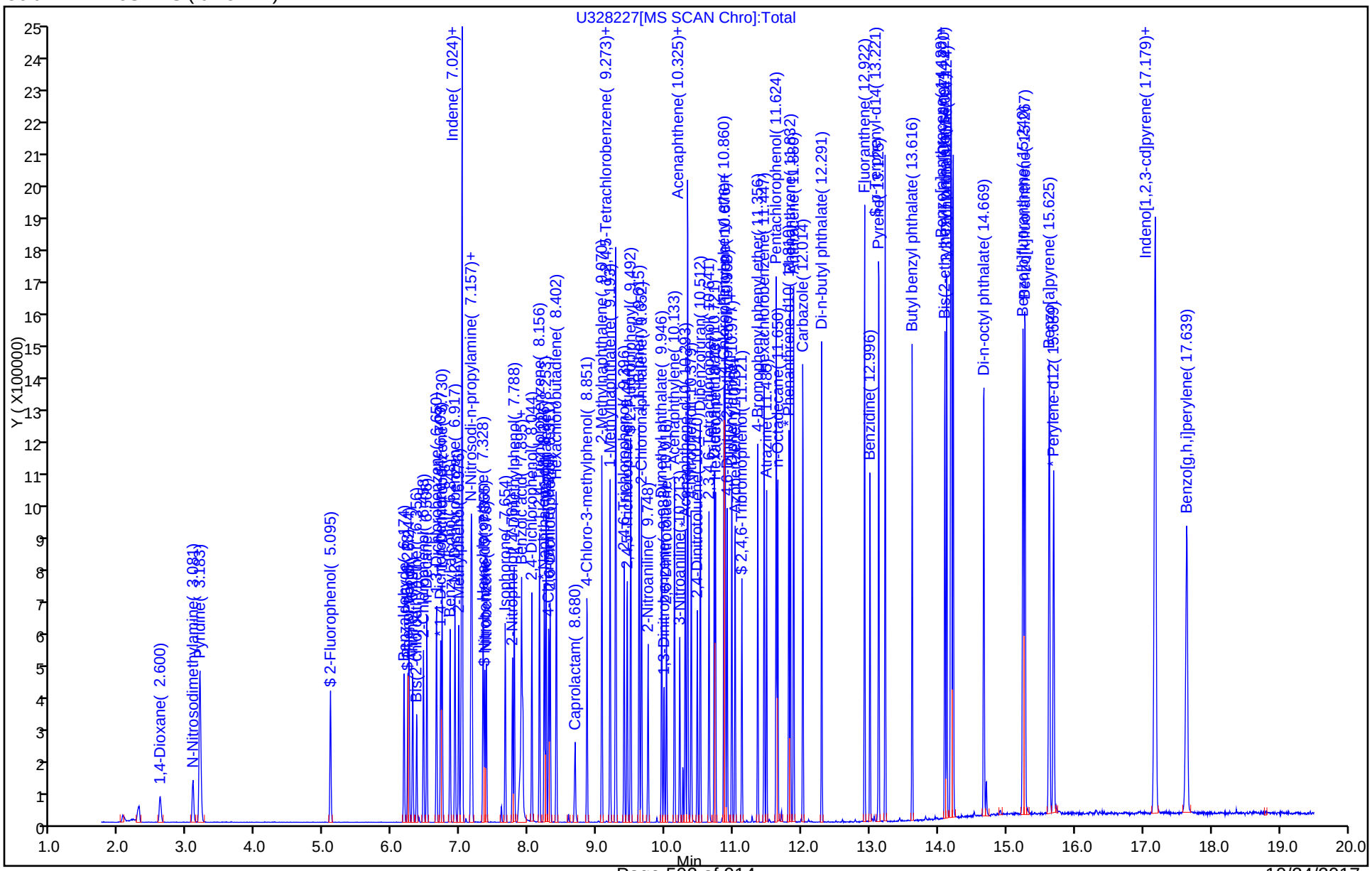
Report Date: 17-Oct-2017 11:38:23 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328227.D

Injection Date:	16-Oct-2017 18:27:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-381534/3 Calibration Date: 10/13/2017 00:32

Instrument ID: HP5973X Calib Start Date: 09/29/2017 19:33

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 09/29/2017 21:44

Lab File ID: X20509.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.8135	0.8114	0.0100	49900	50000	-0.3	20.0
N-Nitrosodimethylamine	Ave	0.7295	0.6341	0.0100	43500	50000	-13.1	50.0
Pyridine	Lin1		0.8056	0.0100	77800	100000	-22.2	50.0
Benzaldehyde	Ave	1.129	0.8507	0.0100	37700	50000	-24.7	50.0
Aniline	Ave	2.249	2.061	0.0100	45800	50000	-8.4	20.0
Phenol	Ave	1.902	1.747	0.8000	45900	50000	-8.1	20.0
Bis(2-chloroethyl)ether	Ave	1.422	1.346	0.7000	47300	50000	-5.3	20.0
2-Chlorophenol	Ave	1.318	1.143	0.8000	43400	50000	-13.2	20.0
n-Decane	Ave	1.386	1.391	0.0100	50200	50000	0.3	20.0
1,3-Dichlorobenzene	Ave	1.543	1.581	0.0100	51200	50000	2.4	20.0
1,4-Dichlorobenzene	Ave	1.561	1.524	0.0100	48800	50000	-2.4	20.0
Benzyl alcohol	Lin1		0.8728	0.0100	47600	50000	-4.8	20.0
1,2-Dichlorobenzene	Ave	1.451	1.485	0.0100	51200	50000	2.3	20.0
Indene	Ave	0.6246	0.5645	0.0100	136000	150000	-9.6	20.0
2-Methylphenol	Ave	1.233	1.186	0.7000	48100	50000	-3.9	20.0
bis (2-chloroisopropyl) ether	Ave	1.465	1.453	0.0100	49600	50000	-0.8	20.0
Acetophenone	Ave	1.947	1.918	0.0100	49300	50000	-1.5	20.0
N-Nitrosodi-n-propylamine	Ave	1.007	0.8710	0.5000	43200	50000	-13.5	20.0
4-Methylphenol	Ave	1.295	1.265	0.6000	48900	50000	-2.3	20.0
Hexachloroethane	Ave	0.6127	0.6089	0.3000	49700	50000	-0.6	20.0
Nitrobenzene	Ave	0.4391	0.4440	0.2000	50600	50000	1.1	20.0
Isophorone	Lin1		0.7626	0.4000	51000	50000	1.9	20.0
2-Nitrophenol	Lin1		0.2083	0.1000	52000	50000	4.1	20.0
2,4-Dimethylphenol	Lin1		0.4185	0.2000	51100	50000	2.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.4673	0.4684	0.3000	50100	50000	0.2	20.0
2,4-Dichlorophenol	Lin1		0.3363	0.2000	49500	50000	-1.0	20.0
Benzoic acid	Lin1		0.2551	0.0100	125000	150000	-16.7	50.0
1,2,4-Trichlorobenzene	Ave	0.3952	0.4174	0.0100	52800	50000	5.6	20.0
Naphthalene	Ave	1.052	1.061	0.7000	50400	50000	0.9	20.0
4-Chloroaniline	Lin1		0.4462	0.0100	49200	50000	-1.6	20.0
2,6-Dichlorophenol	Lin1		0.3456	0.0100	52000	50000	4.1	20.0
Hexachlorobutadiene	Ave	0.2588	0.2700	0.0100	52200	50000	4.4	20.0
Caprolactam	Lin1		0.1127	0.0100	49900	50000	-0.1	50.0
4-Chloro-3-methylphenol	Lin1		0.3463	0.2000	51600	50000	3.2	20.0
2-Methylnaphthalene	Ave	0.7208	0.7946	0.4000	55100	50000	10.2	20.0
1-Methylnaphthalene	Ave	0.6857	0.6995	0.0100	51000	50000	2.0	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.8107	0.6973	0.0100	43000	50000	-14.0	20.0
Hexachlorocyclopentadiene	Lin1		0.5518	0.0500	43600	50000	-12.7	20.0
2,4,6-Trichlorophenol	Lin1		0.4280	0.2000	42600	50000	-14.8	20.0
2,4,5-Trichlorophenol	Lin1		0.4609	0.2000	43000	50000	-14.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-381534/3 Calibration Date: 10/13/2017 00:32

Instrument ID: HP5973X Calib Start Date: 09/29/2017 19:33

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 09/29/2017 21:44

Lab File ID: X20509.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.739	1.581	0.0100	45400	50000	-9.1	20.0
2-Chloronaphthalene	Ave	1.376	1.238	0.8000	45000	50000	-10.0	20.0
2-Nitroaniline	Lin1		0.3729	0.0100	44100	50000	-11.9	20.0
Dimethyl phthalate	Ave	1.557	1.502	0.0100	48200	50000	-3.6	20.0
1,3-Dinitrobenzene	Lin1		0.1659	0.0100	55900	50000	11.9	20.0
2,6-Dinitrotoluene	Lin1		0.3583	0.2000	48600	50000	-2.9	20.0
Acenaphthylene	Ave	1.967	1.957	0.9000	49700	50000	-0.5	20.0
3-Nitroaniline	Lin1		0.3652	0.0100	47700	50000	-4.6	20.0
Acenaphthene	Ave	1.328	1.281	0.0100	48200	50000	-3.5	20.0
2,4-Dinitrophenol	Lin1		0.2166	0.0100	81800	100000	-18.2	20.0
4-Nitrophenol	Lin1		0.2373	0.0100	87600	100000	-12.4	20.0
2,4-Dinitrotoluene	Lin1		0.4708	0.0100	47300	50000	-5.5	20.0
Dibenzofuran	Ave	2.014	1.895	0.8000	47000	50000	-5.9	20.0
2,3,4,6-Tetrachlorophenol	Lin1		0.3975	0.0100	42800	50000	-14.4	20.0
Diethyl phthalate	Ave	1.556	1.446	0.0100	46500	50000	-7.1	20.0
Hexadecane	Ave	0.8376	0.8013	0.0100	47800	50000	-4.3	20.0
Fluorene	Ave	1.556	1.496	0.9000	48100	50000	-3.9	20.0
4-Chlorophenyl phenyl ether	Ave	0.8787	0.8312	0.4000	47300	50000	-5.4	20.0
4-Nitroaniline	Lin1		0.3731	0.0100	47400	50000	-5.3	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1324	0.0100	92600	100000	-7.4	20.0
Diphenylamine	Ave	0.6397	0.6396	0.0100	42700	42800	-0.0	20.0
N-Nitrosodiphenylamine	Ave	0.5470	0.5469	0.0100	50000	50000	-0.0	20.0
1,2-Diphenylhydrazine	Ave	0.7660	0.7207	0.0100	47000	50000	-5.9	20.0
trans-Azobenzene	Ave	0.7660	0.7207	0.0100	47000	50000	-5.9	20.0
4-Bromophenyl phenyl ether	Ave	0.2405	0.2539	0.1000	52800	50000	5.6	20.0
Hexachlorobenzene	Ave	0.2460	0.2551	0.1000	51800	50000	3.7	20.0
Atrazine	Lin1		0.4180	0.0100	46500	50000	-7.1	20.0
Pentachlorophenol	Lin1		0.1147	0.0500	71400	100000	-28.6*	20.0
n-Octadecane	Lin1		0.3974	0.0100	48600	50000	-2.7	20.0
Phenanthrene	Ave	1.076	1.087	0.7000	50500	50000	1.0	20.0
Anthracene	Ave	1.105	1.166	0.7000	52700	50000	5.5	20.0
Carbazole	Ave	1.008	1.115	0.0100	55300	50000	10.6	20.0
Di-n-butyl phthalate	Lin1		1.280	0.0100	53900	50000	7.9	20.0
Fluoranthene	Ave	1.240	1.382	0.6000	55700	50000	11.4	20.0
Benzidine	Lin1		0.5006	0.0100	41500	50000	-17.0	50.0
Pyrene	Ave	1.138	1.136	0.6000	49900	50000	-0.1	20.0
Butyl benzyl phthalate	Lin1		0.4706	0.0100	48700	50000	-2.5	20.0
3,3'-Dichlorobenzidine	Lin1		0.4235	0.0100	48500	50000	-3.0	50.0
Benzo[a]anthracene	Lin1		1.131	0.8000	49700	50000	-0.7	20.0
Bis(2-ethylhexyl) phthalate	Lin1		0.6603	0.0100	47400	50000	-5.2	20.0
Chrysene	Ave	1.105	1.078	0.7000	48800	50000	-2.4	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: CCVIS 480-381534/3 Calibration Date: 10/13/2017 00:32

Instrument ID: HP5973X Calib Start Date: 09/29/2017 19:33

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 09/29/2017 21:44

Lab File ID: X20509.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Lin1		1.114	0.0100	48500	50000	-3.1	20.0
Benzo[b]fluoranthene	Ave	1.275	1.337	0.7000	52400	50000	4.9	20.0
Benzo[k]fluoranthene	Ave	1.361	1.243	0.7000	45700	50000	-8.7	20.0
Benzo[a]pyrene	Lin1		1.222	0.7000	49700	50000	-0.6	20.0
Indeno[1,2,3-cd]pyrene	Lin1		1.430	0.5000	51200	50000	2.4	20.0
Dibenz(a,h)anthracene	Lin1		1.216	0.4000	51300	50000	2.6	20.0
Benzo[g,h,i]perylene	Lin1		1.226	0.5000	51400	50000	2.9	20.0
2-Fluorophenol	Ave	1.345	1.306	0.0100	48500	50000	-2.9	20.0
Phenol-d5	Ave	1.673	1.532	0.0100	45800	50000	-8.4	20.0
Nitrobenzene-d5	Ave	0.4239	0.4307	0.0100	50800	50000	1.6	20.0
2-Fluorobiphenyl	Ave	1.655	1.461	0.0100	44100	50000	-11.7	20.0
2,4,6-Tribromophenol	Lin1		0.1102	0.0100	49700	50000	-0.5	20.0
p-Terphenyl-d14	Ave	0.7698	0.7854	0.0100	51000	50000	2.0	20.0

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20509.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 13-Oct-2017 00:32:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066346-003
Operator ID: DR Instrument ID: HP5973X
Sublist: chrom-X-8270*sub83

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 13-Oct-2017 12:07:58 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: richardsd Date: 13-Oct-2017 11:05:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	5.572	5.572	0.000	94	181304	40.0	40.0	
* 2 Naphthalene-d8	136	7.115	7.115	0.000	98	605227	40.0	40.0	
* 3 Acenaphthene-d10	164	9.183	9.183	0.000	98	371962	40.0	40.0	
* 4 Phenanthrene-d10	188	10.818	10.818	0.000	99	757394	40.0	40.0	
* 5 Chrysene-d12	240	13.211	13.211	0.000	99	943460	40.0	40.0	
* 6 Perylene-d12	264	14.365	14.365	0.000	99	880860	40.0	40.0	
$ 7 2-Fluorophenol	112	3.835	3.835	0.000	94	295970	50.0	48.5	
$ 8 Phenol-d5	99	5.150	5.150	0.000	91	347240	50.0	45.8	
$ 9 Nitrobenzene-d5	82	6.261	6.261	0.000	94	325824	50.0	50.8	
$ 10 2-Fluorobiphenyl	172	8.408	8.408	0.000	100	679178	50.0	44.1	
$ 11 2,4,6-Tribromophenol	330	10.091	10.091	0.000	98	104308	50.0	49.7	
$ 12 p-Terphenyl-d14	244	12.313	12.313	0.000	99	926216	50.0	51.0	
15 1,4-Dioxane	88	1.576	1.576	0.000	93	183893	50.0	49.9	
16 N-Nitrosodimethylamine	42	1.859	1.859	0.000	82	143699	50.0	43.5	
17 Pyridine	52	1.901	1.901	0.000	85	365161	100.0	77.8	M
27 Benzaldehyde	77	5.011	5.011	0.000	86	192784	50.0	37.7	
29 Aniline	93	5.160	5.160	0.000	93	467066	50.0	45.8	
28 Phenol	94	5.166	5.166	0.000	87	395897	50.0	45.9	
31 Bis(2-chloroethyl)ether	93	5.256	5.256	0.000	92	305085	50.0	47.3	
32 2-Chlorophenol	128	5.310	5.310	0.000	99	259115	50.0	43.4	
35 n-Decane	57	5.411	5.411	0.000	94	315269	50.0	50.2	
36 1,3-Dichlorobenzene	146	5.502	5.502	0.000	97	358306	50.0	51.2	
37 1,4-Dichlorobenzene	146	5.593	5.593	0.000	96	345326	50.0	48.8	
38 Benzyl alcohol	108	5.764	5.764	0.000	96	197798	50.0	47.6	
39 1,2-Dichlorobenzene	146	5.785	5.785	0.000	94	336646	50.0	51.2	
229 Indene	115	5.897	5.897	0.000	85	1603370	150.0	135.6	
40 2-Methylphenol	108	5.924	5.924	0.000	96	268689	50.0	48.1	
42 2,2'-oxybis[1-chloropropan	45	5.940	5.940	0.000	96	329313	50.0	49.6	
45 Acetophenone	105	6.084	6.084	0.000	92	434653	50.0	49.3	
47 N-Nitrosodi-n-propylamine	70	6.100	6.100	0.000	86	197387	50.0	43.2	
46 4-Methylphenol	108	6.122	6.122	0.000	94	286766	50.0	48.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
50 Hexachloroethane	117	6.197	6.197	0.000	92	138002	50.0	49.7	
52 Nitrobenzene	77	6.282	6.282	0.000	92	335882	50.0	50.6	
56 Isophorone	82	6.581	6.581	0.000	97	576942	50.0	51.0	
58 2-Nitrophenol	139	6.672	6.672	0.000	90	157566	50.0	52.0	
59 2,4-Dimethylphenol	107	6.758	6.758	0.000	97	316627	50.0	51.1	
62 Bis(2-chloroethoxy)methane	93	6.859	6.859	0.000	96	354350	50.0	50.1	
65 2,4-Dichlorophenol	162	6.966	6.966	0.000	94	254413	50.0	49.5	
64 Benzoic acid	105	6.977	6.977	0.000	83	579038	150.0	125.0	
67 1,2,4-Trichlorobenzene	180	7.062	7.062	0.000	96	315753	50.0	52.8	
69 Naphthalene	128	7.142	7.142	0.000	99	802811	50.0	50.4	
71 4-Chloroaniline	127	7.228	7.228	0.000	98	337598	50.0	49.2	
70 2,6-Dichlorophenol	162	7.233	7.233	0.000	98	261490	50.0	52.0	
73 Hexachlorobutadiene	225	7.313	7.313	0.000	96	204278	50.0	52.2	
78 Caprolactam	113	7.644	7.644	0.000	92	85271	50.0	49.9	
79 4-Chloro-3-methylphenol	107	7.826	7.826	0.000	96	261991	50.0	51.6	
82 2-Methylnaphthalene	142	7.965	7.965	0.000	97	601110	50.0	55.1	
83 1-Methylnaphthalene	142	8.077	8.077	0.000	100	529228	50.0	51.0	
85 1,2,4,5-Tetrachlorobenzene	216	8.168	8.168	0.000	96	324214	50.0	43.0	
84 Hexachlorocyclopentadiene	237	8.168	8.168	0.000	94	256567	50.0	43.6	
86 2,4,6-Trichlorophenol	196	8.312	8.312	0.000	93	199012	50.0	42.6	
87 2,4,5-Trichlorophenol	196	8.355	8.355	0.000	94	214317	50.0	43.0	
90 1,1'-Biphenyl	154	8.520	8.520	0.000	99	735046	50.0	45.4	
91 2-Chloronaphthalene	162	8.531	8.531	0.000	99	575830	50.0	45.0	
93 2-Nitroaniline	65	8.665	8.665	0.000	93	173359	50.0	44.1	
96 Dimethyl phthalate	163	8.900	8.900	0.000	99	698148	50.0	48.2	
97 1,3-Dinitrobenzene	168	8.916	8.916	0.000	90	125484	50.0	55.9	
99 2,6-Dinitrotoluene	165	8.959	8.959	0.000	94	166598	50.0	48.6	
100 Acenaphthylene	152	9.012	9.012	0.000	100	909959	50.0	49.7	
101 3-Nitroaniline	138	9.146	9.146	0.000	97	169787	50.0	47.7	
102 Acenaphthene	153	9.220	9.220	0.000	99	595548	50.0	48.2	
103 2,4-Dinitrophenol	184	9.268	9.268	0.000	87	201436	100.0	81.8	M
104 4-Nitrophenol	109	9.381	9.381	0.000	92	220682	100.0	87.6	
106 2,4-Dinitrotoluene	165	9.423	9.423	0.000	60	218903	50.0	47.3	
107 Dibenzofuran	168	9.423	9.423	0.000	95	881094	50.0	47.0	
110 2,3,4,6-Tetrachlorophenol	232	9.578	9.578	0.000	95	184837	50.0	42.8	
112 Diethyl phthalate	149	9.728	9.728	0.000	100	672307	50.0	46.5	
138 Hexadecane	57	9.771	9.771	0.000	97	372565	50.0	47.8	
115 Fluorene	166	9.819	9.819	0.000	99	695564	50.0	48.1	
116 4-Chlorophenyl phenyl ethe	204	9.835	9.835	0.000	96	386452	50.0	47.3	
118 4-Nitroaniline	138	9.856	9.856	0.000	87	173476	50.0	47.4	
119 4,6-Dinitro-2-methylphenol	198	9.893	9.893	0.000	96	250662	100.0	92.6	
121 Diphenylamine	169	9.968	9.968	0.000	98	517764	42.8	42.7	
120 N-Nitrosodiphenylamine	169	9.968	9.968	0.000	97	517764	50.0	50.0	
123 1,2-Diphenylhydrazine	77	10.011	10.011	0.000	99	682277	50.0	47.0	
122 Azobenzene	77	10.011	10.011	0.000	95	682277	50.0	47.0	
130 4-Bromophenyl phenyl ether	248	10.364	10.364	0.000	95	240418	50.0	52.8	
131 Hexachlorobenzene	284	10.428	10.428	0.000	96	241483	50.0	51.8	
133 Atrazine	200	10.561	10.561	0.000	94	194362	50.0	46.5	
134 Pentachlorophenol	266	10.636	10.636	0.000	96	217203	100.0	71.4	M
113 n-Octadecane	57	10.764	10.764	0.000	91	376205	50.0	48.6	
141 Phenanthrene	178	10.839	10.839	0.000	99	1028722	50.0	50.5	
142 Anthracene	178	10.892	10.892	0.000	99	1103750	50.0	52.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
143 Carbazole	167	11.058	11.058	0.000	100	1055836	50.0	55.3	
145 Di-n-butyl phthalate	149	11.421	11.421	0.000	99	1212274	50.0	53.9	
152 Fluoranthene	202	11.966	11.966	0.000	99	1308119	50.0	55.7	
154 Benzidine	184	12.094	12.094	0.000	100	590360	50.0	41.5	
155 Pyrene	202	12.169	12.169	0.000	99	1340270	50.0	49.9	
162 Butyl benzyl phthalate	149	12.741	12.741	0.000	99	555024	50.0	48.7	
166 3,3'-Dichlorobenzidine	252	13.184	13.184	0.000	86	499400	50.0	48.5	
167 Benzo[a]anthracene	228	13.200	13.200	0.000	96	1334224	50.0	49.7	
172 Bis(2-ethylhexyl) phthalat	149	13.227	13.227	0.000	96	778698	50.0	47.4	
169 Chrysene	228	13.232	13.232	0.000	98	1271617	50.0	48.8	
168 Di-n-octyl phthalate	149	13.751	13.751	0.000	100	1313280	50.0	48.5	
174 Benzo[b]fluoranthene	252	14.071	14.071	0.000	99	1471759	50.0	52.4	
175 Benzo[k]fluoranthene	252	14.092	14.092	0.000	98	1368389	50.0	45.7	
177 Benzo[a]pyrene	252	14.317	14.317	0.000	99	1344973	50.0	49.7	
180 Indeno[1,2,3-cd]pyrene	276	15.252	15.252	0.000	91	1574654	50.0	51.2	
181 Dibenz(a,h)anthracene	278	15.257	15.257	0.000	91	1338512	50.0	51.3	
182 Benzo[g,h,i]perylene	276	15.503	15.503	0.000	100	1350113	50.0	51.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MB_LIST1_WRK_00515	Amount Added: 1.00	Units: mL	
MB_INTSTD_STK_00039	Amount Added: 20.00	Units: uL	Run Reagent

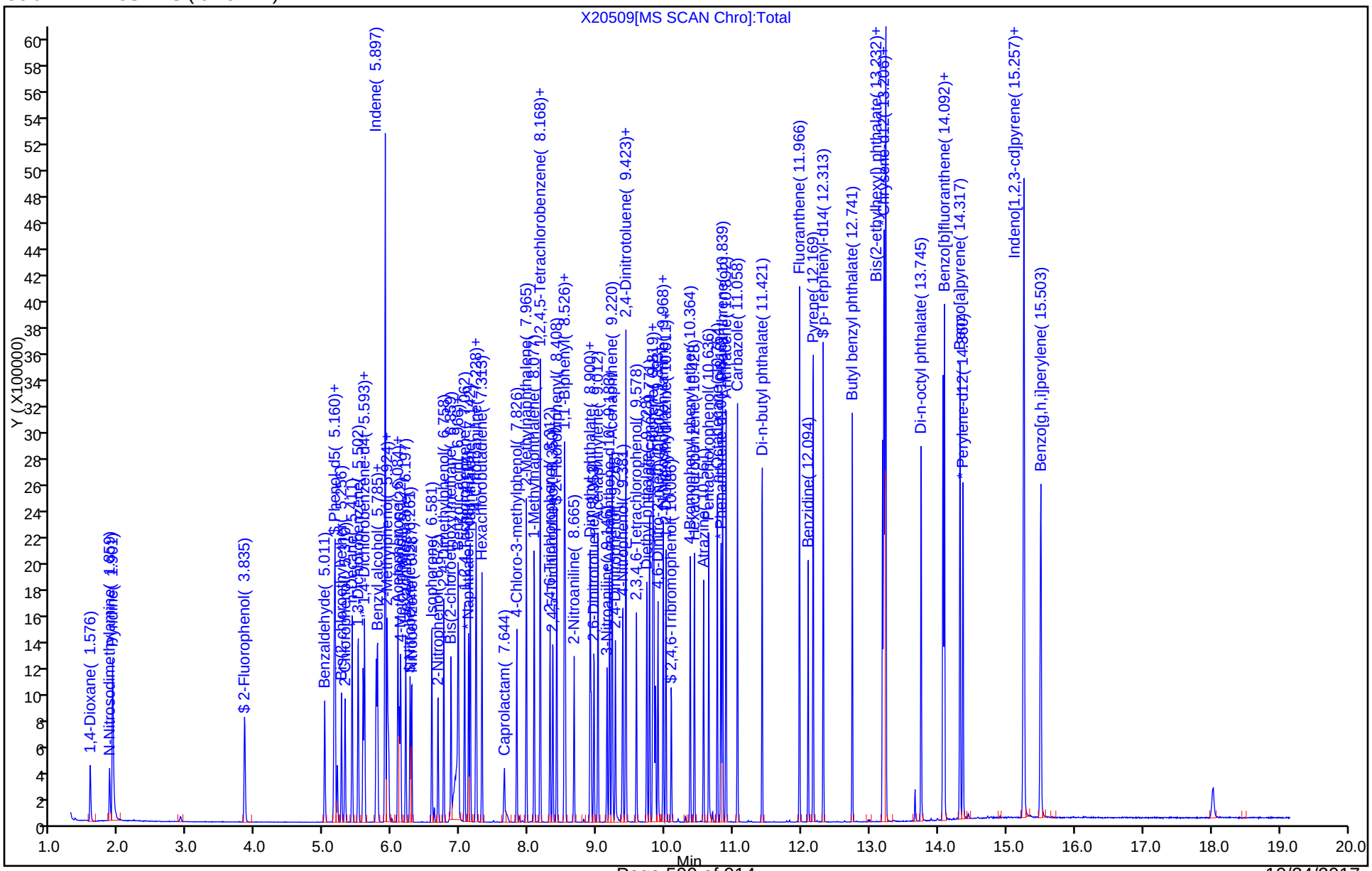
Report Date: 13-Oct-2017 12:07:59 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20509.D

Injection Date:	13-Oct-2017 00:32:30	Instrument ID:	HP5973X	Operator ID:	DR
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	X-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

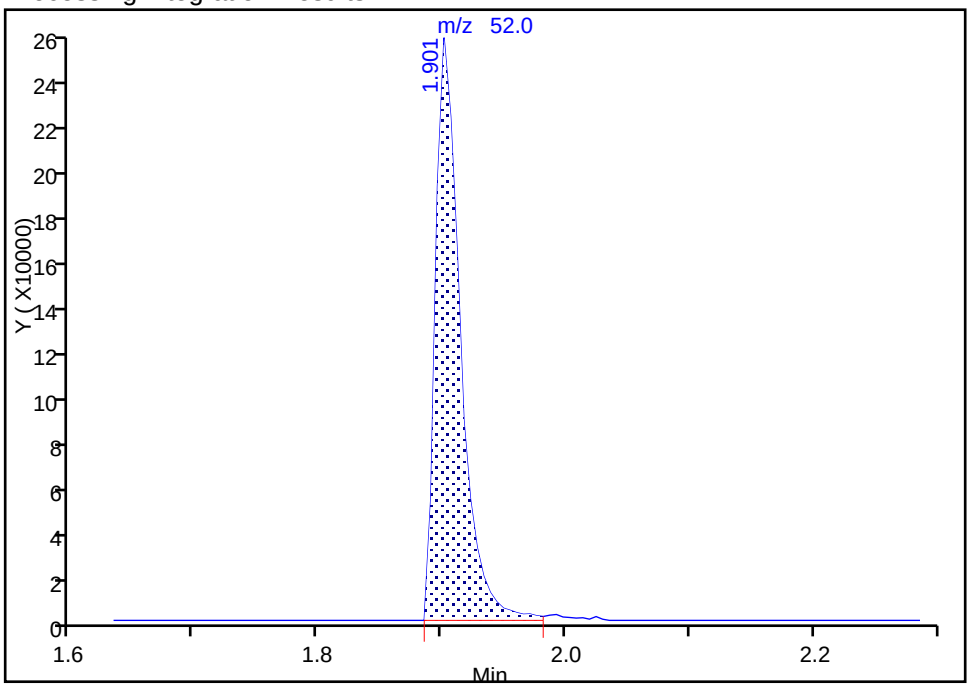
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20509.D
Injection Date: 13-Oct-2017 00:32:30 Instrument ID: HP5973X
Lims ID: CCVIS
Client ID:
Operator ID: DR ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

17 Pyridine, CAS: 110-86-1

Signal: 1

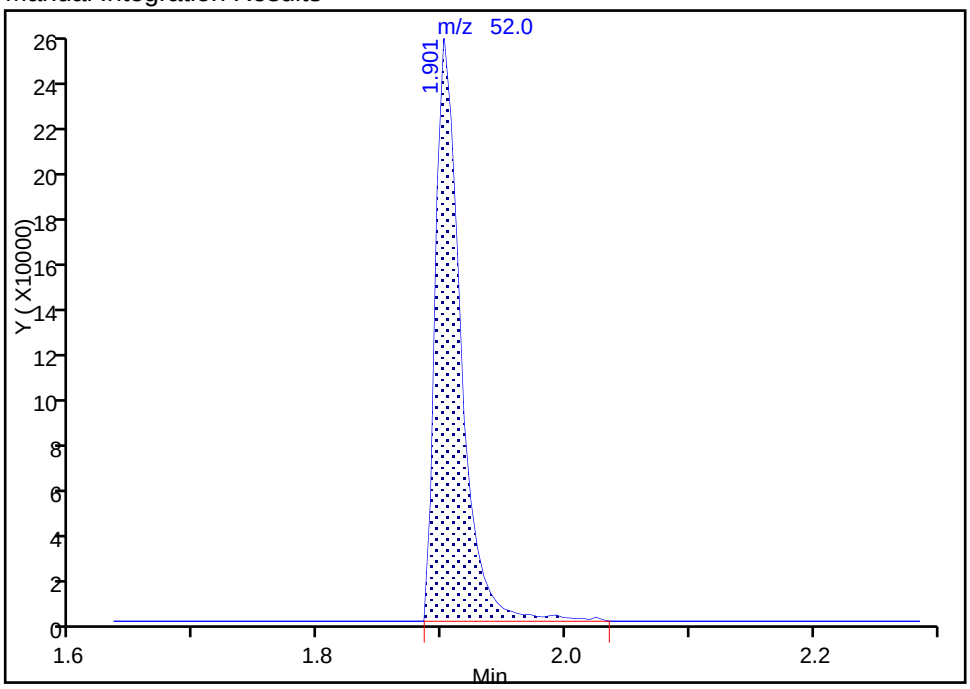
Processing Integration Results

RT: 1.90
Area: 361079
Amount: 76.934141
Amount Units: ng/uL



Manual Integration Results

RT: 1.90
Area: 365161
Amount: 77.787662
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:04:04
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

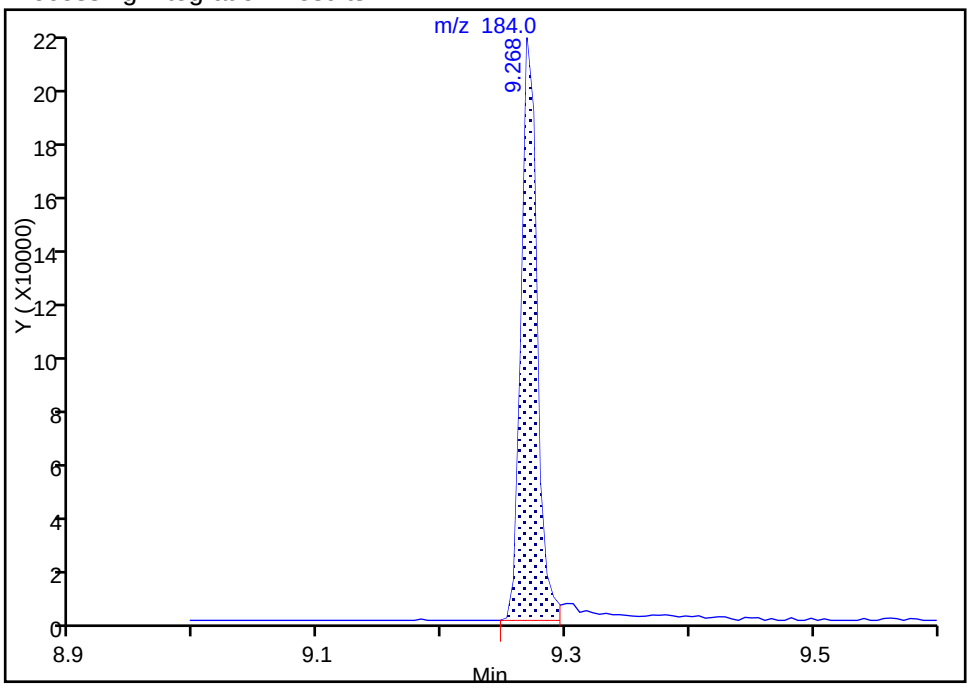
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20509.D
Injection Date: 13-Oct-2017 00:32:30 Instrument ID: HP5973X
Lims ID: CCVIS
Client ID:
Operator ID: DR ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

103 2,4-Dinitrophenol, CAS: 51-28-5

Signal: 1

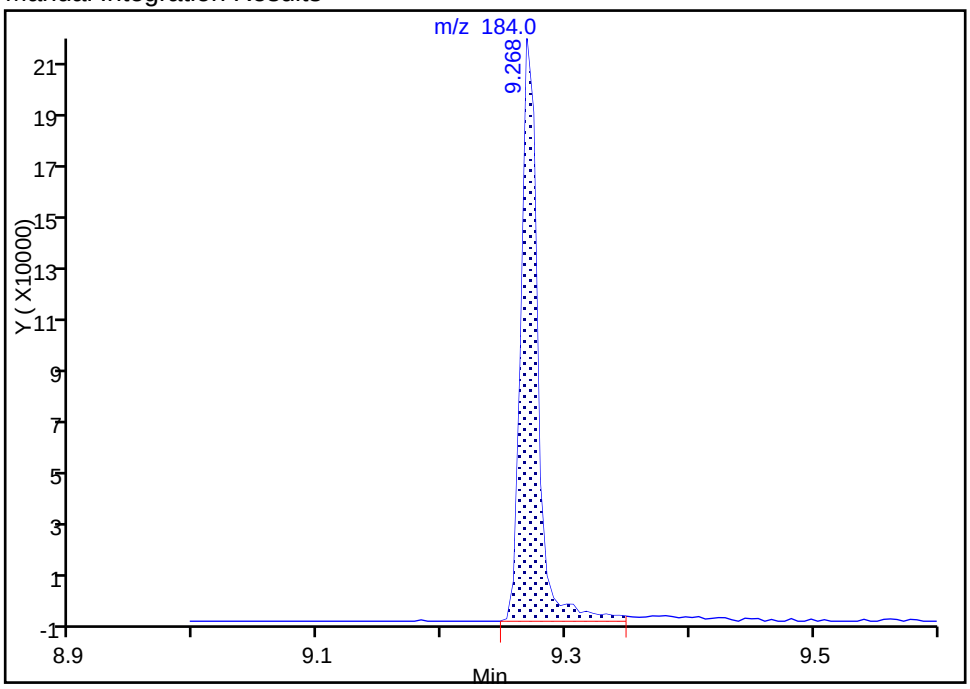
Processing Integration Results

RT: 9.27
Area: 190951
Amount: 77.913115
Amount Units: ng/uL



Manual Integration Results

RT: 9.27
Area: 201436
Amount: 81.843054
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:04:55
Audit Action: Manually Integrated Audit Reason: Peak Tail

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

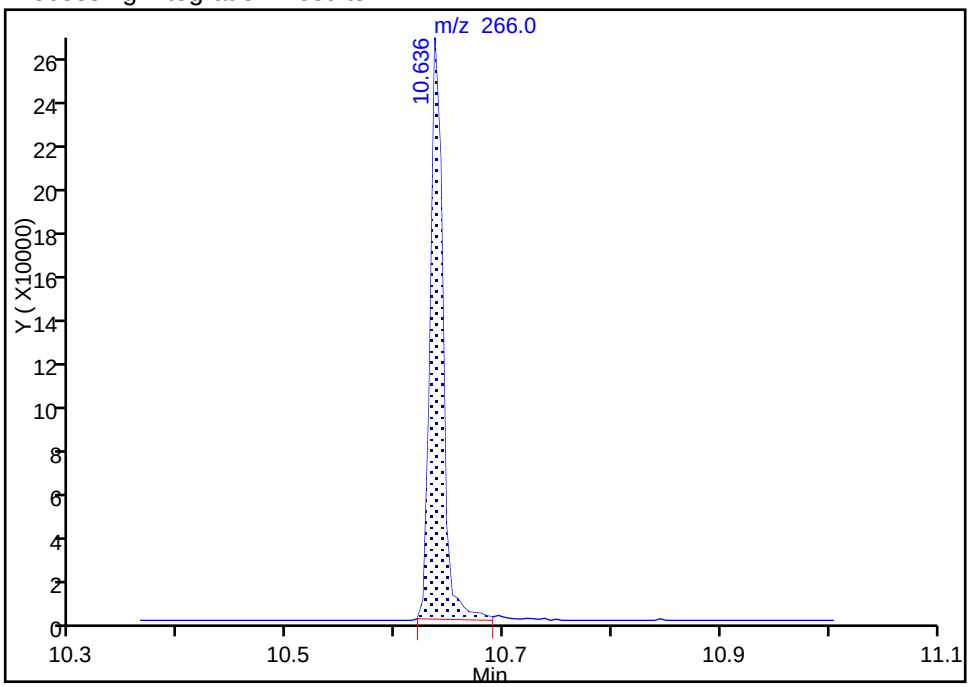
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20509.D
Injection Date: 13-Oct-2017 00:32:30 Instrument ID: HP5973X
Lims ID: CCVIS
Client ID:
Operator ID: DR ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

134 Pentachlorophenol, CAS: 87-86-5

Signal: 1

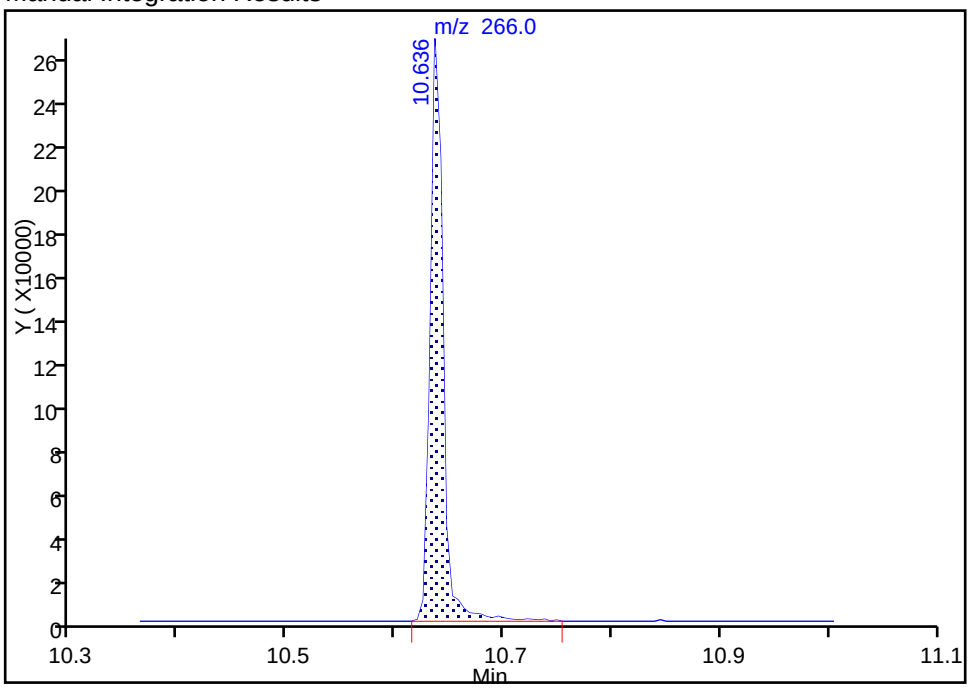
Processing Integration Results

RT: 10.64
Area: 212460
Amount: 69.949265
Amount Units: ng/uL



Manual Integration Results

RT: 10.64
Area: 217203
Amount: 71.387383
Amount Units: ng/uL



Reviewer: richardsd, 13-Oct-2017 11:05:17
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328216.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 16-Oct-2017 11:41:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: DR Instrument ID: HP5973U

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 16-Oct-2017 12:14:39 Calib Date: 02-Sep-2017 00:48:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20170901-65316.b\U327640.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: richardsd Date: 16-Oct-2017 12:14:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
248 Pentachlorophenol_T	266	11.624	11.624	0.000	93	51705	NR	NR	M
249 DFTPP									
250 Benzidine_T	184	13.002	13.002	0.000	99	384676	NR	NR	
251 4,4'-DDE	246		13.425					ND	
252 4,4'-DDD	235		13.467					ND	
253 4,4'-DDT	235	13.734	13.734	0.000	98	233068	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
Review Flags
M - Manually Integrated

Reagents:

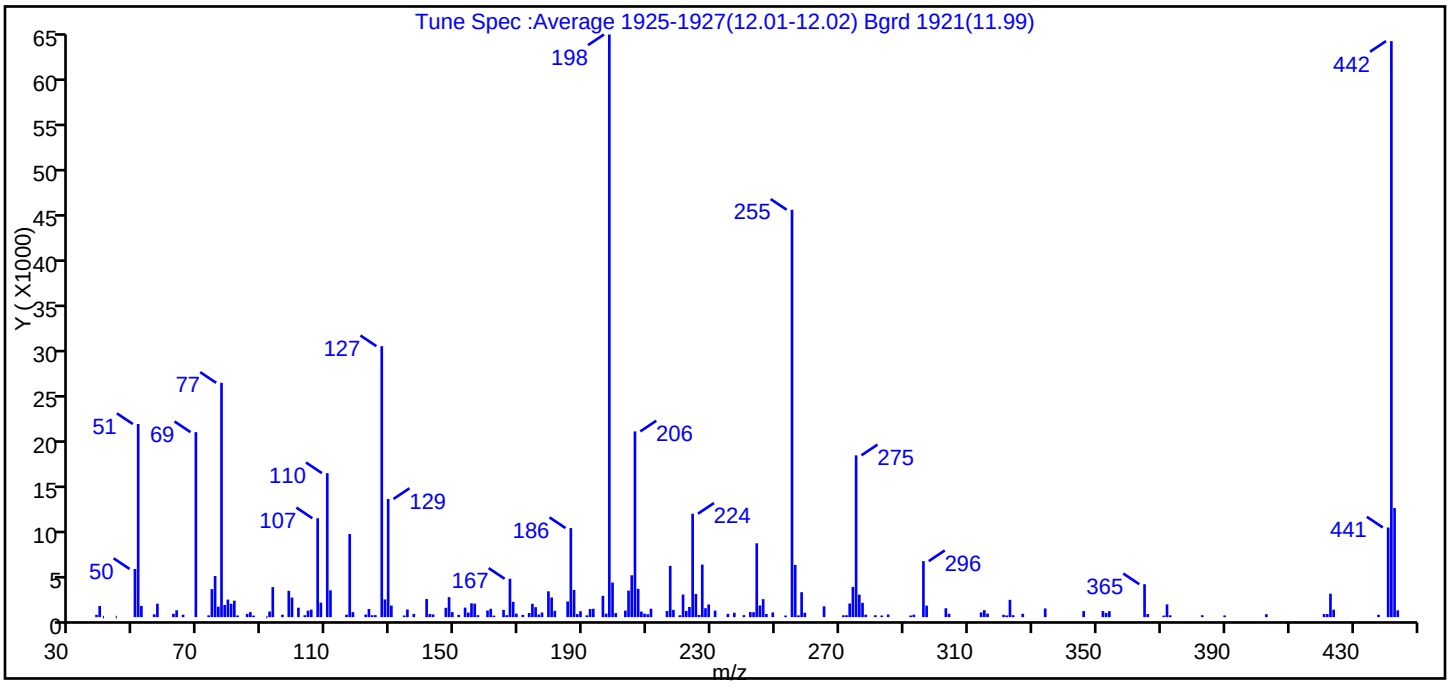
MB_DFTPP_WRK_00319 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328216.D
Injection Date: 16-Oct-2017 11:41:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL
Tune Method: DFTPP Method 8270D, BP 198

249 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (101.1)
51	10-80% of the base peak	33.2
68	<2% of mass 69	0.0 (0.0)
69	Present	31.8
70	<2% of mass 69	0.0 (0.0)
127	10-80% of the base peak	46.5
197	<2% of mass 198	0.6
199	5-9% of mass 198	5.9
275	10-60% of the base peak	27.8
365	>1% of mass 198	5.7
441	present but <24% of mass 442	15.4 (15.6)
442	base peak, or >50% of 198	98.9
443	15-24% of mass 442	18.7 (18.9)

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328216.D\U-8270.rslt\spectra.d
Injection Date: 16-Oct-2017 11:41:30
Spectrum: Tune Spec :Average 1925-1927(12.01-12.02) Bgrd 1921(11.99)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 183

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	253	125.00	224	197.00	383	273.00	1499
39.00	1229	127.00	29808	198.00	64096	274.00	3327
40.00	0	128.00	1950	199.00	3807	275.00	17800
44.00	0	129.00	13001	200.00	449	276.00	2475
50.00	5298	130.00	1277	203.00	716	277.00	1573
51.00	21248	134.00	180	204.00	2916	278.00	268
52.00	1236	135.00	845	205.00	4603	281.00	212
56.00	308	137.00	350	206.00	20432	283.00	179
57.00	1485	141.00	2002	207.00	3110	285.00	289
62.00	369	142.00	348	208.00	612	292.00	178
63.00	751	143.00	300	209.00	379	293.00	277
65.00	268	147.00	1028	210.00	315	296.00	6162
69.00	20352	148.00	2202	211.00	927	297.00	1269
73.00	198	149.00	555	216.00	673	303.00	981
74.00	3087	151.00	251	217.00	5640	304.00	369
75.00	4528	153.00	1050	218.00	798	314.00	522
76.00	1153	154.00	493	220.00	211	315.00	768
77.00	25776	155.00	1524	221.00	2491	316.00	395
78.00	1339	156.00	1492	222.00	687	321.00	259
79.00	1928	157.00	219	223.00	1117	322.00	186
80.00	1468	160.00	726	224.00	11378	323.00	1905
81.00	1811	161.00	918	225.00	2557	324.00	217
82.00	182	162.00	169	226.00	239	327.00	374
85.00	364	165.00	800	227.00	5783	334.00	960
86.00	555	166.00	217	228.00	982	346.00	664
87.00	172	167.00	4221	229.00	1396	352.00	671
91.00	0	168.00	1690	231.00	721	353.00	468
92.00	620	169.00	387	235.00	367	354.00	649
93.00	3303	171.00	246	237.00	485	365.00	3626
96.00	265	173.00	454	240.00	220	366.00	340
98.00	2895	174.00	1466	242.00	558	371.00	170
99.00	2153	175.00	1099	243.00	543	372.00	1404
101.00	1035	176.00	282	244.00	8125	373.00	201

Report Date: 16-Oct-2017 12:14:40 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328216.D\U-8270.rslt\spectra.d
Injection Date: 16-Oct-2017 11:41:30
Spectrum: Tune Spec :Average 1925-1927(12.01-12.02) Bgrd 1921(11.99)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 183

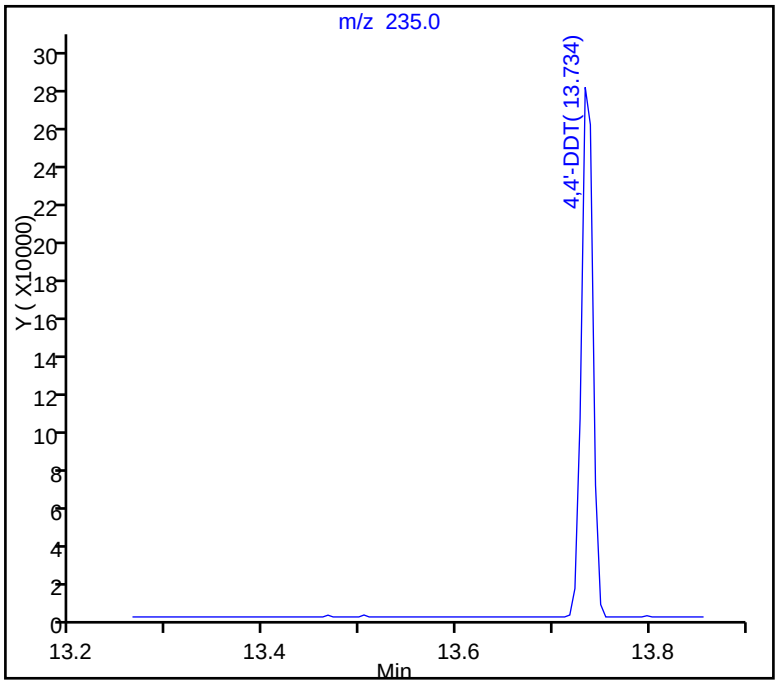
m/z	Y	m/z	Y	m/z	Y	m/z	Y
103.00	209	177.00	510	245.00	1283	383.00	213
104.00	718	179.00	2840	246.00	1981	390.00	183
105.00	830	180.00	2162	247.00	346	403.00	323
107.00	10880	181.00	696	249.00	524	421.00	350
108.00	1591	185.00	1728	253.00	176	422.00	341
110.00	15842	186.00	9799	255.00	44816	423.00	2582
111.00	2951	187.00	2994	256.00	5745	424.00	823
116.00	268	188.00	338	257.00	195	438.00	260
117.00	9144	189.00	654	258.00	2747	441.00	9864
118.00	551	191.00	200	259.00	481	442.00	63368
122.00	284	192.00	899	265.00	1195	443.00	11999
123.00	898	193.00	920	271.00	208	444.00	750
124.00	212	196.00	2348	272.00	210		

Breakdown Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328216.D
Injection Date: 16-Oct-2017 11:41:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL

253 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

253 4,4'-DDT, Area = 233068
252 4,4'-DDD, Area = 0
251 4,4'-DDE, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Buffalo

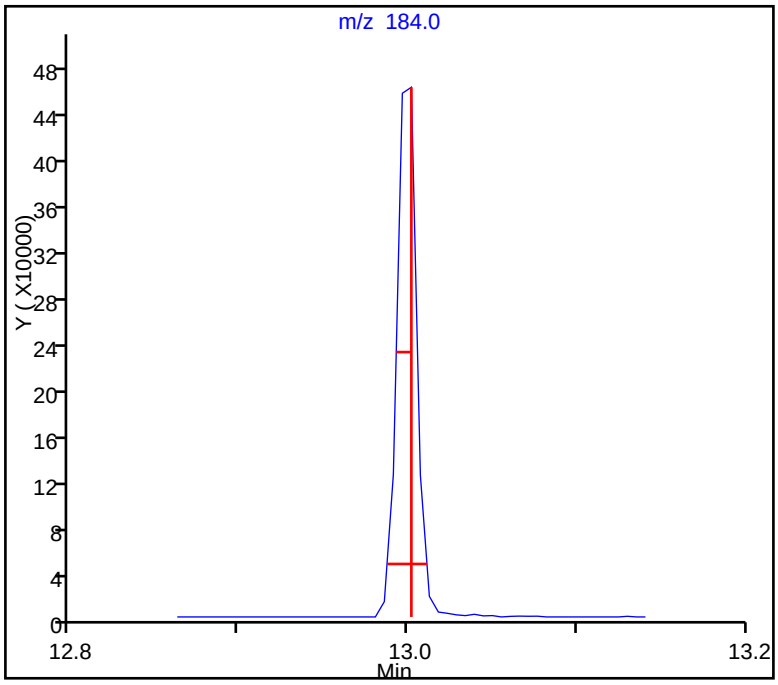
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328216.D
Injection Date: 16-Oct-2017 11:41:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL

250 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.014 (min.)

Tailing Factor = 0.6, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Buffalo

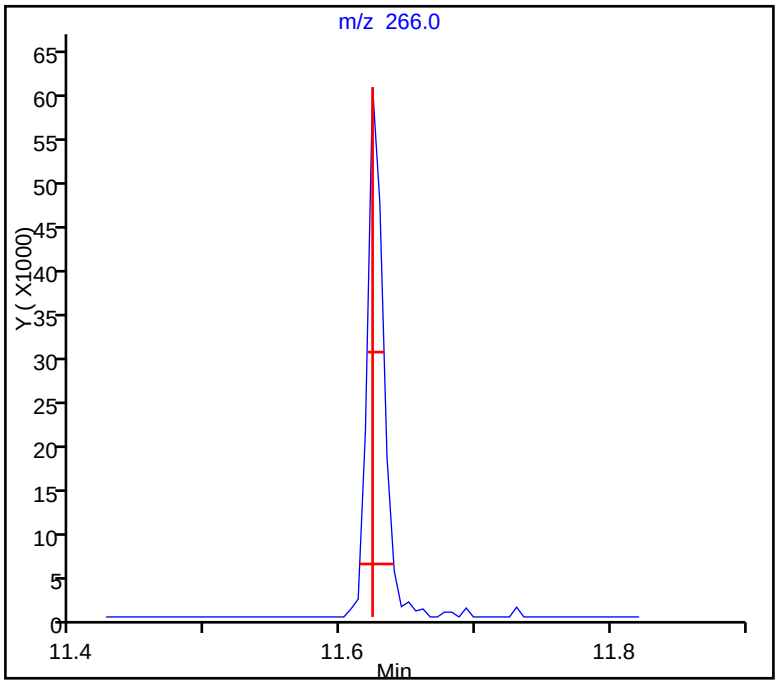
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328216.D
Injection Date: 16-Oct-2017 11:41:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL

248 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.016 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.6, Max. Tailing < 2.00
Passed



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328226.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 16-Oct-2017 18:01:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066446-002
Operator ID: DR Instrument ID: HP5973U

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Oct-2017 11:38:25 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: richardsd Date: 16-Oct-2017 18:29:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
248 Pentachlorophenol_T	266	11.624	11.624	0.000	90	40464	NR	NR	
249 DFTPP									
250 Benzidine_T	184	12.997	12.997	0.000	99	385323	NR	NR	
251 4,4'-DDE	246		13.425					ND	
252 4,4'-DDD	235		13.467					ND	
253 4,4'-DDT	235	13.734	13.734	0.000	98	252962	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

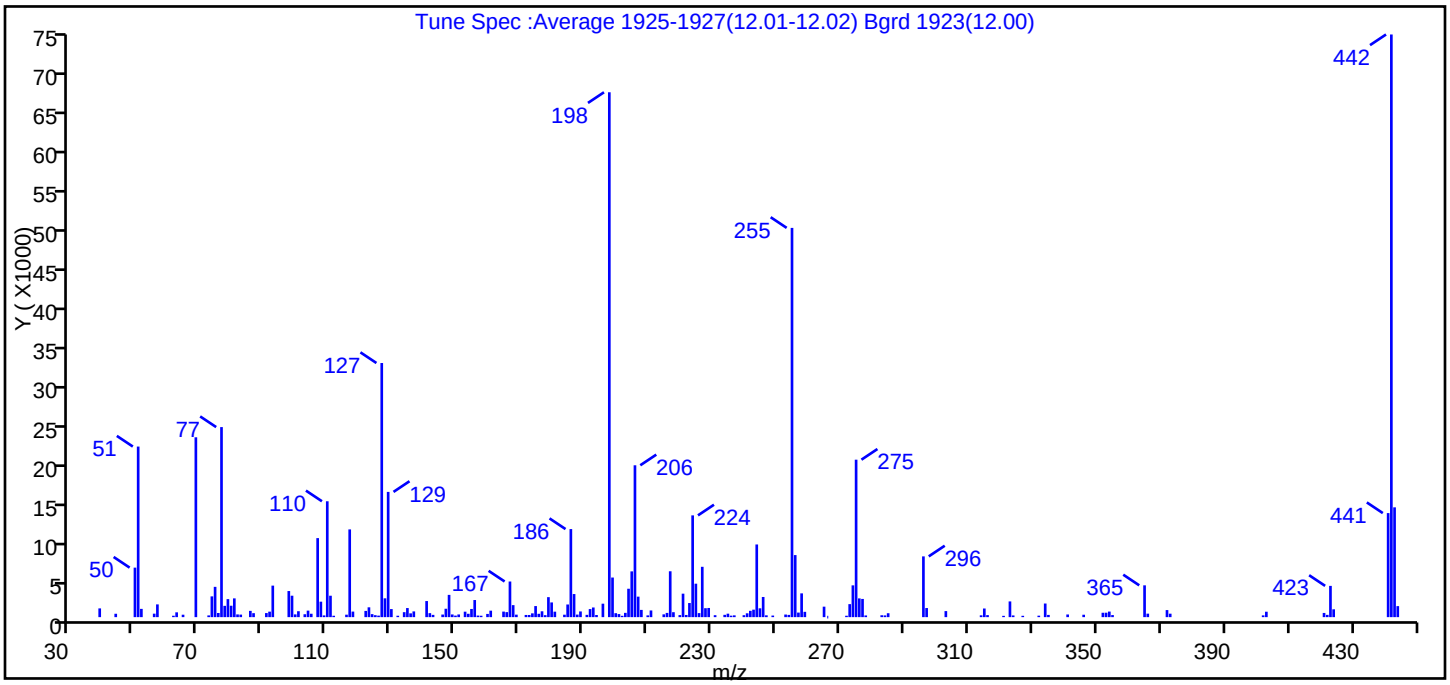
MB_DFTPP_WRK_00319 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328226.D
Injection Date: 16-Oct-2017 18:01:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL
Tune Method: DFTPP Method 8270D, BP 198

249 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (90.1)
51	10-80% of the base peak	32.5
68	<2% of mass 69	0.0 (0.0)
69	Present	34.3
70	<2% of mass 69	0.0 (0.0)
127	10-80% of the base peak	48.4
197	<2% of mass 198	0.0
199	5-9% of mass 198	7.5
275	10-60% of the base peak	30.0
365	>1% of mass 198	6.1
441	present but <24% of mass 442	19.8 (17.9)
442	base peak, or >50% of 198	111.0
443	15-24% of mass 442	20.9 (18.8)

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328226.D\U-8270.rslt\spectra.d
Injection Date: 16-Oct-2017 18:01:30
Spectrum: Tune Spec :Average 1925-1927(12.01-12.02) Bgrd 1923(12.00)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 193

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	1125	128.00	2421	194.00	276	259.00	684
44.00	435	129.00	16106	196.00	1731	265.00	1348
50.00	6366	130.00	1036	198.00	67496	266.00	0
51.00	21936	132.00	180	199.00	5093	272.00	180
52.00	1063	134.00	639	200.00	509	273.00	1673
56.00	447	135.00	1169	201.00	395	274.00	4088
57.00	1640	136.00	487	202.00	171	275.00	20248
62.00	182	137.00	738	203.00	551	276.00	2411
63.00	619	141.00	2069	204.00	3653	277.00	2341
65.00	314	142.00	514	205.00	5886	278.00	218
69.00	23128	143.00	293	206.00	19528	283.00	243
73.00	223	146.00	334	207.00	2635	284.00	223
74.00	2671	147.00	1081	208.00	931	285.00	504
75.00	3896	148.00	2863	210.00	226	296.00	7813
76.00	534	149.00	345	211.00	860	297.00	1170
77.00	24440	150.00	199	215.00	360	303.00	778
78.00	1453	151.00	345	216.00	544	314.00	234
79.00	2318	153.00	703	217.00	5899	315.00	1111
80.00	1467	154.00	432	218.00	636	316.00	261
81.00	2413	155.00	1052	220.00	264	321.00	167
82.00	350	156.00	2200	221.00	3019	323.00	2022
83.00	327	157.00	203	222.00	280	324.00	218
86.00	807	158.00	182	223.00	1814	327.00	172
87.00	511	160.00	414	224.00	13087	332.00	189
91.00	525	161.00	833	225.00	4301	334.00	1752
92.00	707	165.00	714	226.00	519	335.00	287
93.00	4053	166.00	645	227.00	6473	341.00	342
98.00	3357	167.00	4583	228.00	1149	346.00	310
99.00	2756	168.00	1544	229.00	1179	352.00	565
100.00	355	169.00	319	231.00	250	353.00	570
101.00	762	172.00	281	234.00	297	354.00	718
103.00	374	173.00	277	235.00	446	355.00	266
104.00	839	174.00	488	236.00	190	365.00	4090

Report Date: 17-Oct-2017 11:38:26 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328226.D\U-8270.rslt\spectra.d
Injection Date: 16-Oct-2017 18:01:30
Spectrum: Tune Spec :Average 1925-1927(12.01-12.02) Bgrd 1923(12.00)
Base Peak: 442.00
Minimum % Base Peak: 0
Number of Points: 193

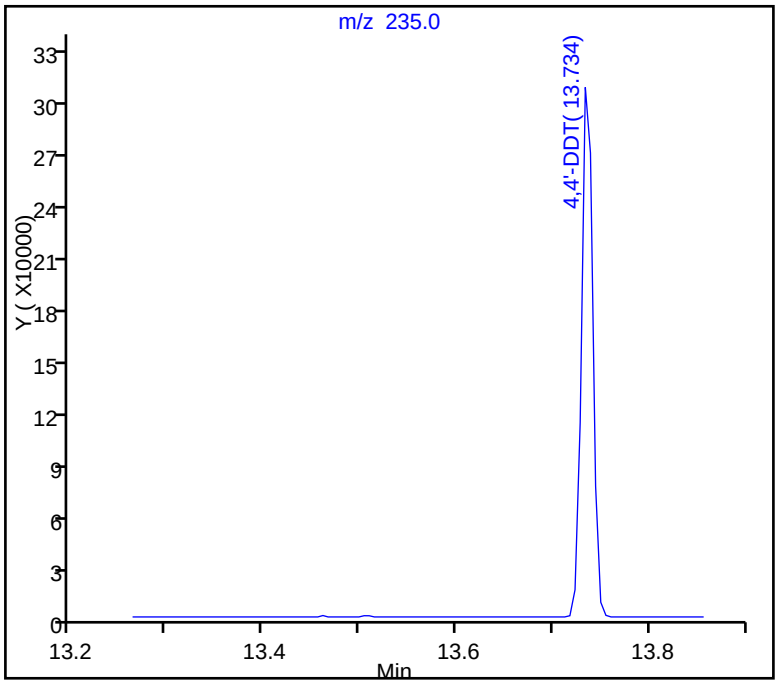
m/z	Y	m/z	Y	m/z	Y	m/z	Y
105.00	437	175.00	1424	237.00	230	366.00	448
107.00	10164	176.00	430	240.00	251	372.00	909
108.00	1989	177.00	753	241.00	495	373.00	445
109.00	222	178.00	255	242.00	813	402.00	227
110.00	14901	179.00	2570	243.00	962	403.00	698
111.00	2754	180.00	1892	244.00	9345	421.00	539
112.00	178	181.00	704	245.00	1136	422.00	292
116.00	316	184.00	314	246.00	2593	423.00	4020
117.00	11283	185.00	1628	247.00	235	424.00	1008
118.00	715	186.00	11325	249.00	203	441.00	13380
122.00	801	187.00	2970	253.00	335	442.00	74928
123.00	1264	188.00	328	254.00	288	443.00	14120
124.00	385	189.00	733	255.00	50056	444.00	1418
125.00	251	191.00	294	256.00	7980		
126.00	195	192.00	1039	257.00	586		
127.00	32680	193.00	1242	258.00	3058		

Breakdown Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328226.D
Injection Date: 16-Oct-2017 18:01:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL

253 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

253 4,4'-DDT, Area = 252962
252 4,4'-DDD, Area = 0
251 4,4'-DDE, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Buffalo

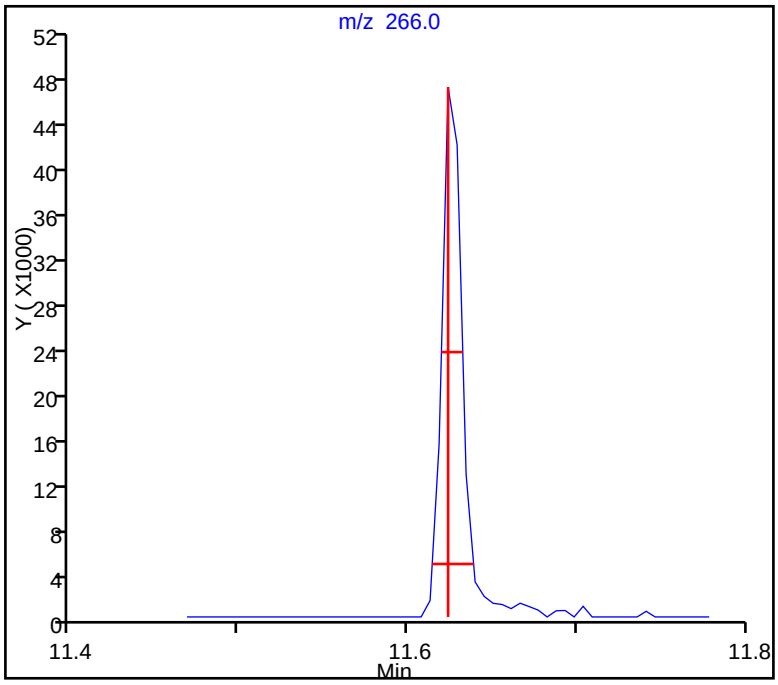
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328226.D
Injection Date: 16-Oct-2017 18:01:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL

248 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.015 (min.)
Front Width = 0.009 (min.)

Tailing Factor = 1.6, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Buffalo

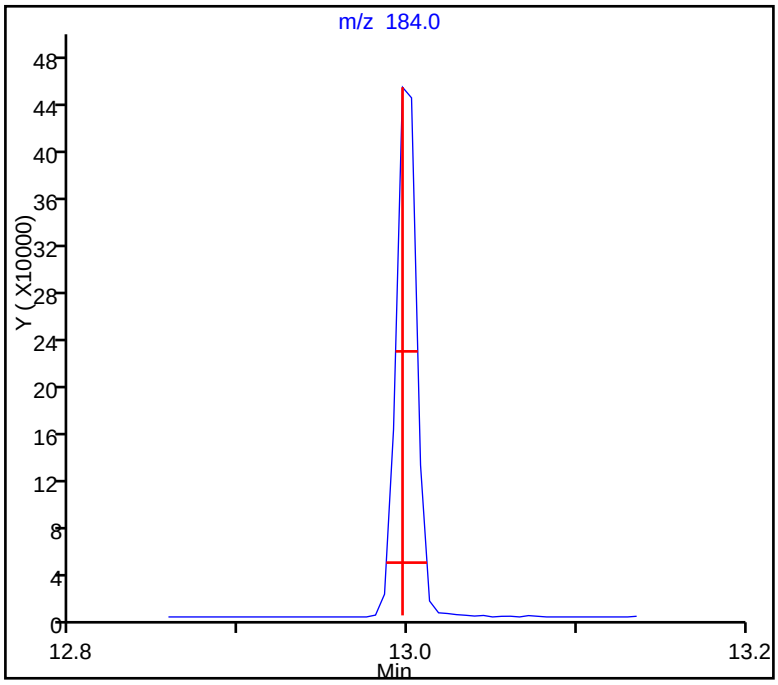
Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328226.D
Injection Date: 16-Oct-2017 18:01:30 Instrument ID: HP5973U
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: U-8270 Limit Group: MB - 8270D ICAL

250 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.015 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.5, Max. Tailing < 2.00
Passed



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20236.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 29-Sep-2017 19:07:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066023-002
Operator ID: DR Instrument ID: HP5973X

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 03-Oct-2017 12:28:41 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK031

First Level Reviewer: pagem Date: 03-Oct-2017 12:28:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
230 Pentachlorophenol_T	266	10.708	10.708	0.000	97	86780	NR	NR	
231 DFTPP									
233 4,4'-DDE	246		12.515					ND	
234 4,4'-DDD	235		12.653					ND	
232 Benzidine_T	184	12.161	12.161	0.000	100	612474	NR	NR	
235 4,4'-DDT	235	12.882	12.882	0.000	97	317434	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

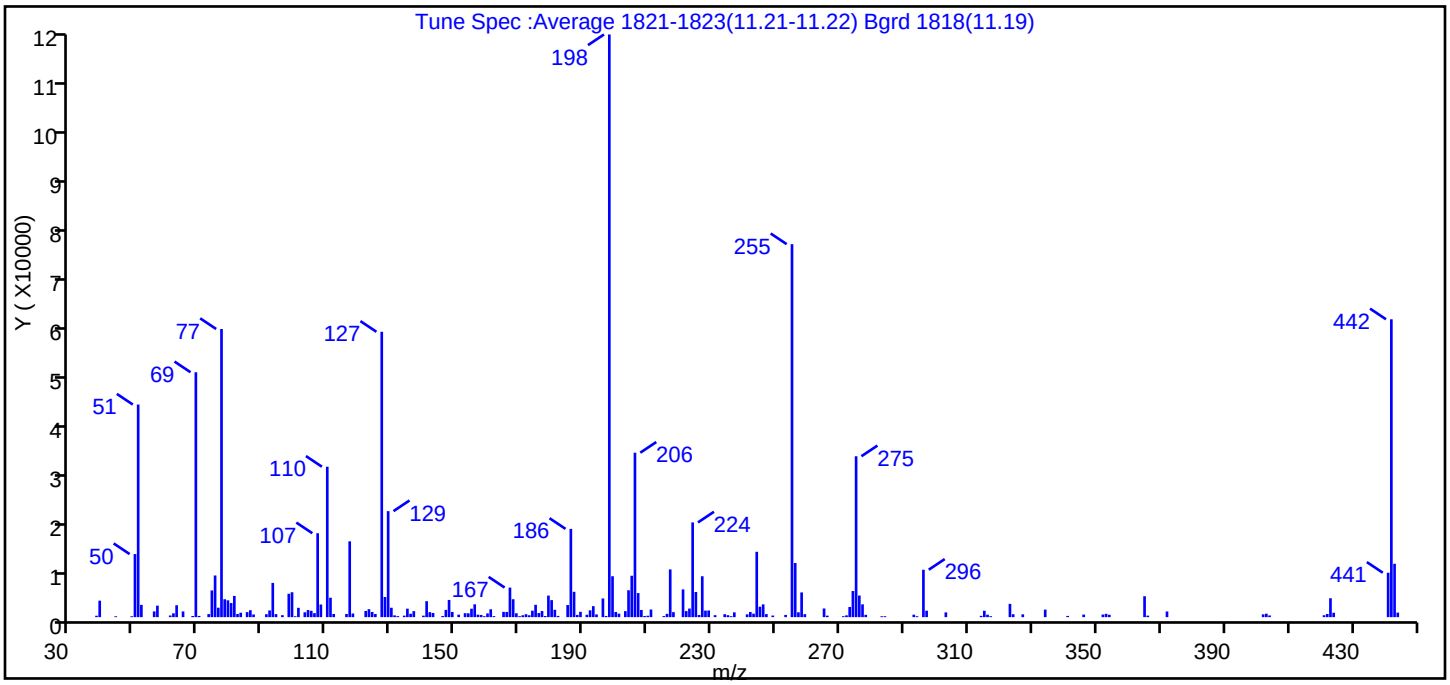
MB_DFTPP_WRK_00317 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20236.D
Injection Date: 29-Sep-2017 19:07:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Tune Method: DFTPP Method 8270D, BP 198

231 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (195.6)
51	10-80% of the base peak	36.5
68	<2% of mass 69	0.2 (0.5)
69	Present	42.0
70	<2% of mass 69	0.2 (0.5)
127	10-80% of the base peak	49.0
197	<2% of mass 198	0.2
199	5-9% of mass 198	7.0
275	10-60% of the base peak	27.6
365	>1% of mass 198	3.6
441	present but <24% of mass 442	7.6 (14.9)
442	base peak, or >50% of 198	51.1
443	15-24% of mass 442	9.2 (17.9)

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20236.D\X-8270.rslt\spectra.d
Injection Date: 29-Sep-2017 19:07:30
Spectrum: Tune Spec :Average 1821-1823(11.21-11.22) Bgrd 1818(11.19)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 202

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	268	122.00	1170	185.00	2293	255.00	70656
39.00	3122	123.00	1505	186.00	16720	256.00	10262
44.00	167	124.00	978	187.00	4799	257.00	918
49.00	167	125.00	601	188.00	421	258.00	4684
50.00	11947	127.00	54056	189.00	1010	259.00	566
51.00	40272	128.00	3815	191.00	448	265.00	1644
52.00	2322	129.00	20080	192.00	1295	266.00	283
56.00	1088	130.00	1777	193.00	2083	271.00	179
57.00	2177	131.00	337	194.00	521	272.00	341
61.00	314	132.00	193	196.00	3539	273.00	1928
62.00	725	134.00	282	197.00	225	274.00	4949
63.00	2255	135.00	1606	198.00	110376	275.00	30480
65.00	1080	136.00	636	199.00	7748	276.00	4093
68.00	216	137.00	1136	200.00	983	277.00	2425
69.00	46392	140.00	286	201.00	663	278.00	442
70.00	232	141.00	3020	203.00	1138	283.00	168
73.00	577	142.00	942	204.00	5091	284.00	173
74.00	5059	143.00	789	205.00	7842	293.00	467
75.00	7893	146.00	212	206.00	31152	294.00	174
76.00	1787	147.00	1376	207.00	4560	296.00	8979
77.00	54584	148.00	3255	208.00	1359	297.00	1222
78.00	3392	149.00	986	209.00	208	303.00	902
79.00	3189	151.00	470	210.00	268	314.00	246
80.00	2672	153.00	750	211.00	1445	315.00	1209
81.00	4019	154.00	728	215.00	200	316.00	464
82.00	596	155.00	1599	216.00	623	317.00	181
83.00	839	156.00	2429	217.00	9040	323.00	2515
85.00	950	157.00	468	218.00	950	324.00	550
86.00	1314	158.00	416	221.00	5253	327.00	534
87.00	506	159.00	175	222.00	1148	334.00	1427
91.00	554	160.00	705	223.00	1625	341.00	233
92.00	1270	161.00	1490	224.00	17944	346.00	489
93.00	6483	162.00	191	225.00	4766	352.00	495

Report Date: 03-Oct-2017 12:28:42 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20236.D\X-8270.rslt\spectra.d
Injection Date: 29-Sep-2017 19:07:30
Spectrum: Tune Spec :Average 1821-1823(11.21-11.22) Bgrd 1818(11.19)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 202

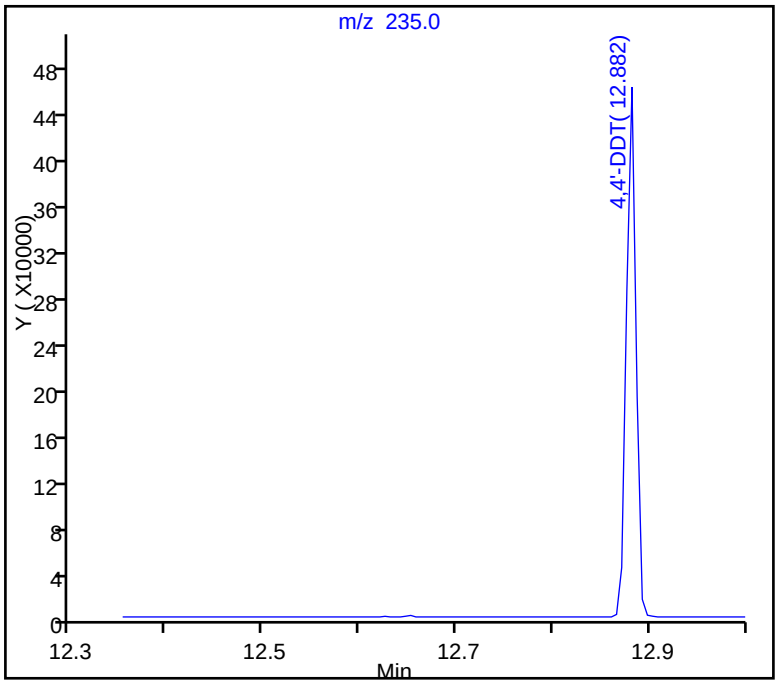
m/z	Y	m/z	Y	m/z	Y	m/z	Y
94.00	571	165.00	1005	226.00	407	353.00	631
96.00	371	166.00	993	227.00	7747	354.00	449
98.00	4423	167.00	5603	228.00	1235	365.00	3957
99.00	4716	168.00	3398	229.00	1260	366.00	285
100.00	167	169.00	729	231.00	373	372.00	1073
101.00	1765	170.00	178	234.00	559	402.00	530
103.00	921	171.00	359	235.00	371	403.00	656
104.00	1349	172.00	558	236.00	175	404.00	317
105.00	1200	173.00	356	237.00	911	421.00	362
106.00	758	174.00	1220	241.00	534	422.00	595
107.00	15896	175.00	2336	242.00	969	423.00	3579
108.00	2395	176.00	778	243.00	648	424.00	828
110.00	28496	177.00	1161	244.00	12378	441.00	8412
111.00	3676	178.00	218	245.00	1975	442.00	56424
112.00	599	179.00	4082	246.00	2420	443.00	10110
116.00	603	180.00	3222	247.00	577	444.00	855
117.00	14361	181.00	1397	249.00	303		
118.00	690	182.00	236	253.00	420		

Breakdown Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20236.D
Injection Date: 29-Sep-2017 19:07:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL

235 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

235 4,4'-DDT, Area = 317434
234 4,4'-DDD, Area = 0
233 4,4'-DDE, Area = 0

%Breakdown: 0.00%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Buffalo

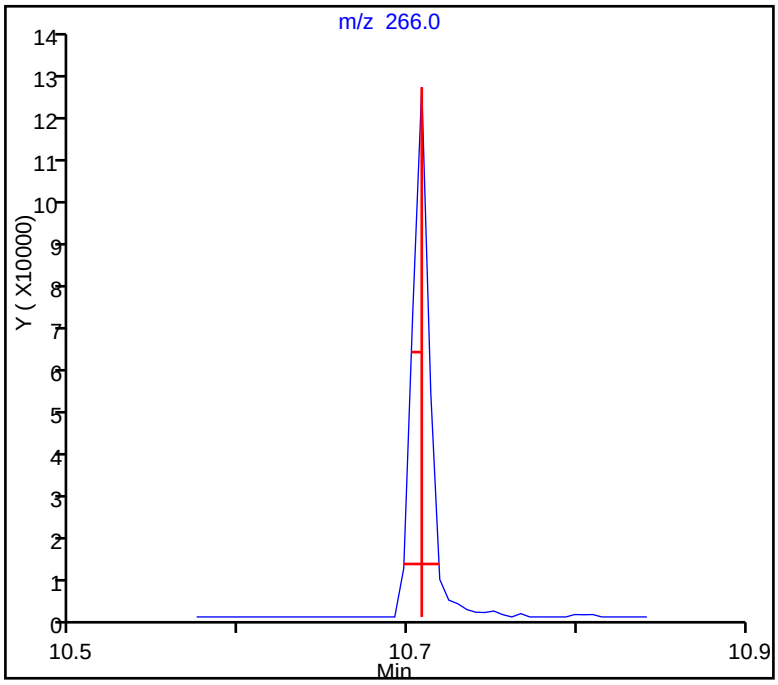
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20236.D
Injection Date: 29-Sep-2017 19:07:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL

230 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Buffalo

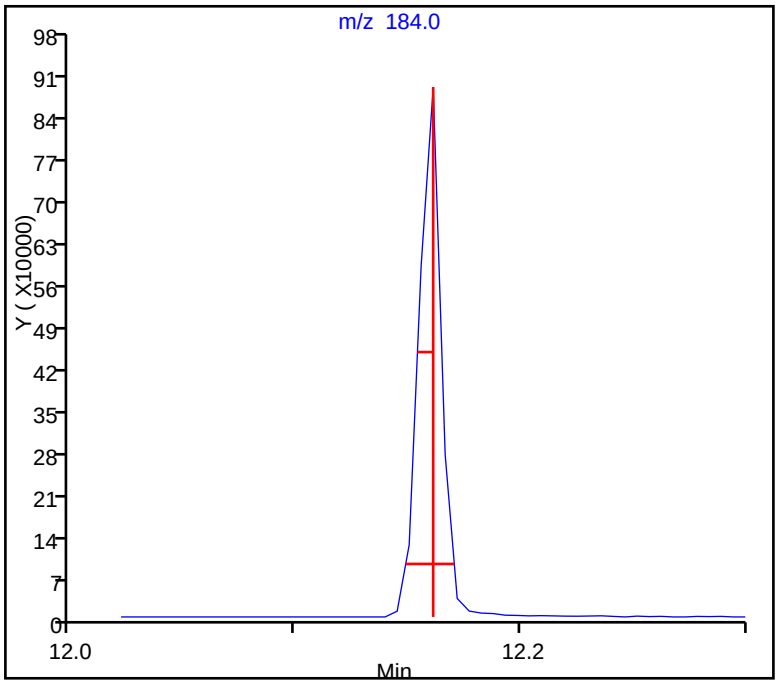
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20236.D
Injection Date: 29-Sep-2017 19:07:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL

232 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20508.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 13-Oct-2017 00:06:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066346-002
Operator ID: DR Instrument ID: HP5973X

Method: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 13-Oct-2017 12:08:03 Calib Date: 29-Sep-2017 21:44:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973X\20170929-66023.b\X20242.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: richardsd Date: 13-Oct-2017 11:03:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
230 Pentachlorophenol_T	266	10.631	10.631	0.000	95	80554	NR	NR	
231 DFTPP									
233 4,4'-DDE	246		11.662					ND	
232 Benzidine_T	184	12.095	12.095	0.000	100	928172	NR	NR	
234 4,4'-DDD	235	12.554	12.554	0.000	1	4550		NR	
235 4,4'-DDT	235	12.816	12.816	0.000	96	513367	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
8 - Failed MS Tune Ratio Test

Reagents:

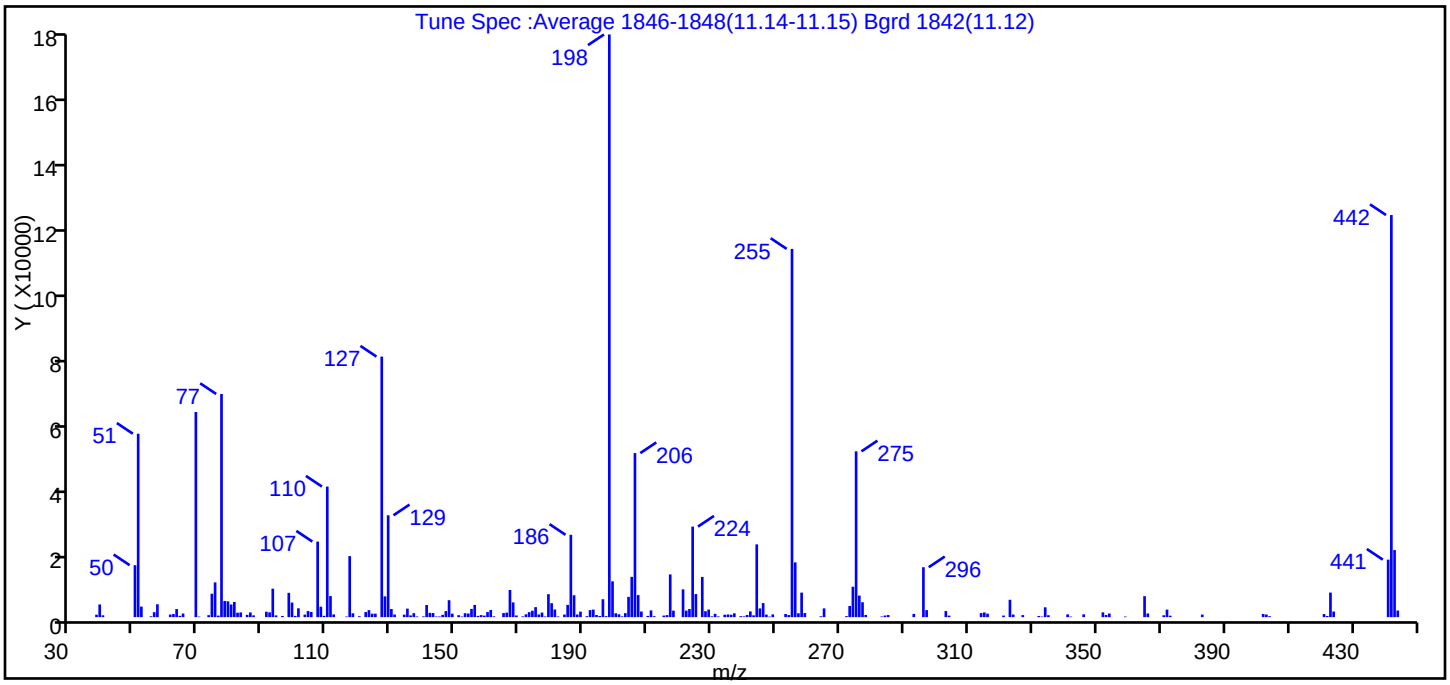
MB_DFTPP_WRK_00319 Amount Added: 1.00 Units: mL

MS Tune Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20508.D
Injection Date: 13-Oct-2017 00:06:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL
Tune Method: DFTPP Method 8270D, BP 198

231 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (144.9)
51	10-80% of the base peak	31.5
68	<2% of mass 69	0.0 (0.0)
69	Present	35.2
70	<2% of mass 69	0.1 (0.3)
127	10-80% of the base peak	44.7
197	<2% of mass 198	0.2
199	5-9% of mass 198	6.1
275	10-60% of the base peak	28.5
365	>1% of mass 198	3.6
441	present but <24% of mass 442	9.9 (14.3)
442	base peak, or >50% of 198	69.0
443	15-24% of mass 442	11.5 (16.7)

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20508.D\X-8270.rslt\spectra.d
Injection Date: 13-Oct-2017 00:06:30
Spectrum: Tune Spec :Average 1846-1848(11.14-11.15) Bgrd 1842(11.12)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 221

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	742	127.00	79048	192.00	2136	259.00	1238
39.00	3849	128.00	6310	193.00	2296	264.00	257
40.00	560	129.00	30904	194.00	655	265.00	2655
50.00	15767	130.00	2474	195.00	342	272.00	300
51.00	55648	131.00	795	196.00	5433	273.00	3395
52.00	3200	134.00	764	197.00	310	274.00	9234
55.00	251	135.00	2590	198.00	176768	275.00	50296
56.00	1498	136.00	525	199.00	10868	276.00	6539
57.00	3909	137.00	1207	200.00	1177	277.00	4522
61.00	794	138.00	198	201.00	867	278.00	660
62.00	944	140.00	227	202.00	239	283.00	190
63.00	2460	141.00	3681	203.00	1213	284.00	491
64.00	399	142.00	1297	204.00	6147	285.00	645
65.00	1097	143.00	1251	205.00	12222	293.00	984
69.00	62240	144.00	190	206.00	49768	296.00	15144
70.00	169	145.00	203	207.00	6690	297.00	2137
73.00	599	146.00	705	208.00	1709	303.00	1842
74.00	7115	147.00	1838	210.00	365	304.00	459
75.00	10539	148.00	5142	211.00	2044	314.00	1234
76.00	465	149.00	1055	212.00	286	315.00	1425
77.00	67704	151.00	593	215.00	477	316.00	1060
78.00	4907	152.00	188	216.00	617	321.00	482
79.00	4806	153.00	1191	217.00	12963	323.00	5264
80.00	3836	154.00	1097	218.00	1974	324.00	797
81.00	4607	155.00	2496	221.00	8423	327.00	623
82.00	1341	156.00	3708	222.00	1987	332.00	356
83.00	1430	157.00	383	223.00	2458	333.00	176
85.00	693	158.00	624	224.00	27472	334.00	2984
86.00	1428	159.00	459	225.00	7005	335.00	577
87.00	537	160.00	1539	227.00	12205	341.00	839
91.00	1636	161.00	2165	228.00	1803	342.00	171
92.00	1460	162.00	248	229.00	2296	346.00	850
93.00	8637	165.00	1244	230.00	233	352.00	1453

Report Date: 13-Oct-2017 12:08:04 Chrom Revision: 2.2 16-Aug-2017 16:24:46
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20508.D\X-8270.rslt\spectra.d
Injection Date: 13-Oct-2017 00:06:30
Spectrum: Tune Spec :Average 1846-1848(11.14-11.15) Bgrd 1842(11.12)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 221

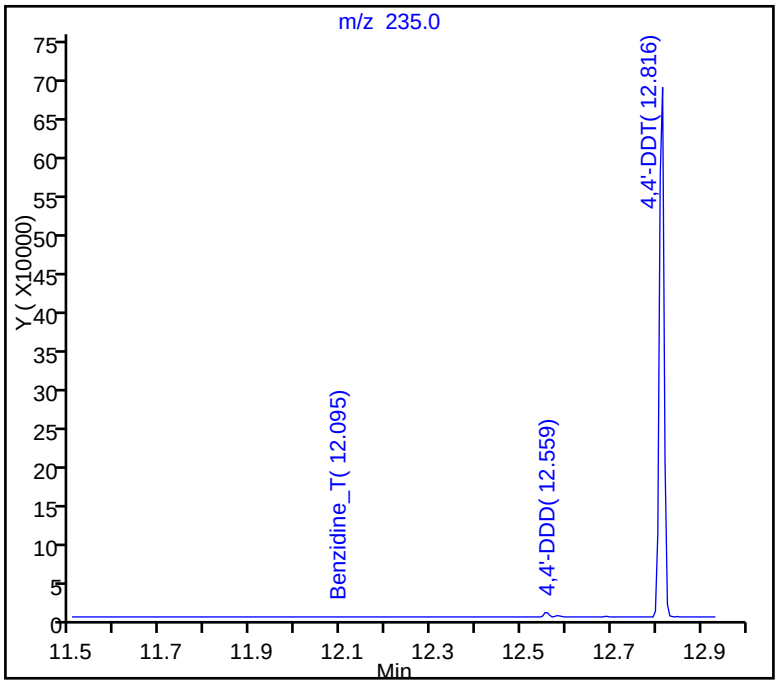
m/z	Y	m/z	Y	m/z	Y	m/z	Y
94.00	529	166.00	1375	231.00	1011	353.00	654
96.00	359	167.00	8243	232.00	222	354.00	1098
98.00	7377	168.00	4470	234.00	735	359.00	190
99.00	4422	169.00	508	235.00	812	365.00	6361
100.00	383	171.00	229	236.00	724	366.00	1120
101.00	2681	172.00	859	237.00	1162	371.00	573
103.00	773	173.00	1521	239.00	290	372.00	2283
104.00	1847	174.00	1943	240.00	229	373.00	438
105.00	1592	175.00	3034	241.00	648	383.00	768
107.00	22928	176.00	804	242.00	1738	402.00	962
108.00	3166	177.00	1386	243.00	547	403.00	802
109.00	385	178.00	198	244.00	22080	404.00	279
110.00	39608	179.00	6967	245.00	2651	421.00	935
111.00	6390	180.00	4239	246.00	4268	422.00	345
112.00	826	181.00	2330	247.00	770	423.00	7452
116.00	185	182.00	209	248.00	167	424.00	1709
117.00	18520	184.00	779	249.00	829	441.00	17440
118.00	1165	185.00	3727	253.00	960	442.00	121992
120.00	272	186.00	24976	254.00	637	443.00	20352
122.00	1545	187.00	6639	255.00	111720	444.00	2007
123.00	2129	188.00	805	256.00	16608		
124.00	1049	189.00	1675	257.00	1173		
125.00	1064	191.00	291	258.00	7442		

Breakdown Report

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20508.D
Injection Date: 13-Oct-2017 00:06:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL

235 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

235 4,4'-DDT, Area = 513367
234 4,4'-DDD, Area = 4550
233 4,4'-DDE, Area = 0

%Breakdown: 0.88%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Buffalo

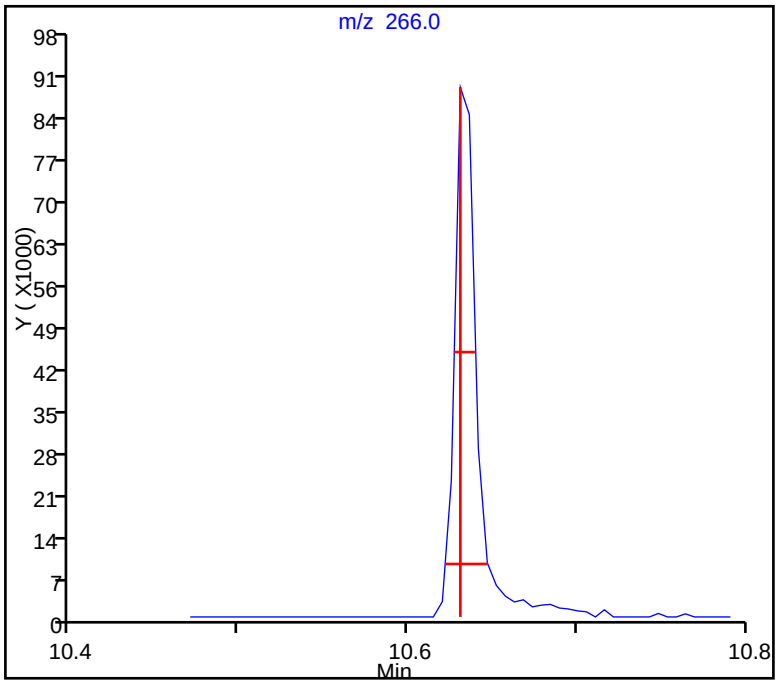
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20508.D
Injection Date: 13-Oct-2017 00:06:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL

230 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.016 (min.)
Front Width = 0.009 (min.)

Tailing Factor = 1.8, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Buffalo

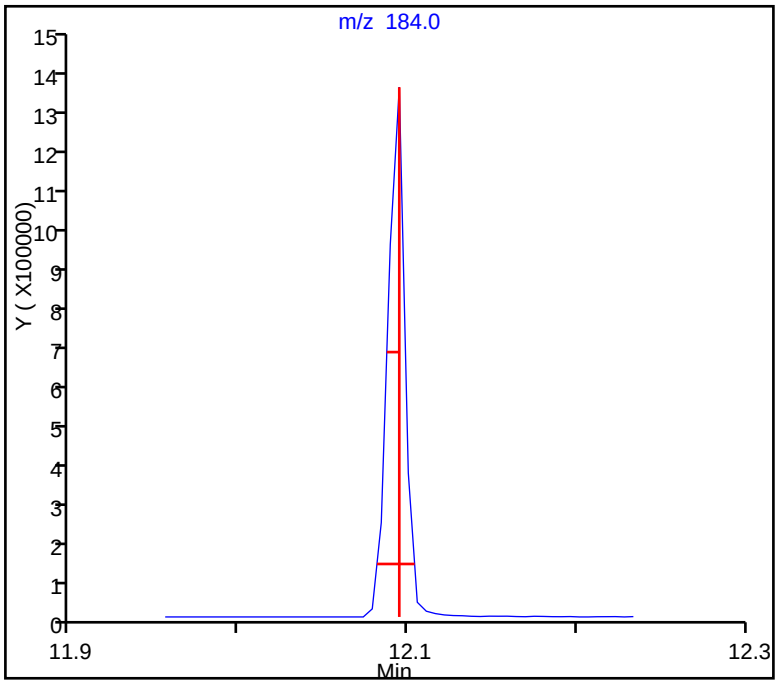
Data File: \\ChromNA\Buffalo\ChromData\HP5973X\20171012-66346.b\X20508.D
Injection Date: 13-Oct-2017 00:06:30 Instrument ID: HP5973X
Lims ID: DFTPP
Client ID:
Operator ID: DR ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: X-8270 Limit Group: MB - 8270D ICAL

232 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 0.7, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-381332/1-A

Matrix: Solid | Lab File ID: U328231.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.37(g) | Date Analyzed: 10/16/2017 20:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		170	45
88-06-2	2,4,6-Trichlorophenol	ND		170	34
120-83-2	2,4-Dichlorophenol	ND		170	18
105-67-9	2,4-Dimethylphenol	ND		170	41
51-28-5	2,4-Dinitrophenol	ND		1600	770
121-14-2	2,4-Dinitrotoluene	ND		170	35
606-20-2	2,6-Dinitrotoluene	ND		170	20
91-58-7	2-Chloronaphthalene	ND		170	28
95-57-8	2-Chlorophenol	ND		170	31
91-57-6	2-Methylnaphthalene	ND		170	34
95-48-7	2-Methylphenol	ND		170	20
88-74-4	2-Nitroaniline	ND		330	25
88-75-5	2-Nitrophenol	ND		170	47
91-94-1	3,3'-Dichlorobenzidine	ND		330	200
99-09-2	3-Nitroaniline	ND		330	46
534-52-1	4,6-Dinitro-2-methylphenol	ND		330	170
101-55-3	4-Bromophenyl phenyl ether	ND		170	24
59-50-7	4-Chloro-3-methylphenol	ND		170	41
106-47-8	4-Chloroaniline	ND		170	41
7005-72-3	4-Chlorophenyl phenyl ether	ND		170	21
106-44-5	4-Methylphenol	ND		330	20
100-01-6	4-Nitroaniline	ND		330	88
100-02-7	4-Nitrophenol	ND		330	120
83-32-9	Acenaphthene	ND		170	25
208-96-8	Acenaphthylene	ND		170	22
98-86-2	Acetophenone	ND		170	23
120-12-7	Anthracene	ND		170	41
1912-24-9	Atrazine	ND		170	58
100-52-7	Benzaldehyde	ND		170	130
56-55-3	Benzo[a]anthracene	ND		170	17
50-32-8	Benzo[a]pyrene	ND		170	25
205-99-2	Benzo[b]fluoranthene	ND		170	27
191-24-2	Benzo[g,h,i]perylene	ND		170	18
207-08-9	Benzo[k]fluoranthene	ND		170	22

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-381332/1-A

Matrix: Solid | Lab File ID: U328231.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.37(g) | Date Analyzed: 10/16/2017 20:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		170	25
108-60-1	bis (2-chloroisopropyl) ether	ND		170	34
111-91-1	Bis(2-chloroethoxy)methane	ND		170	36
111-44-4	Bis(2-chloroethyl)ether	ND		170	22
117-81-7	Bis(2-ethylhexyl) phthalate	ND		170	57
85-68-7	Butyl benzyl phthalate	ND		170	28
105-60-2	Caprolactam	ND		170	50
86-74-8	Carbazole	ND		170	20
218-01-9	Chrysene	ND		170	38
53-70-3	Dibenz(a,h)anthracene	ND		170	30
132-64-9	Dibenzofuran	ND		170	20
84-66-2	Diethyl phthalate	ND		170	22
131-11-3	Dimethyl phthalate	ND		170	20
84-74-2	Di-n-butyl phthalate	ND		170	29
117-84-0	Di-n-octyl phthalate	ND		170	20
206-44-0	Fluoranthene	ND		170	18
86-73-7	Fluorene	ND		170	20
118-74-1	Hexachlorobenzene	ND		170	23
87-68-3	Hexachlorobutadiene	ND		170	25
77-47-4	Hexachlorocyclopentadiene	ND		170	23
67-72-1	Hexachloroethane	ND		170	22
193-39-5	Indeno[1,2,3-cd]pyrene	ND		170	21
78-59-1	Isophorone	ND		170	36
91-20-3	Naphthalene	ND		170	22
98-95-3	Nitrobenzene	ND		170	19
621-64-7	N-Nitrosodi-n-propylamine	ND		170	29
86-30-6	N-Nitrosodiphenylamine	ND		170	140
87-86-5	Pentachlorophenol	ND		330	170
85-01-8	Phenanthrene	ND		170	25
108-95-2	Phenol	ND		170	26
129-00-0	Pyrene	ND		170	20

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-381332/1-A

Matrix: Solid | Lab File ID: U328231.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.37(g) | Date Analyzed: 10/16/2017 20:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	86		54-120
321-60-8	2-Fluorobiphenyl	84		60-120
367-12-4	2-Fluorophenol	77		52-120
4165-60-0	Nitrobenzene-d5	73		53-120
4165-62-2	Phenol-d5	80		54-120
1718-51-0	p-Terphenyl-d14	101		65-121

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328231.D
Lims ID: MB 480-381332/1-A
Client ID:
Sample Type: MB
Inject. Date: 16-Oct-2017 20:13:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066446-007
Operator ID: DR Instrument ID: HP5973U

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Oct-2017 11:35:50 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: richardsd Date: 17-Oct-2017 11:10:50

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	95	154035	40.0	40.0	
*	2 Naphthalene-d8	136	8.226	8.226	0.000	99	528736	40.0	40.0	
*	3 Acenaphthene-d10	164	10.293	10.293	0.000	97	262930	40.0	40.0	
*	4 Phenanthrene-d10	188	11.811	11.811	0.000	96	553477	40.0	40.0	
*	5 Chrysene-d12	240	14.193	14.193	0.000	96	589648	40.0	40.0	
*	6 Perylene-d12	264	15.689	15.689	0.000	98	371113	40.0	40.0	
$	7 2-Fluorophenol	112	5.101	5.095	0.006	91	126848	40.0	30.6	
$	8 Phenol-d5	99	6.233	6.228	0.005	96	150365	40.0	32.0	
$	9 Nitrobenzene-d5	82	7.355	7.355	0.000	89	134779	40.0	29.4	
$	10 2-Fluorobiphenyl	172	9.492	9.492	0.000	99	372614	40.0	33.6	
$	11 2,4,6-Tribromophenol	330	11.121	11.121	0.000	89	86430	40.0	34.6	
$	12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	486299	40.0	40.5	
	14 o-Anisidine	1		0.700					ND	
	18 2-Chloropyridine	1		0.700					ND	
	19 Chlorobenzotrifluoride N.O	1		0.700					ND	
	22 Chlorotoluene N.O.S	1		0.700					ND	
	15 5-Ethyl-5-phenyl barbituri	1		0.700					ND	
	21 N-Methylaniline	1		0.700					ND	
	17 4-Chloropyridine	1		0.700					ND	
	16 Lidocaine	1		0.700					ND	
	13 3-Chloropyridine	1		0.700					ND	
	20 2-Chlorotoluene	91		0.700					ND	
	23 1,4-Dioxane	88		2.600					ND	
	24 N-Nitrosodimethylamine	42		3.081					ND	
	25 Pyridine	52		3.183					ND	
	26 2-Picoline	93		4.743					ND	
	27 N-Nitrosomethylethylamine	88		4.839					ND	
	28 Acrylamide	71		5.144					ND	
	29 Methyl methanesulfonate	80		5.218					ND	
	30 N-Nitrosodiethylamine	102		5.731					ND	
	31 Ethyl methanesulfonate	79		6.062					ND	
	32 Benzaldehyde	77		6.174					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
33 Phenol	94		6.244					ND	
34 Aniline	93		6.297					ND	
35 Bis(2-chloroethyl)ether	93		6.356					ND	
37 2-Chlorophenol	128		6.458					ND	
38 n-Decane	57		6.506					ND	
39 1,3-Dichlorobenzene	146		6.650					ND	
36 Pentachloroethane	167		6.709					ND	
40 1,4-Dichlorobenzene	146		6.730					ND	
41 Benzyl alcohol	108		6.848					ND	
42 1,2-Dichlorobenzene	146		6.917					ND	
43 2-Methylphenol	108		6.976					ND	
44 2,2'-oxybis[1-chloropropan	45		7.013					ND	
45 Indene	115		7.024					ND	
46 4-Methylphenol	108		7.152					ND	
47 N-Nitrosodi-n-propylamine	70		7.157					ND	
49 Acetophenone	105		7.168					ND	
51 4-Methylbenzenamine	106		7.216					ND	
53 Hexachloroethane	117		7.328					ND	
54 Nitrobenzene	77		7.376					ND	
48 N-Nitrosopyrrolidine	100		7.441					ND	
50 N-Nitrosomorpholine	56		7.478					ND	
52 2-Toluidine	106		7.532					ND	
56 Isophorone	82		7.654					ND	
58 2-Chloroaniline	127		7.713					ND	
59 2-Nitrophenol	139		7.761					ND	
60 2,4-Dimethylphenol	107		7.788					ND	
55 N-Nitrosopiperidine	114		7.863					ND	
65 Tetraethyl lead	237		7.873					ND	
62 Bis(2-chloroethoxy)methane	93		7.895					ND	
64 Benzoic acid	105		7.911					ND	
57 2,4-Dichlorotoluene	125		7.991					ND	
67 2,4-Dichlorophenol	162		8.044					ND	
61 1,3,5-Trichlorobenzene	180		8.103					ND	
68 1,2,4-Trichlorobenzene	180		8.156					ND	
63 o,o',o''-Triethylphosphoro	198		8.157					ND	
71 Alpha-Terpineol	59		8.242					ND	
70 Naphthalene	128		8.253					ND	
72 4-Chloroaniline	127		8.290					ND	
73 2,6-Dichlorophenol	162		8.311					ND	
66 alpha,alpha-Dimethyl phene	58		8.338					ND	
74 Hexachlorobutadiene	225		8.402					ND	
69 4-Chlorophenol	128		8.445					ND	
304 1,3-Dibromobenzene TIC	236		8.546					ND	
305 1,4-Dibromobenzene TIC	236		8.589					ND	
76 Caprolactam	113		8.680					ND	
75 Hexachloropropene	213		8.680					ND	
80 4-Chloro-3-methylphenol	107		8.851					ND	
77 Quinoline	129		8.947					ND	
78 N-Nitrosodi-n-butylamine	84		8.979					ND	
79 p-Phenylene diamine	108		9.006					ND	
83 2-Methylnaphthalene	142		9.070					ND	
84 Phthalic anhydride	104		9.107					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
85 1-Methylnaphthalene	142		9.193					ND	
81 Safrole, Total	162		9.252					ND	
86 Hexachlorocyclopentadiene	237		9.273					ND	
87 1,2,4,5-Tetrachlorobenzene	216		9.278					ND	
82 2,4,5-Trichlorotoluene	159		9.337					ND	
89 2,4,6-Trichlorophenol	196		9.396					ND	
91 2,4,5-Trichlorophenol	196		9.444					ND	
88 Isosafrole Peak 1	162		9.594					ND	
94 1,1'-Biphenyl	154		9.615					ND	
95 2-Chloronaphthalene	162		9.652					ND	
90 2,3-Dichlorobenzenamine	161		9.706					ND	
98 2-Nitroaniline	65		9.748					ND	
93 Isosafrole Peak 2	162		9.861					ND	
92 Isosafrole	162		9.861					ND	
100 Dicyclohexylamine	138		9.871					ND	
96 1,2,3,4 -Tetrachlorobenzen	216		9.925					ND	
102 Dimethyl phthalate	163		9.946					ND	
103 1,3-Dinitrobenzene	168		9.983					ND	
97 1-Chloronaphthalene	162		9.989					ND	
104 2,6-Dinitrotoluene	165		10.016					ND	
105 Acenaphthylene	152		10.133					ND	
99 1,4-Naphthoquinone	158		10.139					ND	
101 1,4-Dinitrobenzene	168		10.181					ND	
106 3-Nitroaniline	138		10.213					ND	
107 2,4-Dinitrophenol	184		10.331					ND	
108 Acenaphthene	153		10.331					ND	
109 4-Nitrophenol	109		10.379					ND	
111 2,4-Dinitrotoluene	165		10.470					ND	
112 Dibenzofuran	168		10.512					ND	
116 2,3,4,6-Tetrachlorophenol	232		10.641					ND	
110 n,n'-Dimethylaniline	120		10.665					ND	
118 Diethyl phthalate	149		10.721					ND	
119 Hexadecane	57		10.737					ND	
113 Pentachlorobenzene	250		10.769					ND	
121 4-Chlorophenyl phenyl ethe	204		10.860					ND	
122 4-Nitroaniline	138		10.870					ND	
114 1-Naphthylamine	143		10.870					ND	
123 Fluorene	166		10.876					ND	
115 2,3,5,6-Tetrachlorophenol	232		10.876					ND	
125 4,6-Dinitro-2-methylphenol	198		10.908					ND	
126 Tributyl phosphate	99		10.924					ND	
117 2-Naphthylamine	143		10.951					ND	
128 Diphenylamine	169		10.977					ND	
127 N-Nitrosodiphenylamine	169		10.977					ND	
130 Azobenzene	77		11.025					ND	
129 1,2-Diphenylhydrazine	77		11.025					ND	
120 Thionazin	97		11.073					ND	
124 N-Nitro-o-toluidine	152		11.143					ND	
137 4-Bromophenyl phenyl ether	248		11.356					ND	
131 Sulfotepp	322		11.378					ND	
139 Hexachlorobenzene	284		11.447					ND	
142 Simazine	201		11.453					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
132 1,3,5-Trinitrobenzene	213		11.469					ND	
141 Atrazine	200		11.485					ND	
134 Diallate Peak 1	43		11.528					ND	
135 Phenacetin	108		11.528					ND	
133 Diallate	43		11.528					ND	
136 Phorate	75		11.538					ND	
138 Diallate Peak 2	43		11.618					ND	
143 Pentachlorophenol	266		11.629					ND	
144 n-Octadecane	57		11.650					ND	
140 Dimethoate	87		11.698					ND	
150 Phenanthrene	178		11.832					ND	
145 4-Aminobiphenyl	169		11.875					ND	
151 Anthracene	178		11.880					ND	
146 Pronamide	173		11.907					ND	
147 Pentachloronitrobenzene	237		11.918					ND	
152 Carbazole	167		12.014					ND	
148 Disulfoton	88		12.035					ND	
149 Dinoseb	211		12.046					ND	
153 Alachlor	160		12.126					ND	
155 Di-n-butyl phthalate	149		12.291					ND	
154 Methyl parathion	109		12.388					ND	
159 Anthraquinone	180		12.559					ND	
156 2-Methylanthracene	192		12.623					ND	
157 Ethyl Parathion	97		12.730					ND	
158 4-Nitroquinoline-1-oxide	190		12.799					ND	
160 Methapyrilene	58		12.836					ND	
162 Fluoranthene	202		12.922					ND	
163 1-Hydroxyanthraquinone	224		12.943					ND	
164 Benzidine	184		13.002					ND	
161 Isodrin	193		13.071					ND	
165 Pyrene	202		13.130					ND	
170 1,4-Dihydroxyanthraquinone	240		13.355					ND	
166 Aramite Peak 1	185		13.429					ND	
167 Aramite, Total	185		13.499					ND	
168 Aramite Peak 2	185		13.499					ND	
173 Famphur	218		13.584					ND	
174 9-Octadecenamide	72		13.606					ND	
172 Butyl benzyl phthalate	149		13.616					ND	
169 p-Dimethylamino azobenzene	120		13.616					ND	
171 Chlorobenzilate	139		13.638					ND	
176 Kepone	272		13.739					ND	
175 3,3'-Dimethylbenzidine	212		13.910					ND	
178 Bis(2-ethylhexyl) phthalat	149		14.097					ND	
179 3,3'-Dichlorobenzidine	252		14.124					ND	
177 2-Acetylaminofluorene	181		14.145					ND	
181 Benzo[a]anthracene	228		14.182					ND	
182 Chrysene	228		14.220					ND	
180 4,4'-Methylene bis(2-chlor	231		14.407					ND	
183 Di-n-octyl phthalate	149		14.669					ND	
184 6-Methylchrysene	242		14.984					ND	
185 Benzo[b]fluoranthene	252		15.240					ND	
187 Benzo[k]fluoranthene	252		15.272					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
190 Benzo[a]pyrene	252		15.625					ND	
186 7,12-Dimethylbenz(a)anthra	256		15.630					ND	
188 Hexachlorophene	196		15.740					ND	
189 Benzo[e]pyrene	252		16.042					ND	
191 3-Methylcholanthrene	252		16.549					ND	
193 Dibenz(a,h)anthracene	278		17.179					ND	
194 Indeno[1,2,3-cd]pyrene	276		17.179					ND	
192 Dibenz[a,h]acridine	279		17.409					ND	
195 Benzo[g,h,i]perylene	276		17.639					ND	
196 Dibenzo[a,e]pyrene	302		22.022					ND	
197 2-Aminopyridine TIC	1		0.000					ND	
232 Benzeneacetonitrile	1		0.700					ND	
198 n,n'-Dimethylacetamide	1		0.700					ND	
221 Pendimethalin	1		0.700					ND	
208 2,4-Toluene diamine	1		0.700					ND	
199 CBF-400	1		0.700					ND	
202 Phenyl ether	1		0.700					ND	
203 CN-500	1		0.700					ND	
204 1-Methylcyclopentanol	1		0.700					ND	
205 Octachlorostyrene	1		0.700					ND	
220 Dibenzo[a,h]pyrene	1		0.700					ND	
201 3-Chlorotoluene	1		0.700					ND	
236 o-Anisidine TIC	1		0.700					ND	
207 3-Chlorobenzotrifluoride	1		0.700					ND	
224 NVF-400	1		0.700					ND	
213 4-Chlorotoluene	91		0.700					ND	
200 Photomirex TIC	1		0.700					ND	
222 7H-Dibenzo[c,g]carbazole	1		0.700					ND	
219 5-Methyl-o-Anisidine TIC	1		0.700					ND	
217 2-Chlorobenzotrifluoride	1		0.700					ND	
218 2,6-Dichlorotoluene	1		0.700					ND	
223 p-Fluoroaniline	1		0.700					ND	
206 Phenylmercaptan	110		0.700					ND	
215 1-Bromopropane	1		0.700					ND	
214 2,6-Dichlorotoluene TIC	1		0.700					ND	
211 1,3-phenylenediamine TIC	1		0.700					ND	
229 Benzophenone	1		0.700					ND	
234 4,4'-Methylene bis(2-chlor	1		0.700					ND	
227 4-tert-Octylphenol	1		0.700					ND	
230 1,4-Dioxane TIC	1		0.700					ND	
233 Tetramethyl lead TIC	1		0.700					ND	
210 Benzeneacetic acid (TIC)	1		0.700					ND	
231 1,2,3-Trimethylbenzene	105		0.700					ND	
228 2,6-Dichloropyridine	1		0.700					ND	
235 5-Methyl-o-Anisidine	1		0.700					ND	
225 alpha,alpha-Dimethyl phene	1		0.700					ND	
226 Dibenz(a,i)pyrene	1		0.700					ND	
240 4-Chloro-3-nitro-alpha,alp	1		0.700					ND	
243 Phenylacetic Acid	1		0.700					ND	
246 2,3-Dichlorophenol	1		0.700					ND	
241 2,4-Dichlorotoluene TIC	1		0.700					ND	
242 4-Chlorobenzotrifluoride	1		0.700					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
216 3-Chlorobenzotrifluoride T	1		0.700					ND	
238 CU-600	1		0.700					ND	
239 2-Chlorobenzotrifluoride T	1		0.700					ND	
212 Dibenz[a,j]acridine	279		0.700					ND	
247 Hexamethyldisiloxane TIC	1		0.700					ND	
209 CBF-500	1		0.700					ND	
237 CAG-800	1		0.700					ND	
244 2,4-Xylidine TIC	1		0.700					ND	
245 Tris(2,3-dibromopropyl)pho	1		0.700					ND	
S 254 Total Cresols	1		0.700					ND	
S 256 3-Methylphenol	1		0.700					ND	
S 255 EPH Adjustment 1	1		0.700					ND	
S 257 3 & 4 Methylphenol	108		0.700					ND	
T 312 Fluorobenzene TIC	96		2.654					ND	
T 317 1-Bromo-2-chloroethane TIC	63		3.493					ND	
T 306 Ethylene Dibromide TIC	107		4.695					ND	
T 307 4-Chlorobenzotrifluoride T	180		5.245					ND	
T 314 1-Bromo-3-fluorobenzene TI	95		5.988					ND	
T 310 4-Bromofluorobenzene TIC	174		6.116					ND	
T 311 1,2-dichloro-4-(trifluorom	214		6.768					ND	
T 313 2-Bromopyridine TIC	78		7.099					ND	
T 308 3-Nitro-4-Chlorobenzotrifl	179		8.124					ND	
T 315 1-Bromo-4-ethylbenzene TIC	169		8.146					ND	
T 316 3-Amino-4-Chlorobenzotrifl	195		8.162					ND	
T 309 3'-Bromoacetophenone TIC	183		9.460					ND	
T 263 2,3,7,8-TCDD	322		10.700					ND	

Reagents:

MB_INTSTD_STK_00039 Amount Added: 20.00 Units: uL Run Reagent

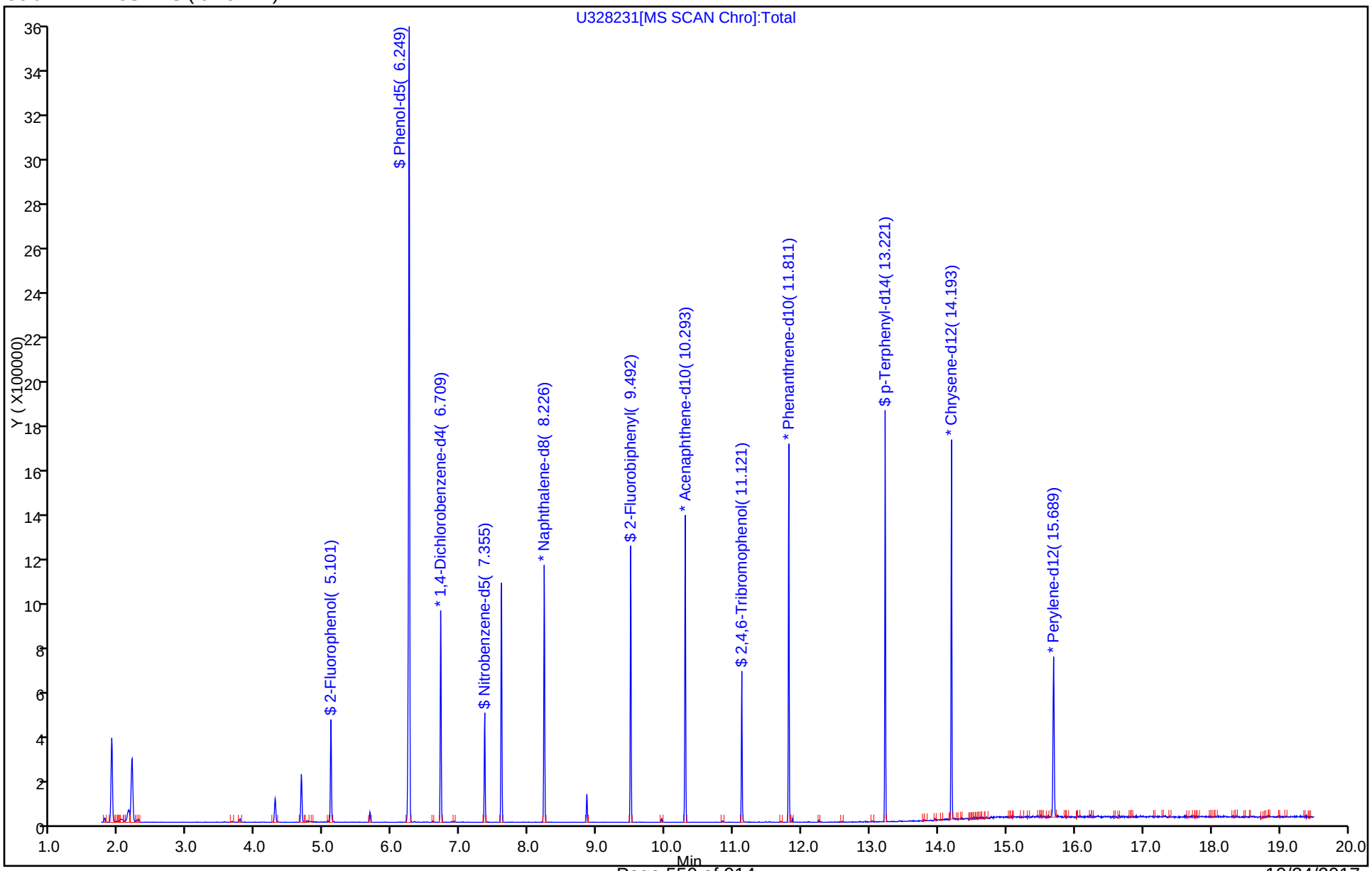
Report Date: 17-Oct-2017 11:38:16 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328231.D

Injection Date:	16-Oct-2017 20:13:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	MB 480-381332/1-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-381332/2-A

Matrix: Solid | Lab File ID: U328232.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.81(g) | Date Analyzed: 10/16/2017 20:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	1350		170	45
88-06-2	2,4,6-Trichlorophenol	1290		170	33
120-83-2	2,4-Dichlorophenol	1310		170	18
105-67-9	2,4-Dimethylphenol	1300		170	40
51-28-5	2,4-Dinitrophenol	1870		1600	760
121-14-2	2,4-Dinitrotoluene	1380		170	34
606-20-2	2,6-Dinitrotoluene	1350		170	19
91-58-7	2-Chloronaphthalene	1250		170	27
95-57-8	2-Chlorophenol	1180		170	30
91-57-6	2-Methylnaphthalene	1280		170	33
95-48-7	2-Methylphenol	1270		170	19
88-74-4	2-Nitroaniline	1260		320	24
88-75-5	2-Nitrophenol	1220		170	47
91-94-1	3,3'-Dichlorobenzidine	2940		320	190
99-09-2	3-Nitroaniline	1300		320	46
534-52-1	4,6-Dinitro-2-methylphenol	2620		320	170
101-55-3	4-Bromophenyl phenyl ether	1490		170	23
59-50-7	4-Chloro-3-methylphenol	1340		170	41
106-47-8	4-Chloroaniline	1180		170	41
7005-72-3	4-Chlorophenyl phenyl ether	1360		170	20
106-44-5	4-Methylphenol	1330		320	19
100-01-6	4-Nitroaniline	1310		320	87
100-02-7	4-Nitrophenol	2720		320	120
83-32-9	Acenaphthene	1330		170	24
208-96-8	Acenaphthylene	1310		170	21
98-86-2	Acetophenone	1230		170	22
120-12-7	Anthracene	1480		170	41
1912-24-9	Atrazine	3030		170	57
100-52-7	Benzaldehyde	2130		170	130
56-55-3	Benzo[a]anthracene	1510		170	17
50-32-8	Benzo[a]pyrene	1860		170	24
205-99-2	Benzo[b]fluoranthene	1940		170	26
191-24-2	Benzo[g,h,i]perylene	1970		170	18
207-08-9	Benzo[k]fluoranthene	1770		170	21

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-381332/2-A

Matrix: Solid | Lab File ID: U328232.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.81(g) | Date Analyzed: 10/16/2017 20:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	1300		170	24
108-60-1	bis (2-chloroisopropyl) ether	1140		170	33
111-91-1	Bis(2-chloroethoxy)methane	1180		170	35
111-44-4	Bis(2-chloroethyl)ether	1150		170	21
117-81-7	Bis(2-ethylhexyl) phthalate	1490		170	56
85-68-7	Butyl benzyl phthalate	1480		170	27
105-60-2	Caprolactam	2790		170	50
86-74-8	Carbazole	1510		170	19
218-01-9	Chrysene	1490		170	37
53-70-3	Dibenz(a,h)anthracene	1950		170	29
132-64-9	Dibenzofuran	1360		170	19
84-66-2	Diethyl phthalate	1440		170	21
131-11-3	Dimethyl phthalate	1420		170	19
84-74-2	Di-n-butyl phthalate	1510		170	28
117-84-0	Di-n-octyl phthalate	1540		170	19
206-44-0	Fluoranthene	1530		170	18
86-73-7	Fluorene	1350		170	19
118-74-1	Hexachlorobenzene	1500		170	22
87-68-3	Hexachlorobutadiene	1220		170	24
77-47-4	Hexachlorocyclopentadiene	1160		170	22
67-72-1	Hexachloroethane	1160		170	21
193-39-5	Indeno[1,2,3-cd]pyrene	1940		170	20
78-59-1	Isophorone	1300		170	35
91-20-3	Naphthalene	1230		170	21
98-95-3	Nitrobenzene	1240		170	19
621-64-7	N-Nitrosodi-n-propylamine	1220		170	28
86-30-6	N-Nitrosodiphenylamine	1490		170	130
87-86-5	Pentachlorophenol	2440		320	170
85-01-8	Phenanthrene	1480		170	24
108-95-2	Phenol	1290		170	25
129-00-0	Pyrene	1480		170	19

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-381332/2-A

Matrix: Solid | Lab File ID: U328232.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.81(g) | Date Analyzed: 10/16/2017 20:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	95		54-120
321-60-8	2-Fluorobiphenyl	80		60-120
367-12-4	2-Fluorophenol	76		52-120
4165-60-0	Nitrobenzene-d5	77		53-120
4165-62-2	Phenol-d5	78		54-120
1718-51-0	p-Terphenyl-d14	96		65-121

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328232.D
Lims ID: LCS 480-381332/2-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Oct-2017 20:39:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 480-0066446-008
Operator ID: DR Instrument ID: HP5973U

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Oct-2017 11:35:50 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: richardsd Date: 17-Oct-2017 11:16:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	95	92044	40.0	40.0	
* 2 Naphthalene-d8	136	8.226	8.226	0.000	99	310349	40.0	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	94	166394	40.0	40.0	
* 4 Phenanthrene-d10	188	11.811	11.811	0.000	96	351816	40.0	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	95	446511	40.0	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	98	344753	40.0	40.0	
$ 7 2-Fluorophenol	112	5.101	5.095	0.006	89	75468	40.0	30.5	
$ 8 Phenol-d5	99	6.233	6.228	0.005	96	87559	40.0	31.2	
$ 9 Nitrobenzene-d5	82	7.355	7.355	0.000	89	82715	40.0	30.7	
$ 10 2-Fluorobiphenyl	172	9.492	9.492	0.000	99	224213	40.0	31.9	
$ 11 2,4,6-Tribromophenol	330	11.122	11.121	0.001	89	60440	40.0	37.9	
$ 12 p-Terphenyl-d14	244	13.221	13.221	0.000	99	349582	40.0	38.5	
23 1,4-Dioxane	88	2.595	2.600	-0.005	94	20616	50.0	19.9	
24 N-Nitrosodimethylamine	42	3.076	3.081	-0.005	84	52212	50.0	36.1	
25 Pyridine	52	3.183	3.183	0.000	83	112550	100.0	51.1	
32 Benzaldehyde	77	6.169	6.174	-0.005	90	107912	100.0	65.7	
33 Phenol	94	6.249	6.244	0.005	93	108503	50.0	39.8	
34 Aniline	93	6.297	6.297	0.000	97	106841	50.0	30.8	
35 Bis(2-chloroethyl)ether	93	6.356	6.356	0.000	98	73939	50.0	35.3	
37 2-Chlorophenol	128	6.458	6.458	0.000	93	97129	50.0	36.3	
38 n-Decane	57	6.506	6.506	0.000	87	71179	50.0	28.0	
39 1,3-Dichlorobenzene	146	6.650	6.650	0.000	96	111921	50.0	34.3	
40 1,4-Dichlorobenzene	146	6.730	6.730	0.000	93	113715	50.0	34.1	
41 Benzyl alcohol	108	6.848	6.848	0.000	91	63434	50.0	39.7	
42 1,2-Dichlorobenzene	146	6.917	6.917	0.000	96	110935	50.0	35.7	
43 2-Methylphenol	108	6.976	6.976	0.000	98	86070	50.0	39.1	
44 2,2'-oxybis[1-chloropropan	45	7.013	7.013	0.000	91	103282	50.0	35.1	
45 Indene	115	7.024	7.024	0.000	89	660429	200.0	148.7	
46 4-Methylphenol	108	7.152	7.152	0.000	92	94325	50.0	41.0	
47 N-Nitrosodi-n-propylamine	70	7.158	7.157	0.001	90	58469	50.0	37.6	
49 Acetophenone	105	7.168	7.168	0.000	96	132593	50.0	37.8	
53 Hexachloroethane	117	7.329	7.328	0.001	84	44097	50.0	35.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
54 Nitrobenzene	77	7.377	7.376	0.001	89	94404	50.0	38.4	
56 Isophorone	82	7.654	7.654	0.000	97	165697	50.0	40.0	
59 2-Nitrophenol	139	7.761	7.761	0.000	95	57369	50.0	37.5	
60 2,4-Dimethylphenol	107	7.788	7.788	0.000	97	110724	50.0	39.9	
62 Bis(2-chloroethoxy)methane	93	7.895	7.895	0.000	99	90772	50.0	36.3	
64 Benzoic acid	105	7.905	7.911	-0.006	88	217989	200.0	123.7	
67 2,4-Dichlorophenol	162	8.044	8.044	0.000	91	102453	50.0	40.2	
68 1,2,4-Trichlorobenzene	180	8.157	8.156	0.001	94	113237	50.0	37.8	
70 Naphthalene	128	8.253	8.253	0.000	97	276356	50.0	37.9	
72 4-Chloroaniline	127	8.290	8.290	0.000	97	111897	50.0	36.3	
73 2,6-Dichlorophenol	162	8.312	8.311	0.001	97	99529	50.0	40.3	
74 Hexachlorobutadiene	225	8.402	8.402	0.000	94	91386	50.0	37.5	
76 Caprolactam	113	8.691	8.680	0.011	81	57857	100.0	85.8	
80 4-Chloro-3-methylphenol	107	8.856	8.851	0.005	93	91610	50.0	41.3	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	90	215408	50.0	39.5	
85 1-Methylnaphthalene	142	9.193	9.193	0.000	90	212146	50.0	41.1	
86 Hexachlorocyclopentadiene	237	9.273	9.273	0.000	95	112416	50.0	35.7	
87 1,2,4,5-Tetrachlorobenzene	216	9.278	9.278	0.000	96	134679	50.0	38.1	
89 2,4,6-Trichlorophenol	196	9.401	9.396	0.005	90	84413	50.0	39.9	
91 2,4,5-Trichlorophenol	196	9.444	9.444	0.000	94	93230	50.0	41.6	
94 1,1'-Biphenyl	154	9.615	9.615	0.000	94	285936	50.0	40.0	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	96	215057	50.0	38.6	
98 2-Nitroaniline	65	9.749	9.748	0.001	86	54018	50.0	38.8	
102 Dimethyl phthalate	163	9.946	9.946	0.000	99	282477	50.0	43.8	
103 1,3-Dinitrobenzene	168	9.984	9.983	0.001	95	50405	50.0	45.5	
104 2,6-Dinitrotoluene	165	10.016	10.016	0.000	94	61271	50.0	41.5	
105 Acenaphthylene	152	10.133	10.133	0.000	97	328628	50.0	40.3	
106 3-Nitroaniline	138	10.213	10.213	0.000	93	60462	50.0	40.1	
107 2,4-Dinitrophenol	184	10.326	10.331	-0.005	80	62871	100.0	57.7	
108 Acenaphthene	153	10.326	10.331	-0.005	89	233481	50.0	41.1	
109 4-Nitrophenol	109	10.379	10.379	0.000	84	111620	100.0	83.8	
111 2,4-Dinitrotoluene	165	10.470	10.470	0.000	94	84841	50.0	42.7	
112 Dibenzofuran	168	10.513	10.512	0.000	95	347984	50.0	41.9	
116 2,3,4,6-Tetrachlorophenol	232	10.641	10.641	0.000	69	91089	50.0	41.6	
118 Diethyl phthalate	149	10.721	10.721	0.000	98	308046	50.0	44.4	
119 Hexadecane	57	10.737	10.737	0.000	94	115066	50.0	37.9	
121 4-Chlorophenyl phenyl ethe	204	10.860	10.860	0.000	88	160080	50.0	42.0	
122 4-Nitroaniline	138	10.870	10.870	0.000	82	65677	50.0	40.3	
123 Fluorene	166	10.876	10.876	0.000	96	278432	50.0	41.5	
125 4,6-Dinitro-2-methylphenol	198	10.908	10.908	0.000	90	97686	100.0	80.6	
128 Diphenylamine	169	10.977	10.977	0.000	93	212587	42.8	39.3	
127 N-Nitrosodiphenylamine	169	10.977	10.977	0.000	62	212587	50.0	45.9	
130 Azobenzene	77	11.020	11.025	-0.005	96	210922	50.0	43.1	
129 1,2-Diphenylhydrazine	77	11.020	11.025	-0.005	97	210922	50.0	43.1	
137 4-Bromophenyl phenyl ether	248	11.357	11.356	0.001	58	113944	50.0	46.0	
139 Hexachlorobenzene	284	11.447	11.447	0.000	96	138569	50.0	46.2	
141 Atrazine	200	11.490	11.485	0.005	94	188839	100.0	93.2	
143 Pentachlorophenol	266	11.624	11.629	-0.005	91	121470	100.0	75.2	
144 n-Octadecane	57	11.645	11.650	-0.005	93	125068	50.0	42.0	
150 Phenanthrene	178	11.832	11.832	0.000	96	414853	50.0	45.5	
151 Anthracene	178	11.880	11.880	0.000	96	430676	50.0	45.7	
152 Carbazole	167	12.014	12.014	0.000	96	397925	50.0	46.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
155 Di-n-butyl phthalate	149	12.291	12.291	0.000	100	493208	50.0	46.6	
162 Fluoranthene	202	12.922	12.922	0.000	95	537593	50.0	47.2	
164 Benzidine	184	12.997	13.002	-0.005	98	311861	100.0	54.9	
165 Pyrene	202	13.125	13.130	-0.005	98	540532	50.0	45.5	
172 Butyl benzyl phthalate	149	13.616	13.616	0.000	94	231645	50.0	45.5	
178 Bis(2-ethylhexyl) phthalat	149	14.097	14.097	0.000	92	318179	50.0	46.0	
179 3,3'-Dichlorobenzidine	252	14.124	14.124	0.000	72	438089	100.0	90.7	
181 Benzo[a]anthracene	228	14.183	14.182	0.001	96	575911	50.0	46.5	
182 Chrysene	228	14.220	14.220	0.000	94	541997	50.0	45.9	
183 Di-n-octyl phthalate	149	14.669	14.669	0.000	98	547488	50.0	47.4	
185 Benzo[b]fluoranthene	252	15.240	15.240	0.000	94	625580	50.0	59.7	
187 Benzo[k]fluoranthene	252	15.267	15.272	-0.005	96	585073	50.0	54.7	
190 Benzo[a]pyrene	252	15.625	15.625	0.000	73	560188	50.0	57.3	
193 Dibenz(a,h)anthracene	278	17.174	17.179	-0.005	88	604715	50.0	60.1	
194 Indeno[1,2,3-cd]pyrene	276	17.180	17.179	0.001	94	708996	50.0	59.9	
195 Benzo[g,h,i]perylene	276	17.634	17.639	-0.005	95	600944	50.0	60.8	
S 256 3-Methylphenol	1				0		50.0	41.0	

Reagents:

MB_INTSTD_STK_00039 Amount Added: 20.00 Units: uL Run Reagent

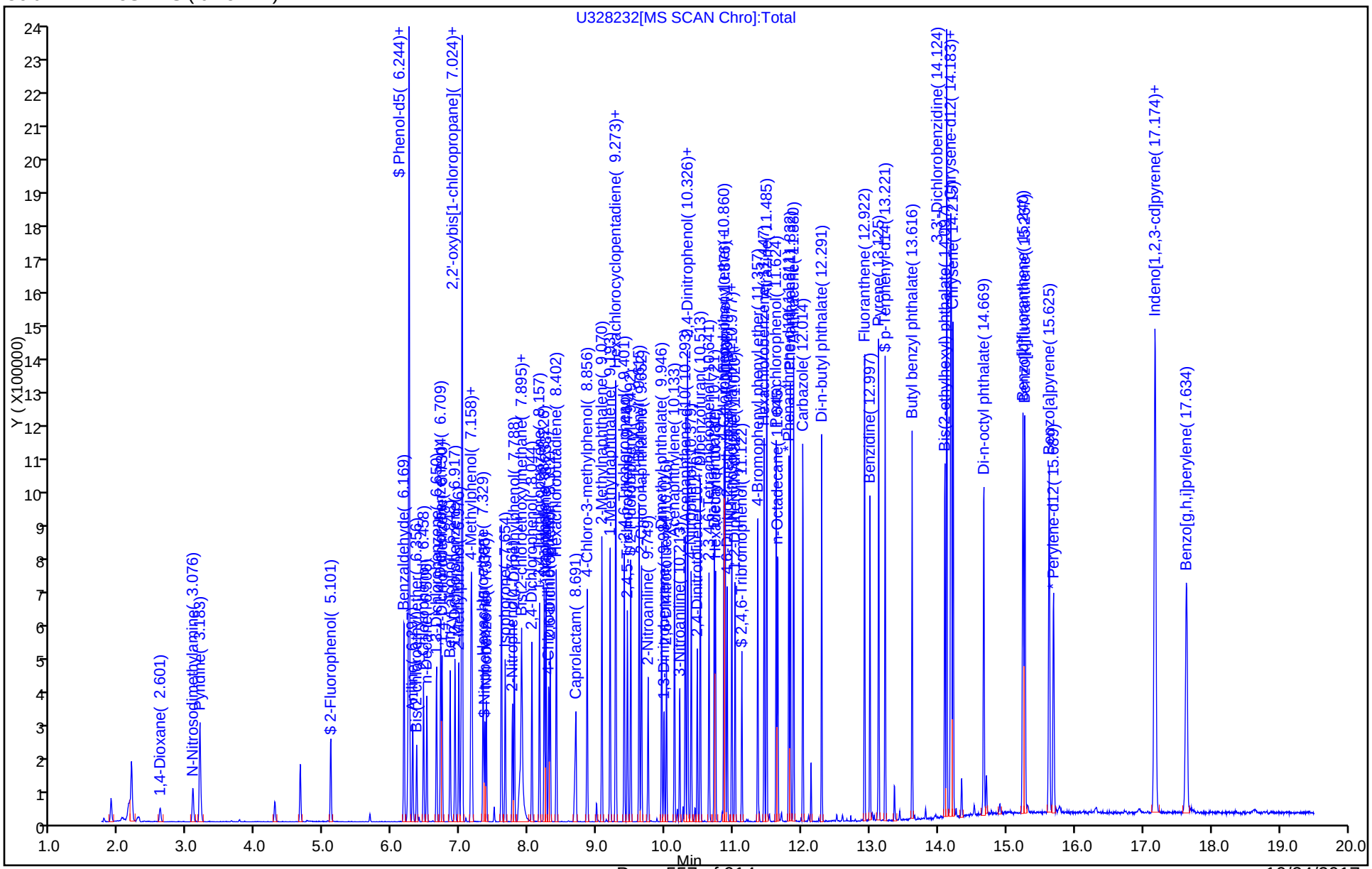
Report Date: 17-Oct-2017 11:38:15 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328232.D

Injection Date:	16-Oct-2017 20:39:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	LCS 480-381332/2-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MS | Lab Sample ID: 480-125579-1 MS

Matrix: Solid | Lab File ID: U328233.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.78(g) | Date Analyzed: 10/16/2017 21:05

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		20000	5300
88-06-2	2,4,6-Trichlorophenol	ND		20000	3900
120-83-2	2,4-Dichlorophenol	ND		20000	2100
105-67-9	2,4-Dimethylphenol	ND		20000	4700
51-28-5	2,4-Dinitrophenol	ND		190000	91000
121-14-2	2,4-Dinitrotoluene	ND		20000	4000
606-20-2	2,6-Dinitrotoluene	ND		20000	2300
91-58-7	2-Chloronaphthalene	ND		20000	3200
95-57-8	2-Chlorophenol	ND		20000	3600
91-57-6	2-Methylnaphthalene	4060	J	20000	3900
95-48-7	2-Methylphenol	ND		20000	2300
88-74-4	2-Nitroaniline	ND		38000	2900
88-75-5	2-Nitrophenol	ND		20000	5500
91-94-1	3,3'-Dichlorobenzidine	ND		38000	23000
99-09-2	3-Nitroaniline	ND		38000	5400
534-52-1	4,6-Dinitro-2-methylphenol	ND		38000	20000
101-55-3	4-Bromophenyl phenyl ether	ND		20000	2800
59-50-7	4-Chloro-3-methylphenol	ND		20000	4900
106-47-8	4-Chloroaniline	ND		20000	4900
7005-72-3	4-Chlorophenyl phenyl ether	ND		20000	2400
106-44-5	4-Methylphenol	ND		38000	2300
100-01-6	4-Nitroaniline	ND		38000	10000
100-02-7	4-Nitrophenol	ND		38000	14000
83-32-9	Acenaphthene	5760	J	20000	2900
208-96-8	Acenaphthylene	16700	J	20000	2500
98-86-2	Acetophenone	ND		20000	2700
120-12-7	Anthracene	39700		20000	4900
1912-24-9	Atrazine	ND		20000	6800
100-52-7	Benzaldehyde	ND		20000	16000
56-55-3	Benzo[a]anthracene	78500		20000	2000
50-32-8	Benzo[a]pyrene	73300		20000	2900
205-99-2	Benzo[b]fluoranthene	79300		20000	3100
191-24-2	Benzo[g,h,i]perylene	41300		20000	2100
207-08-9	Benzo[k]fluoranthene	47600		20000	2500

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MS | Lab Sample ID: 480-125579-1 MS

Matrix: Solid | Lab File ID: U328233.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.78(g) | Date Analyzed: 10/16/2017 21:05

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		20000	2900
108-60-1	bis (2-chloroisopropyl) ether	ND		20000	3900
111-91-1	Bis(2-chloroethoxy)methane	ND		20000	4200
111-44-4	Bis(2-chloroethyl)ether	ND		20000	2500
117-81-7	Bis(2-ethylhexyl) phthalate	ND		20000	6700
85-68-7	Butyl benzyl phthalate	ND		20000	3200
105-60-2	Caprolactam	ND		20000	5900
86-74-8	Carbazole	3420	J	20000	2300
218-01-9	Chrysene	64700		20000	4400
53-70-3	Dibenz(a,h)anthracene	ND		20000	3500
132-64-9	Dibenzofuran	13100	J	20000	2300
84-66-2	Diethyl phthalate	ND		20000	2500
131-11-3	Dimethyl phthalate	ND		20000	2300
84-74-2	Di-n-butyl phthalate	ND		20000	3300
117-84-0	Di-n-octyl phthalate	ND		20000	2300
206-44-0	Fluoranthene	152000		20000	2100
86-73-7	Fluorene	22000		20000	2300
118-74-1	Hexachlorobenzene	ND		20000	2700
87-68-3	Hexachlorobutadiene	ND		20000	2900
77-47-4	Hexachlorocyclopentadiene	ND		20000	2700
67-72-1	Hexachloroethane	ND		20000	2500
193-39-5	Indeno[1,2,3-cd]pyrene	40800		20000	2400
78-59-1	Isophorone	ND		20000	4200
91-20-3	Naphthalene	3040	J	20000	2500
98-95-3	Nitrobenzene	ND		20000	2200
621-64-7	N-Nitrosodi-n-propylamine	ND		20000	3300
86-30-6	N-Nitrosodiphenylamine	ND		20000	16000
87-86-5	Pentachlorophenol	ND		38000	20000
85-01-8	Phenanthrene	117000		20000	2900
108-95-2	Phenol	ND		20000	3000
129-00-0	Pyrene	124000		20000	2300

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MS | Lab Sample ID: 480-125579-1 MS

Matrix: Solid | Lab File ID: U328233.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.78(g) | Date Analyzed: 10/16/2017 21:05

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	0	X	54-120
321-60-8	2-Fluorobiphenyl	0	X	60-120
367-12-4	2-Fluorophenol	0	X	52-120
4165-60-0	Nitrobenzene-d5	0	X	53-120
4165-62-2	Phenol-d5	0	X	54-120
1718-51-0	p-Terphenyl-d14	0	X	65-121

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328233.D
Lims ID: 480-125579-E-1-A MS
Client ID: MW-8 (4-6)
Sample Type: MS
Inject. Date: 16-Oct-2017 21:05:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 100.0000
Sample Info: 480-0066446-009
Operator ID: DR Instrument ID: HP5973U

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Oct-2017 11:35:50 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: richardsd Date: 17-Oct-2017 11:18:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	95	121140	0.4000	40.0	
* 2 Naphthalene-d8	136	8.226	8.226	0.000	99	386209	0.4000	40.0	
* 3 Acenaphthene-d10	164	10.293	10.293	0.000	94	192391	0.4000	40.0	
* 4 Phenanthrene-d10	188	11.810	11.811	-0.001	96	403161	0.4000	40.0	
* 5 Chrysene-d12	240	14.193	14.193	0.000	95	493583	0.4000	40.0	
* 6 Perylene-d12	264	15.689	15.689	0.000	98	403955	0.4000	40.0	
$ 7 2-Fluorophenol	112		5.095				ND	ND	
$ 8 Phenol-d5	99		6.228				ND	ND	
$ 9 Nitrobenzene-d5	82		7.355				ND	ND	
$ 10 2-Fluorobiphenyl	172		9.492				ND	ND	
$ 11 2,4,6-Tribromophenol	330		11.121				ND	ND	
$ 12 p-Terphenyl-d14	244		13.221				ND	ND	
23 1,4-Dioxane	88		2.600				ND	ND	
24 N-Nitrosodimethylamine	42		3.081				ND	ND	
25 Pyridine	52		3.183				ND	ND	
32 Benzaldehyde	77		6.174				ND	ND	
33 Phenol	94		6.244				ND	ND	
34 Aniline	93		6.297				ND	ND	
35 Bis(2-chloroethyl)ether	93		6.356				ND	ND	
37 2-Chlorophenol	128		6.458				ND	ND	
38 n-Decane	57		6.506				ND	ND	
39 1,3-Dichlorobenzene	146		6.650				ND	ND	
40 1,4-Dichlorobenzene	146		6.730				ND	ND	
41 Benzyl alcohol	108		6.848				ND	ND	
42 1,2-Dichlorobenzene	146		6.917				ND	ND	
43 2-Methylphenol	108		6.976				ND	ND	
44 2,2'-oxybis[1-chloropropan	45		7.013				ND	ND	
45 Indene	115	7.024	7.024	0.000	85	8173	2.00	1.40	
46 4-Methylphenol	108		7.152				ND	ND	
47 N-Nitrosodi-n-propylamine	70		7.157				ND	ND	
49 Acetophenone	105		7.168				ND	ND	
53 Hexachloroethane	117		7.328				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
54 Nitrobenzene	77		7.376				ND	ND	
56 Isophorone	82		7.654				ND	ND	
59 2-Nitrophenol	139		7.761				ND	ND	
60 2,4-Dimethylphenol	107		7.788				ND	ND	
62 Bis(2-chloroethoxy)methane	93		7.895				ND	ND	
64 Benzoic acid	105		7.911				ND	ND	
67 2,4-Dichlorophenol	162		8.044				ND	ND	
68 1,2,4-Trichlorobenzene	180		8.156				ND	ND	
70 Naphthalene	128	8.253	8.253	0.000	94	7169	0.5000	0.7901	
72 4-Chloroaniline	127		8.290				ND	ND	
73 2,6-Dichlorophenol	162		8.311				ND	ND	
74 Hexachlorobutadiene	225		8.402				ND	ND	
76 Caprolactam	113		8.680				ND	ND	
80 4-Chloro-3-methylphenol	107		8.851				ND	ND	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	94	7160	0.5000	1.05	
85 1-Methylnaphthalene	142	9.187	9.193	-0.006	92	9841	0.5000	1.53	
86 Hexachlorocyclopentadiene	237		9.273				ND	ND	
87 1,2,4,5-Tetrachlorobenzene	216		9.278				ND	ND	
89 2,4,6-Trichlorophenol	196		9.396				ND	ND	
91 2,4,5-Trichlorophenol	196		9.444				ND	ND	
94 1,1'-Biphenyl	154		9.615				ND	ND	
95 2-Chloronaphthalene	162		9.652				ND	ND	
98 2-Nitroaniline	65		9.748				ND	ND	
102 Dimethyl phthalate	163		9.946				ND	ND	
103 1,3-Dinitrobenzene	168		9.983				ND	ND	
104 2,6-Dinitrotoluene	165		10.016				ND	ND	
105 Acenaphthylene	152	10.133	10.133	0.000	97	40931	0.5000	4.35	
106 3-Nitroaniline	138		10.213				ND	ND	
107 2,4-Dinitrophenol	184		10.331				ND	ND	
108 Acenaphthene	153	10.325	10.331	-0.006	92	9827	0.5000	1.49	
109 4-Nitrophenol	109		10.379				ND	ND	
111 2,4-Dinitrotoluene	165		10.470				ND	ND	
112 Dibenzofuran	168	10.512	10.512	0.000	94	32718	0.5000	3.41	
116 2,3,4,6-Tetrachlorophenol	232		10.641				ND	ND	
118 Diethyl phthalate	149		10.721				ND	ND	
119 Hexadecane	57		10.737				ND	ND	
121 4-Chlorophenyl phenyl ethe	204		10.860				ND	ND	
122 4-Nitroaniline	138		10.870				ND	ND	
123 Fluorene	166	10.876	10.876	0.000	96	44250	0.5000	5.71	
125 4,6-Dinitro-2-methylphenol	198		10.908				ND	ND	
128 Diphenylamine	169		10.977				ND	ND	
127 N-Nitrosodiphenylamine	169		10.977				ND	ND	
130 Azobenzene	77		11.025				ND	ND	
129 1,2-Diphenylhydrazine	77		11.025				ND	ND	
137 4-Bromophenyl phenyl ether	248		11.356				ND	ND	
139 Hexachlorobenzene	284		11.447				ND	ND	
141 Atrazine	200		11.485				ND	ND	
143 Pentachlorophenol	266		11.629				ND	ND	
144 n-Octadecane	57		11.650				ND	ND	
150 Phenanthrene	178	11.832	11.832	0.000	96	317807	0.5000	30.4	
151 Anthracene	178	11.880	11.880	0.000	96	111429	0.5000	10.3	
152 Carbazole	167	12.013	12.014	-0.001	94	8722	0.5000	0.8890	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
155 Di-n-butyl phthalate	149		12.291				ND	ND	
162 Fluoranthene	202	12.922	12.922	0.000	95	515969	0.5000	39.5	
164 Benzidine	184		13.002				ND	ND	
165 Pyrene	202	13.125	13.130	-0.005	98	423288	0.5000	32.2	
172 Butyl benzyl phthalate	149		13.616				ND	ND	
178 Bis(2-ethylhexyl) phthalat	149		14.097				ND	ND	
179 3,3'-Dichlorobenzidine	252		14.124				ND	ND	
181 Benzo[a]anthracene	228	14.182	14.182	0.000	96	279224	0.5000	20.4	
182 Chrysene	228	14.214	14.220	-0.006	94	219473	0.5000	16.8	
183 Di-n-octyl phthalate	149		14.669				ND	ND	
185 Benzo[b]fluoranthene	252	15.240	15.240	0.000	93	253035	0.5000	20.6	
187 Benzo[k]fluoranthene	252	15.262	15.272	-0.010	96	154953	0.5000	12.4	M
190 Benzo[a]pyrene	252	15.625	15.625	0.000	73	217921	0.5000	19.0	
193 Dibenz(a,h)anthracene	278		17.179				ND	ND	
194 Indeno[1,2,3-cd]pyrene	276	17.174	17.179	-0.005	94	139898	0.5000	10.6	
195 Benzo[g,h,i]perylene	276	17.634	17.639	-0.005	95	116419	0.5000	10.7	
S 256 3-Methylphenol	1		0.700				0.5000	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MB_INTSTD_STK_00039 Amount Added: 20.00 Units: uL Run Reagent

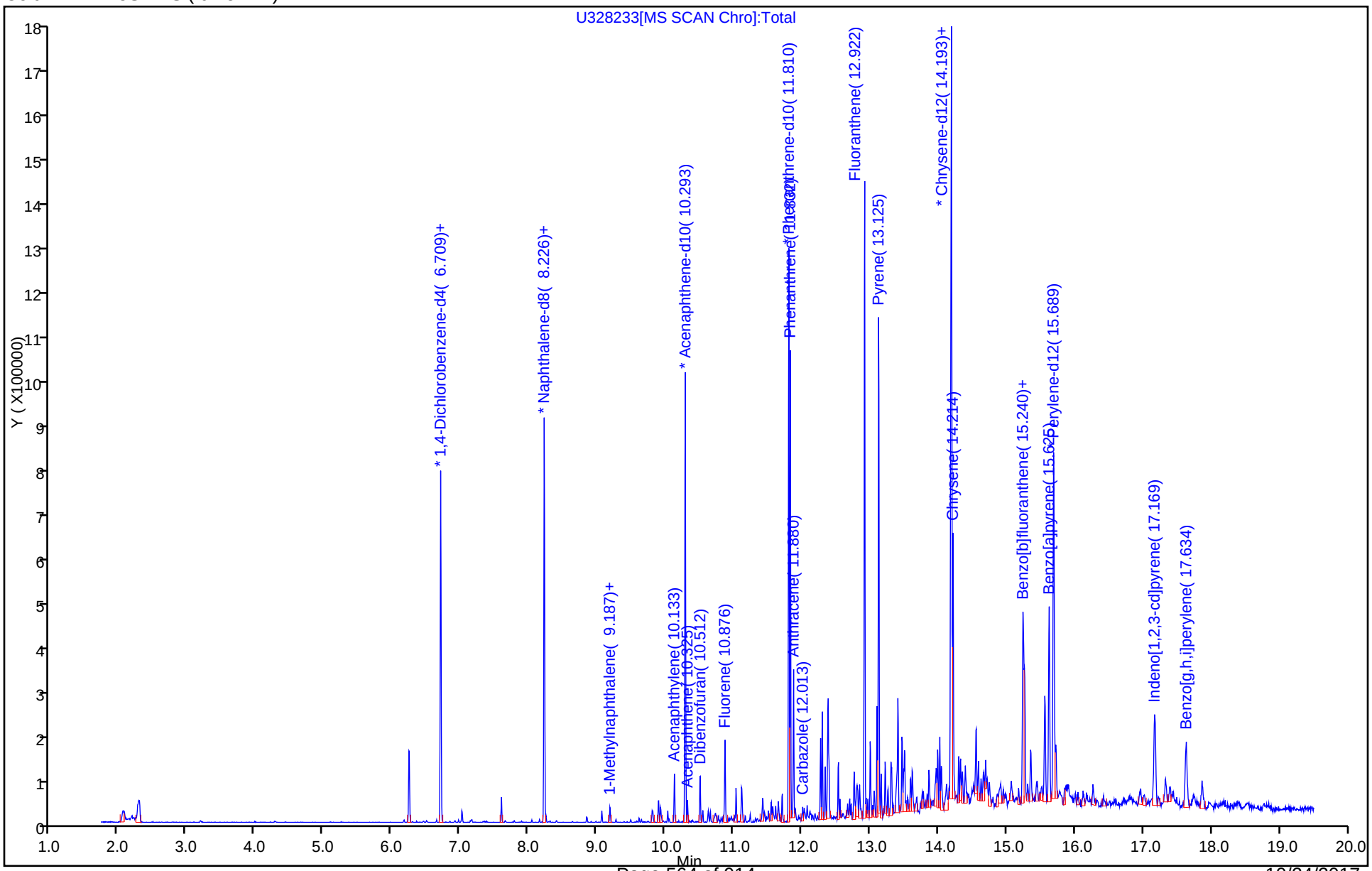
Report Date: 17-Oct-2017 11:38:13 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328233.D

Injection Date:	16-Oct-2017 21:05:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	480-125579-E-1-A MS			Worklist Smp#:	9
Client ID:	MW-8 (4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	100.0000	ALS Bottle#:	9
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

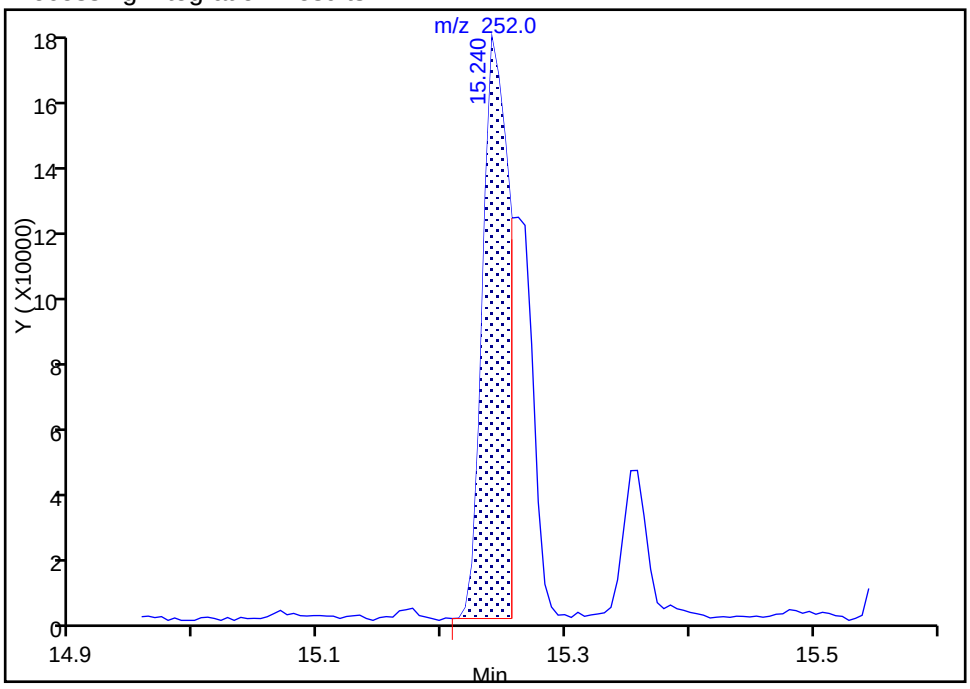
Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328233.D				
Injection Date:	16-Oct-2017 21:05:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-E-1-A MS				
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

187 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

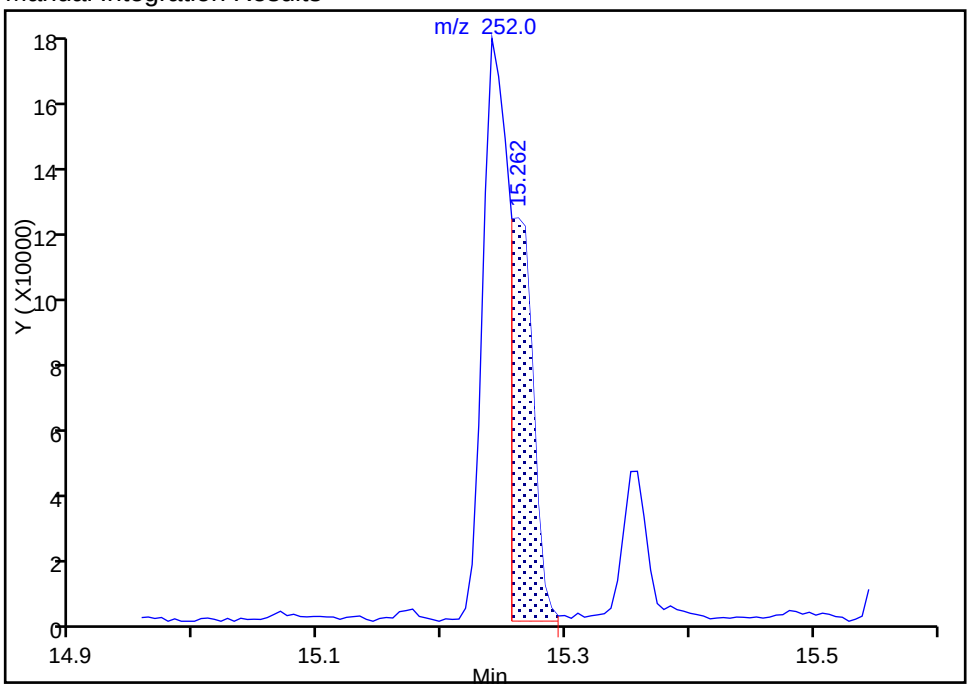
Processing Integration Results

RT: 15.24
Area: 253035
Amount: 20.183573
Amount Units: ng/uL



Manual Integration Results

RT: 15.26
Area: 154953
Amount: 12.359970
Amount Units: ng/uL



Reviewer: richardsd, 17-Oct-2017 11:16:55

Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

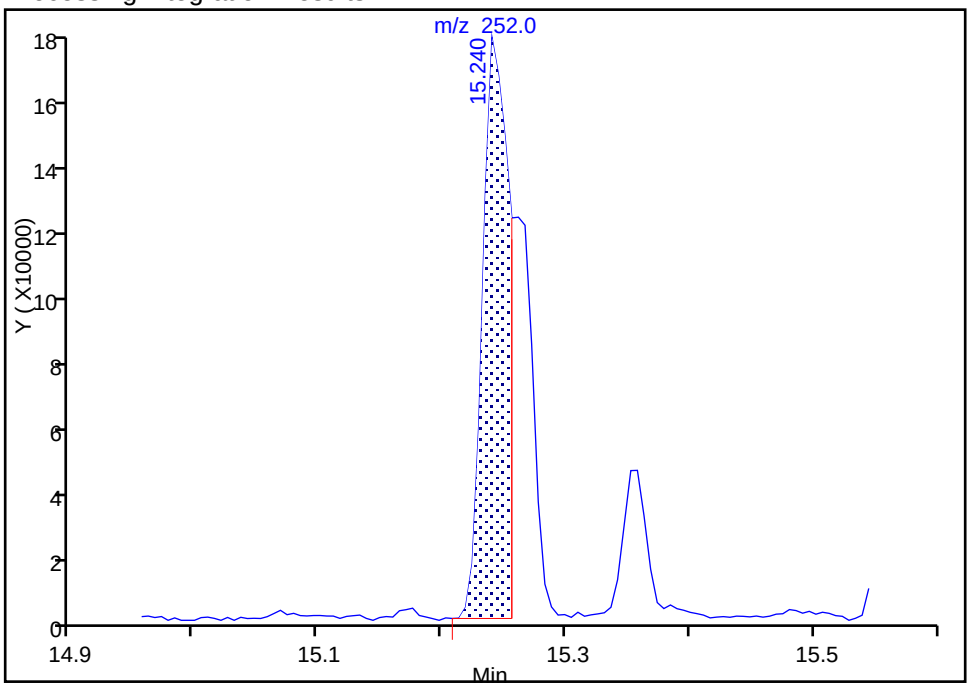
Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328233.D				
Injection Date:	16-Oct-2017 21:05:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-E-1-A MS				
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

187 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

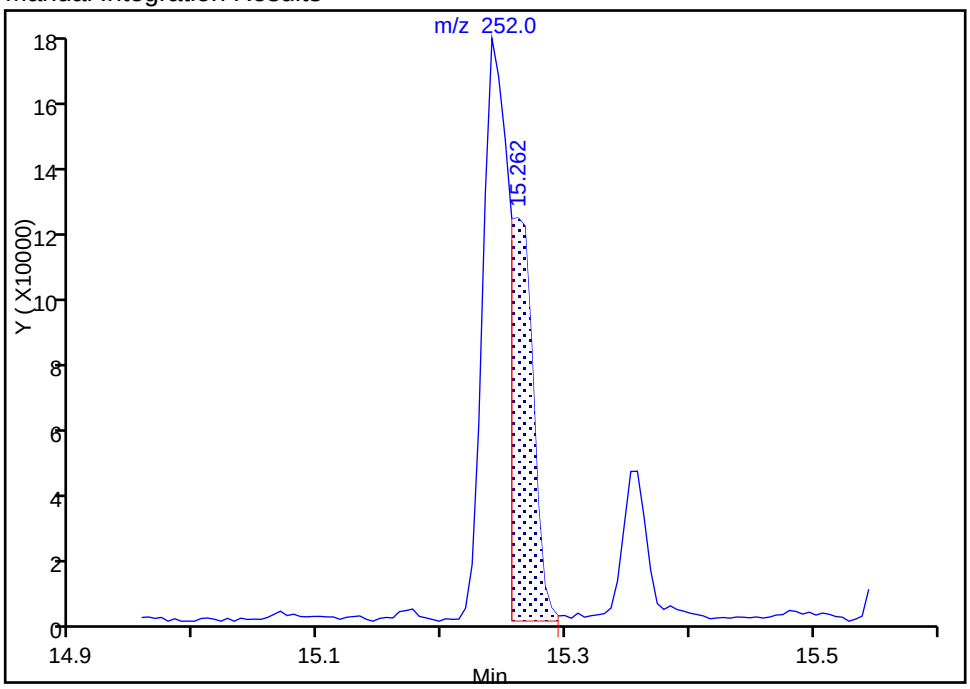
Processing Integration Results

RT: 15.24
Area: 253035
Amount: 20.183573
Amount Units: ng/uL



Manual Integration Results

RT: 15.26
Area: 154953
Amount: 12.359970
Amount Units: ng/uL



Reviewer: richardsd, 17-Oct-2017 11:17:05

Audit Action: Manually Integrated Audit Reason: Assign Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MSD | Lab Sample ID: 480-125579-1 MSD

Matrix: Solid | Lab File ID: U328234.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.62(g) | Date Analyzed: 10/16/2017 21:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		20000	5300
88-06-2	2,4,6-Trichlorophenol	ND		20000	3900
120-83-2	2,4-Dichlorophenol	ND		20000	2100
105-67-9	2,4-Dimethylphenol	ND		20000	4800
51-28-5	2,4-Dinitrophenol	ND		190000	91000
121-14-2	2,4-Dinitrotoluene	ND		20000	4100
606-20-2	2,6-Dinitrotoluene	ND		20000	2300
91-58-7	2-Chloronaphthalene	ND		20000	3300
95-57-8	2-Chlorophenol	ND		20000	3600
91-57-6	2-Methylnaphthalene	ND		20000	3900
95-48-7	2-Methylphenol	ND		20000	2300
88-74-4	2-Nitroaniline	ND		38000	2900
88-75-5	2-Nitrophenol	ND		20000	5600
91-94-1	3,3'-Dichlorobenzidine	ND		38000	23000
99-09-2	3-Nitroaniline	ND		38000	5500
534-52-1	4,6-Dinitro-2-methylphenol	ND		38000	20000
101-55-3	4-Bromophenyl phenyl ether	ND		20000	2800
59-50-7	4-Chloro-3-methylphenol	ND		20000	4900
106-47-8	4-Chloroaniline	ND		20000	4900
7005-72-3	4-Chlorophenyl phenyl ether	ND		20000	2400
106-44-5	4-Methylphenol	ND		38000	2300
100-01-6	4-Nitroaniline	ND		38000	10000
100-02-7	4-Nitrophenol	ND		38000	14000
83-32-9	Acenaphthene	7940	J	20000	2900
208-96-8	Acenaphthylene	26500		20000	2600
98-86-2	Acetophenone	ND		20000	2700
120-12-7	Anthracene	60700		20000	4900
1912-24-9	Atrazine	ND		20000	6900
100-52-7	Benzaldehyde	ND		20000	16000
56-55-3	Benzo[a]anthracene	120000		20000	2000
50-32-8	Benzo[a]pyrene	113000		20000	2900
205-99-2	Benzo[b]fluoranthene	137000		20000	3100
191-24-2	Benzo[g,h,i]perylene	62700		20000	2100
207-08-9	Benzo[k]fluoranthene	55000		20000	2600

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MSD | Lab Sample ID: 480-125579-1 MSD

Matrix: Solid | Lab File ID: U328234.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.62(g) | Date Analyzed: 10/16/2017 21:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		20000	2900
108-60-1	bis (2-chloroisopropyl) ether	ND		20000	3900
111-91-1	Bis(2-chloroethoxy)methane	ND		20000	4200
111-44-4	Bis(2-chloroethyl)ether	ND		20000	2600
117-81-7	Bis(2-ethylhexyl) phthalate	ND		20000	6700
85-68-7	Butyl benzyl phthalate	ND		20000	3300
105-60-2	Caprolactam	ND		20000	5900
86-74-8	Carbazole	4700	J	20000	2300
218-01-9	Chrysene	98100		20000	4400
53-70-3	Dibenz(a,h)anthracene	ND		20000	3500
132-64-9	Dibenzofuran	15500	J	20000	2300
84-66-2	Diethyl phthalate	ND		20000	2600
131-11-3	Dimethyl phthalate	ND		20000	2300
84-74-2	Di-n-butyl phthalate	ND		20000	3400
117-84-0	Di-n-octyl phthalate	ND		20000	2300
206-44-0	Fluoranthene	233000		20000	2100
86-73-7	Fluorene	29500		20000	2300
118-74-1	Hexachlorobenzene	ND		20000	2700
87-68-3	Hexachlorobutadiene	ND		20000	2900
77-47-4	Hexachlorocyclopentadiene	ND		20000	2700
67-72-1	Hexachloroethane	ND		20000	2600
193-39-5	Indeno[1,2,3-cd]pyrene	63400		20000	2400
78-59-1	Isophorone	ND		20000	4200
91-20-3	Naphthalene	4050	J	20000	2600
98-95-3	Nitrobenzene	ND		20000	2200
621-64-7	N-Nitrosodi-n-propylamine	ND		20000	3400
86-30-6	N-Nitrosodiphenylamine	ND		20000	16000
87-86-5	Pentachlorophenol	ND		38000	20000
85-01-8	Phenanthrene	165000		20000	2900
108-95-2	Phenol	ND		20000	3000
129-00-0	Pyrene	189000		20000	2300

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Client Sample ID: MW-8 (4-6) MSD | Lab Sample ID: 480-125579-1 MSD

Matrix: Solid | Lab File ID: U328234.D

Analysis Method: 8270D | Date Collected: 10/08/2017 11:30

Extract. Method: 3550C | Date Extracted: 10/11/2017 14:06

Sample wt/vol: 30.62(g) | Date Analyzed: 10/16/2017 21:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 100

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 382085 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	0	X	54-120
321-60-8	2-Fluorobiphenyl	75		60-120
367-12-4	2-Fluorophenol	47	X	52-120
4165-60-0	Nitrobenzene-d5	63		53-120
4165-62-2	Phenol-d5	0	X	54-120
1718-51-0	p-Terphenyl-d14	119		65-121

TestAmerica Buffalo
Target Compound Quantitation Report

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328234.D
Lims ID: 480-125579-F-1-D MSD
Client ID: MW-8 (4-6)
Sample Type: MSD
Inject. Date: 16-Oct-2017 21:32:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 100.0000
Sample Info: 480-0066446-010
Operator ID: DR Instrument ID: HP5973U

Method: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Oct-2017 11:35:50 Calib Date: 16-Oct-2017 14:19:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66432.b\U328222.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: XAWRK024

First Level Reviewer: richardsd Date: 17-Oct-2017 11:20:46

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.709	6.709	0.000	94	107519	0.4000	40.0	
*	2 Naphthalene-d8	136	8.226	8.226	0.000	99	362961	0.4000	40.0	
*	3 Acenaphthene-d10	164	10.293	10.293	0.000	96	187134	0.4000	40.0	
*	4 Phenanthrene-d10	188	11.811	11.811	0.000	96	416284	0.4000	40.0	
*	5 Chrysene-d12	240	14.193	14.193	0.000	95	529808	0.4000	40.0	
*	6 Perylene-d12	264	15.689	15.689	0.000	98	424892	0.4000	40.0	
$	7 2-Fluorophenol	112	5.101	5.095	0.006	1	541	0.4000	0.1873	
$	8 Phenol-d5	99		6.228				ND	ND	
$	9 Nitrobenzene-d5	82	7.355	7.355	0.000	1	793	0.4000	0.2516	
$	10 2-Fluorobiphenyl	172	9.492	9.492	0.000	1	2383	0.4000	0.3016	
$	11 2,4,6-Tribromophenol	330		11.121				ND	ND	M
$	12 p-Terphenyl-d14	244	13.221	13.221	0.000	1	5146	0.4000	0.4772	
	23 1,4-Dioxane	88		2.600				ND	ND	
	24 N-Nitrosodimethylamine	42		3.081				ND	ND	
	25 Pyridine	52		3.183				ND	ND	
	32 Benzaldehyde	77		6.174				ND	ND	
	33 Phenol	94		6.244				ND	ND	
	34 Aniline	93		6.297				ND	ND	
	35 Bis(2-chloroethyl)ether	93		6.356				ND	ND	
	37 2-Chlorophenol	128		6.458				ND	ND	
	38 n-Decane	57		6.506				ND	ND	
	39 1,3-Dichlorobenzene	146		6.650				ND	ND	
	40 1,4-Dichlorobenzene	146		6.730				ND	ND	
	41 Benzyl alcohol	108		6.848				ND	ND	
	42 1,2-Dichlorobenzene	146		6.917				ND	ND	
	43 2-Methylphenol	108		6.976				ND	ND	
	44 2,2'-oxybis[1-chloropropan	45		7.013				ND	ND	
	45 Indene	115	7.024	7.024	0.000	82	9139	2.00	1.76	
	46 4-Methylphenol	108		7.152				ND	ND	
	47 N-Nitrosodi-n-propylamine	70		7.157				ND	ND	
	49 Acetophenone	105		7.168				ND	ND	
	53 Hexachloroethane	117		7.328				ND	ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
54 Nitrobenzene	77		7.376				ND	ND	
56 Isophorone	82		7.654				ND	ND	
59 2-Nitrophenol	139		7.761				ND	ND	
60 2,4-Dimethylphenol	107		7.788				ND	ND	
62 Bis(2-chloroethoxy)methane	93		7.895				ND	ND	
64 Benzoic acid	105		7.911				ND	ND	
67 2,4-Dichlorophenol	162		8.044				ND	ND	
68 1,2,4-Trichlorobenzene	180		8.156				ND	ND	
70 Naphthalene	128	8.253	8.253	0.000	93	8920	0.5000	1.05	
72 4-Chloroaniline	127		8.290				ND	ND	
73 2,6-Dichlorophenol	162		8.311				ND	ND	
74 Hexachlorobutadiene	225		8.402				ND	ND	
76 Caprolactam	113		8.680				ND	ND	
80 4-Chloro-3-methylphenol	107		8.851				ND	ND	
83 2-Methylnaphthalene	142	9.070	9.070	0.000	93	6391	0.5000	1.00	
85 1-Methylnaphthalene	142	9.188	9.193	-0.005	87	9990	0.5000	1.66	
86 Hexachlorocyclopentadiene	237		9.273				ND	ND	
87 1,2,4,5-Tetrachlorobenzene	216		9.278				ND	ND	
89 2,4,6-Trichlorophenol	196		9.396				ND	ND	
91 2,4,5-Trichlorophenol	196		9.444				ND	ND	
94 1,1'-Biphenyl	154	9.615	9.615	0.000	86	3538	0.5000	0.4399	
95 2-Chloronaphthalene	162	9.652	9.652	0.000	1	2649	0.5000	0.4231	
98 2-Nitroaniline	65		9.748				ND	ND	
102 Dimethyl phthalate	163		9.946				ND	ND	
103 1,3-Dinitrobenzene	168		9.983				ND	ND	
104 2,6-Dinitrotoluene	165		10.016				ND	ND	
105 Acenaphthylene	152	10.133	10.133	0.000	97	62638	0.5000	6.84	
106 3-Nitroaniline	138		10.213				ND	ND	
107 2,4-Dinitrophenol	184		10.331				ND	ND	
108 Acenaphthene	153	10.325	10.331	-0.006	91	13121	0.5000	2.05	
109 4-Nitrophenol	109		10.379				ND	ND	
111 2,4-Dinitrotoluene	165		10.470				ND	ND	
112 Dibenzofuran	168	10.512	10.512	0.000	97	37424	0.5000	4.01	
116 2,3,4,6-Tetrachlorophenol	232		10.641				ND	ND	
118 Diethyl phthalate	149		10.721				ND	ND	
119 Hexadecane	57	10.737	10.737	0.000	25	2147	0.5000	0.6287	
121 4-Chlorophenyl phenyl ethe	204		10.860				ND	ND	
122 4-Nitroaniline	138		10.870				ND	ND	
123 Fluorene	166	10.876	10.876	0.000	96	57553	0.5000	7.63	
125 4,6-Dinitro-2-methylphenol	198		10.908				ND	ND	
128 Diphenylamine	169		10.977				ND	ND	
127 N-Nitrosodiphenylamine	169		10.977				ND	ND	
130 Azobenzene	77		11.025				ND	ND	
129 1,2-Diphenylhydrazine	77		11.025				ND	ND	
137 4-Bromophenyl phenyl ether	248	11.357	11.356	0.001	1	688	0.5000	0.6416	
139 Hexachlorobenzene	284	11.453	11.447	0.006	1	1156	0.5000	0.3254	
141 Atrazine	200	11.479	11.485	-0.006	1	1937	1.00	0.8503	
143 Pentachlorophenol	266		11.629				ND	ND	
144 n-Octadecane	57	11.650	11.650	0.000	41	2221	0.5000	0.6297	
150 Phenanthrene	178	11.832	11.832	0.000	96	460602	0.5000	42.7	
151 Anthracene	178	11.880	11.880	0.000	95	174650	0.5000	15.7	
152 Carbazole	167	12.014	12.014	0.000	95	12301	0.5000	1.21	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
155 Di-n-butyl phthalate	149		12.291				ND	ND	
162 Fluoranthene	202	12.922	12.922	0.000	95	811015	0.5000	60.2	
164 Benzidine	184		13.002				ND	ND	
165 Pyrene	202	13.130	13.130	0.000	98	690150	0.5000	48.9	
172 Butyl benzyl phthalate	149		13.616				ND	ND	
178 Bis(2-ethylhexyl) phthalat	149		14.097				ND	ND	
179 3,3'-Dichlorobenzidine	252		14.124				ND	ND	
181 Benzo[a]anthracene	228	14.183	14.182	0.001	96	454458	0.5000	30.9	
182 Chrysene	228	14.215	14.220	-0.005	94	355348	0.5000	25.3	
183 Di-n-octyl phthalate	149		14.669				ND	ND	
185 Benzo[b]fluoranthene	252	15.246	15.240	0.006	93	456895	0.5000	35.4	M
187 Benzo[k]fluoranthene	252	15.262	15.272	-0.010	95	187224	0.5000	14.2	M
190 Benzo[a]pyrene	252	15.625	15.625	0.000	73	350101	0.5000	29.1	
193 Dibenz(a,h)anthracene	278		17.179				ND	ND	
194 Indeno[1,2,3-cd]pyrene	276	17.174	17.179	-0.005	95	232573	0.5000	16.4	
195 Benzo[g,h,i]perylene	276	17.634	17.639	-0.005	95	190022	0.5000	16.2	
S 256 3-Methylphenol	1		0.700				0.5000	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MB_INTSTD_STK_00039 Amount Added: 20.00 Units: uL Run Reagent

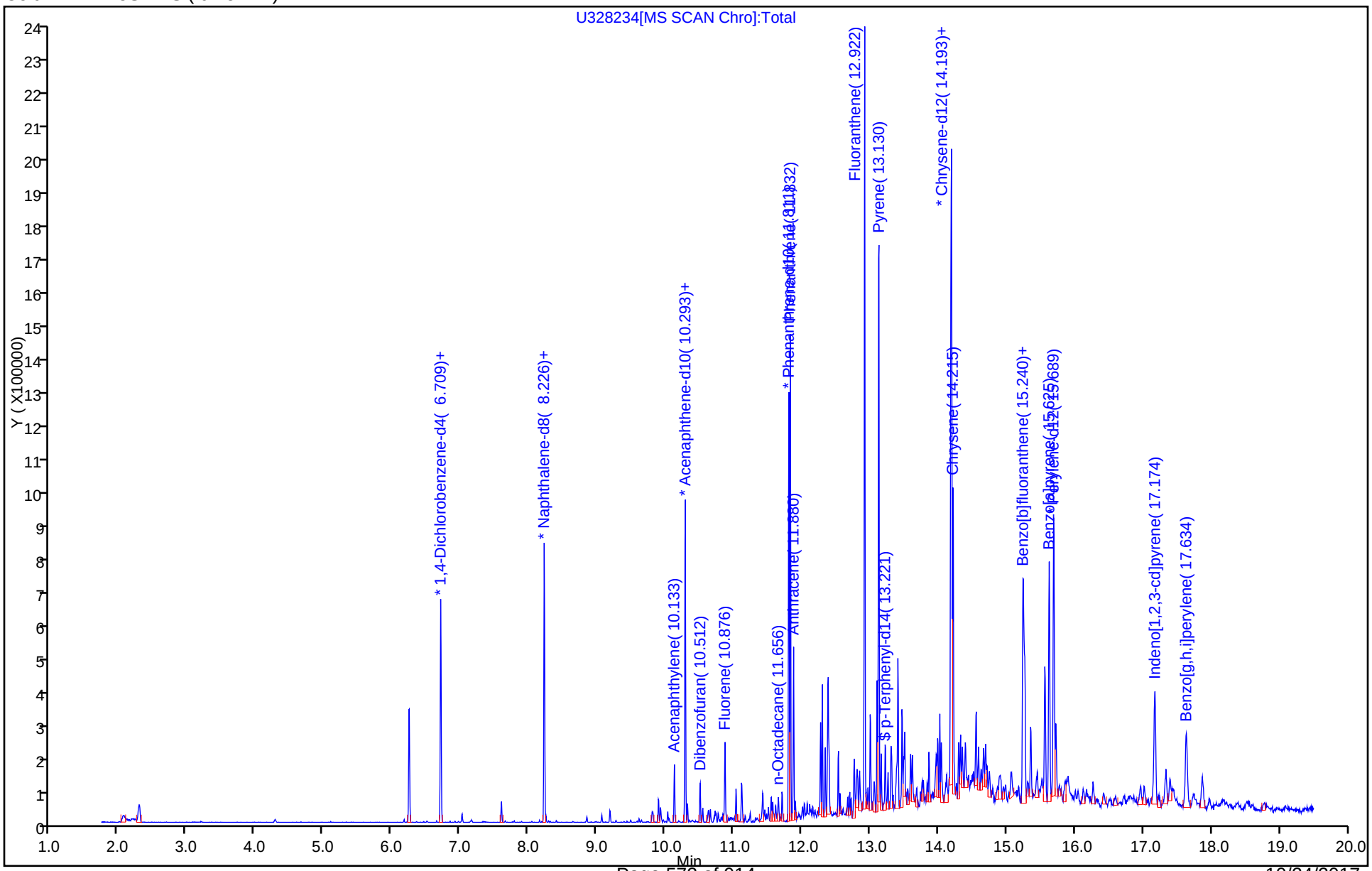
Report Date: 17-Oct-2017 11:38:11 Chrom Revision: 2.2 16-Aug-2017 16:24:46

TestAmerica Buffalo

Data File: \\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328234.D

Injection Date:	16-Oct-2017 21:32:30	Instrument ID:	HP5973U	Operator ID:	DR
Lims ID:	480-125579-F-1-D MSD			Worklist Smp#:	10
Client ID:	MW-8 (4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	100.0000	ALS Bottle#:	10
Method:	U-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

TestAmerica Buffalo

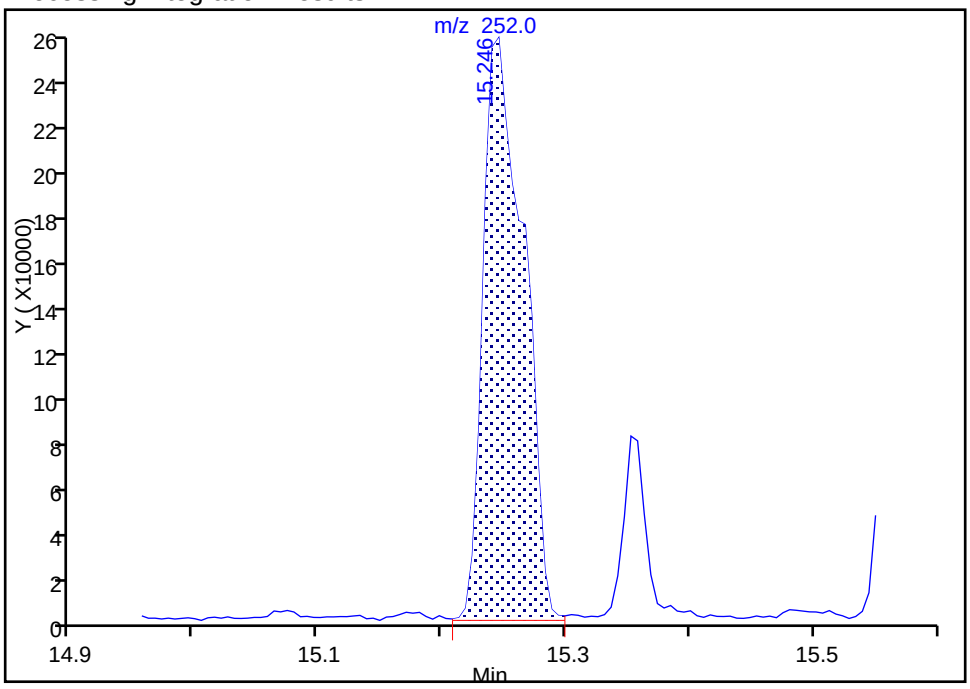
Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328234.D				
Injection Date:	16-Oct-2017 21:32:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-D MSD				
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

185 Benzo[b]fluoranthene, CAS: 205-99-2

Signal: 1

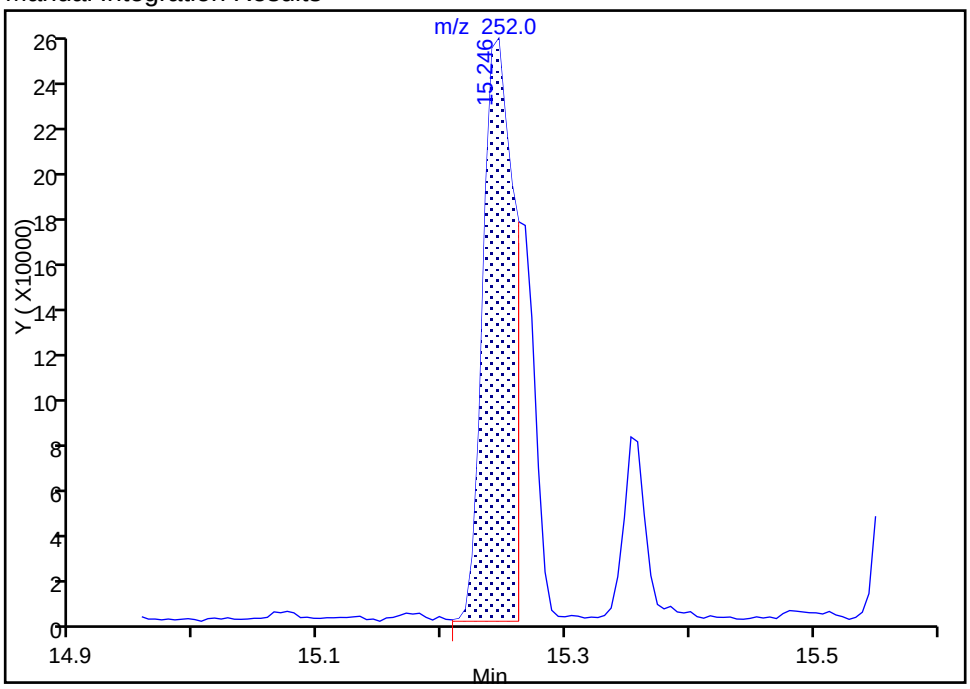
Processing Integration Results

RT: 15.25
Area: 588585
Amount: 45.549801
Amount Units: ng/uL



Manual Integration Results

RT: 15.25
Area: 456895
Amount: 35.358489
Amount Units: ng/uL



Reviewer: richardsd, 17-Oct-2017 11:20:33

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Buffalo

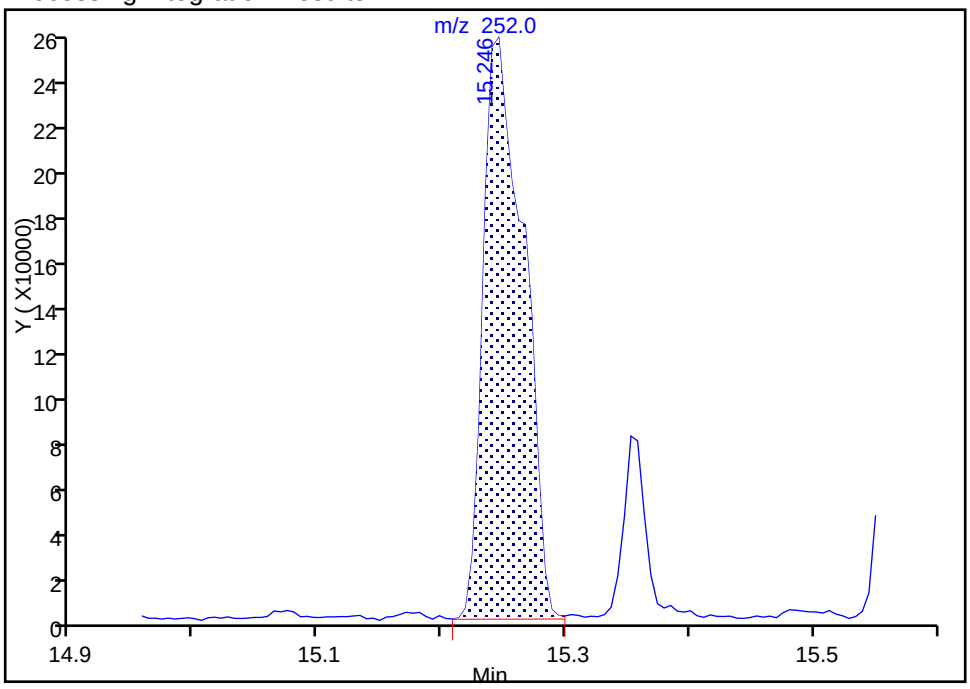
Data File:	\\ChromNA\Buffalo\ChromData\HP5973U\20171016-66446.b\U328234.D				
Injection Date:	16-Oct-2017 21:32:30	Instrument ID:	HP5973U		
Lims ID:	480-125579-F-1-D MSD				
Client ID:	MW-8 (4-6)				
Operator ID:	DR	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	100.0000		
Method:	U-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

187 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

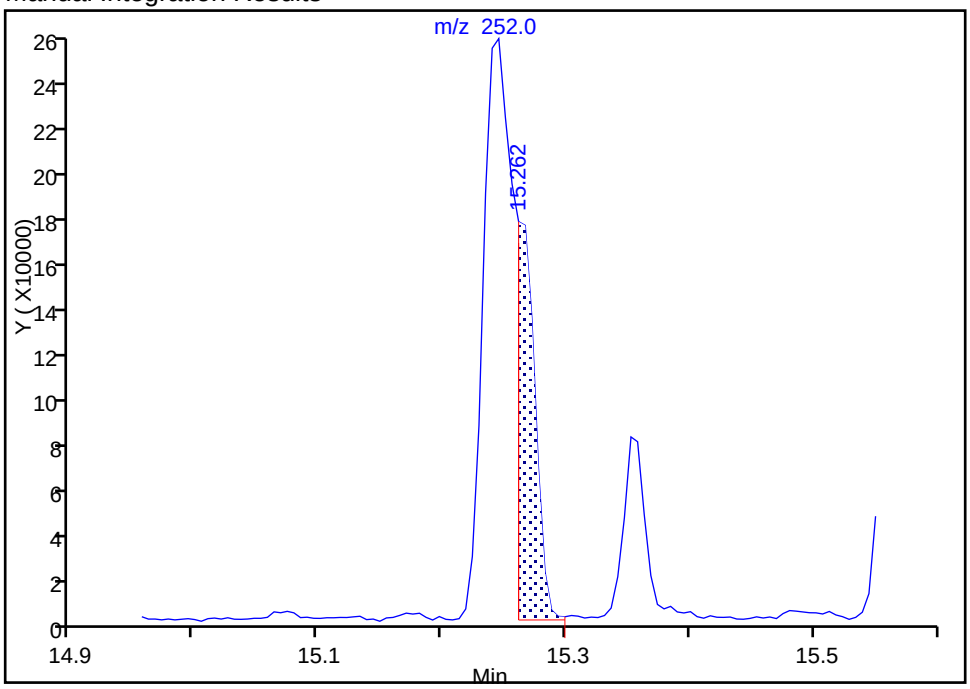
Processing Integration Results

RT: 15.25
Area: 585464
Amount: 44.398886
Amount Units: ng/uL



Manual Integration Results

RT: 15.26
Area: 187224
Amount: 14.198203
Amount Units: ng/uL



Reviewer: richardsd, 17-Oct-2017 11:20:37

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973U Start Date: 10/16/2017 11:41

Analysis Batch Number: 382005 End Date: 10/16/2017 15:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-382005/2		10/16/2017 11:41	1	U328216.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-382005/3		10/16/2017 12:07	1	U328217.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-382005/4		10/16/2017 12:34	1	U328218.D	RXI-5Sil MS(0.5 0.25(mm)
ICIS 480-382005/5		10/16/2017 13:00	1	U328219.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-382005/6		10/16/2017 13:26	1	U328220.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-382005/7		10/16/2017 13:53	1	U328221.D	RXI-5Sil MS(0.5 0.25(mm)
IC 480-382005/8		10/16/2017 14:19	1	U328222.D	RXI-5Sil MS(0.5 0.25(mm)
ICV 480-382005/9		10/16/2017 14:45	1		RXI-5Sil MS(0.5 0.25(mm)
ICV 480-382005/10		10/16/2017 15:12	1		RXI-5Sil MS(0.5 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973U Start Date: 10/16/2017 18:01

Analysis Batch Number: 382085 End Date: 10/17/2017 01:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-382085/2		10/16/2017 18:01	1	U328226.D	RXI-5Sil MS(0.5 0.25(mm)
CCVIS 480-382085/3		10/16/2017 18:27	1	U328227.D	RXI-5Sil MS(0.5 0.25(mm)
RL 480-382085/4		10/16/2017 18:53	1		RXI-5Sil MS(0.5 0.25(mm)
CCV 480-382085/5		10/16/2017 19:20	1		RXI-5Sil MS(0.5 0.25(mm)
MB 480-381332/1-A		10/16/2017 20:13	1	U328231.D	RXI-5Sil MS(0.5 0.25(mm)
LCS 480-381332/2-A		10/16/2017 20:39	1	U328232.D	RXI-5Sil MS(0.5 0.25(mm)
480-125579-1 MS		10/16/2017 21:05	100	U328233.D	RXI-5Sil MS(0.5 0.25(mm)
480-125579-1 MSD		10/16/2017 21:32	100	U328234.D	RXI-5Sil MS(0.5 0.25(mm)
480-125579-1		10/16/2017 21:58	100	U328235.D	RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/16/2017 22:25	50		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/16/2017 22:51	100		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/16/2017 23:17	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/16/2017 23:44	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/17/2017 00:10	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/17/2017 00:37	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/17/2017 01:03	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/17/2017 01:30	1		RXI-5Sil MS(0.5 0.25(mm)
ZZZZZ		10/17/2017 01:56	1		RXI-5Sil MS(0.5 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973X Start Date: 09/29/2017 19:07

Analysis Batch Number: 379526 End Date: 09/29/2017 21:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-379526/2		09/29/2017 19:07	1	X20236.D	RXI-5Sil MS 0.25(mm)
IC 480-379526/3		09/29/2017 19:33	1	X20237.D	RXI-5Sil MS 0.25(mm)
IC 480-379526/4		09/29/2017 19:59	1	X20238.D	RXI-5Sil MS 0.25(mm)
ICIS 480-379526/5		09/29/2017 20:25	1	X20239.D	RXI-5Sil MS 0.25(mm)
IC 480-379526/6		09/29/2017 20:52	1	X20240.D	RXI-5Sil MS 0.25(mm)
IC 480-379526/7		09/29/2017 21:18	1	X20241.D	RXI-5Sil MS 0.25(mm)
IC 480-379526/8		09/29/2017 21:44	1	X20242.D	RXI-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: HP5973X Start Date: 10/13/2017 00:06

Analysis Batch Number: 381534 End Date: 10/13/2017 11:05

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-381534/2		10/13/2017 00:06	1	X20508.D	RXI-5Sil MS 0.25(mm)
CCVIS 480-381534/3		10/13/2017 00:32	1	X20509.D	RXI-5Sil MS 0.25(mm)
RL 480-381534/4		10/13/2017 00:59	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 01:26	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 01:52	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 02:18	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 02:45	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 03:11	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 03:38	5		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 04:05	5		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 04:31	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 04:57	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 05:24	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 05:50	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 06:17	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 06:43	10		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 07:09	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 07:36	10		RXI-5Sil MS 0.25(mm)
480-125579-2		10/13/2017 08:02	5	X20526.D	RXI-5Sil MS 0.25(mm)
480-125579-3		10/13/2017 08:28	10	X20527.D	RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 08:54	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 09:21	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 09:47	10		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 10:13	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 10:39	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		10/13/2017 11:05	1		RXI-5Sil MS 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Batch Number: 381332 Batch Start Date: 10/11/17 14:06 Batch Analyst: Kelly, Breannon E

Batch Method: 3550C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	O_8270/625LCS 00107	O_8270surr 00064	AnalysisComment
MB 480-381332/1		3550C, 8270D		CALC NOT SET TO RUN	30.37 g	1 mL		1 mL	
LCS 480-381332/2		3550C, 8270D		CALC NOT SET TO RUN	30.81 g	1 mL	1 mL	1 mL	
480-125579-E-1 MS	MW-8 (4-6)	3550C, 8270D	T	CALC NOT SET TO RUN	30.78 g	1 mL	1 mL	1 mL	
480-125579-F-1 MSD	MW-8 (4-6)	3550C, 8270D	T	CALC NOT SET TO RUN	30.62 g	1 mL	1 mL	1 mL	
480-125579-F-1	MW-8 (4-6)	3550C, 8270D	T	CALC NOT SET TO RUN	30.12 g	1 mL		1 mL	
480-125579-E-2	MW-8 (13-14)	3550C, 8270D	T	CALC NOT SET TO RUN	30.65 g	1 mL		1 mL	clay
480-125579-E-3	DUP-100817	3550C, 8270D	T	CALC NOT SET TO RUN	30.60 g	1 mL		1 mL	

Batch Notes	
Balance ID	Balance 5
Batch Comment	Filter paper lot # 9850063
Blank Soil Lot Number	4246310
Analyst ID - Concentration	BK, RT
Na2SO4 ID	4246310
Nominal Amount Used	30 g
Prep Solvent ID	4289045/4248310
Prep Solvent Name	MeCl2/Acetone
Prep Solvent Volume Used	300 mL
Person's name who did the prep	BK
Analyst ID - Reagent Drop Witness	BK
Analyst ID - Reagent Drop	BK
Perform Calculation (0=No, 1=Yes)	0
Vial Lot Number	1634811094

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG No.:

Project: RGE - Park St.

Client Sample ID	Lab Sample ID
MW-8 (4-6)	480-125579-1
MW-8 (13-14)	480-125579-2
DUP-100817	480-125579-3

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-8 (4-6)
Lab Sample ID: 480-125579-1
Lab Name: TestAmerica Buffalo
Job No.: 480-125579-1
SDG ID.:
Matrix: Solid
Date Sampled: 10/08/2017 11:30
Reporting Basis: DRY
Date Received: 10/10/2017 09:50
% Solids: 84.4

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	15400	11.7	5.2	mg/Kg			1	6010C
7440-36-0	Antimony	ND	17.6	0.47	mg/Kg		F1	1	6010C
7440-38-2	Arsenic	18.5	2.3	0.47	mg/Kg			1	6010C
7440-39-3	Barium	184	0.59	0.13	mg/Kg		F1	1	6010C
7440-41-7	Beryllium	0.96	0.23	0.033	mg/Kg			1	6010C
7440-43-9	Cadmium	1.1	0.23	0.035	mg/Kg			1	6010C
7440-70-2	Calcium	26100	58.6	3.9	mg/Kg		F2 B	1	6010C
7440-47-3	Chromium	31.3	0.59	0.23	mg/Kg			1	6010C
7440-48-4	Cobalt	13.1	0.59	0.059	mg/Kg			1	6010C
7440-50-8	Copper	60.5	1.2	0.25	mg/Kg		F2 F1	1	6010C
7439-89-6	Iron	25000	11.7	4.1	mg/Kg		^	1	6010C
7439-92-1	Lead	679	1.2	0.28	mg/Kg			1	6010C
7439-95-4	Magnesium	5870	23.4	1.1	mg/Kg		F1	1	6010C
7439-96-5	Manganese	308	0.23	0.037	mg/Kg			1	6010C
7440-02-0	Nickel	39.1	5.9	0.27	mg/Kg			1	6010C
7440-09-7	Potassium	4310	35.1	23.4	mg/Kg		F1	1	6010C
7782-49-2	Selenium	4.0	4.7	0.47	mg/Kg	J		1	6010C
7440-22-4	Silver	0.26	0.70	0.23	mg/Kg	J		1	6010C
7440-23-5	Sodium	565	164	15.2	mg/Kg			1	6010C
7440-28-0	Thallium	ND	7.0	0.35	mg/Kg			1	6010C
7440-62-2	Vanadium	29.1	0.59	0.13	mg/Kg		F1	1	6010C
7440-66-6	Zinc	482	2.3	0.75	mg/Kg			1	6010C
7439-97-6	Mercury	0.35	0.024	0.0099	mg/Kg			1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-8 (13-14)
Lab Sample ID: 480-125579-2
Lab Name: TestAmerica Buffalo
Job No.: 480-125579-1
SDG ID.:
Matrix: Solid
Date Sampled: 10/08/2017 12:00
Reporting Basis: DRY
Date Received: 10/10/2017 09:50
% Solids: 81.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	15100	11.8	5.2	mg/Kg			1	6010C
7440-36-0	Antimony	ND	17.7	0.47	mg/Kg			1	6010C
7440-38-2	Arsenic	2.3	2.4	0.47	mg/Kg	J		1	6010C
7440-39-3	Barium	45.9	0.59	0.13	mg/Kg			1	6010C
7440-41-7	Beryllium	0.89	0.24	0.033	mg/Kg			1	6010C
7440-43-9	Cadmium	ND	0.24	0.035	mg/Kg			1	6010C
7440-70-2	Calcium	16800	59.1	3.9	mg/Kg		B	1	6010C
7440-47-3	Chromium	21.8	0.59	0.24	mg/Kg			1	6010C
7440-48-4	Cobalt	8.9	0.59	0.059	mg/Kg			1	6010C
7440-50-8	Copper	26.2	1.2	0.25	mg/Kg			1	6010C
7439-89-6	Iron	17900	11.8	4.1	mg/Kg		^	1	6010C
7439-92-1	Lead	8.8	1.2	0.28	mg/Kg			1	6010C
7439-95-4	Magnesium	5420	23.6	1.1	mg/Kg			1	6010C
7439-96-5	Manganese	173	0.24	0.038	mg/Kg			1	6010C
7440-02-0	Nickel	33.3	5.9	0.27	mg/Kg			1	6010C
7440-09-7	Potassium	4350	35.5	23.6	mg/Kg			1	6010C
7782-49-2	Selenium	0.47	4.7	0.47	mg/Kg	J		1	6010C
7440-22-4	Silver	ND	0.71	0.24	mg/Kg			1	6010C
7440-23-5	Sodium	411	165	15.4	mg/Kg			1	6010C
7440-28-0	Thallium	ND	7.1	0.35	mg/Kg			1	6010C
7440-62-2	Vanadium	22.5	0.59	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	35.9	2.4	0.76	mg/Kg			1	6010C
7439-97-6	Mercury	0.013	0.024	0.0098	mg/Kg	J		1	7471B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DUP-100817 | Lab Sample ID: 480-125579-3

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG ID.:

Matrix: Solid | Date Sampled: 10/08/2017 00:00

Reporting Basis: DRY | Date Received: 10/10/2017 09:50

% Solids: 84.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	21300	11.9	5.2	mg/Kg			1	6010C
7440-36-0	Antimony	ND	17.9	0.48	mg/Kg			1	6010C
7440-38-2	Arsenic	6.4	2.4	0.48	mg/Kg			1	6010C
7440-39-3	Barium	65.2	0.60	0.13	mg/Kg			1	6010C
7440-41-7	Beryllium	1.2	0.24	0.033	mg/Kg			1	6010C
7440-43-9	Cadmium	ND	0.24	0.036	mg/Kg			1	6010C
7440-70-2	Calcium	25300	59.7	3.9	mg/Kg		B	1	6010C
7440-47-3	Chromium	31.8	0.60	0.24	mg/Kg			1	6010C
7440-48-4	Cobalt	19.1	0.60	0.060	mg/Kg			1	6010C
7440-50-8	Copper	45.3	1.2	0.25	mg/Kg		^	1	6010C
7439-89-6	Iron	30800	11.9	4.2	mg/Kg		^	1	6010C
7439-92-1	Lead	20.2	1.2	0.29	mg/Kg			1	6010C
7439-95-4	Magnesium	8480	23.9	1.1	mg/Kg			1	6010C
7439-96-5	Manganese	339	0.24	0.038	mg/Kg		^	1	6010C
7440-02-0	Nickel	55.7	6.0	0.27	mg/Kg			1	6010C
7440-09-7	Potassium	5760	35.8	23.9	mg/Kg			1	6010C
7782-49-2	Selenium	ND	4.8	0.48	mg/Kg			1	6010C
7440-22-4	Silver	ND	0.72	0.24	mg/Kg			1	6010C
7440-23-5	Sodium	471	167	15.5	mg/Kg			1	6010C
7440-28-0	Thallium	ND	7.2	0.36	mg/Kg			1	6010C
7440-62-2	Vanadium	30.8	0.60	0.13	mg/Kg			1	6010C
7440-66-6	Zinc	52.8	2.4	0.76	mg/Kg		^	1	6010C
7439-97-6	Mercury	0.039	0.022	0.0089	mg/Kg			1	7471B

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

ICV Source: MEI_04_ICV_00348 Concentration Units: mg/L

CCV Source: MEI_09_CCV_00262

Analyte	ICV 480-382167/6 10/16/2017 10:22				CCV 480-382167/16 10/16/2017 10:58				CCV 480-382167/20 10/16/2017 11:46			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	18.21		18.8	97	25.01		25.0	100	25.39		25.0	102
Antimony	0.370		0.375	99	0.513		0.500	103	0.515		0.500	103
Arsenic	0.374		0.375	100	0.519		0.500	104	0.522		0.500	104
Barium	0.368		0.375	98	0.498		0.500	100	0.499		0.500	100
Beryllium	0.386		0.375	103	0.529		0.500	106	0.532		0.500	106
Cadmium	0.373		0.375	99	0.512		0.500	102	0.512		0.500	102
Calcium	19.20		18.8	102	26.15		25.0	105	26.53		25.0	106
Chromium	0.385		0.375	103	0.525		0.500	105	0.520		0.500	104
Cobalt	0.369		0.375	98	0.512		0.500	102	0.510		0.500	102
Copper	0.370		0.375	99	0.508		0.500	102	0.505		0.500	101
Iron	18.82		18.8	100	25.67		25.0	103	25.80		25.0	103
Lead	0.375		0.375	100	0.516		0.500	103	0.516		0.500	103
Magnesium	18.88		18.8	101	25.81		25.0	103	25.63		25.0	103
Manganese	0.387		0.375	103	0.532		0.500	106	0.526		0.500	105
Nickel	0.375		0.375	100	0.518		0.500	104	0.516		0.500	103
Potassium	18.49		18.8	99	25.40		25.0	102	25.11		25.0	100
Selenium	0.378		0.375	101	0.526		0.500	105	0.530		0.500	106
Silver	0.378		0.375	101	0.519		0.500	104	0.523		0.500	105
Sodium	18.57		18.8	99	25.49		25.0	102	25.46		25.0	102
Thallium	0.381		0.375	102	0.524		0.500	105	0.526		0.500	105
Vanadium	0.384		0.375	102	0.527		0.500	105	0.534		0.500	107
Zinc	0.389		0.375	104	0.528		0.500	106	0.544		0.500	109

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

ICV Source: MEI_04_ICV_00348 Concentration Units: mg/L

CCV Source: MEI_09_CCV_00262

Analyte	CCV 480-382167/32 10/16/2017 12:28				CCV 480-382167/44 10/16/2017 13:12							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	25.23		25.0	101	25.31		25.0	101				
Antimony	0.514		0.500	103	0.512		0.500	102				
Arsenic	0.522		0.500	104	0.520		0.500	104				
Barium	0.501		0.500	100	0.499		0.500	100				
Beryllium	0.530		0.500	106	0.532		0.500	106				
Cadmium	0.512		0.500	102	0.514		0.500	103				
Calcium	26.39		25.0	106	26.47		25.0	106				
Chromium	0.520		0.500	104	0.527		0.500	105				
Cobalt	0.514		0.500	103	0.515		0.500	103				
Copper	0.504		0.500	101	0.515		0.500	103				
Iron	25.99		25.0	104	25.96		25.0	104				
Lead	0.518		0.500	104	0.518		0.500	104				
Magnesium	25.75		25.0	103	25.97		25.0	104				
Manganese	0.525		0.500	105	0.536		0.500	107				
Nickel	0.520		0.500	104	0.521		0.500	104				
Potassium	25.41		25.0	102	25.46		25.0	102				
Selenium	0.529		0.500	106	0.527		0.500	105				
Silver	0.524		0.500	105	0.525		0.500	105				
Sodium	25.58		25.0	102	25.58		25.0	102				
Thallium	0.531		0.500	106	0.528		0.500	106				
Vanadium	0.531		0.500	106	0.533		0.500	107				
Zinc	0.525		0.500	105	0.536		0.500	107				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

ICV Source: MEI_10_CCVL_00158 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00158

Analyte	ICVL 480-382167/8 10/16/2017 10:29				CCVL 480-382167/18 10/16/2017 11:10				CCVL 480-382167/22 10/16/2017 11:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.179	J	0.200	89	0.178	J	0.200	89	0.198	J	0.200	99
Antimony	0.0194	J	0.0200	97	0.0204		0.0200	102	0.0208		0.0200	104
Arsenic	0.0162		0.0150	108	0.0163		0.0150	109	0.0124	J	0.0150	83
Barium	0.00206		0.00200	103	0.00206		0.00200	103	0.00205		0.00200	103
Beryllium	0.00211		0.00200	106	0.00217		0.00200	109	0.00219		0.00200	110
Cadmium	0.00214		0.00200	107	0.00215		0.00200	108	0.00211		0.00200	106
Calcium	0.517		0.500	103	0.521		0.500	104	0.527		0.500	105
Chromium	0.00363	J	0.00400	91	0.00389	J	0.00400	97	0.00386	J	0.00400	97
Cobalt	0.00391	J	0.00400	98	0.00379	J	0.00400	95	0.00385	J	0.00400	96
Copper	0.0105		0.0100	105	0.0103		0.0100	103	0.00954	J	0.0100	95
Iron	0.0527		0.0500	105	0.0526		0.0500	105	0.0525		0.0500	105
Lead	0.0111		0.0100	111	0.0102		0.0100	102	0.0116		0.0100	116
Magnesium	0.205		0.200	103	0.214		0.200	107	0.211		0.200	105
Manganese	0.00311		0.00300	104	0.00306		0.00300	102	0.00312		0.00300	104
Nickel	0.00977	J	0.0100	98	0.00971	J	0.0100	97	0.00988	J	0.0100	99
Potassium	0.532		0.500	106	0.460	J	0.500	92	0.509		0.500	102
Selenium	0.0275		0.0250	110	0.0253		0.0250	101	0.0255		0.0250	102
Silver	0.00638		0.00600	106	0.00668		0.00600	111	0.00607		0.00600	101
Sodium	0.998	J	1.00	100	1.01		1.00	101	0.999	J	1.00	100
Thallium	0.0198	J	0.0200	99	0.0207		0.0200	104	0.0213		0.0200	106
Vanadium	0.00547		0.00500	109	0.00533		0.00500	107	0.00551		0.00500	110
Zinc	0.0104		0.0100	104	0.0133		0.0100	133	0.0108		0.0100	108

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

ICV Source: MEI_10_CCVL_00158 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00158

Analyte	CCVL 480-382167/34 10/16/2017 12:36				CCVL 480-382167/46 10/16/2017 13:19							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.196	J	0.200	98	0.216		0.200	108				
Antimony	0.0198	J	0.0200	99	0.0209		0.0200	105				
Arsenic	0.0166		0.0150	111	0.0150		0.0150	100				
Barium	0.00228		0.00200	114	0.00259		0.00200	130				
Beryllium	0.00219		0.00200	110	0.00215		0.00200	108				
Cadmium	0.00220		0.00200	110	0.00220		0.00200	110				
Calcium	0.552		0.500	110	0.613		0.500	123				
Chromium	0.00397	J	0.00400	99	0.00437		0.00400	109				
Cobalt	0.00383	J	0.00400	96	0.00421		0.00400	105				
Copper	0.0105		0.0100	105	0.0184		0.0100	184				
Iron	0.0842		0.0500	168	0.165		0.0500	330				
Lead	0.0121		0.0100	121	0.0104		0.0100	104				
Magnesium	0.223		0.200	111	0.222		0.200	111				
Manganese	0.00343		0.00300	114	0.0121		0.00300	403				
Nickel	0.00986	J	0.0100	99	0.0106		0.0100	106				
Potassium	0.547		0.500	109	0.529		0.500	106				
Selenium	0.0293		0.0250	117	0.0256		0.0250	102				
Silver	0.00648		0.00600	108	0.00623		0.00600	104				
Sodium	1.01		1.00	101	1.02		1.00	102				
Thallium	0.0217		0.0200	109	0.0217		0.0200	108				
Vanadium	0.00596		0.00500	119	0.00542		0.00500	108				
Zinc	0.0113		0.0100	113	0.0148		0.0100	148				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

ICV Source: MEH_HG1_WKG_01592 Concentration Units: mg/L

CCV Source: MEH_HG1_WKG_01592

Analyte	ICV 480-381152/1 10/10/2017 14:54				ICVL 480-381152/3 10/10/2017 14:58				CCV 480-381152/4 10/10/2017 14:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00287		0.00300	96	0.000155	J	0.000200	78	0.00186		0.00200	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

ICV Source: MEH_HG1_WKG_01592 Concentration Units: mg/L

CCV Source: MEH_HG1_WKG_01592

Analyte	CCV 480-381152/16 10/10/2017 15:18				CCV 480-381152/19 10/10/2017 15:24				CCVL 480-381152/21 10/10/2017 15:27			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.00192		0.00200	96	0.00192		0.00200	96	0.000185	J	0.000200	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-382167/7 10/16/2017 10:25		CCB 480-382167/17 10/16/2017 11:01		CCB 480-382167/21 10/16/2017 11:50		CCB 480-382167/33 10/16/2017 12:32	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		0.0359	J
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		0.00231	J	ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-382167/45 10/16/2017 13:16							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	ND							
Beryllium	0.0020	ND							
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	0.00476	J						
Iron	0.050	0.0684							
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	0.00566							
Nickel	0.010	ND							
Potassium	0.50	ND							
Selenium	0.025	ND							
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	0.00270	J						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-381152/2 10/10/2017 14:56		CCB 480-381152/5 10/10/2017 15:00		CCB 480-381152/17 10/10/2017 15:21		CCB 480-381152/20 10/10/2017 15:25	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-381758/1-A

Instrument Code: ICAP2 Batch No.: 382167

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	6.53	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND		^	6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-381100/1-A

Instrument Code: LEEMAN2 Batch No.: 381152

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7471B

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: ICSA 480-382167/9 Instrument ID: ICAP2

Lab File ID: i2101617a-2.asc ICS Source: MEI_07_ICSA_00103

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**490**	**98**
Antimony		**-0.0108**	
Arsenic		**0.0015**	
Barium		**0.0007**	
Beryllium		**-0.0001**	
Cadmium		**-0.0003**	
Calcium	**500**	**488**	**98**
Chromium		**0.0001**	
Cobalt		**-0.0009**	
Copper		**-0.0052**	
Iron	**200**	**190**	**95**
Lead		**0.0001**	
Magnesium	**500**	**525**	**105**
Manganese		**-0.0006**	
Nickel		**-0.0017**	
Potassium		**0.0103**	
Selenium		**0.0039**	
Silver		**0.0000**	
Sodium		**0.0067**	
Thallium		**0.0017**	
Vanadium		**0.0017**	
Zinc		**0.0043**	
Boron		*-0.0021*	
Lithium		*-0.0187*	
Molybdenum		*-0.0018*	
Tin		*0.0020*	
Titanium		*-0.0036*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Lab Sample ID: ICSAB 480-382167/10 Instrument ID: ICAP2

Lab File ID: i2101617a-2.asc ICS Source: MEI_08_ICSAB_00117

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**524**	**105**
Antimony	**0.600**	**0.608**	**101**
Arsenic	**0.100**	**0.109**	**109**
Barium	**0.500**	**0.491**	**98**
Beryllium	**0.501**	**0.522**	**104**
Cadmium	**1.00**	**1.03**	**103**
Calcium	**500**	**493**	**98**
Chromium	**0.500**	**0.491**	**98**
Cobalt	**0.500**	**0.500**	**100**
Copper	**0.501**	**0.524**	**105**
Iron	**100**	**99.0**	**99**
Lead	**0.0501**	**0.0498**	**99**
Magnesium	**500**	**544**	**109**
Manganese	**0.501**	**0.505**	**101**
Nickel	**1.00**	**0.984**	**98**
Potassium		**-0.0079**	
Selenium	**0.0501**	**0.0571**	**114**
Silver	**0.200**	**0.227**	**114**
Sodium		**0.131**	
Thallium	**0.100**	**0.104**	**104**
Vanadium	**0.501**	**0.523**	**104**
Zinc	**1.00**	**0.963**	**96**
Boron		*0.0010*	
Lithium	*0.501*	*0.503*	*100*
Molybdenum		*-0.0008*	
Strontium	*0.500*	*0.497*	*99*
Tin		*0.0023*	
Titanium		*-0.0020*	

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MW-8 (4-6) MS
Lab ID: 480-125579-1 MS
Lab Name: TestAmerica Buffalo
Job No.: 480-125579-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 84.4

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	25540		15400		2280	445	75-125	4	6010C
Antimony	21.37		ND		45.5	47	75-125	F1	6010C
Arsenic	58.09		18.5		45.5	87	75-125		6010C
Barium	276.7		184		45.5	204	75-125	4	6010C
Beryllium	41.70		0.96		45.5	89	75-125		6010C
Cadmium	43.03		1.1		45.5	92	75-125		6010C
Calcium	35650		26100		2280	419	75-125	4	6010C
Chromium	76.35		31.3		45.5	99	75-125		6010C
Cobalt	57.92		13.1		45.5	98	75-125		6010C
Copper	125.5		60.5		45.5	143	75-125	F1	6010C
Iron	22220		25000		2280	-123	75-125	^ 4	6010C
Lead	463.7		679		45.5	-473	75-125	4	6010C
Magnesium	10190		5870		2280	190	75-125	F1	6010C
Manganese	365.9		308		45.5	127	75-125	4	6010C
Nickel	79.55		39.1		45.5	89	75-125		6010C
Potassium	9390		4310		2280	223	75-125	F1	6010C
Selenium	45.48		4.0	J	45.5	91	75-125		6010C
Silver	11.15		0.26	J	11.4	96	75-125		6010C
Sodium	2699		565		2280	94	75-125		6010C
Thallium	44.79		ND		45.5	98	75-125		6010C
Vanadium	86.26		29.1		45.5	125	75-125		6010C
Zinc	400.8		482		45.5	-178	75-125	4	6010C
Mercury	0.773		0.35		0.398	107	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: MW-8 (4-6) MSD
Lab ID: 480-125579-1 MSD
Lab Name: TestAmerica Buffalo
Job No.: 480-125579-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 84.4

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	27000		2300	503	75-125	6	20	4	6010C
Antimony	22.79		46.1	49	75-125	6	20	F1	6010C
Arsenic	55.84		46.1	81	75-125	4	20		6010C
Barium	242.5		46.1	128	75-125	13	20	F1	6010C
Beryllium	42.09		46.1	89	75-125	1	20		6010C
Cadmium	42.91		46.1	91	75-125	0	20		6010C
Calcium	26210		2300	4	75-125	31	20	4 F2	6010C
Chromium	80.08		46.1	106	75-125	5	20		6010C
Cobalt	57.95		46.1	97	75-125	0	20		6010C
Copper	91.59		46.1	67	75-125	31	20	F2 F1	6010C
Iron	26580		2300	68	75-125	18	20	^ 4	6010C
Lead	530.8		46.1	-322	75-125	13	20	4	6010C
Magnesium	9143		2300	142	75-125	11	20	F1	6010C
Manganese	331.0		46.1	50	75-125	10	20	4	6010C
Nickel	80.48		46.1	90	75-125	1	20		6010C
Potassium	9786		2300	238	75-125	4	20	F1	6010C
Selenium	44.12		46.1	87	75-125	3	20		6010C
Silver	11.11		11.5	94	75-125	0	20		6010C
Sodium	2685		2310	92	75-125	1	20		6010C
Thallium	45.53		46.1	99	75-125	2	20		6010C
Vanadium	88.19		46.1	128	75-125	2	20	F1	6010C
Zinc	331.6		46.1	-326	75-125	19	20	4	6010C
Mercury	0.756		0.405	101	80-120	2	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: MW-8 (4-6) PDS | Lab ID: 480-125579-1 PDS

Lab Name: TestAmerica Buffalo | Job No.: 480-125579-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	16420		15400		2340	43	80-120	W	6010C
Antimony	42.82		ND		46.8	91	80-120		6010C
Arsenic	62.96		18.5		46.8	95	80-120		6010C
Barium	205.6		184		46.8	47	80-120	W	6010C
Beryllium	45.17		0.96		46.8	94	80-120		6010C
Cadmium	45.56		1.1		46.8	95	80-120		6010C
Calcium	27320		26100		2340	NC	80-120		6010C
Chromium	72.91		31.3		46.8	89	80-120		6010C
Cobalt	60.46		13.1		46.8	101	80-120		6010C
Copper	103.0		60.5		46.8	91	80-120		6010C
Iron	26310		25000		2340	NC	80-120	^	6010C
Lead	705.7		679		46.8	NC	80-120		6010C
Magnesium	7867		5870		2340	85	80-120		6010C
Manganese	340.2		308		46.8	69	80-120	W	6010C
Nickel	86.31		39.1		46.8	101	80-120		6010C
Potassium	5596		4310		2340	55	80-120	W	6010C
Selenium	48.87		4.0	J	46.8	96	80-120		6010C
Silver	11.48		0.26	J	11.7	96	80-120		6010C
Sodium	1959		565		2350	59	80-120	W	6010C
Thallium	48.05		ND		46.8	103	80-120		6010C
Vanadium	73.88		29.1		46.8	96	80-120		6010C
Zinc	503.3		482		46.8	NC	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
METALS

Lab ID: LCSSRM 480-381758/2-A

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

Sample Matrix: Solid LCS Source: MED_SRM_D087_00012

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	8090	9097		112.4	39.6	160.7		6010C
Antimony	99.3	61.79		62.2	21.6	256.8		6010C
Arsenic	100	87.66		87.7	69.6	131.0		6010C
Barium	217	185.3		85.4	73.7	128.1		6010C
Beryllium	147	128.7		87.5	75.5	125.9		6010C
Cadmium	83.7	69.57		83.1	73.2	131.4		6010C
Calcium	6010	5274		87.8	73.7	126.3		6010C
Chromium	107	92.96		86.9	69.4	134.6		6010C
Cobalt	123	124.6		101.3	74.3	130.1		6010C
Copper	166	137.8		83.0	75.3	128.3		6010C
Iron	14600	15210		104.2	36.1	163.7	^	6010C
Lead	88.4	91.16		103.1	69.9	130.1		6010C
Magnesium	2930	2668		91.0	65.9	134.5		6010C
Manganese	311	275.4		88.5	74.9	125.4		6010C
Nickel	49.8	51.05		102.5	69.1	135.1		6010C
Potassium	2620	2594		99.0	61.1	138.9		6010C
Selenium	87.7	78.35		89.3	64.1	135.7		6010C
Silver	41.4	34.32		82.9	65.9	133.8		6010C
Sodium	252	238.4		94.6	32.9	167.5		6010C
Thallium	58.1	60.51		104.2	63.9	136.3		6010C
Vanadium	140	130.3		93.1	69.9	129.3		6010C
Zinc	145	127.1		87.7	67.7	132.4		6010C

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

FORM VIIA - IN

7D-IN
LCSD - CERTIFIED REFERENCE MATERIAL
METALS

Lab ID: LCDSRM 480-381758/3-A

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

Sample Matrix: Solid LCS Source: MED_SRM_D087_00012

Analyte	(SDR)	C	Spike Added	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	9312		8090	115.1	6-160.7	2	20		6010C
Antimony	62.56		99.3	63.0	6-256.8	1	20		6010C
Arsenic	89.24		100	89.2	6-131.0	2	20		6010C
Barium	185.7		217	85.6	7-128.1	0	20		6010C
Beryllium	130.8		147	89.0	5-125.9	2	20		6010C
Cadmium	71.20		83.7	85.1	2-131.4	2	20		6010C
Calcium	5438		6010	90.5	7-126.3	3	20		6010C
Chromium	94.17		107	88.0	4-134.6	1	20		6010C
Cobalt	127.0		123	103.2	3-130.1	2	20		6010C
Copper	141.7		166	85.4	3-128.3	3	20		6010C
Iron	15770		14600	108.0	1-163.7	4	20	^	6010C
Lead	92.44		88.4	104.6	9-130.1	1	20		6010C
Magnesium	2744		2930	93.6	9-134.5	3	20		6010C
Manganese	272.9		311	87.7	9-125.4	1	20		6010C
Nickel	52.11		49.8	104.6	1-135.1	2	20		6010C
Potassium	2635		2620	100.6	1-138.9	2	20		6010C
Selenium	80.75		87.7	92.1	1-135.7	3	20		6010C
Silver	35.46		41.4	85.7	9-133.8	3	20		6010C
Sodium	242.2		252	96.1	9-167.5	2	20		6010C
Thallium	62.62		58.1	107.8	9-136.3	3	20		6010C
Vanadium	132.4		140	94.6	9-129.3	2	20		6010C
Zinc	129.6		145	89.4	7-132.4	2	20		6010C

SDR = Spike Duplicate Results
Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LCS-CERTIFIED REFERENCE MATERIAL
METALS

Lab ID: LCSSRM 480-381100/2-A ^10

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

Sample Matrix: Solid LCS Source: MED_SRM_D087_00006

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	12.6	11.17		88.7	44.4	128.6		7471B

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-125579-1

SDG No:

Lab Name: TestAmerica Buffalo Job No: 480-125579-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	15400		16940		9.9		6010C
Antimony	ND		ND		NC		6010C
Arsenic	18.5		19.16		3.5		6010C
Barium	184		202.4		10		6010C
Beryllium	0.96		1.12	J	17	V	6010C
Cadmium	1.1		1.29		17	V	6010C
Calcium	26100		28780		10		6010C
Chromium	31.3		35.82		14	V	6010C
Cobalt	13.1		12.86		2.0		6010C
Copper	60.5		64.89		7.2		6010C
Iron	25000		28030		12	^ V	6010C
Lead	679		674.1		0.73		6010C
Magnesium	5870		6537		11	V	6010C
Manganese	308		343.3		11	V	6010C
Nickel	39.1		38.60		1.4		6010C
Potassium	4310		4742		10		6010C
Selenium	4.0	J	5.28	J	NC		6010C
Silver	0.26	J	ND		NC		6010C
Sodium	565		619.1	J	9.6		6010C
Thallium	ND		ND		NC		6010C
Vanadium	29.1		32.13		10		6010C
Zinc	482		547.6		14	V	6010C

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-125579-1

SDG No:

Lab Name: TestAmerica Buffalo Job No: 480-125579-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Mercury	0.35		0.334		3.9		7471B

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG Number:

Matrix: Solid Instrument ID: ICAP2

Method: 6010C MDL Date: 06/04/2015 15:22

Prep Method: 3050B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Aluminum	308.215	10	4.4
Antimony	206.833	15	0.4
Arsenic	189.042	2	0.4
Barium	455.403	0.5	0.11
Beryllium	313.042	0.2	0.028
Cadmium	228.802	0.2	0.03
Calcium	317.933	50	3.3
Chromium	267.716	0.5	0.2
Cobalt	228.616	0.5	0.05
Copper	327.396	1	0.21
Iron	259.940	10	3.5
Lead	220.353	1	0.24
Magnesium	279.079	20	0.927
Manganese	257.610	0.2	0.032
Nickel	231.604	5	0.23
Potassium	766.490	30	20
Selenium	196.090	4	0.4
Silver	328.068	0.6	0.2
Sodium	589.592	140	13
Thallium	190.856	6	0.3
Vanadium	292.402	0.5	0.11
Zinc	206.200	2	0.64

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG Number:

Matrix: Solid Instrument ID: ICAP2

Method: 6010C XMDL Date: 07/17/2013 10:53

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Aluminum	308.215	0.2	0.06
Antimony	206.833	0.02	0.00679
Arsenic	189.042	0.015	0.00555
Barium	455.403	0.002	0.0007
Beryllium	313.042	0.002	0.0003
Cadmium	228.802	0.002	0.0005
Calcium	317.933	0.5	0.1
Chromium	267.716	0.004	0.001
Cobalt	228.616	0.004	0.00063
Copper	327.396	0.01	0.0016
Iron	259.940	0.05	0.0193
Lead	220.353	0.01	0.003
Magnesium	279.079	0.2	0.0434
Manganese	257.610	0.003	0.0004
Nickel	231.604	0.01	0.00126
Potassium	766.490	0.5	0.1
Selenium	196.090	0.025	0.0087
Silver	328.068	0.006	0.0017
Sodium	589.592	1	0.324
Thallium	190.856	0.02	0.01024
Vanadium	292.402	0.005	0.0015
Zinc	206.200	0.01	0.0015

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG Number:

Matrix: Solid Instrument ID: LEEMAN2

Method: 7471B MDL Date: 01/29/2010 00:00

Prep Method: 7471B

Analyte	Wavelength/ Mass	RL (mg/Kg)	MDL (mg/Kg)
Mercury	253.7	0.02	0.0081

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG Number:

Matrix: Solid Instrument ID: LEEMAN2

Method: 7471B XMDL Date: 01/29/2010 00:00

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Mercury	253.7	0.0002	0.00012

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG No.:

ICP-AES Instrument ID: ICAP2 Date: 02/16/2017

Analyte	Wave Length	Al	As	Be	Ca	Cd	Co	Cr	Cu	Fe	Mg	Mn	Mo	Ni	Se
Aluminum	308.215												0.021502		
Antimony	206.833							0.015259		-0.000068					
Arsenic	189.042	-0.000017						-0.016071					-0.005260		
Barium	455.403														
Beryllium	313.042														
Boron	208.959												0.043278		
Cadmium	228.802		0.010934							-0.000006					
Calcium	317.933														
Chromium	267.716									-0.000010		0.000052			
Cobalt	228.616									-0.000003			-0.001257		
Copper	327.396				0.000030					-0.000034					
Iron	259.940														
Lead	220.353	-0.000020							0.000134	0.000031			-0.002133		
Lithium	670.784				0.000078										
Magnesium	279.079											-0.003617			
Manganese	257.610	0.000007								0.000008					
Molybdenum	202.030														
Nickel	231.604									0.000018					
Potassium	766.490														
Selenium	196.090	-0.000180										0.000419			
Silicon	288.158							-0.000713							
Silver	328.068											0.000149			
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034	-0.000327			-0.000197										
Thallium	190.856						0.001873					0.000754			
Tin	189.989														
Titanium	334.904				0.000010			0.000294					0.000785		
Vanadium	292.402									0.000020		0.000057	-0.009464		
Zinc	206.200							-0.000300							

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG No.:

ICP-AES Instrument ID: ICAP2 Date: 02/16/2017

Analyte	Wave Length	Si	Sn	Ti	Tl	V									
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042			-0.00065367											
Boron	208.959														
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616			0.002032											
Copper	327.396			-0.00018661											
Iron	259.940														
Lead	220.353			-0.00070612											
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610					00080073									
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090														
Silicon	288.158														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856					-0.006240									
Tin	189.989			-0.00012256											

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG No.:

ICP-AES Instrument ID: ICAP2 Date: 02/16/2017

Analyte	Wave Length	Si	Sn	Ti	Tl	V									
Titanium	334.904														
Vanadium	292.402			0.000751											
Zinc	206.200														

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Buffalo Job No: 480-125579-1

SDG No.:

Instrument ID: ICAP2 Date: 02/16/2017 09:13

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum	15	600	6010C
Antimony	15	10	6010C
Arsenic	15	5	6010C
Barium	15	10	6010C
Beryllium	15	25	6010C
Cadmium	15	5	6010C
Calcium	15	1000	6010C
Chromium	15	10	6010C
Cobalt	15	20	6010C
Copper	15	25	6010C
Iron	15	600	6010C
Lead	15	120	6010C
Magnesium	15	500	6010C
Manganese	15	50	6010C
Nickel	15	10	6010C
Potassium	15	600	6010C
Selenium	15	60	6010C
Silver	15	3	6010C
Sodium	15	5000	6010C
Thallium	15	20	6010C
Vanadium	15	5	6010C
Zinc	15	20	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Buffalo Job No: 480-125579-1

SDG No.:

Instrument ID: LEEMAN2 Date: 10/13/2015 15:08

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury	10	10	7471B

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 480-381758/1-A	10/13/2017 16:34	381758	+0.5283		50
LCSSRM 480-381758/2-A	10/13/2017 16:34	381758	+0.5026		50
LCDSRM 480-381758/3-A	10/13/2017 16:34	381758	+0.4988		50
480-125579-1	10/13/2017 16:34	381758	+0.5060		50
480-125579-1 MS	10/13/2017 16:34	381758	+0.5206		50
480-125579-1 MSD	10/13/2017 16:34	381758	+0.5145		50
480-125579-2	10/13/2017 16:34	381758	+0.5181		50
480-125579-3	10/13/2017 16:34	381758	+0.4950		50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Prep Method: 7471B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 480-381100/1-A	10/10/2017 13:30	381100	+0.5849		50
LCSSRM 480-381100/2-A ^10	10/10/2017 13:30	381100	+0.1598		50
480-125579-1	10/10/2017 13:30	381100	+0.5835		50
480-125579-1 MS	10/10/2017 13:30	381100	+0.5961		50
480-125579-1 MSD	10/10/2017 13:30	381100	+0.5859		50
480-125579-2	10/10/2017 13:30	381100	+0.6071		50
480-125579-3	10/10/2017 13:30	381100	+0.6417		50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 10/16/2017 09:33 End Date: 10/16/2017 14:57

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ICIS 480-382167/1	1		09:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 480-382167/2			09:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 480-382167/3			09:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 480-382167/4			09:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:48																				
ICV 480-382167/6	1		10:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 480-382167/7	1		10:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICVL 480-382167/8	1		10:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 480-382167/9	1		10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 480-382167/10	1		10:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:40																				
ZZZZZZ			10:43																				
ZZZZZZ			10:47																				
ZZZZZZ			10:51																				
ZZZZZZ			10:54																				
CCV 480-382167/16	1		10:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 480-382167/17	1		11:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCVL 480-382167/18	1		11:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 480-381758/1-A	1	T	11:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 480-382167/20	1		11:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 480-382167/21	1		11:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCVL 480-382167/22	1		11:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCSSRM 480-381758/2-A	1	T	11:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCDSRM 480-381758/3-A	1	T	12:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:04																				
480-125579-1	1	T	12:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-125579-1 SD	5	T	12:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-125579-1 PDS	1	T	12:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-125579-1 MS	1	T	12:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-125579-1 MSD	1	T	12:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-125579-2	1	T	12:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 480-382167/32	1		12:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 480-382167/33	1		12:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCVL 480-382167/34	1		12:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
480-125579-3	1	T	12:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:43																				
ZZZZZZ			12:46																				
ZZZZZZ			12:50																				
ZZZZZZ			12:53																				
ZZZZZZ			12:57																				
ZZZZZZ			13:00																				
ZZZZZZ			13:04																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 10/16/2017 09:33 End Date: 10/16/2017 14:57

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			13:08																				
CCV 480-382167/44	1		13:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 480-382167/45	1		13:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCVL 480-382167/46	1		13:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			13:23																				
ZZZZZZ			13:27																				
ZZZZZZ			13:42																				
ZZZZZZ			13:46																				
ZZZZZZ			13:49																				
ZZZZZZ			13:53																				
ZZZZZZ			13:57																				
ZZZZZZ			14:00																				
ZZZZZZ			14:04																				
CCV 480-382167/56			14:07																				
CCB 480-382167/57			14:11																				
CCVL 480-382167/58			14:14																				
ZZZZZZ			14:18																				
ZZZZZZ			14:21																				
ZZZZZZ			14:25																				
ZZZZZZ			14:28																				
ZZZZZZ			14:32																				
ZZZZZZ			14:36																				
ZZZZZZ			14:39																				
ZZZZZZ			14:43																				
ZZZZZZ			14:47																				
CCV 480-382167/68			14:50																				
CCB 480-382167/69			14:54																				
CCVL 480-382167/70			14:57																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 10/16/2017 09:33 End Date: 10/16/2017 14:57

Lab Sample ID	D/F	Type	Time	Analytes																			
				V	Zn																		
ICIS 480-382167/1	1		09:33	X	X																		
IC 480-382167/2			09:37	X	X																		
IC 480-382167/3			09:41	X	X																		
IC 480-382167/4			09:44	X	X																		
ZZZZZZ			09:48																				
ICV 480-382167/6	1		10:22	X	X																		
ICB 480-382167/7	1		10:25	X	X																		
ICVL 480-382167/8	1		10:29	X	X																		
ICSA 480-382167/9	1		10:32	X	X																		
ICSAB 480-382167/10	1		10:36	X	X																		
ZZZZZZ			10:40																				
ZZZZZZ			10:43																				
ZZZZZZ			10:47																				
ZZZZZZ			10:51																				
ZZZZZZ			10:54																				
CCV 480-382167/16	1		10:58	X	X																		
CCB 480-382167/17	1		11:01	X	X																		
CCVL 480-382167/18	1		11:10	X	X																		
MB 480-381758/1-A	1	T	11:43	X	X																		
CCV 480-382167/20	1		11:46	X	X																		
CCB 480-382167/21	1		11:50	X	X																		
CCVL 480-382167/22	1		11:53	X	X																		
LCSSRM 480-381758/2-A	1	T	11:57	X	X																		
LCDSRM 480-381758/3-A	1	T	12:00	X	X																		
ZZZZZZ			12:04																				
480-125579-1	1	T	12:07	X	X																		
480-125579-1 SD	5	T	12:11	X	X																		
480-125579-1 PDS	1	T	12:14	X	X																		
480-125579-1 MS	1	T	12:18	X	X																		
480-125579-1 MSD	1	T	12:21	X	X																		
480-125579-2	1	T	12:25	X	X																		
CCV 480-382167/32	1		12:28	X	X																		
CCB 480-382167/33	1		12:32	X	X																		
CCVL 480-382167/34	1		12:36	X	X																		
480-125579-3	1	T	12:39	X	X																		
ZZZZZZ			12:43																				
ZZZZZZ			12:46																				
ZZZZZZ			12:50																				
ZZZZZZ			12:53																				
ZZZZZZ			12:57																				
ZZZZZZ			13:00																				
ZZZZZZ			13:04																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: ICAP2 Method: 6010C

Start Date: 10/16/2017 09:33 End Date: 10/16/2017 14:57

Lab Sample ID	D / F	Type	Time	Analytes																				
				V	Zn																			
ZZZZZZ			13:08																					
CCV 480-382167/44	1		13:12	X	X																			
CCB 480-382167/45	1		13:16	X	X																			
CCVL 480-382167/46	1		13:19	X	X																			
ZZZZZZ			13:23																					
ZZZZZZ			13:27																					
ZZZZZZ			13:42																					
ZZZZZZ			13:46																					
ZZZZZZ			13:49																					
ZZZZZZ			13:53																					
ZZZZZZ			13:57																					
ZZZZZZ			14:00																					
ZZZZZZ			14:04																					
CCV 480-382167/56			14:07																					
CCB 480-382167/57			14:11																					
CCVL 480-382167/58			14:14																					
ZZZZZZ			14:18																					
ZZZZZZ			14:21																					
ZZZZZZ			14:25																					
ZZZZZZ			14:28																					
ZZZZZZ			14:32																					
ZZZZZZ			14:36																					
ZZZZZZ			14:39																					
ZZZZZZ			14:43																					
ZZZZZZ			14:47																					
CCV 480-382167/68			14:50																					
CCB 480-382167/69			14:54																					
CCVL 480-382167/70			14:57																					

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: LEEMAN2 Method: 7471B

Start Date: 10/10/2017 14:54 End Date: 10/10/2017 15:27

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ICV 480-381152/1	1		14:54	X																			
ICB 480-381152/2	1		14:56	X																			
ICVL 480-381152/3	1		14:58	X																			
CCV 480-381152/4	1		14:59	X																			
CCB 480-381152/5	1		15:00	X																			
MB 480-381100/1-A	1	T	15:02	X																			
LCSSRM 480-381100/2-A ^10	10	T	15:04	X																			
ZZZZZZ			15:05																				
ZZZZZZ			15:07																				
ZZZZZZ			15:09																				
480-125579-1	1	T	15:10	X																			
480-125579-1 SD	5	T	15:12	X																			
480-125579-1 MS	1	T	15:13	X																			
480-125579-1 MSD	1	T	15:15	X																			
480-125579-2	1	T	15:16	X																			
CCV 480-381152/16	1		15:18	X																			
CCB 480-381152/17	1		15:21	X																			
480-125579-3	1	T	15:22	X																			
CCV 480-381152/19	1		15:24	X																			
CCB 480-381152/20	1		15:25	X																			
CCVL 480-381152/21	1		15:27	X																			

Prep Types
T = Total/NA

Run File: i2101617a Instrument: ICAP2

Analyst: jrk JRK 10/17/17 Data Review: 10/17/17

Spikes Ids: 4027863(W1), 4273102(W2), 4192545(Sn), 4224435(Ag), 4305701(Si), 3885452(TCLP) 4192552 (S)
Pipette IDs: 06/16/17-(1-9, 11)
Internal Standard: 4271254

Seq#	Run File ID	Sample ID	Date / Time	Type
1	i2101617a	ICIS-4278202	10/16/17 09:33 AM	Standard
2	i2101617a	IC-4278204	10/16/17 09:37 AM	Standard
3	i2101617a	IC-4278258	10/16/17 09:41 AM	Standard
4	i2101617a	IC-4278206	10/16/17 09:44 AM	Standard
5	i2101617a	xicv-4278260	10/16/17 09:48 AM	QC
6	i2101617a	icv-4278260	10/16/17 10:22 AM	QC
7	i2101617a	icb-4278202	10/16/17 10:25 AM	QC
8	i2101617a	icvl-4278204	10/16/17 10:29 AM	QC
9	i2101617a	icsa-4278263	10/16/17 10:32 AM	QC
10	i2101617a	icsab-4278265	10/16/17 10:36 AM	QC
11	i2101617a	ICEX1	10/16/17 10:40 AM	Unknown
12	i2101617a	ICEX2	10/16/17 10:43 AM	Unknown
13	i2101617a	ICEX3	10/16/17 10:47 AM	Unknown
14	i2101617a	ICEX4	10/16/17 10:51 AM	Unknown
15	i2101617a	ICEX5	10/16/17 10:54 AM	Unknown
16	i2101617a	CCV-4278259	10/16/17 10:58 AM	QC
17	i2101617a	CCB-4278202	10/16/17 11:01 AM	QC
18	i2101617a	ccvl-4278204	10/16/17 11:10 AM	QC
19	i2101617a	LB2 480-378831/1-B	10/16/17 11:14 AM	Unknown
20	i2101617a	MB 480-378949/2-A	10/16/17 11:17 AM	Unknown
21	i2101617a	LCS 480-378949/3-A	10/16/17 11:21 AM	Unknown
22	i2101617a	480-124556-A-3-D	10/16/17 11:25 AM	Unknown
23	i2101617a	480-124556-A-3-DSD@5	10/16/17 11:28 AM	Unknown
24	i2101617a	480-124556-A-3-DPDS	10/16/17 11:32 AM	Unknown
25	i2101617a	480-124556-A-3-E MS	10/16/17 11:35 AM	Unknown
26	i2101617a	480-124556-A-3-F MSD	10/16/17 11:39 AM	Unknown
27	i2101617a	MB 480-381758/1-A	10/16/17 11:43 AM	Unknown
28	i2101617a	CCV-4278259	10/16/17 11:46 AM	QC
29	i2101617a	CCB-4278202	10/16/17 11:50 AM	QC
30	i2101617a	ccvl-4278204	10/16/17 11:53 AM	QC
31	i2101617a	LCSSRM 480-381758/2-	10/16/17 11:57 AM	Unknown
32	i2101617a	LCDSRM 480-381758/3-	10/16/17 12:00 PM	Unknown
33	i2101617a	480-125696-A-1-A	10/16/17 12:04 PM	Unknown
34	i2101617a	480-125579-E-1-B	10/16/17 12:07 PM	Unknown
35	i2101617a	480-125579-E-1-BSD@5	10/16/17 12:11 PM	Unknown
36	i2101617a	480-125579-E-1-BPDS	10/16/17 12:14 PM	Unknown
37	i2101617a	480-125579-F-1-F MS	10/16/17 12:18 PM	Unknown
38	i2101617a	480-125579-E-1-C MSD	10/16/17 12:21 PM	Unknown
39	i2101617a	480-125579-F-2-B	10/16/17 12:25 PM	Unknown
40	i2101617a	CCV-4278259	10/16/17 12:28 PM	QC
41	i2101617a	CCB-4278202	10/16/17 12:32 PM	QC
42	i2101617a	ccvl-4278204	10/16/17 12:36 PM	QC

43	i2101617a	480-125579-F-3-B	10/16/17 12:39 PM Unknown
44	i2101617a	480-125631-B-1-A	10/16/17 12:43 PM Unknown
45	i2101617a	480-125631-C-2-B	10/16/17 12:46 PM Unknown
46	i2101617a	480-125631-B-3-B	10/16/17 12:50 PM Unknown
47	i2101617a	480-125631-B-4-B	10/16/17 12:53 PM Unknown
48	i2101617a	480-125631-B-6-B	10/16/17 12:57 PM Unknown
49	i2101617a	480-125681-A-1-D	10/16/17 01:00 PM Unknown
50	i2101617a	480-125681-A-2-D	10/16/17 01:04 PM Unknown
51	i2101617a	480-125681-A-3-D	10/16/17 01:08 PM Unknown
52	i2101617a	CCV-4278259	10/16/17 01:12 PM QC
53	i2101617a	CCB-4278202	10/16/17 01:16 PM QC
54	i2101617a	ccvl-4278204	10/16/17 01:19 PM QC
55	i2101617a	480-125681-A-4-D	10/16/17 01:23 PM Unknown
56	i2101617a	480-125681-A-5-I	10/16/17 01:27 PM Unknown
57	i2101617a	480-125681-A-6-D@5	10/16/17 01:42 PM Unknown
58	i2101617a	480-125681-A-7-D@5	10/16/17 01:46 PM Unknown
59	i2101617a	480-125681-A-8-E@5	10/16/17 01:49 PM Unknown
60	i2101617a	480-125681-A-9-D@5	10/16/17 01:53 PM Unknown
61	i2101617a	480-125681-A-10-A@5	10/16/17 01:57 PM Unknown
62	i2101617a	480-124142-A-1-K	10/16/17 02:00 PM Unknown
63	i2101617a	LCS 480-381758/26-A	10/16/17 02:04 PM Unknown
64	i2101617a	CCV-4278259	10/16/17 02:07 PM QC
65	i2101617a	CCB-4278202	10/16/17 02:11 PM QC
66	i2101617a	ccvl-4278204	10/16/17 02:14 PM QC
67	i2101617a	LCSD 480-381758/27-A	10/16/17 02:18 PM Unknown
68	i2101617a	480-125681-A-1-D@5	10/16/17 02:21 PM Unknown
69	i2101617a	480-125681-A-2-D@5	10/16/17 02:25 PM Unknown
70	i2101617a	480-125681-A-2-D@10	10/16/17 02:28 PM Unknown
71	i2101617a	480-125681-A-3-D@5	10/16/17 02:32 PM Unknown
72	i2101617a	480-125681-A-4-D@5	10/16/17 02:36 PM Unknown
73	i2101617a	480-125681-A-5-I@5	10/16/17 02:39 PM Unknown
74	i2101617a	480-125681-A-10-A@10	10/16/17 02:43 PM Unknown
75	i2101617a	blank	10/16/17 02:47 PM Unknown
76	i2101617a	CCV-4278259	10/16/17 02:50 PM QC
77	i2101617a	CCB-4278202	10/16/17 02:54 PM QC
78	i2101617a	ccvl-4278204	10/16/17 02:57 PM QC
79	i2101617a	480-125681-A-6-D	10/16/17 03:01 PM Unknown
80	i2101617a	480-125681-A-7-D	10/16/17 03:05 PM Unknown
81	i2101617a	480-125681-A-8-E	10/16/17 03:09 PM Unknown
82	i2101617a	480-125681-A-9-D	10/16/17 03:13 PM Unknown
83	i2101617a	480-125681-A-10-A	10/16/17 03:17 PM Unknown
84	i2101617a	blank	10/16/17 03:21 PM Unknown
85	i2101617a	blank	10/16/17 03:24 PM Unknown
86	i2101617a	blank	10/16/17 03:40 PM Unknown
87	i2101617a	blank	10/16/17 03:44 PM Unknown

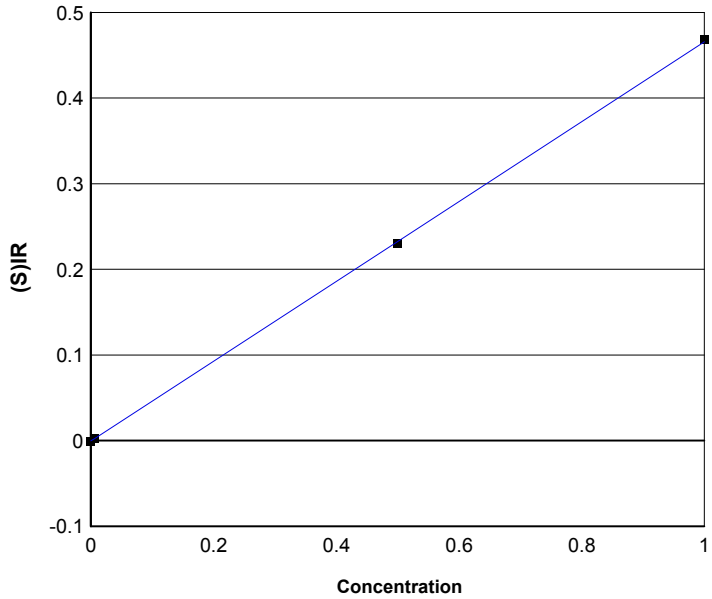
i2101617a

Author: jrk

Published: 10/17/2017 7:05:30AM

Instrument Name: iCAP2 Serial Number: 20094602

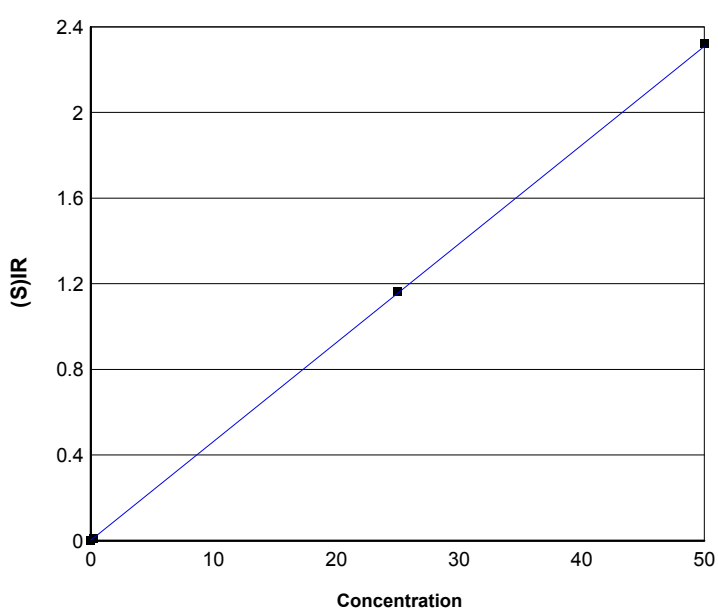
Method Name: ICAP2 June 2017 (154)



Element Name:	Ag
Element Wavelength:	Ag 328.068 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.00033960
A1 (Gain):	0.46589
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

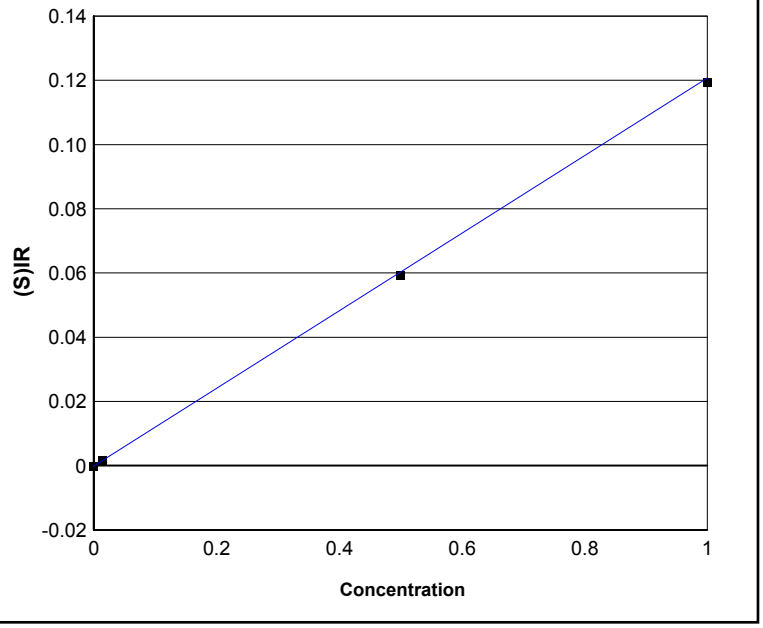
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000002634	0.0000002634	0.00000	-0.00033948	0.00043164	1
IC-4278204	0.0060000	0.0057657	-0.00023435	-3.9058	0.0023467	0.0000093454	1
IC-4278258	0.50000	0.49492	-0.0050776	-1.0155	0.23026	0.00060188	1
IC-4278206	1.0000	1.0053	0.0053119	0.53119	0.46808	0.00044686	1



Element Name:	Al
Element Wavelength:	Al 308.215 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.0023141
A1 (Gain):	0.046145
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

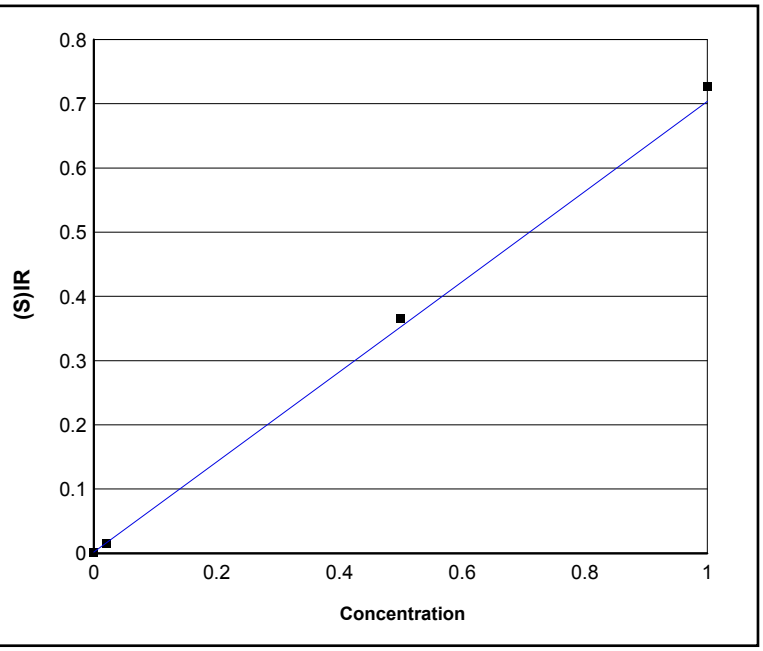
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000030649	-0.0000030649	0.00000	0.0023140	0.00072417	1
IC-4278204	0.20000	0.20291	0.0029102	1.4551	0.011738	0.00026759	1
IC-4278258	25.000	25.042	0.041605	0.16642	1.1639	0.0016352	1
IC-4278206	50.000	49.955	-0.044519	-0.089037	2.3196	0.0080078	1



Element Name:	As
Element Wavelength:	As 189.042 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.00010295
A1 (Gain):	0.12085
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

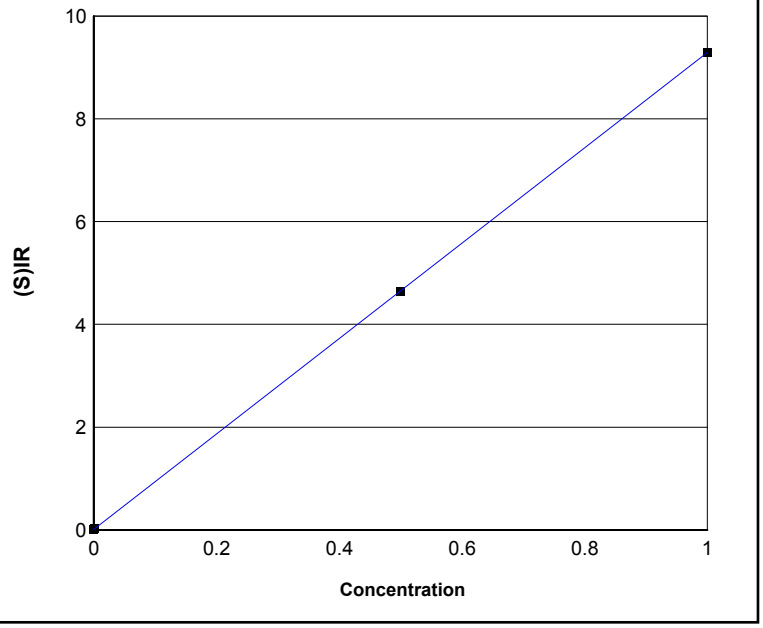
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000003549	0.0000003549	0.00000	-0.00010290	0.00022161	1
IC-4278204	0.015000	0.014669	-0.00033053	-2.2035	0.0016632	0.00011127	1
IC-4278258	0.50000	0.49804	-0.0019608	-0.39216	0.059247	0.000065850	1
IC-4278206	1.0000	1.0023	0.0022947	0.22947	0.11935	0.00011531	1



Element Name:	B
Element Wavelength:	B 208.959 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.0019420
A1 (Gain):	0.70162
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

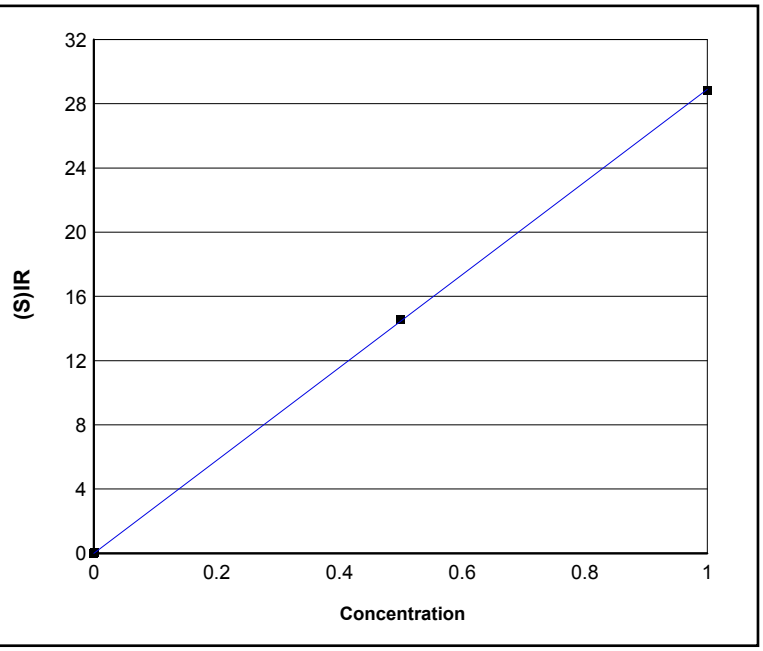
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001693	0.0000001693	0.00000	0.0019421	0.000055109	1
IC-4278204	0.020000	0.019797	-0.00020263	-1.0132	0.016071	0.000020524	1
IC-4278258	0.50000	0.50147	0.0014685	0.29369	0.36571	0.00030114	1
IC-4278206	1.0000	0.99873	-0.0012692	-0.12692	0.72653	0.000072879	1



Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.011754
A1 (Gain):	9.2805
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

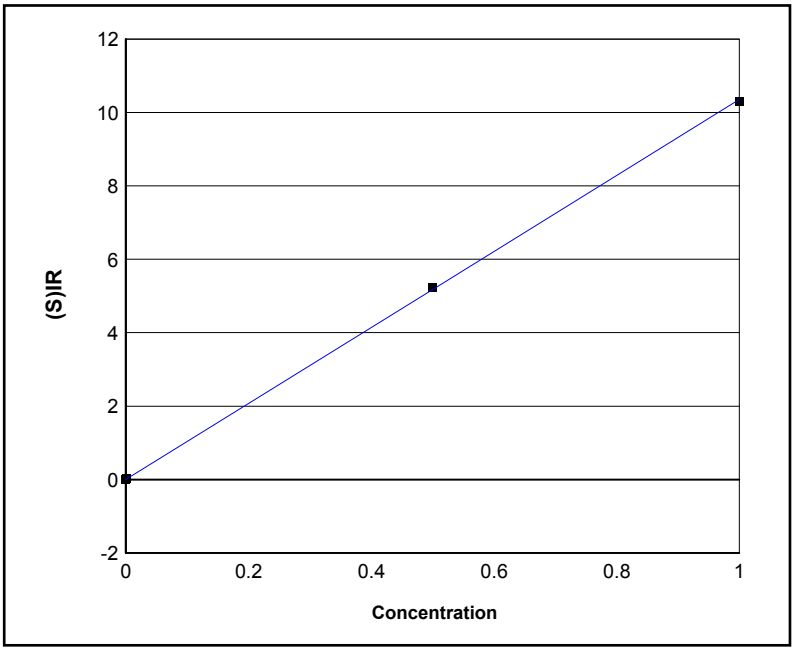
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000000268	-0.0000000268	0.00000	0.011754	0.00068090	1
IC-4278204	0.0020000	0.0020284	0.000028397	1.4198	0.030579	0.00035221	1
IC-4278258	0.50000	0.49925	-0.00075343	-0.15069	4.6450	0.021911	1
IC-4278206	1.0000	1.0007	0.00072503	0.072503	9.2990	0.020667	1



Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.0062364
A1 (Gain):	28.893
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

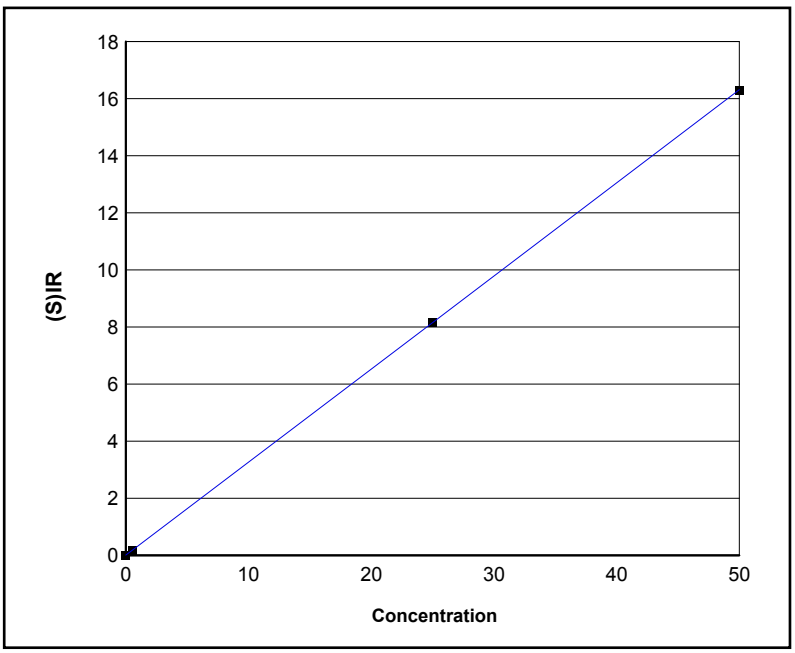
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001243	-0.0000001243	0.00000	0.0062328	0.00018199	1
IC-4278204	0.0020000	0.0021182	0.00011817	5.9086	0.067437	0.00034896	1
IC-4278258	0.50000	0.50318	0.0031849	0.63698	14.545	0.00054467	1
IC-4278206	1.0000	0.99670	-0.0033031	-0.33031	28.804	0.16822	1



Element Name:	Be
Element Wavelength:	Be 313.042 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.000063435
A1 (Gain):	10.360
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

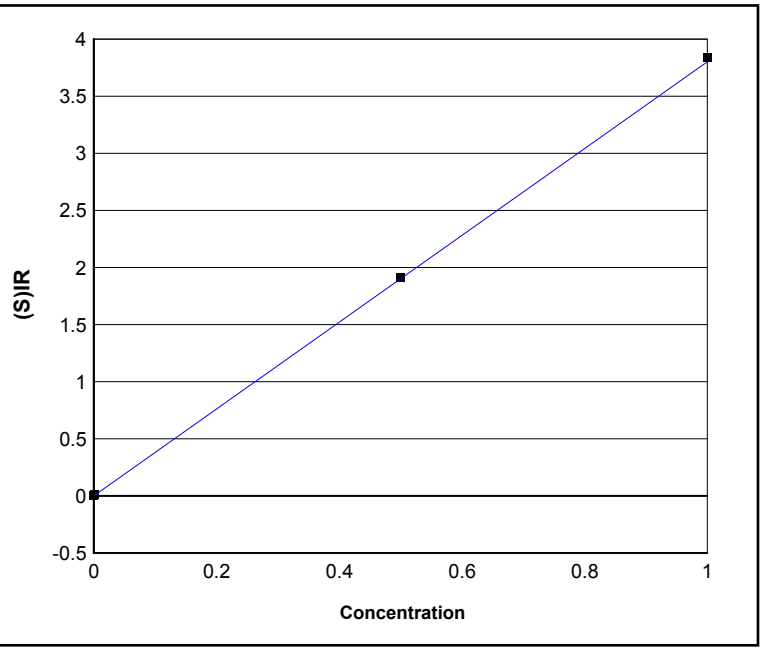
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000000945	-0.0000000945	0.00000	-0.000064414	0.00068439	1
IC-4278204	0.0020000	0.0020860	0.000086048	4.3024	0.021513	0.00071210	1
IC-4278258	0.50000	0.50431	0.0043080	0.86159	5.2211	0.025642	1
IC-4278206	1.0000	0.99561	-0.0043939	-0.43939	10.307	0.030196	1



Element Name:	Ca
Element Wavelength:	Ca 317.933 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.0082332
A1 (Gain):	0.32600
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

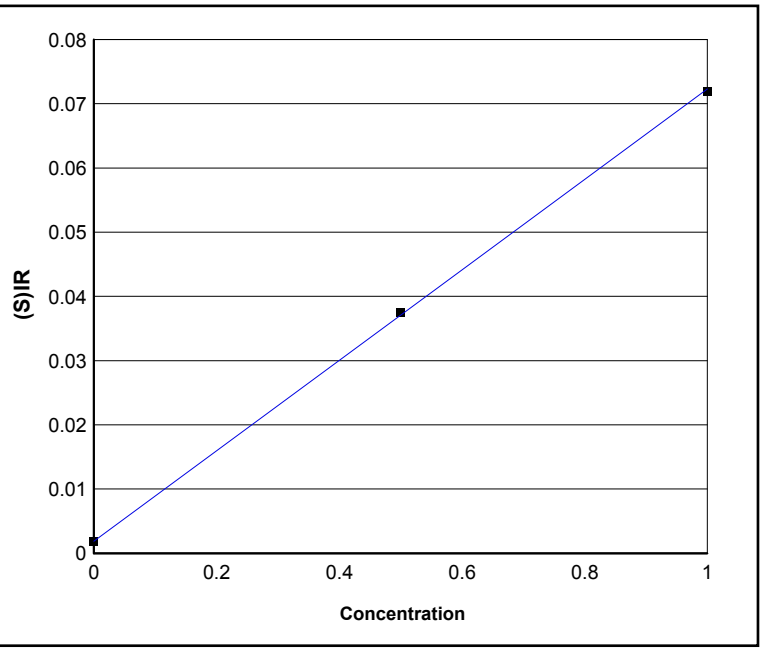
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	-0.000016292	-0.000016292	0.00000	0.0082278	0.00084374	1
IC-4278204	0.50000	0.51633	0.016328	3.2656	0.17656	0.0013963	1
IC-4278258	25.000	25.013	0.012747	0.050988	8.1624	0.056126	1
IC-4278206	50.000	49.971	-0.029075	-0.058149	16.299	0.051505	1



Element Name:	Cd
Element Wavelength:	Cd 228.802 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.0000096047
A1 (Gain):	3.8027
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

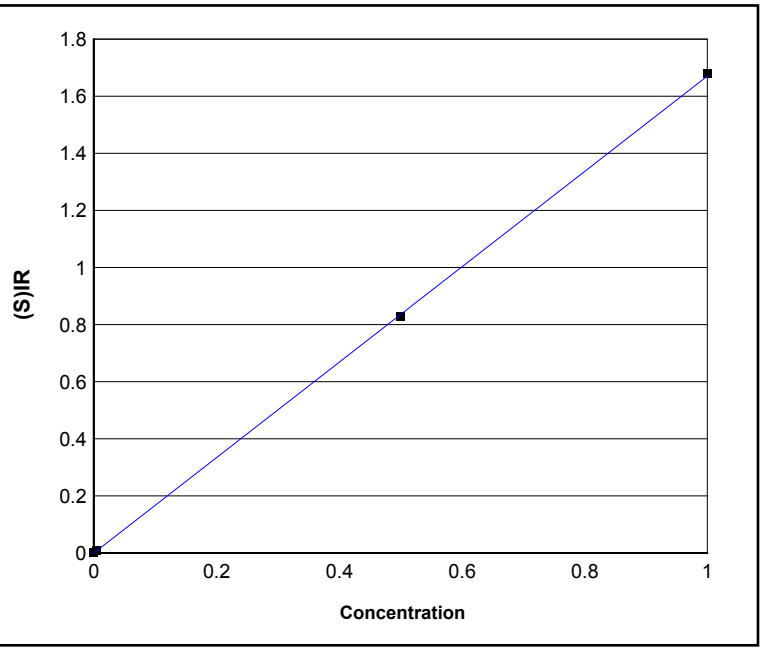
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001206	-0.0000001206	0.00000	-0.000010063	0.00020518	1
IC-4278204	0.0020000	0.0021224	0.00012245	6.1224	0.0085820	0.00027012	1
IC-4278258	0.50000	0.49920	-0.00080437	-0.16087	1.9156	0.0016371	1
IC-4278206	1.0000	1.0007	0.00067471	0.067471	3.8398	0.0040650	1



Element Name:	Ce
Element Wavelength:	Ce 404.076 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.0000
A0 (Offset):	0.001866
A1 (Gain):	0.07044
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

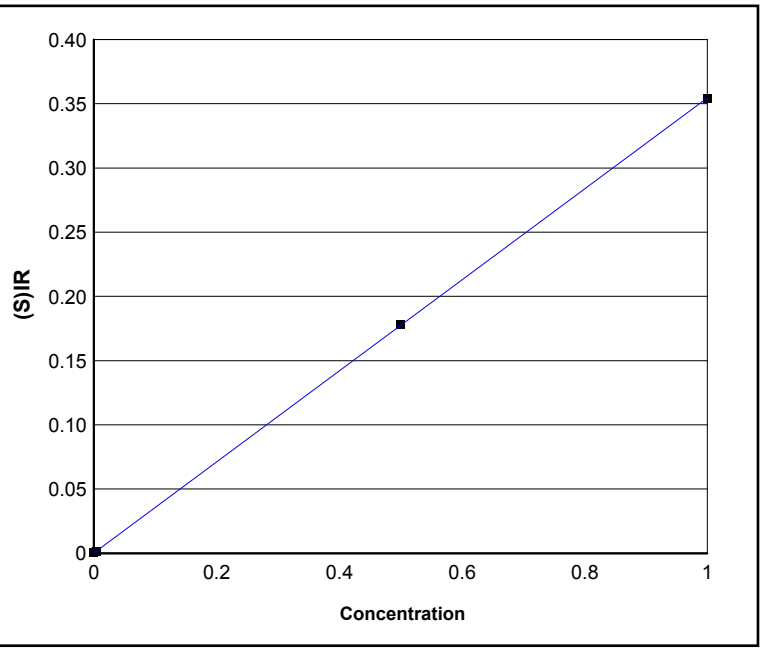
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.0000	-0.000002794	-0.000002794	0.0000	0.001866	0.002207	1
IC-4278258	0.5000	0.5056	0.005587	1.117	0.03748	0.0002203	1
IC-4278206	1.000	0.9944	-0.005587	-0.5587	0.07191	0.0006974	1



Element Name:	Co
Element Wavelength:	Co 228.616 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.00013475
A1 (Gain):	1.6700
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

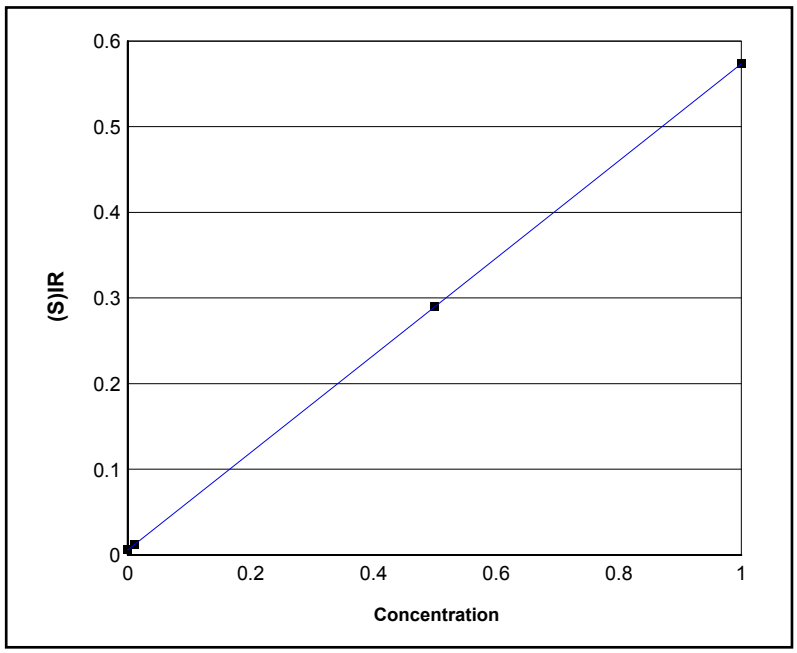
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001046	0.0000001046	0.00000	0.00013493	0.000067733	1
IC-4278204	0.0040000	0.0039119	-0.000088061	-2.2015	0.0066714	0.00026558	1
IC-4278258	0.50000	0.49579	-0.0042123	-0.84247	0.82912	0.00016722	1
IC-4278206	1.0000	1.0043	0.0043003	0.43003	1.6794	0.00082856	1



Element Name:	Cr
Element Wavelength:	Cr 267.716 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.00033268
A1 (Gain):	0.35420
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

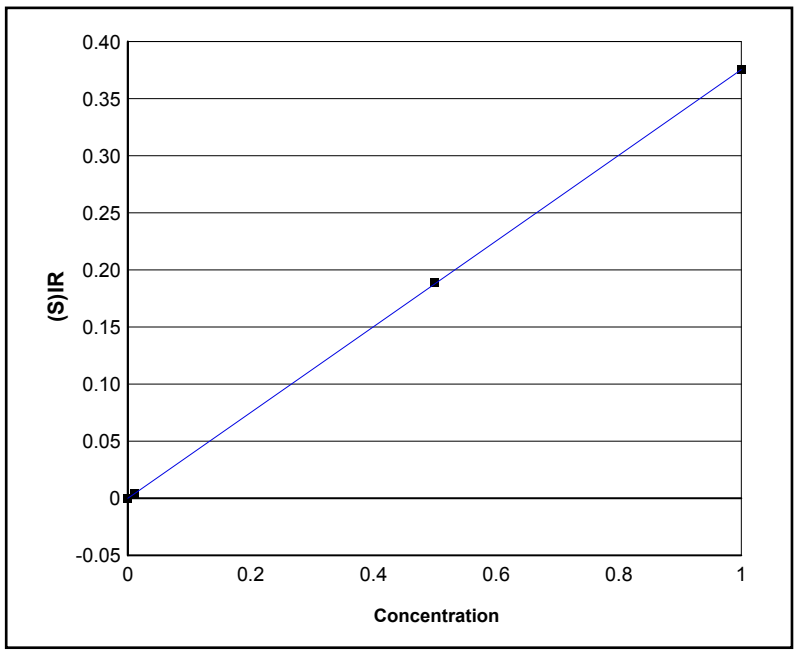
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001801	0.0000001801	0.00000	0.00033274	0.00013609	1
IC-4278204	0.0040000	0.0038114	-0.00018857	-4.7142	0.0016828	0.00025267	1
IC-4278258	0.50000	0.50193	0.0019310	0.38620	0.17811	0.0012377	1
IC-4278206	1.0000	0.99826	-0.0017424	-0.17424	0.35390	0.00033828	1



Element Name:	Cu
Element Wavelength:	Cu 324.754 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.0059413
A1 (Gain):	0.56774
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

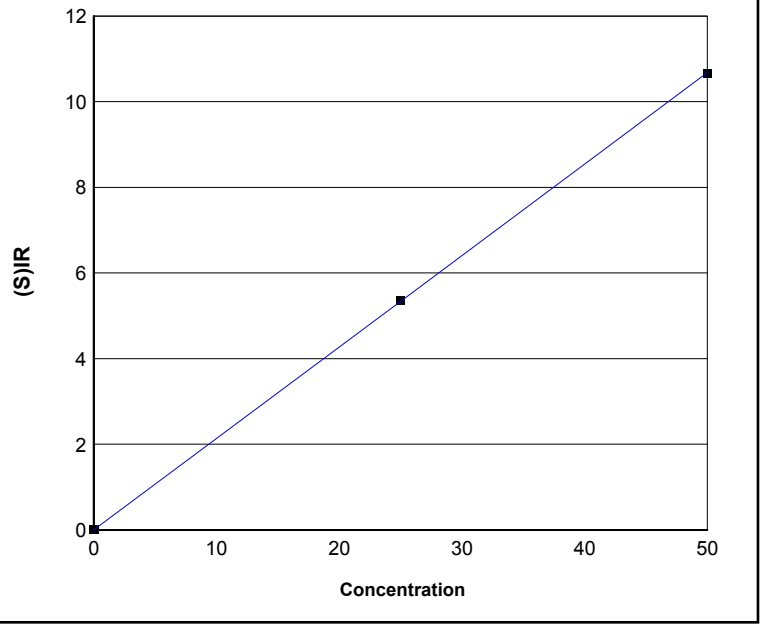
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000006672	-0.0000006672	0.00000	0.0059409	0.00046608	1
IC-4278204	0.010000	0.010681	0.00068074	6.8074	0.012005	0.00020026	1
IC-4278258	0.50000	0.49932	-0.00067653	-0.13531	0.28943	0.0012293	1
IC-4278206	1.0000	1.00000	-0.0000042085	-0.00042085	0.57368	0.00065136	1



Element Name:	Cu
Element Wavelength:	Cu 327.396 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.000053736
A1 (Gain):	0.37544
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

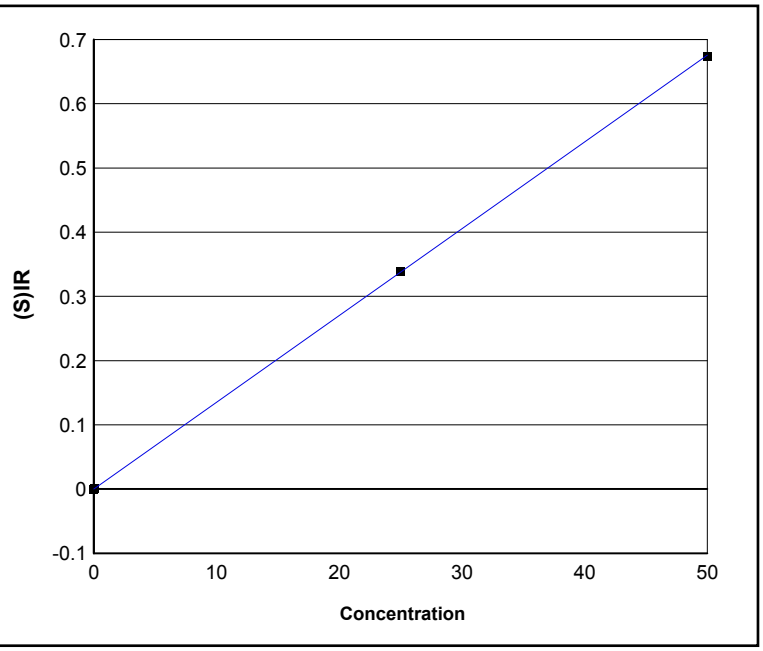
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000000881	0.0000000881	0.00000	-0.000053702	0.00014371	1
IC-4278204	0.010000	0.0098922	-0.00010776	-1.0776	0.0036649	0.00026396	1
IC-4278258	0.50000	0.50185	0.0018545	0.37089	0.18855	0.0010853	1
IC-4278206	1.0000	0.99825	-0.0017467	-0.17467	0.37510	0.00053261	1



Element Name:	Fe
Element Wavelength:	Fe 259.940 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99993
A0 (Offset):	0.00054660
A1 (Gain):	0.21367
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

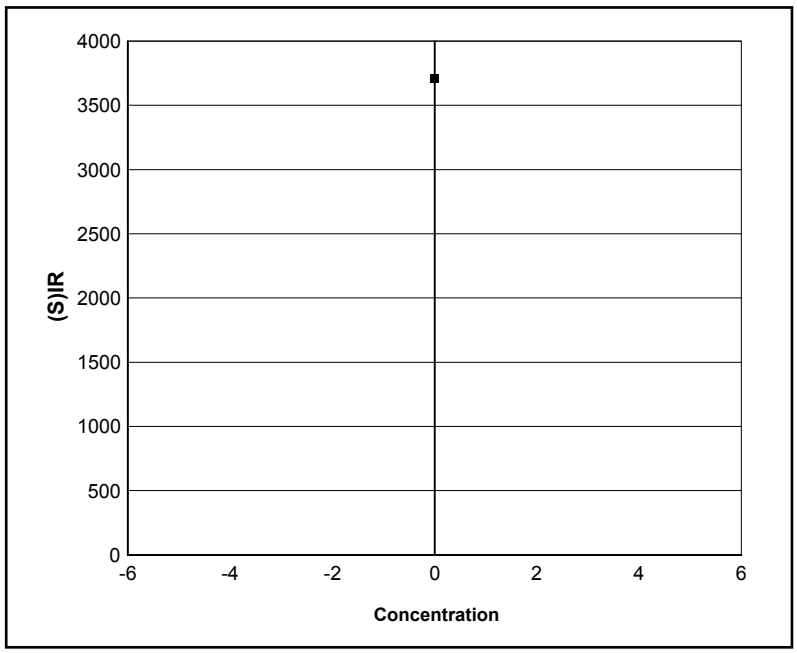
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	-0.000021247	-0.000021247	0.00000	0.00054206	0.00054241	1
IC-4278204	0.050000	0.071145	0.021145	42.291	0.015748	0.00012426	1
IC-4278258	25.000	25.123	0.12312	0.49248	5.3685	0.033054	1
IC-4278206	50.000	49.856	-0.14427	-0.28853	10.653	0.0026046	1



Element Name:	Fe
Element Wavelength:	Fe 271.441 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99995
A0 (Offset):	-0.000012866
A1 (Gain):	0.013508
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

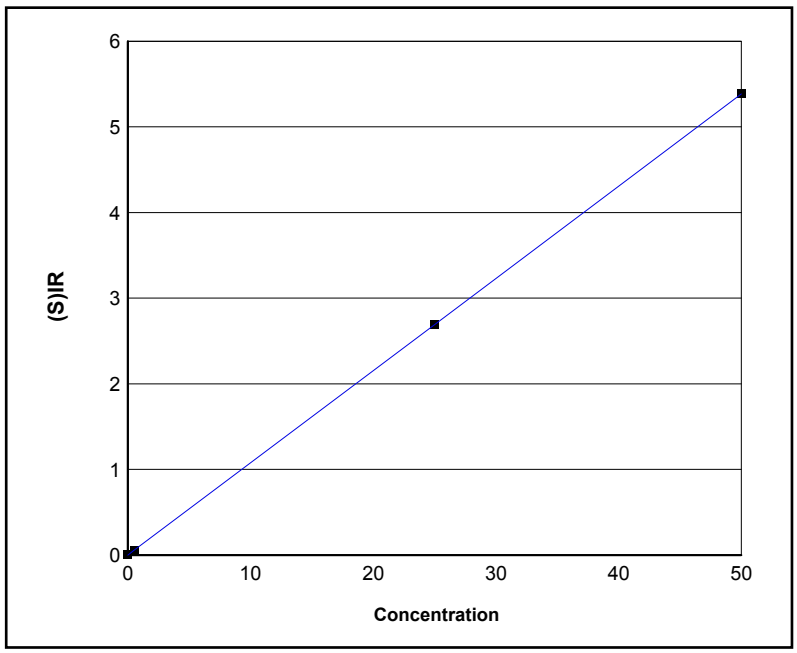
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	-0.000018105	-0.000018105	0.00000	-0.000013110	0.000018541	1
IC-4278204	0.050000	0.067994	0.017994	35.988	0.00090560	0.00035737	1
IC-4278258	25.000	25.129	0.12886	0.51545	0.33943	0.0030666	1
IC-4278206	50.000	49.853	-0.14686	-0.29372	0.67340	0.0029542	1



Element Name:	In
Element Wavelength:	In 230.606 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:37:36AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		**QC Normalize**	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

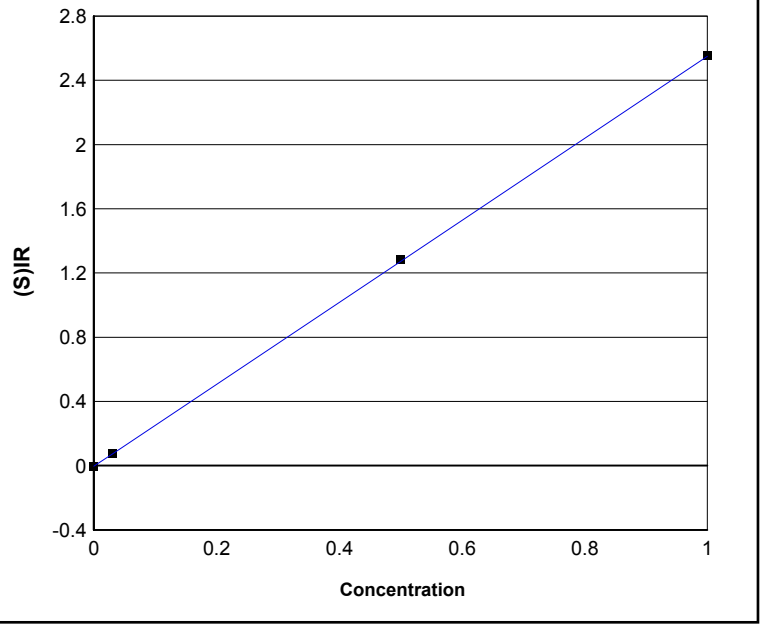
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.0000			0.0000	3,711	1.664	1



Element Name:	K
Element Wavelength:	K 766.490 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00097797
A1 (Gain):	0.10772
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

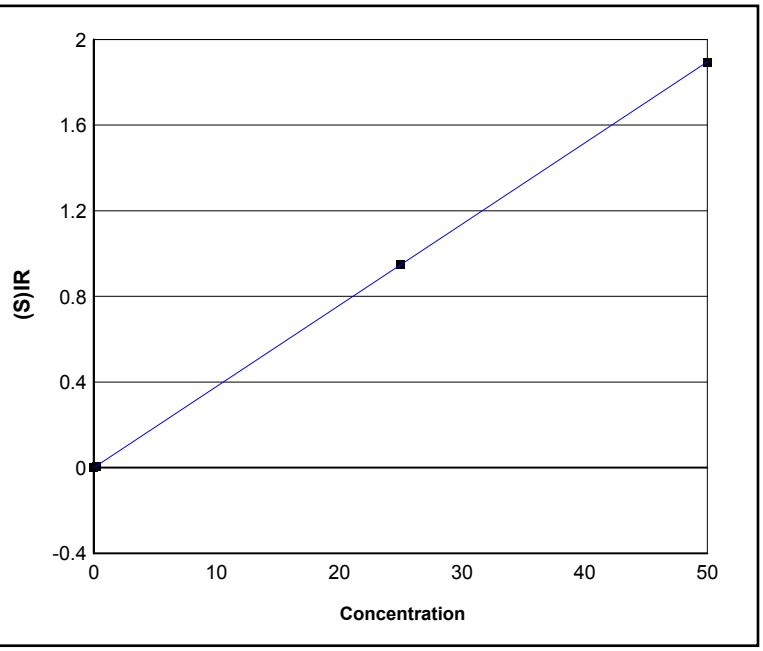
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000044204	0.0000044204	0.00000	0.00097845	0.0058166	1
IC-4278204	0.50000	0.49603	-0.0039681	-0.79362	0.054411	0.0011086	1
IC-4278258	25.000	24.951	-0.049204	-0.19681	2.6887	0.012427	1
IC-4278206	50.000	50.053	0.053172	0.10634	5.3927	0.015587	1



Element Name:	Li
Element Wavelength:	Li 670.784 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.0037318
A1 (Gain):	2.5529
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

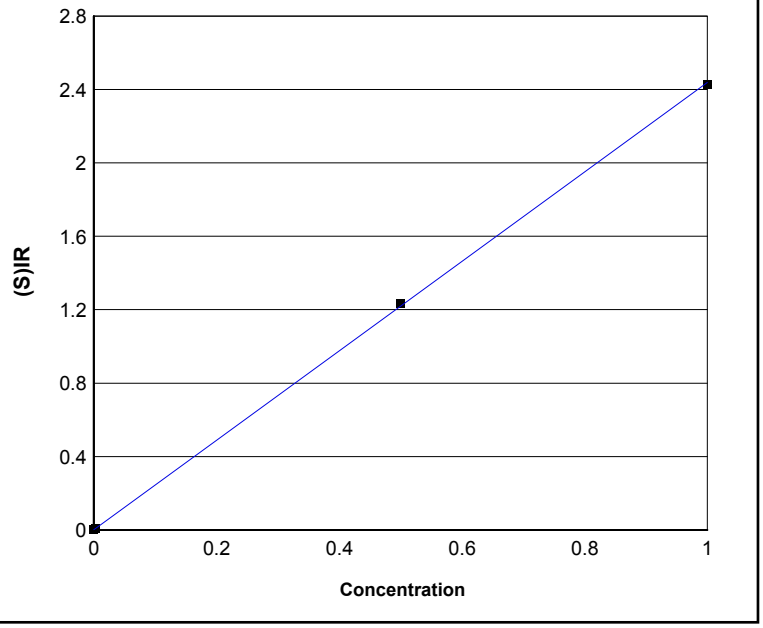
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000010930	-0.0000010930	0.00000	-0.0037346	0.0011082	1
IC-4278204	0.030000	0.031067	0.0010670	3.5566	0.075706	0.0020272	1
IC-4278258	0.50000	0.50193	0.0019291	0.38581	1.2840	0.0040089	1
IC-4278206	1.0000	0.99701	-0.0029925	-0.29925	2.5543	0.0025824	1



Element Name:	Mg
Element Wavelength:	Mg 279.079 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.00021008
A1 (Gain):	0.037916
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

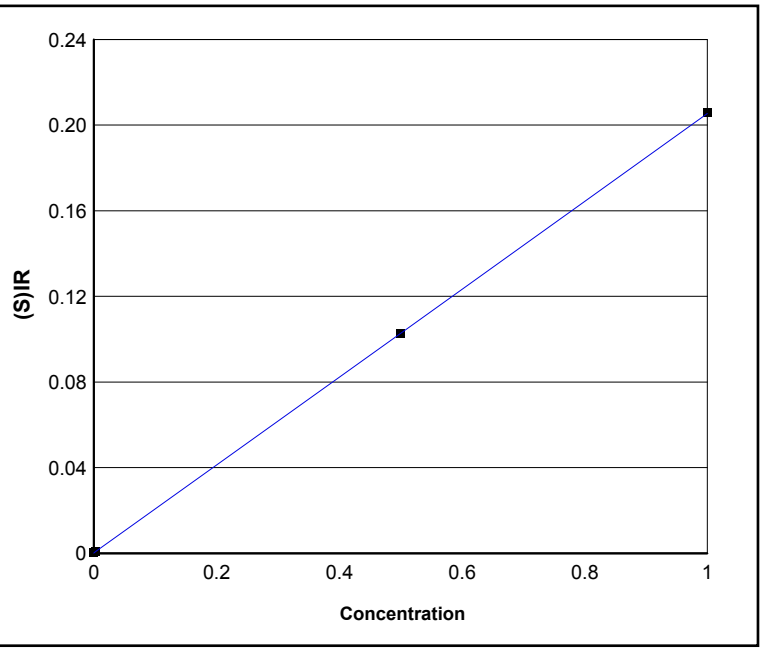
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000083560	-0.0000083560	0.00000	-0.00021040	0.000041333	1
IC-4278204	0.20000	0.20832	0.0083192	4.1596	0.0076882	0.000070672	1
IC-4278258	25.000	25.018	0.017506	0.070025	0.94829	0.0016918	1
IC-4278206	50.000	49.974	-0.025826	-0.051651	1.8945	0.0038769	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.0020101
A1 (Gain):	2.4357
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

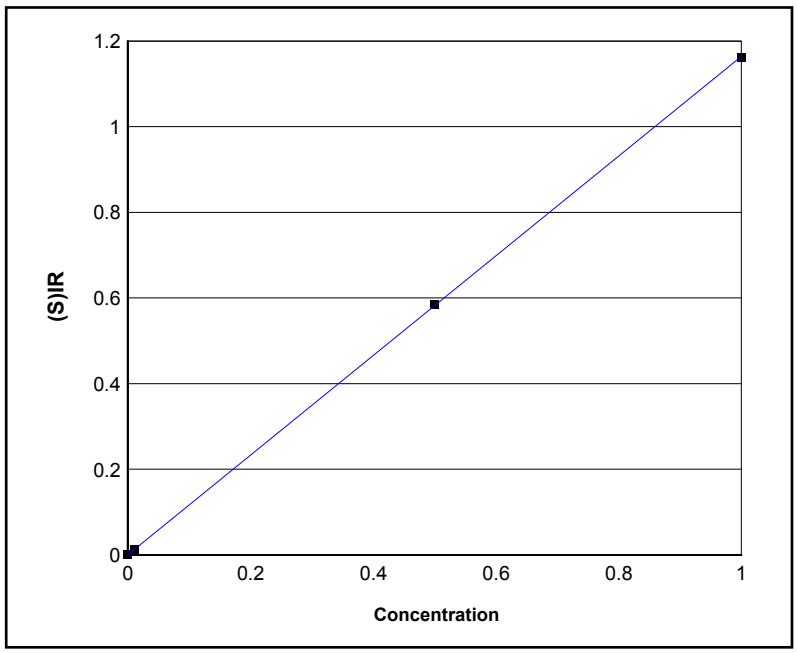
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001683	-0.0000001683	0.00000	0.0020097	0.000087718	1
IC-4278204	0.0030000	0.0031567	0.00015671	5.2236	0.0097019	0.00041448	1
IC-4278258	0.50000	0.50403	0.0040332	0.80664	1.2308	0.0017275	1
IC-4278206	1.0000	0.99581	-0.0041898	-0.41898	2.4297	0.0049956	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.00019165
A1 (Gain):	0.20524
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

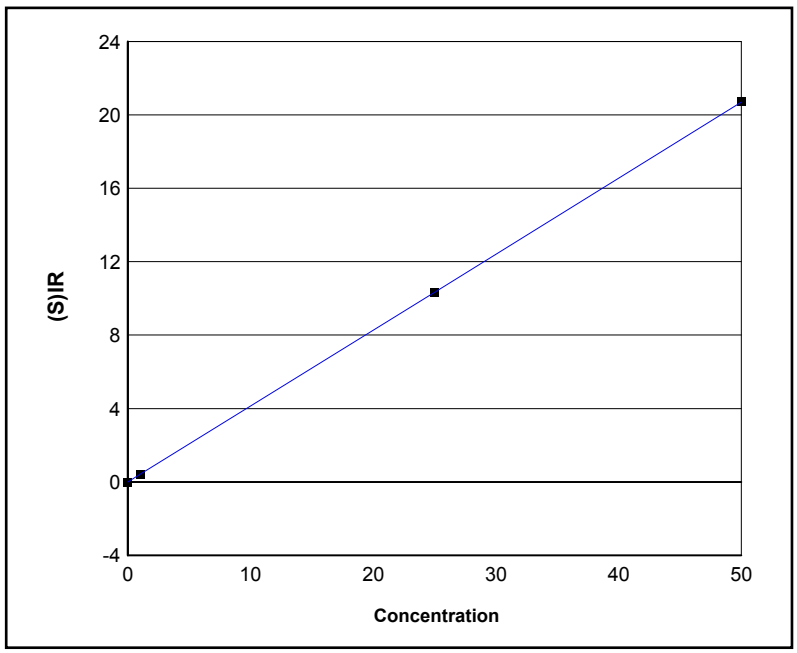
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000002084	-0.0000002084	0.00000	0.00019161	0.000013571	1
IC-4278204	0.0030000	0.0032128	0.00021278	7.0925	0.00085130	0.000061297	1
IC-4278258	0.50000	0.49877	-0.0012323	-0.24647	0.10265	0.00097525	1
IC-4278206	1.0000	1.0010	0.0010197	0.10197	0.20583	0.00067101	1



Element Name:	Mo
Element Wavelength:	Mo 202.030 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00032889
A1 (Gain):	1.1635
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

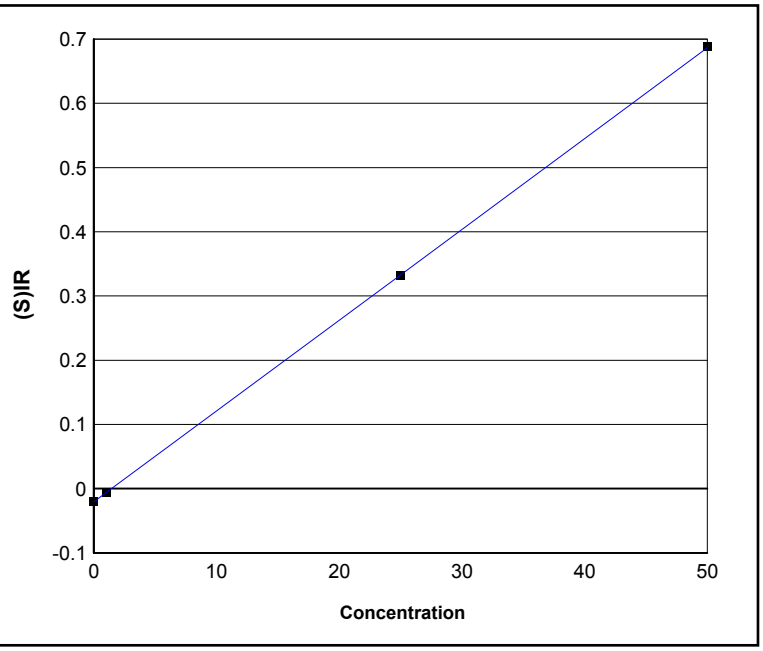
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001818	-0.0000001818	0.00000	0.00032868	0.000031792	1
IC-4278204	0.010000	0.010164	0.00016404	1.6404	0.012155	0.000057420	1
IC-4278258	0.50000	0.50194	0.0019366	0.38733	0.58435	0.00049227	1
IC-4278206	1.0000	0.99790	-0.0021007	-0.21007	1.1614	0.000074243	1



Element Name:	Na
Element Wavelength:	Na 589.592 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.010175
A1 (Gain):	0.41401
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

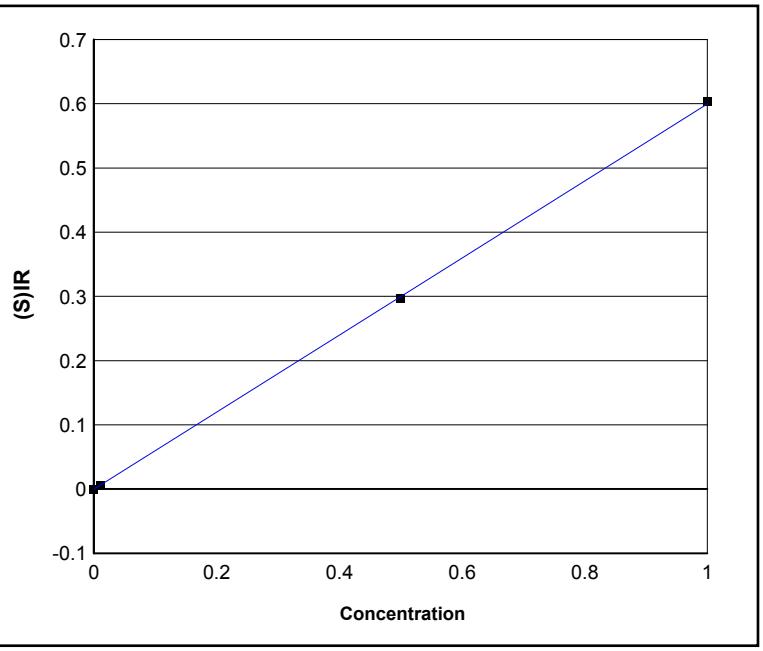
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	-0.000018764	-0.000018764	0.00000	-0.010183	0.00033336	1
IC-4278204	1.0000	1.0210	0.021032	2.1032	0.41254	0.00063069	1
IC-4278258	25.000	24.908	-0.092365	-0.36946	10.302	0.035292	1
IC-4278206	50.000	50.071	0.071333	0.14267	20.720	0.058237	1



Element Name:	Na
Element Wavelength:	Na 818.326 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:07AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.020574
A1 (Gain):	0.014138
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

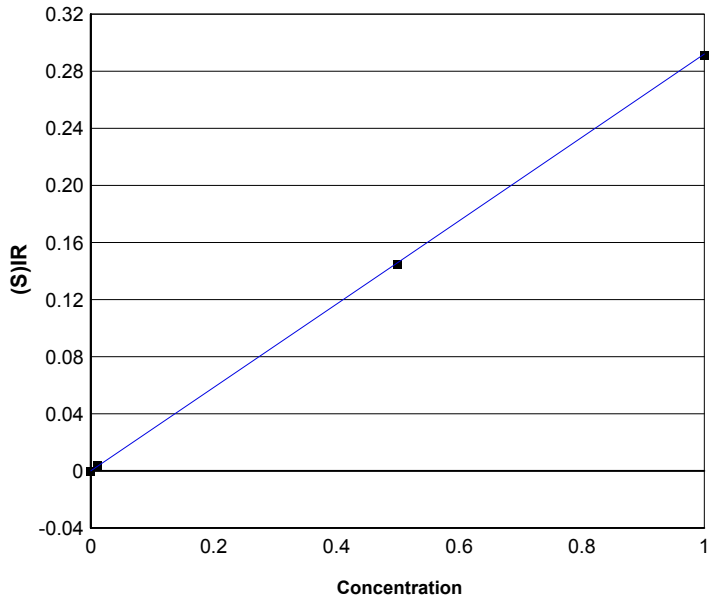
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.000011096	0.000011096	0.00000	-0.020574	0.0036218	1
IC-4278204	1.0000	0.99097	-0.0090280	-0.90280	-0.0065639	0.000085683	1
IC-4278258	25.000	24.888	-0.11241	-0.44965	0.33129	0.0026892	1
IC-4278206	50.000	50.121	0.12144	0.24288	0.68805	0.0010397	1



Element Name:	Ni
Element Wavelength:	Ni 231.604 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.00043982
A1 (Gain):	0.59992
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

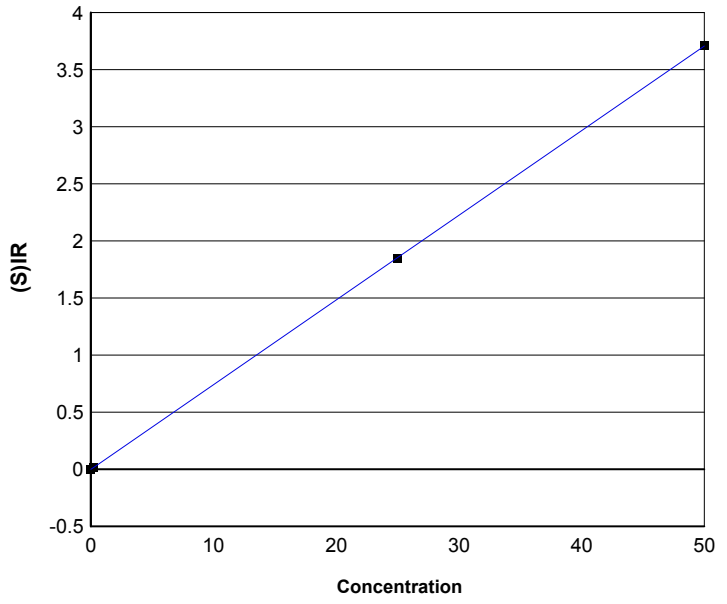
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001148	0.0000001148	0.00000	-0.00043975	0.000042399	1
IC-4278204	0.010000	0.0099279	-0.000072053	-0.72053	0.0055168	0.000064789	1
IC-4278258	0.50000	0.49566	-0.0043439	-0.86879	0.29723	0.00012360	1
IC-4278206	1.0000	1.0044	0.0044159	0.44159	0.60276	0.000067439	1



Element Name:	Pb
Element Wavelength:	Pb 220.353 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99986
A0 (Offset):	-0.00013238
A1 (Gain):	0.29212
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

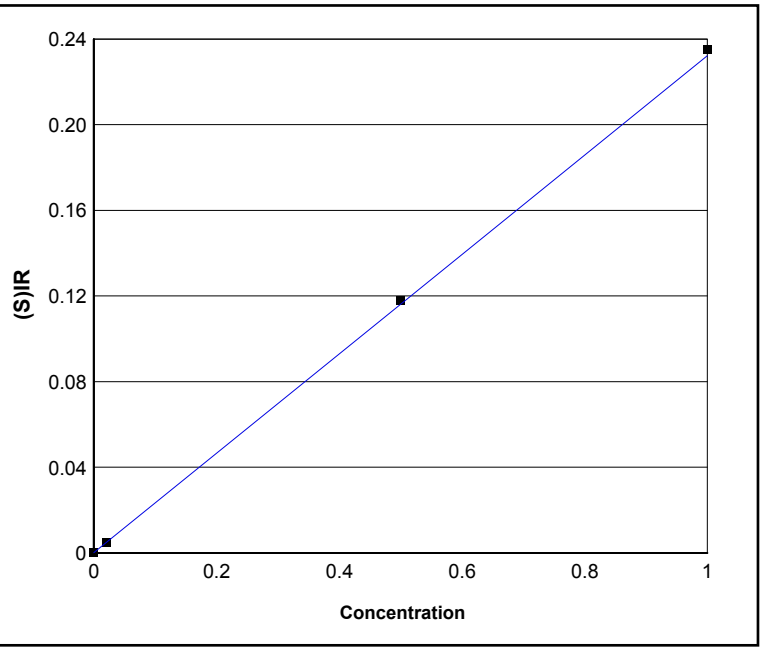
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000020050	-0.0000020050	0.00000	-0.00013296	0.00018651	1
IC-4278204	0.010000	0.012047	0.0020471	20.471	0.0033804	0.00023597	1
IC-4278258	0.50000	0.49784	-0.0021636	-0.43272	0.14496	0.00034005	1
IC-4278206	1.0000	1.0001	0.00011635	0.011635	0.29136	0.0013067	1



Element Name:	S
Element Wavelength:	S 182.034 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.000027740
A1 (Gain):	0.074124
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

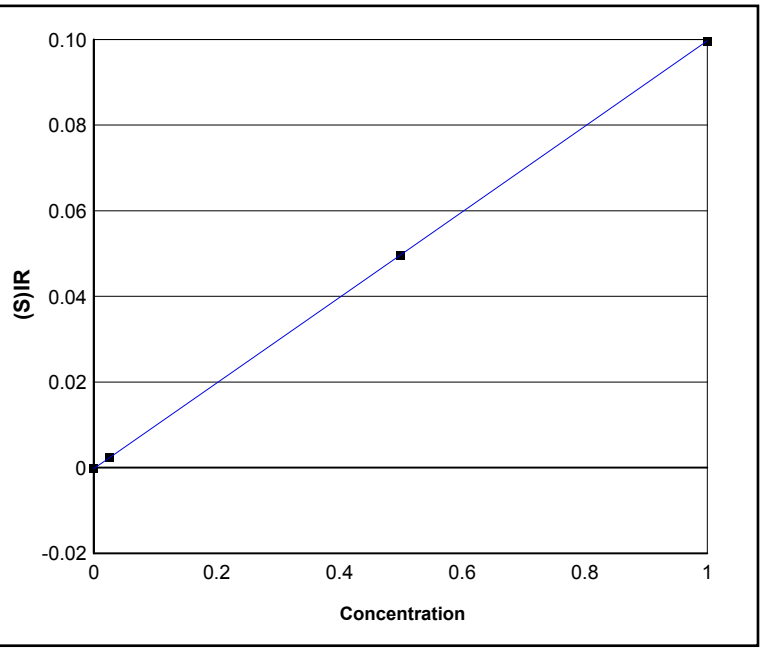
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000021242	0.0000021242	0.00000	-0.000027583	0.000044593	1
IC-4278204	0.20000	0.19828	-0.0017181	-0.85904	0.014670	0.000085650	1
IC-4278258	25.000	24.897	-0.10325	-0.41302	1.8454	0.0026842	1
IC-4278206	50.000	50.105	0.10497	0.20994	3.7140	0.0023931	1



Element Name:	Sb
Element Wavelength:	Sb 206.833 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00011866
A1 (Gain):	0.23211
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

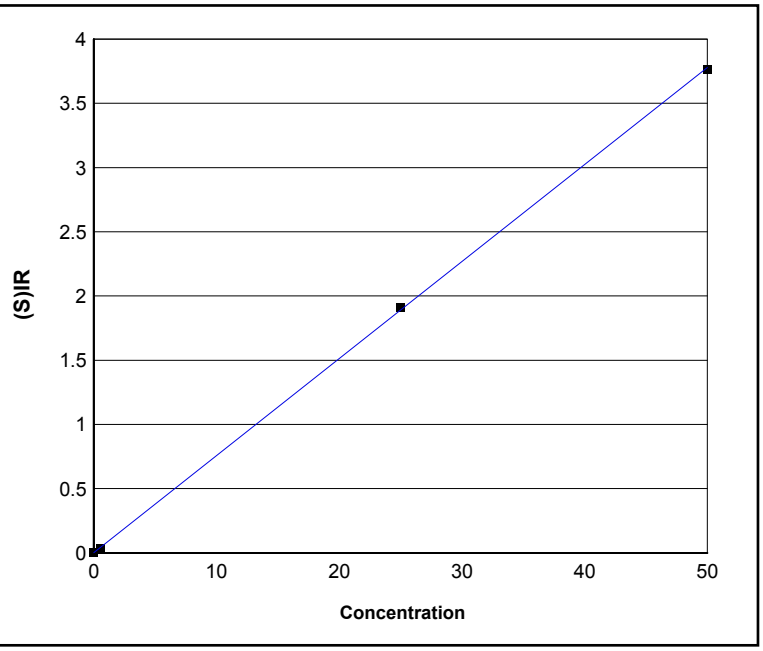
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000002535	0.0000002535	0.00000	0.00011872	0.00013937	1
IC-4278204	0.020000	0.019720	-0.00028014	-1.4007	0.0047086	0.000021586	1
IC-4278258	0.50000	0.50105	0.0010529	0.21059	0.11796	0.00058039	1
IC-4278206	1.0000	0.99922	-0.00077570	-0.077570	0.23513	0.000091106	1



Element Name:	Se
Element Wavelength:	Se 196.090 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.00023188
A1 (Gain):	0.099907
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

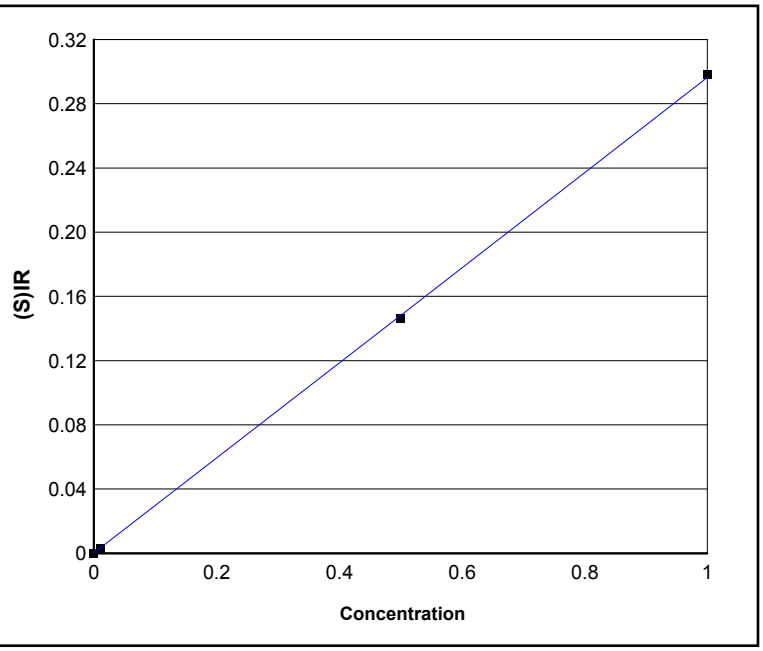
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000011918	-0.0000011918	0.00000	-0.00023200	0.00018548	1
IC-4278204	0.025000	0.026235	0.0012350	4.9398	0.0023887	0.000054311	1
IC-4278258	0.50000	0.49951	-0.00049055	-0.098110	0.049613	0.000090548	1
IC-4278206	1.0000	0.99925	-0.00074563	-0.074563	0.099481	0.00042511	1



Element Name:	Si
Element Wavelength:	Si 288.158 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.0027334
A1 (Gain):	0.075524
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

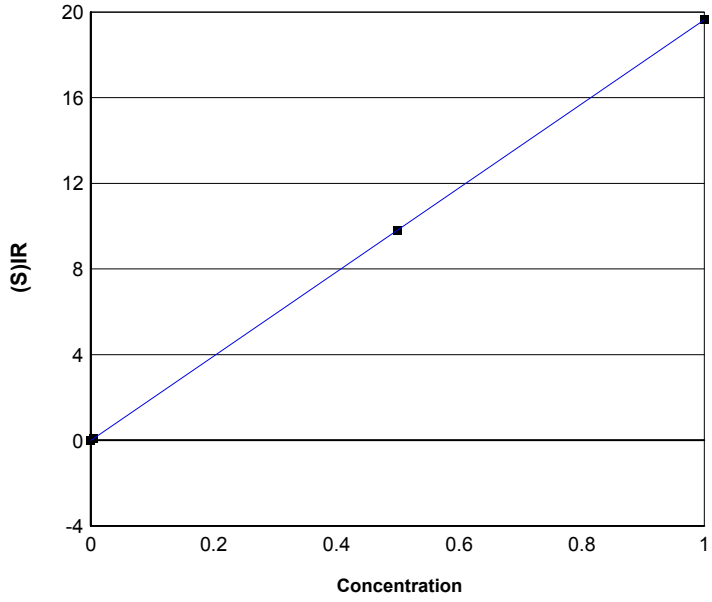
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.000051063	0.000051063	0.00000	0.0027372	0.00099587	1
IC-4278204	0.50000	0.44588	-0.054124	-10.825	0.036408	0.00022053	1
IC-4278258	25.000	25.252	0.25203	1.0081	1.9099	0.011591	1
IC-4278206	50.000	49.802	-0.19790	-0.39580	3.7640	0.0049815	1



Element Name:	Sn
Element Wavelength:	Sn 189.989 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99995
A0 (Offset):	0.00012382
A1 (Gain):	0.29615
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

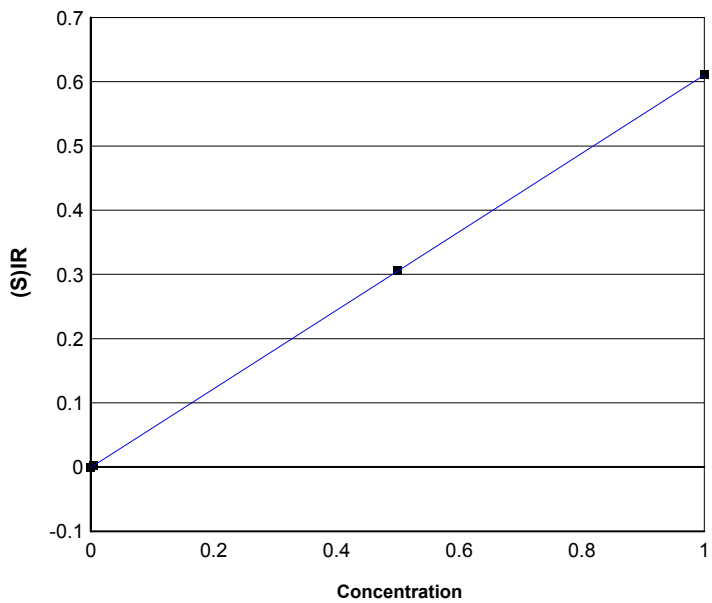
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000001590	-0.0000001590	0.00000	0.00012377	0.00011889	1
IC-4278204	0.010000	0.010230	0.00023012	2.3012	0.0031535	0.00016111	1
IC-4278258	0.50000	0.49312	-0.0068847	-1.3769	0.14616	0.00020104	1
IC-4278206	1.0000	1.0067	0.0066546	0.66546	0.29824	0.00069435	1



Element Name:	Sr
Element Wavelength:	Sr 407.771 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.0034292
A1 (Gain):	19.645
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

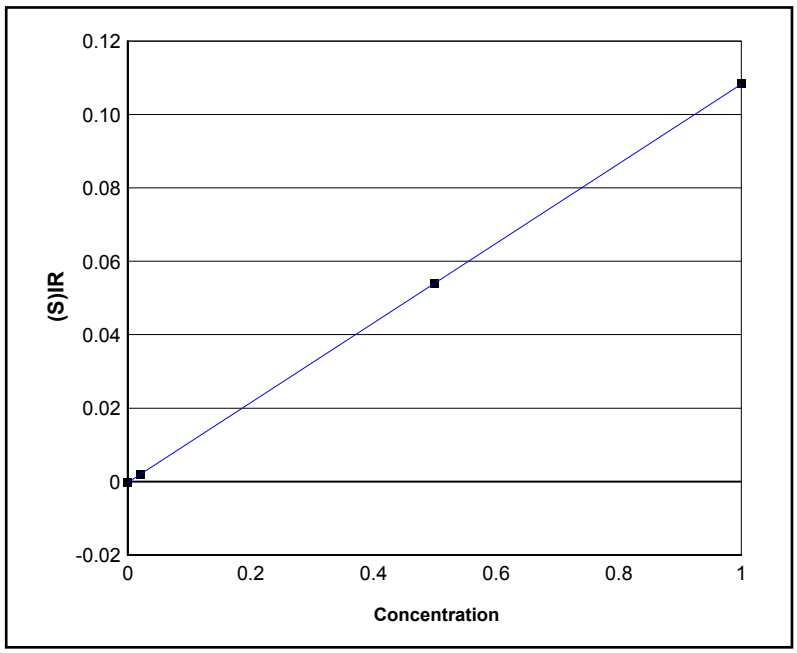
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000000378	-0.0000000378	0.00000	-0.0034299	0.00023789	1
IC-4278204	0.0050000	0.0050418	0.000041806	0.83613	0.095620	0.0011327	1
IC-4278258	0.50000	0.49924	-0.00075620	-0.15124	9.8045	0.033302	1
IC-4278206	1.0000	1.0007	0.00071439	0.071439	19.656	0.031613	1



Element Name:	Ti
Element Wavelength:	Ti 334.904 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.00020714
A1 (Gain):	0.61072
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

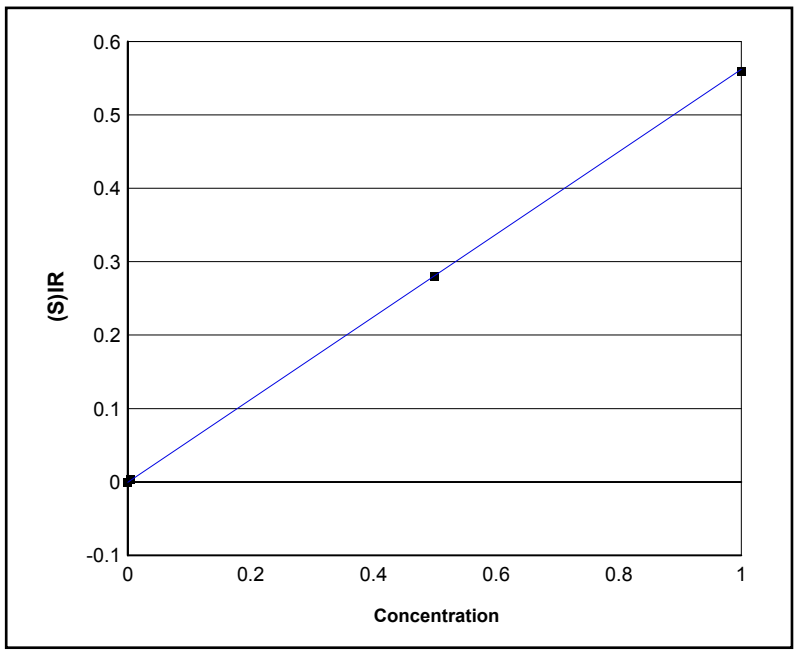
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000006002	0.0000006002	0.00000	-0.00020677	0.00023088	1
IC-4278204	0.0050000	0.0043916	-0.00060845	-12.169	0.0024825	0.0000021449	1
IC-4278258	0.50000	0.50105	0.0010490	0.20980	0.30622	0.00093880	1
IC-4278206	1.0000	0.99956	-0.00043987	-0.043987	0.61110	0.000062212	1



Element Name:	Tl
Element Wavelength:	Tl 190.856 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.00026763
A1 (Gain):	0.10852
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

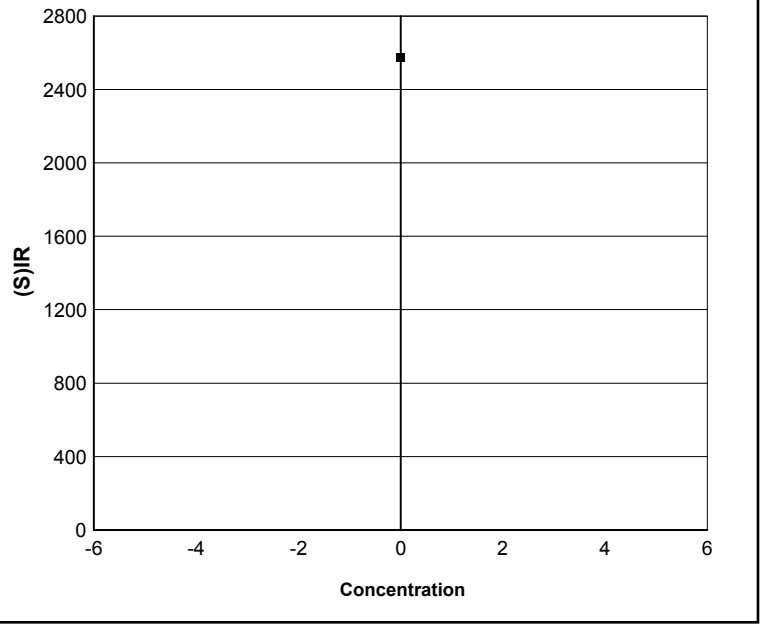
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000000970	0.0000000970	0.00000	-0.00026762	0.000063841	1
IC-4278204	0.020000	0.019909	-0.000090812	-0.45406	0.0018935	0.00010219	1
IC-4278258	0.50000	0.49960	-0.00040161	-0.080322	0.054075	0.000042000	1
IC-4278206	1.0000	1.0005	0.00049224	0.049224	0.10856	0.000097610	1



Element Name:	V
Element Wavelength:	V 292.402 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.00035233
A1 (Gain):	0.56271
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

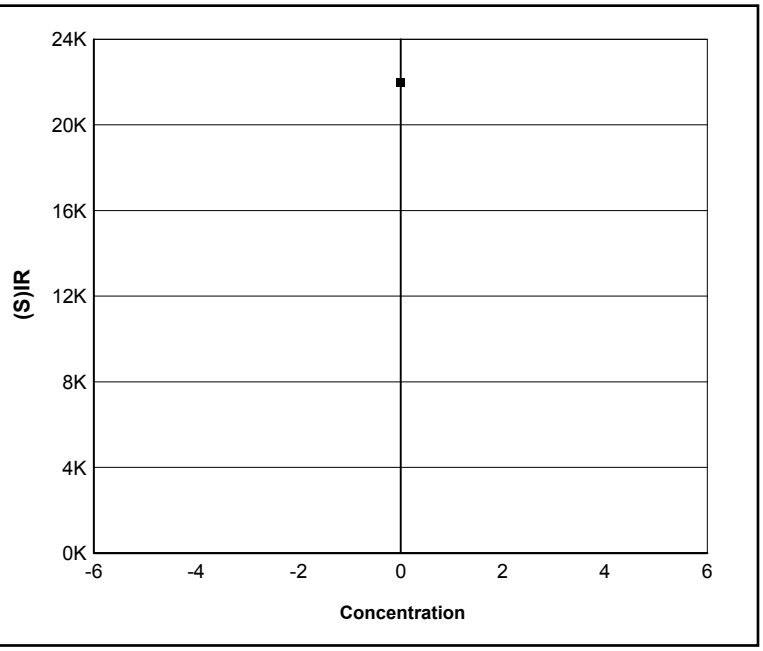
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000003938	-0.0000003938	0.00000	-0.00035256	0.00026278	1
IC-4278204	0.0050000	0.0053939	0.00039391	7.8783	0.0026523	0.00020035	1
IC-4278258	0.50000	0.50036	0.00036278	0.072557	0.27991	0.00080997	1
IC-4278206	1.0000	0.99925	-0.00075423	-0.075423	0.55933	0.000045124	1



Element Name:	Y
Element Wavelength:	Y 224.306 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:37:36AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

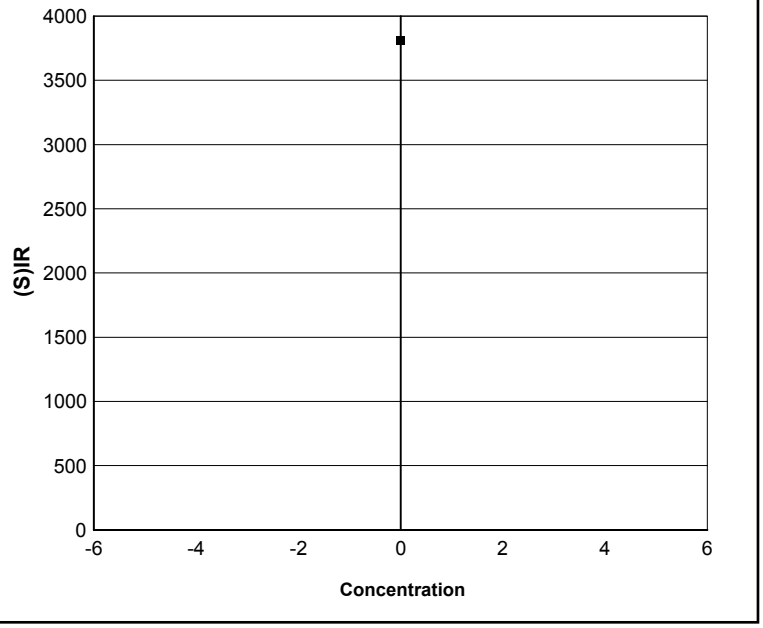
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.0000			0.0000	2,577	0.1344	1



Element Name:	Y
Element Wavelength:	Y 360.073 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:37:36AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

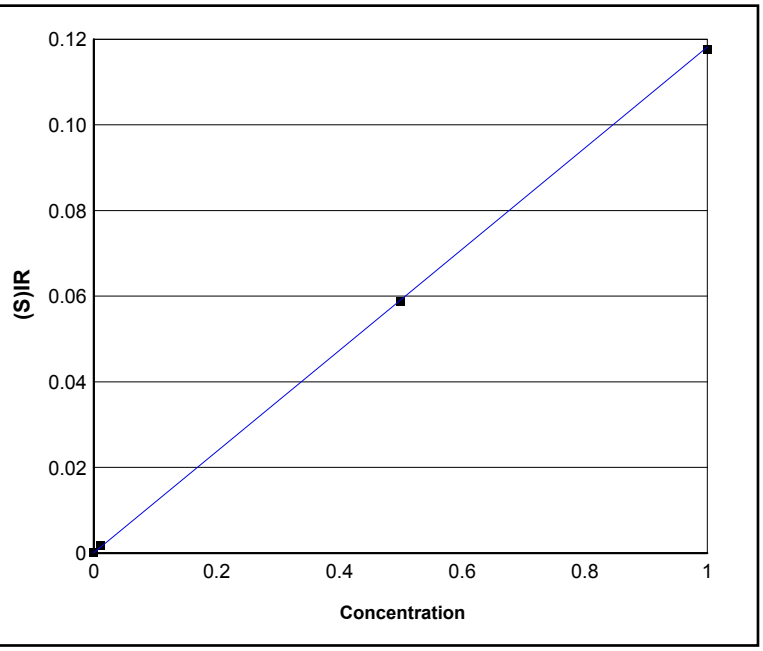
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.0000			0.0000	21,970	141.4	1



Element Name:	Y
Element Wavelength:	Y 377.433 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:37:36AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.0000			0.0000	3,810	5.636	1



Element Name:	Zn
Element Wavelength:	Zn 206.200 nm
Concentration Units:	ppm
Date of Calibration:	10/16/2017 9:48:08AM
Date of Fit:	10/16/2017 11:08:50AM
Type of Fit:	Linear
Correlation:	0.99953
A0 (Offset):	0.000046110
A1 (Gain):	0.11820
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-4278202	0.00000	0.0000037144	-0.0000037144	0.00000	0.000045671	0.0000035652	1
IC-4278204	0.010000	0.013764	0.0037644	37.644	0.0016722	0.000055546	1
IC-4278258	0.50000	0.49877	-0.0012284	-0.24567	0.058893	0.000036742	1
IC-4278206	1.0000	0.99746	-0.0025401	-0.25401	0.11773	0.00034807	1

Sample Name: IC-4278204 Acquired: 10/16/2017 9:37:39 Type: Cal
Method: ICAP2 June 2017(v154) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00235**	**.01174**	**.00166**	**.01607**	**.03058**
Stddev	.00001	.00027	.00011	.00002	.00035
%RSD	.39823	2.2797	6.6905	.12771	1.1518
#1	.00235	.01193	.00158	.01606	.03033
#2	.00234	.01155	.00174	.01609	.03083

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	Co2286
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	228.616 {447}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.06744**	**.02151**	**.17656**	**.00858**	**.00667**
Stddev	.00035	.00071	.00140	.00027	.00027
%RSD	.51745	3.3101	.79087	3.1476	3.9808
#1	.06768	.02101	.17557	.00877	.00686
#2	.06719	.02202	.17754	.00839	.00648

Elem	Cr2677	Cu3273	Fe2599	Fe2714	K_7664
Line	267.716 {126}	327.396 {103}	259.940 {130}	271.441 {124}	766.490 { 44}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00168**	**.00366**	**.01575**	**.00091**	**.05441**
Stddev	.00025	.00026	.00012	.00036	.00111
%RSD	15.014	7.2024	.78906	39.463	2.0376
#1	.00150	.00385	.01566	.00065	.05519
#2	.00186	.00348	.01584	.00116	.05363

Elem	Li6707	Mg2790	Mn2576	Mn2576-2	Mo2020
Line	670.784 { 50}	279.079 {121}2	257.610 {131}	257.610 {131}2	202.030 {467}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.07571**	**.00769**	**.00970**	**.00085**	**.01216**
Stddev	.00203	.00007	.00041	.00006	.00006
%RSD	2.6777	.91923	4.2722	7.2005	.47239
#1	.07714	.00764	.00941	.00089	.01211
#2	.07427	.00774	.00999	.00081	.01220

Sample Name: IC-4278204 Acquired: 10/16/2017 9:37:39 Type: Cal
Method: ICAP2 June 2017(v154) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Na5895	Na8183	Ni2316	Pb2203	S_1820
Line	589.592 { 57}	818.326 { 41}	231.604 {446}	220.353 {453}	182.034 {485}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.41254**	**-.00656**	**.00552**	**.00338**	**.01467**
Stddev	.00063	.00009	.00006	.00024	.00009
%RSD	.15288	1.3054	1.1744	6.9804	.58385
#1	.41299	-.00650	.00547	.00355	.01473
#2	.41210	-.00662	.00556	.00321	.01461

Elem	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Line	206.833 {463}	196.090 {472}	288.158 {117}2	189.989 {477}	407.771 { 83}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00471**	**.00239**	**.03641**	**.00315**	**.09562**
Stddev	.00002	.00005	.00022	.00016	.00113
%RSD	.45844	2.2737	.60574	5.1091	1.1846
#1	.00472	.00235	.03625	.00327	.09482
#2	.00469	.00243	.03656	.00304	.09642

Elem	Ti3349	Tl1908	V_2924	Zn2062
Line	334.904 {101}	190.856 {477}	292.402 {115}	206.200 {163}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00248**	**.00189**	**.00265**	**.00167**
Stddev	.00000	.00010	.00020	.00006
%RSD	.08640	5.3966	7.5536	3.3218
#1	.00248	.00182	.00279	.00163
#2	.00248	.00197	.00251	.00171

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3698.5**	**2563.5**	**21926.**	**3895.4**
Stddev	2.9	2.4	27.	14.6
%RSD	.07854	.09238	.12345	.37514
#1	3700.6	2565.2	21946.	3905.7
#2	3696.5	2561.8	21907.	3885.0

Sample Name: IC-4278258 Acquired: 10/16/2017 9:41:18 Type: Cal
Method: ICAP2 June 2017(v154) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.23026**	**1.1639**	**.05925**	**.36571**	**4.6450**
Stddev	.00060	.0016	.00007	.00030	.0219
%RSD	.26139	.14049	.11115	.08234	.47171
#1	.22984	1.1627	.05929	.36550	4.6295
#2	.23069	1.1651	.05920	.36592	4.6605

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	**Ce4040
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**14.545**	**5.2211**	**8.1624**	**1.9156**	**.0375**
Stddev	.001	.0256	.0561	.0016	.0002
%RSD	.00374	.49113	.68761	.08546	.5877
#1	14.544	5.2030	8.1227	1.9144	.0376
#2	14.545	5.2392	8.2020	1.9167	.0373

Elem	Co2286	Cr2677	Cu3273	Fe2599	Fe2714
Line	228.616 {447}	267.716 {126}	327.396 {103}	259.940 {130}	271.441 {124}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.82912**	**.17811**	**.18855**	**5.3685**	**.33943**
Stddev	.00017	.00124	.00109	.0331	.00307
%RSD	.02017	.69490	.57558	.61570	.90346
#1	.82924	.17723	.18778	5.3452	.33726
#2	.82900	.17898	.18932	5.3919	.34160

Elem	K_7664	Li6707	Mg2790	Mn2576	Mn2576-2
Line	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	257.610 {131}2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.6887**	**1.2840**	**.94829**	**1.2308**	**.10265**
Stddev	.0124	.0040	.00169	.0017	.00098
%RSD	.46220	.31222	.17840	.14036	.95006
#1	2.6799	1.2812	.94709	1.2296	.10334
#2	2.6975	1.2868	.94948	1.2320	.10196

Sample Name: IC-4278258 Acquired: 10/16/2017 9:41:18 Type: Cal
Method: ICAP2 June 2017(v154) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	Na5895	Na8183	Ni2316	Pb2203
Line	202.030 {467}	589.592 { 57}	818.326 { 41}	231.604 {446}	220.353 {453}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.58435**	**10.302**	**.33129**	**.29723**	**.14496**
Stddev	.00049	.035	.00269	.00012	.00034
%RSD	.08424	.34257	.81174	.04158	.23458
#1	.58469	10.277	.32939	.29732	.14472
#2	.58400	10.327	.33319	.29714	.14520

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2	189.989 {477}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.8454**	**.11796**	**.04961**	**1.9099**	**.14616**
Stddev	.0027	.00058	.00009	.0116	.00020
%RSD	.14545	.49204	.18251	.60691	.13755
#1	1.8435	.11755	.04955	1.9017	.14602
#2	1.8473	.11837	.04968	1.9181	.14630

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Line	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}	206.200 {163}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9.8045**	**.30622**	**.05408**	**.27991**	**.05889**
Stddev	.0333	.00094	.00004	.00081	.00004
%RSD	.33966	.30658	.07767	.28937	.06239
#1	9.7809	.30688	.05405	.27933	.05887
#2	9.8280	.30556	.05411	.28048	.05892

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3373.0**	**2491.5**	**20989.**	**3837.7**
Stddev	1.3	2.8	77.	52.2
%RSD	.03841	.11080	.36505	1.3597
#1	3374.0	2493.5	21043.	3874.6
#2	3372.1	2489.6	20935.	3800.8

Sample Name: IC-4278206 Acquired: 10/16/2017 9:44:46 Type: Cal
Method: ICAP2 June 2017(v154) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.46808**	**2.3196**	**.11935**	**.72653**	**9.2990**
Stddev	.00045	.0080	.00012	.00007	.0207
%RSD	.09547	.34522	.09662	.01003	.22225
#1	.46776	2.3253	.11927	.72647	9.3136
#2	.46839	2.3139	.11943	.72658	9.2844

Elem	Ba4554-2	Be3130	Ca3179	Cd2288	**Ce4040
Line	455.403 { 74}2	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**28.804**	**10.307**	**16.299**	**3.8398**	**.0719**
Stddev	.168	.030	.052	.0041	.0007
%RSD	.58403	.29295	.31601	.10586	.9698
#1	28.923	10.329	16.335	3.8369	.0724
#2	28.685	10.286	16.262	3.8427	.0714

Elem	Co2286	Cr2677	Cu3273	Fe2599	Fe2714
Line	228.616 {447}	267.716 {126}	327.396 {103}	259.940 {130}	271.441 {124}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.6794**	**.35390**	**.37510**	**10.653**	**.67340**
Stddev	.0008	.00034	.00053	.003	.00295
%RSD	.04934	.09559	.14199	.02445	.43870
#1	1.6788	.35366	.37473	10.655	.67549
#2	1.6799	.35414	.37548	10.651	.67131

Elem	K_7664	Li6707	Mg2790	Mn2576	Mn2576-2
Line	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	257.610 {131}2
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.3927**	**2.5543**	**1.8945**	**2.4297**	**.20583**
Stddev	.0156	.0026	.0039	.0050	.00067
%RSD	.28904	.10110	.20464	.20561	.32601
#1	5.4037	2.5561	1.8917	2.4262	.20535
#2	5.3817	2.5524	1.8972	2.4332	.20630

Sample Name: IC-4278206 Acquired: 10/16/2017 9:44:46 Type: Cal
Method: ICAP2 June 2017(v154) Mode: IR Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mo2020	Na5895	Na8183	Ni2316	Pb2203
Line	202.030 {467}	589.592 { 57}	818.326 { 41}	231.604 {446}	220.353 {453}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.1614**	**20.720**	**.68805**	**.60276**	**.29136**
Stddev	.0001	.058	.00104	.00007	.00131
%RSD	.00639	.28106	.15111	.01119	.44849
#1	1.1614	20.761	.68732	.60272	.29044
#2	1.1615	20.679	.68879	.60281	.29228

Elem	S_1820	Sb2068	Se1960	Si2881	Sn1899
Line	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2	189.989 {477}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.7140**	**.23513**	**.09948**	**3.7640**	**.29824**
Stddev	.0024	.00009	.00043	.0050	.00069
%RSD	.06444	.03875	.42733	.13235	.23281
#1	3.7157	.23506	.09978	3.7675	.29775
#2	3.7123	.23519	.09918	3.7605	.29873

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Line	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}	206.200 {163}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**19.656**	**.61110**	**.10856**	**.55933**	**.11773**
Stddev	.032	.00006	.00010	.00005	.00035
%RSD	.16083	.01018	.08991	.00807	.29565
#1	19.678	.61114	.10863	.55930	.11748
#2	19.634	.61105	.10849	.55936	.11798

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3194.1**	**2433.1**	**20483.**	**3760.6**
Stddev	1.6	2.8	15.	18.9
%RSD	.05087	.11464	.07138	.50332
#1	3195.2	2435.0	20493.	3747.2
#2	3192.9	2431.1	20472.	3774.0

Sample Name: icv-4278260 Acquired: 10/16/2017 9:48:11 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.37852**	**18.273**	**.37792**	**.38271**	**.37662**
Stddev	.00033	.033	.00381	.00094	.00011
%RSD	.08793	.18155	1.0093	.24489	.02918
#1	.37875	18.249	.37522	.38205	.37670
#2	.37828	18.296	.38062	.38338	.37654
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.38497**	**18.957**	**.37945**	**-.0009**	**.37178**
Stddev	.00016	.020	.00023	.0081	.00009
%RSD	.04080	.10483	.06144	870.4	.02501
#1	.38485	18.971	.37962	.0048	.37171
#2	.38508	18.943	.37929	-.0067	.37184
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.38492**	**.38009**	**18.739**	**18.852**	**.37769**
Stddev	.00192	.00121	.017	.004	.00051
%RSD	.49752	.31746	.09006	.02352	.13560
#1	.38357	.37924	18.727	18.855	.37805
#2	.38627	.38094	18.751	18.849	.37733
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: icv-4278260 Acquired: 10/16/2017 9:48:11 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.863**	**.38818**	**.38291**	**18.840**	**.37729**
Stddev	.034	.00040	.00099	.019	.00034
%RSD	.18100	.10363	.25854	.10295	.09020
#1	18.887	.38846	.38361	18.826	.37705
#2	18.839	.38789	.38221	18.854	.37753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.37344**	**18.938**	**.37938**	**.37807**	F **16.614**
Stddev	.00240	.003	.00220	.00190	.017
%RSD	.64354	.01761	.57977	.50269	.10086
#1	.37174	18.940	.38094	.37942	16.626
#2	.37513	18.936	.37783	.37673	16.602
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value					18.750
Range					-10.000%

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.38396**	**.37596**	**.38139**	**.37878**	**.38361**
Stddev	.00112	.00051	.00136	.00171	.00052
%RSD	.29142	.13688	.35779	.45188	.13485
#1	.38475	.37560	.38236	.37999	.38325
#2	.38317	.37633	.38043	.37757	.38398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: icv-4278260 Acquired: 10/16/2017 9:48:11 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: AMH Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.37817
Stddev	.00046
%RSD	.12285
#1	.37784
#2	.37850
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3425.9	2499.7	21161.	3832.7
Stddev	5.1	5.4	18.	.0
%RSD	.14976	.21488	.08468	.00011
#1	3422.3	2495.9	21148.	3832.7
#2	3429.6	2503.5	21173.	3832.7

Sample Name: icv-4278260 Acquired: 10/16/2017 10:22:05 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.37753**	**18.209**	**.37394**	**.37363**	**.36819**
Stddev	.00073	.103	.00246	.00033	.00027
%RSD	.19437	.56593	.65880	.08914	.07354
#1	.37805	18.136	.37568	.37386	.36838
#2	.37701	18.282	.37219	.37339	.36800
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.38630**	**19.197**	**.37274**	**-.0115**	**.36929**
Stddev	.00332	.194	.00028	.0277	.00018
%RSD	.85877	1.0104	.07497	239.9	.04786
#1	.38395	19.059	.37294	-.0311	.36917
#2	.38864	19.334	.37254	.0080	.36942
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.38472**	**.37025**	**18.823**	**18.492**	**.37441**
Stddev	.00231	.00176	.126	.164	.00439
%RSD	.60024	.47481	.67013	.88514	1.1712
#1	.38635	.36901	18.734	18.376	.37131
#2	.38309	.37149	18.913	18.608	.37751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: icv-4278260 Acquired: 10/16/2017 10:22:05 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.879**	**.38655**	**.37884**	**18.566**	**.37545**
Stddev	.003	.00032	.00001	.152	.00004
%RSD	.01730	.08214	.00392	.81690	.01036
#1	18.876	.38677	.37885	18.459	.37548
#2	18.881	.38633	.37883	18.673	.37542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.37478**	**18.699**	**.37026**	**.37788**	F **16.474**
Stddev	.00167	.024	.00100	.00467	.153
%RSD	.44599	.12996	.26986	1.2368	.93117
#1	.37360	18.716	.37097	.38118	16.366
#2	.37596	18.682	.36956	.37457	16.583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value					18.750
Range					-10.000%

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.38347**	**.37104**	**.38152**	**.38146**	**.38372**
Stddev	.00086	.00136	.00103	.00374	.00063
%RSD	.22329	.36628	.26920	.98073	.16416
#1	.38286	.37008	.38225	.37881	.38417
#2	.38407	.37200	.38080	.38410	.38328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: icv-4278260 Acquired: 10/16/2017 10:22:05 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.38911
Stddev	.00052
%RSD	.13308
#1	.38874
#2	.38948
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3493.3	2570.1	21363.	3826.1
Stddev	2.9	4.9	69.	36.0
%RSD	.08243	.18905	.32388	.94126
#1	3491.2	2566.6	21314.	3851.6
#2	3495.3	2573.5	21412.	3800.6

Sample Name: icb-4278202 Acquired: 10/16/2017 10:25:30 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**-.00542**	**.00077**	**-.00083**	**-.00003**
Stddev	.00032	.01003	.00309	.00014	.00001
%RSD	162.97	185.07	399.69	17.220	45.949
#1	.00003	-.01251	-.00141	-.00073	-.00002
#2	-.00042	.00167	.00296	-.00093	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.00621**	**.00002**	**-.0095**	**-.00009**
Stddev	.00004	.00281	.00005	.0037	.00007
%RSD	122.47	45.225	278.91	39.31	75.872
#1	-.00006	.00819	-.00002	-.0121	-.00004
#2	-.00000	.00422	.00005	-.0068	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00058**	**.00027**	**.00279**	**.00005**	**.00041**
Stddev	.00012	.00074	.00024	.04103	.00029
%RSD	20.108	276.87	8.6985	88060.	69.674
#1	-.00050	-.00026	.00262	.02906	.00021
#2	-.00066	.00079	.00296	-.02897	.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: icb-4278202 Acquired: 10/16/2017 10:25:30 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00277**	**-.00006**	**-.00004**	**-.01297**	**.00018**
Stddev	.00100	.00002	.00009	.00126	.00010
%RSD	36.058	34.728	220.77	9.7044	54.438
#1	.00348	-.00005	-.00010	-.01208	.00011
#2	.00207	-.00008	.00002	-.01386	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00112**	**-.00731**	**.00034**	**.00079**	**-.00396**
Stddev	.00065	.00115	.00001	.00038	.00982
%RSD	58.400	15.788	3.3334	47.622	248.18
#1	.00065	-.00649	.00033	.00052	-.01090
#2	.00158	-.00813	.00034	.00106	.00299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.00001**	**.00000**	**.00117**	**-.00008**
Stddev	.00018	.00000	.00025	.00097	.00004
%RSD	79.417	14.628	12450.	83.399	53.479
#1	.00010	.00002	-.00017	.00185	-.00011
#2	.00036	.00001	.00018	.00048	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: icb-4278202 Acquired: 10/16/2017 10:25:30 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	**-.00001**
Stddev	.00038
%RSD	7463.9
#1	.00026
#2	-.00028
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3754.5**	**2628.0**	**22104.**	**3861.5**
Stddev	3.2	1.3	19.	12.2
%RSD	.08399	.05133	.08774	.31563
#1	3756.7	2629.0	22090.	3870.1
#2	3752.3	2627.1	22117.	3852.8

Sample Name: icvl-4278204 Acquired: 10/16/2017 10:29:09 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00638**	**.17892**	**.01620**	**.01880**	**.00206**
Stddev	.00031	.01268	.00111	.00019	.00002
%RSD	4.8053	7.0871	6.8526	1.0237	.91585
#1	.00659	.18788	.01698	.01893	.00205
#2	.00616	.16995	.01541	.01866	.00207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00211**	**.51713**	**.00214**	**.0098**	**.00391**
Stddev	.00011	.00095	.00008	.0363	.00002
%RSD	5.3358	.18318	3.7691	368.8	.49663
#1	.00203	.51646	.00209	.0355	.00392
#2	.00219	.51780	.00220	-.0158	.00389
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00363**	**.01050**	**.05271**	**.53227**	**.03006**
Stddev	.00043	.00002	.00027	.01420	.00208
%RSD	11.797	.15386	.50482	2.6673	6.9026
#1	.00332	.01051	.05289	.54231	.02860
#2	.00393	.01049	.05252	.52223	.03153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: icvl-4278204 Acquired: 10/16/2017 10:29:09 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20549**	**.00311**	**.01008**	**.99779**	**.00977**
Stddev	.00266	.00008	.00010	.00114	.00011
%RSD	1.2934	2.4424	1.0369	.11438	1.1287
#1	.20737	.00305	.01001	.99698	.00985
#2	.20361	.00316	.01016	.99860	.00969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01108**	**.18719**	**.01935**	**.02746**	**.45135**
Stddev	.00052	.00162	.00358	.00094	.00608
%RSD	4.6855	.86541	18.519	3.4131	1.3476
#1	.01072	.18605	.01681	.02812	.45565
#2	.01145	.18834	.02188	.02680	.44705
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00995**	**.00508**	**.00477**	**.01977**	**.00547**
Stddev	.00060	.00008	.00034	.00009	.00005
%RSD	6.0363	1.6513	7.0579	.46804	.90098
#1	.01037	.00502	.00501	.01983	.00550
#2	.00953	.00514	.00453	.01970	.00543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: icvl-4278204 Acquired: 10/16/2017 10:29:09 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	**.01043**
Stddev	.00016
%RSD	1.5406
#1	.01054
#2	.01032
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3742.9**	**2617.0**	**22177.**	**3873.0**
Stddev	2.3	4.2	8.	27.9
%RSD	.06018	.16086	.03667	.72033
#1	3741.3	2620.0	22183.	3892.8
#2	3744.5	2614.0	22171.	3853.3

Sample Name: icsa-4278263 Acquired: 10/16/2017 10:32:47 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**490.37**	**.00149**	**-.00207**	**.00070**
Stddev	.00034	.41	.00010	.00046	.00003
%RSD	963.96	.08384	6.6205	22.107	4.8166
#1	-.00020	490.66	.00142	-.00175	.00073
#2	.00027	490.08	.00156	-.00239	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00011**	**488.04**	**-.00027**	**.0241**	**-.00085**
Stddev	.00002	4.11	.00008	.0026	.00013
%RSD	19.949	.84266	29.553	10.84	15.442
#1	-.00012	490.94	-.00032	.0223	-.00094
#2	-.00009	485.13	-.00021	.0260	-.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**-.00518**	**189.69**	**.01031**	**-.01867**
Stddev	.00003	.00006	.04	.02101	.00058
%RSD	62.241	1.1864	.02260	203.75	3.1244
#1	.00007	-.00514	189.66	.02517	-.01825
#2	.00003	-.00522	189.72	-.00454	-.01908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: icsa-4278263 Acquired: 10/16/2017 10:32:47 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**524.55**	**-.00062**	**-.00182**	**.00666**	**-.00171**
Stddev	1.29	.00000	.00012	.00454	.00063
%RSD	.24609	.55599	6.3611	68.063	36.975
#1	523.64	-.00062	-.00190	.00346	-.00216
#2	525.46	-.00062	-.00174	.00987	-.00126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.00070**	**-.01080**	**.00385**	**.01847**
Stddev	.00068	.00113	.00077	.00293	.02875
%RSD	615.56	160.58	7.1491	76.009	155.65
#1	.00059	.00150	-.01026	.00592	.03880
#2	-.00037	-.00010	-.01135	.00178	-.00186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00201**	**.03167**	**-.00359**	**.00172**	**.00167**
Stddev	.00066	.00006	.00014	.00003	.00082
%RSD	32.559	.17934	3.9732	1.9200	49.257
#1	.00248	.03163	-.00369	.00175	.00225
#2	.00155	.03171	-.00349	.00170	.00109
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: icsa-4278263 Acquired: 10/16/2017 10:32:47 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.00430
Stddev	.00053
%RSD	12.274
#1	.00468
#2	.00393
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2799.1	2325.9	19010.	3794.0
Stddev	5.5	5.5	20.	29.3
%RSD	.19583	.23600	.10548	.77141
#1	2795.2	2322.0	18996.	3773.3
#2	2802.9	2329.8	19025.	3814.7

Sample Name: icsab-4278265 Acquired: 10/16/2017 10:36:32 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.22705**	**523.61**	**.10918**	**.00104**	**.49082**
Stddev	.00122	1.38	.00323	.00018	.00130
%RSD	.53563	.26336	2.9600	17.794	.26585
#1	.22791	524.59	.11147	.00091	.49174
#2	.22619	522.64	.10690	.00117	.48989
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52190**	**492.85**	**1.0284**	**.0261**	**.50043**
Stddev	.00042	1.03	.0010	.0032	.00061
%RSD	.08003	.20967	.10017	12.07	.12221
#1	.52219	493.58	1.0277	.0239	.50000
#2	.52160	492.12	1.0291	.0284	.50087
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.49064**	**.52369**	**99.028**	**-.00794**	**.50331**
Stddev	.00069	.00045	.119	.00518	.00074
%RSD	.14073	.08627	.12027	65.293	.14789
#1	.49015	.52337	99.112	-.00427	.50279
#2	.49113	.52400	98.944	-.01161	.50384
Check ?	Chk Pass	Chk Pass	Chk Pass	None	None
Value					
Range					

Sample Name: icsab-4278265 Acquired: 10/16/2017 10:36:32 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**543.58**	**.50544**	**-.00079**	**.13110**	**.98446**
Stddev	2.58	.00038	.00061	.00229	.00082
%RSD	.47534	.07610	77.128	1.7429	.08342
#1	541.76	.50571	-.00036	.12949	.98388
#2	545.41	.50516	-.00121	.13272	.98505
Check ?	Chk Pass	Chk Pass	None	None	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04975**	**1.0210**	**.60793**	**.05712**	**.91374**
Stddev	.00067	.0110	.00067	.00588	.01265
%RSD	1.3409	1.0756	.10988	10.300	1.3845
#1	.05022	1.0132	.60745	.05296	.92269
#2	.04928	1.0287	.60840	.06128	.90480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00234**	**.49681**	**-.00202**	**.10423**	**.52257**
Stddev	.00045	.00113	.00071	.00194	.00236
%RSD	19.250	.22651	35.222	1.8602	.45193
#1	.00266	.49601	-.00151	.10286	.52090
#2	.00202	.49761	-.00252	.10560	.52424
Check ?	None	None	None	Chk Pass	Chk Pass
Value					
Range					

Sample Name: icsab-4278265 Acquired: 10/16/2017 10:36:32 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	**.96326**
Stddev	.00496
%RSD	.51444
#1	.95975
#2	.96676
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2798.2**	**2319.9**	**18943.**	**3791.4**
Stddev	1.7	1.1	15.	19.6
%RSD	.06028	.04682	.07824	.51758
#1	2797.0	2319.2	18954.	3777.5
#2	2799.4	2320.7	18933.	3805.2

Sample Name: ICEX1 Acquired: 10/16/2017 10:40:14 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00106**	**.15689**	**5.0254**	**-.00143**	**.00000**
Stddev	.00111	.02424	.0111	.00038	.00002
%RSD	104.94	15.450	.22018	26.793	438.02
#1	.00027	.13975	5.0332	-.00116	.00002
#2	.00184	.17403	5.0175	-.00170	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**.05264**	**-.00003**	**-.0199**	**.00002**
Stddev	.00006	.02017	.00010	.0236	.00019
%RSD	16.870	38.326	300.13	118.4	781.29
#1	.00030	.03837	-.00010	-.0032	-.00011
#2	.00038	.06690	.00004	-.0367	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00094**	**25.368**	**.01871**	**.02593**	**.00126**
Stddev	.00030	.096	.00546	.00947	.00133
%RSD	32.416	.37825	29.204	36.542	105.73
#1	-.00072	25.301	.01485	.01923	.00219
#2	-.00115	25.436	.02257	.03262	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX1 Acquired: 10/16/2017 10:40:14 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02980**	**-.00047**	**-.00121**	**-.00618**	**-.00021**
Stddev	.00085	.00001	.00002	.00011	.00005
%RSD	2.8494	1.9728	1.3879	1.8255	24.076
#1	.02920	-.00047	-.00122	-.00626	-.00025
#2	.03040	-.00048	-.00120	-.00610	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00303**	**-.00516**	**.00159**	**.00012**	**.02395**
Stddev	.00020	.00117	.00022	.00023	.00034
%RSD	6.4661	22.726	13.647	182.29	1.4222
#1	.00289	-.00433	.00175	.00028	.02420
#2	.00317	-.00599	.00144	-.00004	.02371
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00057**	**.00005**	**-.00195**	**.00745**	**5.2182**
Stddev	.00045	.00006	.00003	.00073	.0041
%RSD	80.226	119.47	1.4960	9.7911	.07912
#1	.00089	.00009	-.00197	.00797	5.2153
#2	.00025	.00001	-.00193	.00693	5.2211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX1 Acquired: 10/16/2017 10:40:14 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00102
Stddev	.00015
%RSD	14.232
#1	.00112
#2	.00092
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3751.7	2626.5	22291.	3890.3
Stddev	2.4	.2	24.	19.8
%RSD	.06448	.00706	.10874	.50893
#1	3753.4	2626.3	22308.	3904.3
#2	3750.0	2626.6	22273.	3876.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.10%	101.91%	101.47%	102.11%
Range				

Sample Name: ICEX2 Acquired: 10/16/2017 10:43:55 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00278**	**.05972**	**.00353**	**.00948**	**-.00003**
Stddev	.00002	.01914	.00056	.00012	.00002
%RSD	.62891	32.047	15.880	1.2705	63.167
#1	-.00277	.07326	.00313	.00940	-.00001
#2	-.00279	.04619	.00393	.00957	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00088**	**.01045**	**.00042**	**-.0025**	**.00029**
Stddev	.00000	.00212	.00016	.0248	.00002
%RSD	.40593	20.337	37.898	977.4	6.8412
#1	-.00088	.01195	.00053	.0150	.00031
#2	-.00088	.00894	.00030	-.0201	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00056**	**.00213**	**.00203**	**.01450**	**.00006**
Stddev	.00076	.00124	.00415	.03858	.00097
%RSD	134.44	57.957	204.81	266.13	1628.2
#1	.00110	.00126	.00496	.04178	.00075
#2	.00003	.00301	-.00091	-.01278	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX2 Acquired: 10/16/2017 10:43:55 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01153**	**-.00042**	**-.00020**	**.00207**	**.00472**
Stddev	.00237	.00006	.00017	.00881	.00019
%RSD	20.517	15.010	82.496	425.02	4.0308
#1	.00986	-.00047	-.00008	.00830	.00486
#2	.01320	-.00038	-.00032	-.00415	.00459
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00418**	**-.00838**	**.00654**	**-.00118**	**.38473**
Stddev	.00005	.00050	.00018	.00186	.02663
%RSD	1.2950	5.9794	2.8130	157.11	6.9226
#1	.00422	-.00803	.00641	-.00250	.36590
#2	.00414	-.00874	.00667	.00013	.40356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00045**	**.00005**	**20.131**	**20.322**	**.00272**
Stddev	.00062	.00003	.035	.023	.00016
%RSD	138.05	70.981	.17319	.11516	6.0595
#1	.00089	.00002	20.106	20.338	.00260
#2	.00001	.00007	20.156	20.305	.00283
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX2 Acquired: 10/16/2017 10:43:55 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**-.00020**
Stddev	.00026
%RSD	130.01
#1	-.00002
#2	-.00038
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3777.1**	**2652.6**	**22484.**	**3995.0**
Stddev	2.7	5.8	51.	13.0
%RSD	.07050	.21700	.22688	.32451
#1	3779.0	2656.7	22520.	4004.1
#2	3775.2	2648.6	22448.	3985.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.78%	102.93%	102.35%	104.86%
Range				

Sample Name: ICEX3 Acquired: 10/16/2017 10:47:31 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00334**	**.01629**	**.00145**	**-.00184**	**.00008**
Stddev	.00031	.00740	.00026	.00002	.00002
%RSD	9.2018	45.398	17.622	.87996	18.217
#1	-.00312	.02152	.00127	-.00182	.00007
#2	-.00355	.01106	.00163	-.00185	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.15391**	**.00046**	**-.1862**	**.00011**
Stddev	.00000	.00200	.00004	.0036	.00005
%RSD	3.1959	1.3025	9.0453	1.914	43.678
#1	.00008	.15533	.00043	-.1837	.00008
#2	.00008	.15249	.00049	-.1887	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**.00172**	**.00648**	**.01040**	**.00146**
Stddev	.00006	.00031	.00220	.00400	.00021
%RSD	1707.7	17.792	33.977	38.485	14.212
#1	-.00004	.00194	.00493	.00757	.00161
#2	.00005	.00151	.00804	.01323	.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX3 Acquired: 10/16/2017 10:47:31 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576-2	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}2	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.03004**	**53.250**	**-.00267**	**.01017**	**.00098**
Stddev	.00033	.014	.00007	.00149	.00009
%RSD	1.1037	.02710	2.5919	14.671	9.5308
#1	-.03027	53.240	-.00262	.00912	.00092
#2	-.02980	53.260	-.00272	.01123	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00588**	**98.531**	**-.00358**	**.00649**	**.00564**
Stddev	.00132	.038	.00132	.00033	.01115
%RSD	22.517	.03848	36.807	5.1371	197.67
#1	.00681	98.505	-.00451	.00673	-.00224
#2	.00494	98.558	-.00265	.00626	.01353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.00015**	**.00235**	**.00486**	**.00006**
Stddev	.00018	.00002	.00029	.00007	.00053
%RSD	297.36	13.909	12.231	1.5145	904.64
#1	.00007	.00016	.00215	.00491	.00043
#2	-.00019	.00013	.00255	.00481	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX3 Acquired: 10/16/2017 10:47:31 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00137
Stddev	.00013
%RSD	9.4013
#1	.00127
#2	.00146
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3746.9	2637.7	22067.	3893.9
Stddev	2.0	1.7	57.	10.4
%RSD	.05296	.06499	.25624	.26804
#1	3748.3	2638.9	22107.	3901.2
#2	3745.5	2636.5	22027.	3886.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.97%	102.35%	100.45%	102.20%
Range				

Sample Name: ICEX4 Acquired: 10/16/2017 10:51:12 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00071**	**-.02198**	**-.00466**	**-.00317**	**.00004**
Stddev	.00121	.00716	.00178	.00034	.00000
%RSD	170.09	32.562	38.216	10.798	11.792
#1	.00157	-.01692	-.00340	-.00293	.00004
#2	-.00014	-.02704	-.00591	-.00341	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.01971**	**.00032**	**-.0033**	**19.239**
Stddev	.00002	.00261	.00000	.0168	.010
%RSD	59.823	13.235	1.0571	510.5	.04957
#1	-.00002	.01786	.00032	.0086	19.246
#2	-.00005	.02155	.00032	-.0152	19.232
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.565**	**.00753**	**.00382**	**.02261**	**.00032**
Stddev	.065	.00020	.00172	.00551	.00150
%RSD	.61599	2.6240	45.007	24.374	468.58
#1	10.611	.00767	.00503	.01872	.00138
#2	10.519	.00739	.00260	.02651	-.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX4 Acquired: 10/16/2017 10:51:12 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00467**	F **.00473**	**.00023**	**.00484**	**9.7983**
Stddev	.00104	.00011	.00009	.00110	.0057
%RSD	22.231	2.2780	39.611	22.789	.05788
#1	-.00394	.00481	.00017	.00562	9.8023
#2	-.00541	.00465	.00030	.00406	9.7943
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.00300			
Low Limit		-.00300			

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**.01099**	**-.00568**	**-.00139**	**-.03261**
Stddev	.00118	.00100	.00196	.00049	.00274
%RSD	65.530	9.0942	34.405	35.003	8.4036
#1	-.00097	.01169	-.00707	-.00105	-.03067
#2	-.00264	.01028	-.00430	-.00174	-.03455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.00004**	**-.00085**	**.00612**	**.00017**
Stddev	.00000	.00002	.00028	.00089	.00005
%RSD	1.4022	53.389	32.956	14.559	30.375
#1	.00030	.00006	-.00104	.00675	.00014
#2	.00029	.00003	-.00065	.00549	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX4 Acquired: 10/16/2017 10:51:12 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00172
Stddev	.00023
%RSD	13.588
#1	.00156
#2	.00189
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3754.4	2614.2	22365.	3970.5
Stddev	2.1	1.0	74.	15.6
%RSD	.05497	.03760	.33271	.39281
#1	3752.9	2614.9	22418.	3959.4
#2	3755.9	2613.5	22312.	3981.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.17%	101.44%	101.80%	104.22%
Range				

Sample Name: ICEX5 Acquired: 10/16/2017 10:54:48 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**.06583**	**.00698**	**-.00535**	**-.00005**
Stddev	.00025	.02668	.00108	.00037	.00000
%RSD	101.87	40.534	15.460	6.8737	8.0630
#1	.00043	.08469	.00775	-.00509	-.00006
#2	.00007	.04696	.00622	-.00561	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.01815**	**.00009**	**-.0128**	**-.00104**
Stddev	.00003	.00241	.00004	.0031	.00025
%RSD	16.656	13.287	39.107	23.88	23.838
#1	-.00013	.01985	.00011	-.0107	-.00121
#2	-.00017	.01644	.00006	-.0150	-.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**-.00159**	**.00116**	**.01240**	**.00091**
Stddev	.00041	.00072	.00129	.02629	.00194
%RSD	92.704	45.304	111.98	212.03	212.57
#1	-.00015	-.00108	.00207	-.00619	-.00046
#2	-.00072	-.00209	.00024	.03098	.00228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX5 Acquired: 10/16/2017 10:54:48 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.07188**	**.00201**	**5.1438**	**.00420**	**.00025**
Stddev	.00105	.00091	.0066	.00604	.00002
%RSD	1.4598	45.420	.12884	143.72	6.3682
#1	-.07262	.00265	5.1485	-.00007	.00026
#2	-.07113	.00136	5.1392	.00847	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**-.01787**	**.00199**	**-.00060**	**-.02392**
Stddev	.00084	.00067	.00038	.00037	.00962
%RSD	412.86	3.7359	19.128	61.395	40.214
#1	-.00039	-.01834	.00172	-.00034	-.03072
#2	.00079	-.01740	.00226	-.00085	-.01712
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00063**	**-.00001**	**.00173**	**.00005**	**-.00145**
Stddev	.00008	.00002	.00051	.00047	.00037
%RSD	12.509	277.83	29.433	919.10	25.485
#1	.00068	.00001	.00209	-.00028	-.00171
#2	.00057	-.00002	.00137	.00039	-.00119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX5 Acquired: 10/16/2017 10:54:48 Type: Unk
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00067
Stddev	.00042
%RSD	62.557
#1	.00037
#2	.00096
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3689.0	2598.9	21982.	3836.1
Stddev	10.4	4.2	96.	7.4
%RSD	.28190	.16040	.43879	.19288
#1	3696.4	2601.9	21914.	3841.3
#2	3681.7	2596.0	22051.	3830.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.407%	100.84%	100.06%	100.69%
Range				

Sample Name: CCV-4278259 Acquired: 10/16/2017 10:58:26 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51854**	**25.006**	**.51948**	**.51638**	**.49788**
Stddev	.00046	.007	.00237	.00028	.00071
%RSD	.08778	.02725	.45623	.05355	.14193
#1	.51886	25.002	.51780	.51618	.49838
#2	.51822	25.011	.52115	.51657	.49738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52861**	**26.146**	**.51244**	**-.0153**	**.51199**
Stddev	.00104	.036	.00033	.0055	.00064
%RSD	.19688	.13707	.06384	35.95	.12538
#1	.52788	26.121	.51221	-.0192	.51153
#2	.52935	26.171	.51267	-.0114	.51244
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52547**	**.50806**	**25.665**	**25.404**	**.51526**
Stddev	.00182	.00148	.030	.085	.00156
%RSD	.34632	.29164	.11864	.33470	.30299
#1	.52419	.50701	25.644	25.344	.51415
#2	.52676	.50911	25.687	25.464	.51636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 10:58:26 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.814**	**.53186**	**.52117**	**25.488**	**.51824**
Stddev	.055	.00242	.00068	.044	.00036
%RSD	.21164	.45552	.13141	.17124	.06963
#1	25.853	.53014	.52166	25.458	.51849
#2	25.775	.53357	.52069	25.519	.51798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51615**	**25.928**	**.51256**	**.52613**	F **22.326**
Stddev	.00023	.006	.00245	.00203	.061
%RSD	.04393	.02347	.47877	.38509	.27262
#1	.51631	25.932	.51430	.52470	22.283
#2	.51599	25.924	.51083	.52756	22.369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value					25.000
Range					-10.000%

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52886**	**.51000**	**.52602**	**.52383**	**.52748**
Stddev	.00004	.00118	.00173	.00074	.00139
%RSD	.00712	.23064	.32880	.14056	.26298
#1	.52889	.50917	.52480	.52330	.52650
#2	.52884	.51083	.52724	.52435	.52847
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 10:58:26 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.52777
Stddev	.00147
%RSD	.27780
#1	.52881
#2	.52673
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3442.6	2558.7	21445.	3897.5
Stddev	.5	1.9	15.	2.9
%RSD	.01389	.07441	.07146	.07566
#1	3442.3	2560.1	21435.	3895.4
#2	3442.9	2557.4	21456.	3899.6

Sample Name: CCB-4278202 Acquired: 10/16/2017 11:01:54 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**-.02588**	**.00013**	**-.00073**	**-.00001**
Stddev	.00015	.00192	.00129	.00020	.00000
%RSD	44.123	7.4032	964.66	27.636	1.8284
#1	.00046	-.02723	.00105	-.00059	-.00001
#2	.00024	-.02452	-.00078	-.00088	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.00806**	**.00000**	**.0126**	**.00035**
Stddev	.00009	.00163	.00012	.0170	.00007
%RSD	119.08	20.158	12184.	135.6	19.809
#1	.00014	.00921	.00009	.0005	.00030
#2	.00001	.00691	-.00008	.0246	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.00078**	**.00166**	**.01044**	**.00066**
Stddev	.00044	.00005	.00075	.00917	.00119
%RSD	127.62	7.0269	44.994	87.838	180.03
#1	.00003	.00082	.00113	.00396	-.00018
#2	.00066	.00074	.00219	.01693	.00151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 11:01:54 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00624**	**.00231**	**.00012**	**-.00162**	**.00023**
Stddev	.00198	.00005	.00004	.00197	.00000
%RSD	31.715	2.0044	32.684	121.85	.44564
#1	.00484	.00234	.00010	-.00301	.00023
#2	.00764	.00228	.00015	-.00022	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00028**	**-.00586**	**-.00032**	**.00280**	**.00681**
Stddev	.00004	.00135	.00101	.00029	.01375
%RSD	15.660	22.965	320.23	10.422	202.01
#1	.00031	-.00491	-.00103	.00259	-.00292
#2	.00024	-.00681	.00040	.00301	.01653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.00002**	**.00077**	**.00148**	**.00012**
Stddev	.00006	.00002	.00061	.00006	.00007
%RSD	17.585	67.372	78.543	3.8421	57.621
#1	.00028	.00003	.00120	.00152	.00007
#2	.00036	.00001	.00034	.00144	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 11:01:54 Type: QC
Method: ICAP2 June 2017(v155) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	**-.00005**
Stddev	.00011
%RSD	233.05
#1	.00003
#2	-.00012
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3749.8**	**2628.4**	**22273.**	**3893.4**
Stddev	9.9	5.6	89.	12.5
%RSD	.26360	.21407	.40113	.32068
#1	3756.8	2632.4	22210.	3884.6
#2	3742.8	2624.5	22336.	3902.2

Sample Name: ccvl-4278204 Acquired: 10/16/2017 11:10:42 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00668**	**.17801**	**.01634**	**.01916**	**.00206**
Stddev	.00053	.00971	.00125	.00024	.00001
%RSD	7.9140	5.4528	7.6688	1.2362	.42473
#1	.00706	.18487	.01722	.01933	.00206
#2	.00631	.17115	.01545	.01899	.00205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00217**	**.52131**	**.00215**	**-.0019**	**.00379**
Stddev	.00007	.00097	.00011	.0274	.00019
%RSD	3.1173	.18642	4.9109	1422.	5.0476
#1	.00222	.52063	.00207	.0174	.00393
#2	.00212	.52200	.00222	-.0213	.00366
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00389**	**.01030**	**.05255**	**.46046**	**.02877**
Stddev	.00094	.00030	.00045	.02478	.00018
%RSD	24.237	2.8754	.85931	5.3824	.63398
#1	.00322	.01009	.05223	.47798	.02864
#2	.00456	.01051	.05287	.44293	.02890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 11:10:42 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21353**	**.00306**	**.01016**	**1.0054**	**.00971**
Stddev	.00615	.00005	.00009	.0029	.00013
%RSD	2.8779	1.5019	.90380	.28557	1.3052
#1	.20919	.00303	.01022	1.0074	.00980
#2	.21788	.00310	.01009	1.0034	.00962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01016**	**.18577**	**.02044**	**.02526**	**.45324**
Stddev	.00066	.00165	.00180	.00002	.00506
%RSD	6.4987	.88643	8.8221	.06508	1.1164
#1	.00969	.18694	.01916	.02528	.44966
#2	.01062	.18461	.02171	.02525	.45682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01010**	**.00502**	**.00483**	**.02073**	**.00533**
Stddev	.00031	.00009	.00006	.00046	.00026
%RSD	3.0538	1.7345	1.1625	2.2327	4.9007
#1	.00988	.00495	.00479	.02106	.00552
#2	.01032	.00508	.00487	.02040	.00515
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 11:10:42 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	W .01330
Stddev	.00003
%RSD	.24756
#1	.01327
#2	.01332
Check ?	Chk Warn
Value	.01000
Range	30.000%

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3751.6	2634.3	22211.	3931.3
Stddev	3.3	2.2	56.	6.8
%RSD	.08790	.08165	.25338	.17353
#1	3753.9	2632.8	22250.	3926.4
#2	3749.2	2635.8	22171.	3936.1

Sample Name: LB2 480-378831/1-B Acquired: 10/16/2017 11:14:20 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00089**	**.05362**	**.00300**	**.06794**	**.00400**
Stddev	.00055	.00553	.00054	.00021	.00004
%RSD	61.371	10.313	18.040	.31005	.97898
#1	.00128	.05753	.00262	.06780	.00397
#2	.00051	.04971	.00338	.06809	.00403
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.70778**	**.00010**	**.0002**	**-.00006**
Stddev	.00004	.00124	.00006	.0050	.00002
%RSD	145.48	.17454	63.006	2042.	34.285
#1	.00005	.70690	.00015	-.0033	-.00004
#2	-.00000	.70865	.00006	.0038	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00051**	**.00036**	**.00920**	**.12760**	**.00024**
Stddev	.00037	.00013	.00126	.01035	.00068
%RSD	71.975	35.791	13.708	8.1076	282.61
#1	-.00025	.00027	.00830	.13491	.00073
#2	-.00077	.00046	.01009	.12028	-.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LB2 480-378831/1-B Acquired: 10/16/2017 11:14:20 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08008**	**.00011**	**-.00023**	F **18.995**	**-.00000**
Stddev	.00360	.00008	.00003	.006	.00017
%RSD	4.5006	69.520	12.084	.03333	4520.1
#1	.07753	.00016	-.00021	18.999	.00011
#2	.08263	.00006	-.00025	18.991	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				1.0000	
Low Limit				-1.0000	

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00112**	**.00236**	**.00150**	**.00718**	**.08381**
Stddev	.00023	.00094	.00016	.00303	.00848
%RSD	20.801	39.638	10.718	42.169	10.118
#1	.00128	.00170	.00139	.00504	.07781
#2	.00095	.00303	.00162	.00932	.08980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00112**	**.00083**	**.00020**	**-.00075**	**.00060**
Stddev	.00020	.00004	.00014	.00117	.00028
%RSD	17.815	4.5917	71.470	156.59	46.956
#1	.00098	.00085	.00030	.00008	.00081
#2	.00126	.00080	.00010	-.00157	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LB2 480-378831/1-B Acquired: 10/16/2017 11:14:20 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00279
Stddev	.00043
%RSD	15.413
#1	.00310
#2	.00249
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3703.7	2601.2	22097.	3982.2
Stddev	10.8	8.3	63.	15.7
%RSD	.29249	.31734	.28616	.39447
#1	3711.3	2607.1	22052.	3971.0
#2	3696.0	2595.4	22141.	3993.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.801%	100.93%	100.58%	104.52%
Range				

Sample Name: MB 480-378949/2-A Acquired: 10/16/2017 11:17:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.01668**	**.00153**	**-.00031**	**.00005**
Stddev	.00017	.01026	.00033	.00008	.00001
%RSD	75.424	61.532	21.728	26.579	25.066
#1	.00010	.00942	.00177	-.00037	.00006
#2	.00034	.02393	.00130	-.00025	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.01907**	**.00003**	**-.0052**	**.00006**
Stddev	.00000	.00041	.00012	.0036	.00003
%RSD	3.1057	2.1672	378.38	69.18	58.642
#1	.00006	.01878	-.00005	-.0077	.00008
#2	.00007	.01936	.00012	-.0027	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00062**	**.00014**	**.00387**	**.00409**	**-.00060**
Stddev	.00014	.00073	.00065	.00045	.00027
%RSD	23.047	527.20	16.784	10.948	45.525
#1	-.00052	.00065	.00342	.00441	-.00040
#2	-.00072	-.00038	.00433	.00377	-.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-378949/2-A Acquired: 10/16/2017 11:17:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00865**	**.00004**	**-.00020**	**.00197**	**-.00002**
Stddev	.00015	.00014	.00007	.00338	.00000
%RSD	1.6890	319.91	34.524	171.12	18.489
#1	.00875	.00014	-.00015	-.00041	-.00001
#2	.00855	-.00005	-.00026	.00436	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**-.00550**	**-.00003**	**.00138**	**-.00652**
Stddev	.00066	.00012	.00061	.00184	.00510
%RSD	91.468	2.2573	1952.1	133.39	78.334
#1	.00118	-.00541	.00040	.00269	-.01013
#2	.00025	-.00558	-.00046	.00008	-.00291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**.00009**	**.00046**	**.00084**	**.00022**
Stddev	.00026	.00002	.00056	.00110	.00014
%RSD	38.662	25.151	121.25	130.39	64.148
#1	.00084	.00007	.00085	.00007	.00032
#2	.00048	.00010	.00007	.00162	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-378949/2-A Acquired: 10/16/2017 11:17:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00044
Stddev	.00012
%RSD	28.077
#1	.00053
#2	.00036
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3746.3	2627.7	22350.	3901.2
Stddev	10.4	6.9	83.	17.1
%RSD	.27668	.26111	.36998	.43916
#1	3753.7	2632.5	22408.	3889.1
#2	3739.0	2622.8	22291.	3913.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.95%	101.96%	101.74%	102.40%
Range				

Sample Name: LCS 480-378949/3-A Acquired: 10/16/2017 11:21:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0015**	**.03103**	**1.0446**	**.06201**	**1.0225**
Stddev	.0017	.00169	.0012	.00000	.0018
%RSD	.17145	5.4329	.11278	.00722	.17790
#1	1.0003	.03223	1.0454	.06202	1.0238
#2	1.0027	.02984	1.0437	.06201	1.0212
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0516**	**.66369**	**1.0299**	**.0276**	**.96942**
Stddev	.0048	.00493	.0013	.0022	.00066
%RSD	.45723	.74354	.12108	7.964	.06857
#1	1.0550	.66718	1.0290	.0291	.96989
#2	1.0482	.66020	1.0308	.0260	.96895
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0272**	**1.0198**	**.00705**	**.08514**	**.00048**
Stddev	.0038	.0013	.00029	.01014	.00018
%RSD	.36943	.12332	4.1571	11.913	37.454
#1	1.0299	1.0207	.00726	.07797	.00035
#2	1.0245	1.0189	.00685	.09231	.00060
Check ?	Chk Pass	Chk Pass	None	None	None
High Limit					
Low Limit					

Sample Name: LCS 480-378949/3-A Acquired: 10/16/2017 11:21:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.06167**	**1.0210**	**1.0446**	**18.071**	**.98477**
Stddev	.00266	.0024	.0014	.074	.00089
%RSD	4.3142	.23052	.13211	.40925	.09046
#1	.05979	1.0227	1.0437	18.123	.98540
#2	.06356	1.0193	1.0456	18.019	.98414
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0121**	**.00169**	**1.0152**	**1.0922**	**.09153**
Stddev	.0032	.00097	.0005	.0019	.00415
%RSD	.31161	57.517	.04929	.17048	4.5361
#1	1.0143	.00100	1.0149	1.0908	.08860
#2	1.0098	.00238	1.0156	1.0935	.09447
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00134**	**1.0385**	**-.00031**	**1.0333**	**1.0718**
Stddev	.00023	.0016	.00021	.0014	.0017
%RSD	17.525	.15642	67.475	.13552	.15468
#1	.00150	1.0397	-.00016	1.0323	1.0729
#2	.00117	1.0374	-.00046	1.0343	1.0706
Check ?	None	None	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-378949/3-A Acquired: 10/16/2017 11:21:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	1.0517
Stddev	.0042
%RSD	.39917
#1	1.0547
#2	1.0488
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3695.0	2596.0	22187.	4013.2
Stddev	.6	4.1	102.	16.3
%RSD	.01669	.15849	.46102	.40574
#1	3694.5	2598.9	22114.	4001.7
#2	3695.4	2593.0	22259.	4024.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.567%	100.73%	100.99%	105.34%
Range				

Sample Name: 480-124556-A-3-D Acquired: 10/16/2017 11:25:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**3.2077**	**.00705**	**.20773**	**1.8970**
Stddev	.00005	.0310	.00406	.00106	.0039
%RSD	21.508	.96659	57.531	.51028	.20734
#1	-.00020	3.2297	.00992	.20698	1.8942
#2	-.00027	3.1858	.00418	.20848	1.8998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	F **1592.7**	**.20068**	**.0578**	**.04491**
Stddev	.00012	44.1	.00063	.0038	.00014
%RSD	172.38	2.7703	.31379	6.634	.30151
#1	-.00002	1623.9	.20023	.0551	.04501
#2	.00016	1561.5	.20112	.0605	.04481
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01358**	**9.7652**	**.23100**	**2.1678**	F **-.04502**
Stddev	.00022	.0027	.00184	.0121	.00573
%RSD	1.6329	.02758	.79467	.55625	12.718
#1	.01374	9.7671	.23230	2.1763	-.04907
#2	.01342	9.7633	.22970	2.1592	-.04097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					45.000
Low Limit					-.03000

Sample Name: 480-124556-A-3-D Acquired: 10/16/2017 11:25:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.943**	**5.5019**	**.00008**	**24.055**	**.15216**
Stddev	.025	.0089	.00026	.035	.00038
%RSD	.12502	.16121	307.86	.14724	.25237
#1	19.961	5.5082	.00027	24.030	.15189
#2	19.926	5.4956	-.00010	24.080	.15243
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.8489**	**3.9838**	**.00625**	**.00117**	**4.8233**
Stddev	.0030	.0122	.00240	.00025	.0241
%RSD	.05149	.30648	38.485	21.050	.49952
#1	5.8467	3.9752	.00795	.00135	4.8404
#2	5.8510	3.9924	.00455	.00100	4.8063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00229**	**2.6139**	F **-.01272**	**-.00233**	**-.00034**
Stddev	.00069	.0055	.00036	.00098	.00001
%RSD	30.033	.21180	2.7959	42.228	3.8989
#1	.00277	2.6100	-.01297	-.00302	-.00033
#2	.00180	2.6178	-.01246	-.00163	-.00035
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-124556-A-3-D Acquired: 10/16/2017 11:25:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	F **30.736**
Stddev	.011
%RSD	.03570
#1	30.728
#2	30.744
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2774.8**	**2257.8**	**19208.**	**3810.1**
Stddev	7.7	10.3	8.	100.6
%RSD	.27848	.45670	.03960	2.6396
#1	2780.2	2265.1	19203.	3739.0
#2	2769.3	2250.5	19214.	3881.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.771%	87.607%	87.435%	100.01%
Range				

Sample Name: 480-124556-A-3-DSD@5 Acquired: 10/16/2017 11:28:46 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00057**	**.91668**	**.00120**	**.07998**	**.39314**
Stddev	.00067	.00009	.00256	.00026	.00050
%RSD	117.81	.00986	213.57	.32525	.12593
#1	.00105	.91662	.00301	.07979	.39279
#2	.00010	.91675	-.00061	.08016	.39349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**353.48**	**.04102**	**.0372**	**.00908**
Stddev	.00000	3.59	.00061	.0127	.00024
%RSD	1.2198	1.0168	1.4774	34.05	2.6804
#1	.00003	356.02	.04059	.0462	.00891
#2	.00003	350.94	.04145	.0282	.00925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00284**	**1.9677**	**.05732**	**.44650**	**-.01243**
Stddev	.00043	.0013	.00144	.04528	.00019
%RSD	15.275	.06483	2.5039	10.140	1.5357
#1	.00253	1.9668	.05834	.41448	-.01256
#2	.00315	1.9686	.05631	.47851	-.01229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-124556-A-3-DSD@5 Acquired: 10/16/2017 11:28:46 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.4261**	**1.1865**	**-.00001**	**4.8520**	**.03116**
Stddev	.0004	.0007	.00002	.0153	.00060
%RSD	.00799	.05942	155.81	.31479	1.9098
#1	4.4259	1.1860	-.00003	4.8412	.03074
#2	4.4264	1.1870	.00000	4.8628	.03158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.2193**	**.78541**	**-.00001**	**.00017**	**.99790**
Stddev	.0118	.00064	.00173	.00043	.00534
%RSD	.96894	.08204	16064.	248.94	.53548
#1	1.2110	.78496	-.00123	.00048	1.0017
#2	1.2277	.78587	.00121	-.00013	.99412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**.54475**	**-.00241**	**-.00010**	**.00063**
Stddev	.00006	.00333	.00013	.00219	.00034
%RSD	6.3873	.61090	5.4486	2283.1	54.612
#1	.00095	.54240	-.00232	.00145	.00039
#2	.00087	.54711	-.00251	-.00164	.00087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-124556-A-3-DSD@5 Acquired: 10/16/2017 11:28:46 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**7.0074**
Stddev	.0145
%RSD	.20641
#1	7.0176
#2	6.9972
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3246.4**	**2431.3**	**20589.**	**3874.8**
Stddev	6.7	3.6	57.	37.0
%RSD	.20716	.14970	.27823	.95559
#1	3251.1	2433.8	20548.	3848.6
#2	3241.6	2428.7	20629.	3901.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.479%	94.337%	93.720%	101.70%
Range				

Sample Name: 480-124556-A-3-DPDS Acquired: 10/16/2017 11:32:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0666**	**3.2576**	**1.0834**	**.20407**	**2.8866**
Stddev	.0036	.0473	.0040	.00052	.0149
%RSD	.34130	1.4515	.37132	.25688	.51446
#1	1.0691	3.2241	1.0806	.20369	2.8761
#2	1.0640	3.2910	1.0863	.20444	2.8971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.96514**	F **1595.2**	**1.2499**	**.0782**	**1.0278**
Stddev	.00474	3.3	.0020	.0075	.0004
%RSD	.49090	.20534	.15748	9.623	.03806
#1	.96179	1597.5	1.2485	.0835	1.0281
#2	.96849	1592.9	1.2513	.0729	1.0276
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.94246**	**10.597**	**.23315**	**2.1698**	F **-.04834**
Stddev	.00037	.021	.00154	.0187	.00236
%RSD	.03976	.20118	.66022	.85934	4.8857
#1	.94220	10.582	.23423	2.1566	-.05001
#2	.94273	10.612	.23206	2.1830	-.04667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					45.000
Low Limit					-.03000

Sample Name: 480-124556-A-3-DPDS Acquired: 10/16/2017 11:32:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.903**	**6.3799**	**.96973**	**23.988**	**1.1384**
Stddev	.002	.0121	.00033	.156	.0011
%RSD	.01030	.18967	.03363	.64867	.09595
#1	19.905	6.3714	.96950	23.878	1.1376
#2	19.902	6.3885	.96996	24.098	1.1392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.8408**	**3.9546**	**1.0432**	**1.1188**	**4.8205**
Stddev	.0184	.0180	.0009	.0043	.0391
%RSD	.26955	.45521	.08817	.38442	.81165
#1	6.8539	3.9419	1.0426	1.1157	4.7928
#2	6.8278	3.9674	1.0439	1.1218	4.8482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00137**	**2.6086**	F **-.01351**	**.98322**	**1.0186**
Stddev	.00031	.0121	.00003	.00228	.0004
%RSD	22.643	.46493	.24672	.23177	.04207
#1	.00159	2.6000	-.01348	.98483	1.0183
#2	.00115	2.6172	-.01353	.98161	1.0189
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-124556-A-3-DPDS Acquired: 10/16/2017 11:32:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	F **31.816**
Stddev	.039
%RSD	.12202
#1	31.788
#2	31.843
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2762.1**	**2248.0**	**18975.**	**3790.5**
Stddev	10.1	4.3	42.	13.4
%RSD	.36416	.19212	.22396	.35259
#1	2755.0	2244.9	19005.	3800.0
#2	2769.2	2251.0	18945.	3781.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.429%	87.226%	86.376%	99.493%
Range				

Sample Name: 480-124556-A-3-E MS Acquired: 10/16/2017 11:35:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0913**	**3.1782**	**1.1145**	**.20023**	**2.8742**
Stddev	.0005	.0049	.0041	.00059	.0132
%RSD	.04703	.15315	.36853	.29278	.46036
#1	1.0917	3.1816	1.1174	.19982	2.8648
#2	1.0910	3.1747	1.1116	.20065	2.8836
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99374**	F **1570.2**	**1.2743**	**.0442**	**1.0533**
Stddev	.00064	6.4	.0008	.0139	.0014
%RSD	.06421	.41057	.06549	31.51	.13068
#1	.99328	1574.8	1.2737	.0344	1.0543
#2	.99419	1565.6	1.2749	.0541	1.0523
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.96555**	**10.432**	**.22561**	**2.0854**	F **-.04528**
Stddev	.00057	.010	.00075	.0571	.00026
%RSD	.05935	.09326	.33414	2.7364	.58511
#1	.96515	10.426	.22507	2.0450	-.04509
#2	.96596	10.439	.22614	2.1257	-.04547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					45.000
Low Limit					-.03000

Sample Name: 480-124556-A-3-E MS Acquired: 10/16/2017 11:35:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.374**	**6.2689**	**1.0002**	**23.474**	**1.1629**
Stddev	.007	.0029	.0002	.085	.0004
%RSD	.03637	.04616	.01987	.36321	.03181
#1	19.379	6.2669	1.0004	23.413	1.1627
#2	19.369	6.2709	1.0001	23.534	1.1632
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.7449**	**3.8797**	**1.0705**	**1.1616**	**4.7620**
Stddev	.0050	.0023	.0001	.0049	.0364
%RSD	.07378	.06013	.01076	.42022	.76379
#1	6.7414	3.8780	1.0706	1.1650	4.7363
#2	6.7484	3.8813	1.0705	1.1581	4.7877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00161**	**3.5771**	F **-.01303**	**1.0049**	**1.0419**
Stddev	.00055	.0145	.00035	.0046	.0006
%RSD	34.097	.40610	2.6863	.45376	.06219
#1	.00122	3.5668	-.01328	1.0081	1.0423
#2	.00200	3.5874	-.01279	1.0016	1.0414
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-124556-A-3-E MS Acquired: 10/16/2017 11:35:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	F **30.933**
Stddev	.026
%RSD	.08371
#1	30.951
#2	30.915
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2764.4**	**2243.8**	**19115.**	**3803.7**
Stddev	1.8	.2	11.	26.7
%RSD	.06497	.00876	.05780	.70242
#1	2763.2	2243.7	19123.	3784.9
#2	2765.7	2244.0	19107.	3822.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.492%	87.064%	87.011%	99.840%
Range				

Sample Name: 480-124556-A-3-F MSD Acquired: 10/16/2017 11:39:31 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0910**	**3.2380**	**1.1204**	**.20339**	**2.8778**
Stddev	.0045	.0194	.0037	.00079	.0095
%RSD	.41497	.59891	.33439	.38609	.33134
#1	1.0942	3.2243	1.1231	.20395	2.8710
#2	1.0878	3.2518	1.1178	.20284	2.8845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99754**	F **1565.0**	**1.2791**	**.0691**	**1.0531**
Stddev	.00164	12.4	.0010	.0223	.0010
%RSD	.16464	.79452	.07414	32.33	.09134
#1	.99638	1556.2	1.2785	.0533	1.0524
#2	.99870	1573.8	1.2798	.0849	1.0538
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.96901**	**10.517**	**.22740**	**2.1138**	F **-.04455**
Stddev	.00370	.047	.00212	.0261	.00164
%RSD	.38148	.45062	.93032	1.2329	3.6910
#1	.97162	10.550	.22890	2.0953	-.04339
#2	.96639	10.483	.22591	2.1322	-.04572
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					45.000
Low Limit					-.03000

Sample Name: 480-124556-A-3-F MSD Acquired: 10/16/2017 11:39:31 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.314**	**6.2711**	**1.0028**	**23.491**	**1.1616**
Stddev	.093	.0179	.0008	.086	.0003
%RSD	.47899	.28604	.08117	.36523	.02474
#1	19.379	6.2838	1.0033	23.430	1.1618
#2	19.248	6.2585	1.0022	23.552	1.1614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.7420**	**3.8967**	**1.0803**	**1.1740**	**4.7541**
Stddev	.0167	.0029	.0003	.0018	.0199
%RSD	.24807	.07462	.02691	.15596	.41929
#1	6.7302	3.8987	1.0801	1.1727	4.7400
#2	6.7539	3.8946	1.0805	1.1753	4.7682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00179**	**3.5827**	F **-.01265**	**1.0056**	**1.0469**
Stddev	.00002	.0094	.00061	.0022	.0018
%RSD	.84028	.26358	4.8308	.22301	.17096
#1	.00180	3.5760	-.01222	1.0040	1.0482
#2	.00178	3.5894	-.01309	1.0072	1.0456
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-124556-A-3-F MSD Acquired: 10/16/2017 11:39:31 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	F **30.762**
Stddev	.122
%RSD	.39775
#1	30.849
#2	30.676
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2773.0**	**2246.2**	**19172.**	**3759.7**
Stddev	2.8	1.3	54.	1.9
%RSD	.10019	.05730	.28312	.05095
#1	2774.9	2247.1	19133.	3761.1
#2	2771.0	2245.3	19210.	3758.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.722%	87.157%	87.270%	98.685%
Range				

Sample Name: MB 480-381758/1-A Acquired: 10/16/2017 11:43:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00051**	**.01531**	**-.00033**	**.00063**	**.00022**
Stddev	.00039	.00094	.00034	.00015	.00002
%RSD	76.033	6.1268	101.14	22.932	10.528
#1	.00079	.01598	-.00009	.00053	.00024
#2	.00024	.01465	-.00057	.00074	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.06896**	**.00022**	**.0065**	**-.00009**
Stddev	.00000	.01114	.00006	.0037	.00002
%RSD	4.4995	16.153	26.091	57.35	20.041
#1	.00005	.07684	.00018	.0092	-.00008
#2	.00004	.06108	.00026	.0039	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00051**	**.00054**	**.02181**	**.01747**	**-.00036**
Stddev	.00018	.00040	.00011	.02099	.00205
%RSD	35.000	74.553	.50338	120.16	572.40
#1	.00064	.00083	.02173	.03232	-.00181
#2	.00039	.00026	.02189	.00263	.00109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-381758/1-A Acquired: 10/16/2017 11:43:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00551**	**.00028**	**-.00003**	**.02657**	**.00022**
Stddev	.00139	.00005	.00002	.00743	.00030
%RSD	25.207	19.205	64.663	27.967	136.49
#1	.00650	.00031	-.00002	.03182	.00001
#2	.00453	.00024	-.00004	.02132	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00126**	**-.00420**	**.00240**	**.00172**	**.20970**
Stddev	.00169	.00357	.00224	.00074	.01107
%RSD	133.88	84.925	93.462	42.675	5.2799
#1	.00246	-.00168	.00399	.00224	.20187
#2	.00007	-.00673	.00081	.00120	.21753
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00117**	**.00016**	**.00079**	**-.00000**	**.00018**
Stddev	.00003	.00005	.00033	.00040	.00019
%RSD	2.3384	28.643	42.076	30573.	107.75
#1	.00119	.00019	.00056	-.00028	.00032
#2	.00115	.00013	.00103	.00028	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-381758/1-A Acquired: 10/16/2017 11:43:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00210
Stddev	.00052
%RSD	24.573
#1	.00247
#2	.00174
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3775.8	2612.5	22455.	4003.7
Stddev	8.8	3.4	69.	3.2
%RSD	.23181	.12955	.30684	.08048
#1	3769.6	2610.1	22504.	4006.0
#2	3781.9	2614.9	22406.	4001.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.74%	101.37%	102.21%	105.09%
Range				

Sample Name: CCV-4278259 Acquired: 10/16/2017 11:46:45 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52276**	**25.393**	**.52230**	**.51673**	**.49904**
Stddev	.00139	.090	.00498	.00106	.00732
%RSD	.26506	.35252	.95264	.20494	1.4671
#1	.52374	25.329	.52582	.51598	.50422
#2	.52178	25.456	.51878	.51747	.49386
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53185**	**26.532**	**.51192**	**-.0263**	**.51019**
Stddev	.00100	.015	.00084	.0156	.00004
%RSD	.18843	.05684	.16393	59.54	.00717
#1	.53115	26.522	.51133	-.0152	.51016
#2	.53256	26.543	.51251	-.0373	.51021
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51970**	**.50457**	**25.796**	**25.110**	**.51474**
Stddev	.00066	.00261	.025	.010	.00037
%RSD	.12762	.51769	.09618	.03955	.07178
#1	.51923	.50273	25.814	25.117	.51500
#2	.52017	.50642	25.778	25.103	.51448
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 11:46:45 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.625**	**.52577**	**.52596**	**25.462**	**.51550**
Stddev	.005	.00013	.00010	.016	.00054
%RSD	.02026	.02523	.01931	.06218	.10496
#1	25.629	.52568	.52603	25.450	.51512
#2	25.622	.52586	.52589	25.473	.51588
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51597**	**25.905**	**.51486**	**.53007**	**22.688**
Stddev	.00059	.044	.00081	.00025	.057
%RSD	.11411	.17061	.15768	.04716	.25106
#1	.51555	25.874	.51429	.53024	22.728
#2	.51638	25.937	.51543	.52989	22.647
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52761**	**.50801**	**.52786**	**.52638**	**.53364**
Stddev	.00024	.00066	.00089	.00262	.00176
%RSD	.04505	.13038	.16826	.49748	.33007
#1	.52778	.50754	.52723	.52823	.53489
#2	.52745	.50848	.52849	.52452	.53240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 11:46:45 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	**.54357**
Stddev	.00444
%RSD	.81639
#1	.54670
#2	.54043
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3415.5**	**2535.0**	**21187.**	**3833.5**
Stddev	4.5	1.3	84.	5.9
%RSD	.13035	.05075	.39537	.15344
#1	3412.3	2534.1	21128.	3829.3
#2	3418.6	2535.9	21246.	3837.6

Sample Name: CCB-4278202 Acquired: 10/16/2017 11:50:13 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**-.02681**	**.00063**	**-.00082**	**-.00003**
Stddev	.00036	.00773	.00200	.00003	.00002
%RSD	1541.9	28.822	316.40	3.9833	65.170
#1	-.00028	-.03228	-.00078	-.00084	-.00004
#2	.00023	-.02135	.00205	-.00080	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.00787**	**.00008**	**-.0036**	**.00007**
Stddev	.00000	.00278	.00003	.0402	.00025
%RSD	688.15	35.330	38.622	1131.	359.88
#1	.00000	.00984	.00006	.0249	-.00011
#2	-.00000	.00591	.00010	-.0320	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.00084**	**.00197**	**.01913**	**.00179**
Stddev	.00054	.00013	.00097	.01185	.00050
%RSD	645.14	15.551	49.577	61.963	27.700
#1	-.00030	.00074	.00265	.02751	.00214
#2	.00046	.00093	.00128	.01075	.00144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 11:50:13 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00448**	**-.00004**	**-.00001**	**-.00186**	**.00019**
Stddev	.00036	.00000	.00007	.00476	.00021
%RSD	8.0232	10.280	513.71	255.75	107.98
#1	.00422	-.00004	.00004	-.00522	.00005
#2	.00473	-.00005	-.00006	.00150	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00061**	**-.00891**	**.00000**	**.00324**	**-.00042**
Stddev	.00031	.00097	.00049	.00245	.02016
%RSD	51.053	10.922	92981.	75.523	4790.6
#1	.00083	-.00823	-.00034	.00497	-.01468
#2	.00039	-.00960	.00034	.00151	.01383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**-.00003**	**-.00022**	**.00122**	**.00017**
Stddev	.00027	.00004	.00072	.00095	.00009
%RSD	131.36	145.42	327.92	78.209	54.945
#1	.00039	-.00006	.00029	.00189	.00010
#2	.00001	.00000	-.00073	.00054	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 11:50:13 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.00012
Stddev	.00025
%RSD	206.41
#1	.00030
#2	-.00006
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3758.1	2622.5	22384.	3950.7
Stddev	.5	5.3	66.	22.8
%RSD	.01445	.20358	.29378	.57827
#1	3758.4	2626.3	22338.	3934.6
#2	3757.7	2618.8	22431.	3966.9

Sample Name: ccvl-4278204 Acquired: 10/16/2017 11:53:52 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00607**	**.19844**	**.01238**	**.01941**	**.00205**
Stddev	.00039	.00114	.00048	.00023	.00003
%RSD	6.3549	.57503	3.9002	1.1692	1.2437
#1	.00579	.19763	.01204	.01925	.00207
#2	.00634	.19925	.01272	.01957	.00203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00219**	**.52685**	**.00211**	**.0003**	**.00385**
Stddev	.00003	.00189	.00007	.0098	.00003
%RSD	1.5902	.35839	3.3015	2986.	.89024
#1	.00216	.52819	.00215	-.0066	.00383
#2	.00221	.52552	.00206	.0072	.00388
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00386**	**.00954**	**.05251**	**.50925**	**.03141**
Stddev	.00008	.00014	.00094	.02796	.00109
%RSD	1.9577	1.4398	1.7974	5.4896	3.4703
#1	.00380	.00964	.05318	.52902	.03218
#2	.00391	.00944	.05184	.48949	.03064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 11:53:52 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21066**	**.00312**	**.01031**	**.99889**	**.00988**
Stddev	.00073	.00002	.00009	.00012	.00009
%RSD	.34560	.68665	.86861	.01222	.86532
#1	.21118	.00314	.01037	.99880	.00994
#2	.21015	.00311	.01024	.99897	.00982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01162**	**.18613**	**.02077**	**.02549**	**.45157**
Stddev	.00088	.00107	.00014	.00002	.00498
%RSD	7.5808	.57292	.65968	.06741	1.1036
#1	.01099	.18538	.02067	.02548	.44805
#2	.01224	.18688	.02087	.02551	.45509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01028**	**.00502**	**.00528**	**.02127**	**.00551**
Stddev	.00031	.00005	.00028	.00014	.00011
%RSD	3.0388	1.0633	5.2510	.64115	2.0541
#1	.01006	.00506	.00547	.02137	.00543
#2	.01050	.00498	.00508	.02118	.00559
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 11:53:52 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.01078
Stddev	.00044
%RSD	4.1124
#1	.01109
#2	.01047
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3744.1	2619.1	22226.	3939.0
Stddev	9.3	3.8	98.	10.6
%RSD	.24794	.14500	.44235	.26943
#1	3737.5	2616.4	22157.	3946.5
#2	3750.6	2621.8	22296.	3931.5

Sample Name: LCSSRM 480-381758/2- Acquired: 10/16/2017 11:57:30 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.34501	91.444	.88112	.71211	1.8631
Stddev	.00015	.267	.00127	.00129	.0029
%RSD	.04413	.29185	.14385	.18174	.15525
#1	.34512	91.633	.88202	.71303	1.8611
#2	.34490	91.256	.88022	.71120	1.8652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	1.2932	53.015	.69936	1.618	1.2523
Stddev	.0015	.057	.00057	.003	.0021
%RSD	.11377	.10817	.08107	.1739	.16520
#1	1.2942	53.055	.69976	1.620	1.2508
#2	1.2921	52.974	.69896	1.616	1.2537
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.93446	1.3856	152.88	26.070	.07208
Stddev	.00067	.0004	.06	.026	.00085
%RSD	.07190	.03051	.04151	.10165	1.1763
#1	.93398	1.3853	152.83	26.051	.07268
#2	.93493	1.3859	152.92	26.088	.07148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Sample Name: LCSSRM 480-381758/2- Acquired: 10/16/2017 11:57:30 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.814**	**2.7681**	**.47841**	**2.3965**	**.51314**
Stddev	.117	.0042	.00056	.0129	.00237
%RSD	.43531	.15078	.11704	.53845	.46138
#1	26.897	2.7711	.47801	2.4057	.51146
#2	26.732	2.7652	.47881	2.3874	.51481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.91631**	**1.0398**	**.62112**	**.78758**	**4.9822**
Stddev	.00311	.0024	.00363	.00031	.0706
%RSD	.33964	.23042	.58411	.03947	1.4178
#1	.91411	1.0381	.62369	.78780	5.0322
#2	.91851	1.0415	.61856	.78736	4.9323
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.5685**	**.53608**	**4.6798**	**.60829**	**1.3097**
Stddev	.0061	.00098	.0052	.00079	.0012
%RSD	.38606	.18298	.11042	.13017	.09297
#1	1.5642	.53539	4.6835	.60773	1.3088
#2	1.5727	.53678	4.6762	.60885	1.3105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCSSRM 480-381758/2- Acquired: 10/16/2017 11:57:30 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	1.2776
Stddev	.0007
%RSD	.05831
#1	1.2781
#2	1.2770
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3298.5	2993.8	25207.	4710.4
Stddev	7.8	.9	68.	14.5
%RSD	.23501	.03076	.27159	.30838
#1	3304.0	2994.4	25159.	4700.2
#2	3293.0	2993.1	25255.	4720.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.883%	116.16%	114.74%	123.64%
Range				

Sample Name: LCDSRM 480-381758/3- Acquired: 10/16/2017 12:00:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.35375**	**92.900**	**.89024**	**.71381**	**1.8529**
Stddev	.00141	.284	.00071	.00064	.0025
%RSD	.39866	.30620	.08031	.08908	.13433
#1	.35275	93.102	.89074	.71336	1.8547
#2	.35474	92.699	.88973	.71426	1.8512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.3045**	**54.251**	**.71028**	**1.506**	**1.2667**
Stddev	.0018	.199	.00141	.009	.0004
%RSD	.14072	.36679	.19790	.5794	.02901
#1	1.3058	54.392	.70928	1.500	1.2670
#2	1.3032	54.111	.71127	1.512	1.2665
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.93944**	**1.4136**	**157.34**	**26.283**	**.07248**
Stddev	.00155	.0034	1.00	.004	.00022
%RSD	.16465	.24195	.63700	.01473	.30884
#1	.93835	1.4160	158.04	26.286	.07232
#2	.94054	1.4112	156.63	26.281	.07264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Sample Name: LCDSRM 480-381758/3- Acquired: 10/16/2017 12:00:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.370**	**2.7224**	**.48461**	**2.4165**	**.51984**
Stddev	.006	.0020	.00022	.0120	.00098
%RSD	.02349	.07353	.04546	.49759	.18762
#1	27.365	2.7210	.48476	2.4250	.52053
#2	27.374	2.7238	.48445	2.4080	.51915
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.92215**	**1.0397**	**.62408**	**.80557**	**5.3171**
Stddev	.00014	.0010	.00015	.00450	.1575
%RSD	.01536	.09101	.02478	.55849	2.9614
#1	.92205	1.0390	.62397	.80239	5.4285
#2	.92225	1.0403	.62419	.80875	5.2058
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.5796**	**.53721**	**4.6289**	**.62472**	**1.3206**
Stddev	.0015	.00052	.0097	.00313	.0032
%RSD	.09588	.09714	.20844	.50051	.24451
#1	1.5807	.53758	4.6358	.62693	1.3183
#2	1.5786	.53684	4.6221	.62251	1.3229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCDSRM 480-381758/3- Acquired: 10/16/2017 12:00:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	1.2925
Stddev	.0039
%RSD	.30334
#1	1.2898
#2	1.2953
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3308.2	2997.7	25159.	4686.1
Stddev	5.1	2.1	52.	40.8
%RSD	.15301	.06934	.20663	.86994
#1	3304.6	2996.2	25195.	4657.3
#2	3311.8	2999.1	25122.	4715.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.145%	116.31%	114.52%	123.00%
Range				

Sample Name: 480-125696-A-1-A Acquired: 10/16/2017 12:04:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00095**	**111.49**	**.04389**	**.00843**	**.64640**
Stddev	.00041	.13	.00027	.00054	.00388
%RSD	42.783	.11815	.61351	6.3601	.60077
#1	-.00066	111.58	.04408	.00881	.64915
#2	-.00124	111.39	.04370	.00805	.64366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00318**	**11.202**	**.00670**	**.4011**	**.09363**
Stddev	.00006	.002	.00002	.0375	.00014
%RSD	2.0160	.01470	.24575	9.362	.15251
#1	.00322	11.203	.00668	.4276	.09373
#2	.00313	11.201	.00671	.3745	.09353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12718**	**13.974**	**230.98**	**10.077**	**.24575**
Stddev	.00079	.011	.08	.020	.00054
%RSD	.62272	.07848	.03270	.19805	.21877
#1	.12774	13.982	231.03	10.091	.24613
#2	.12662	13.966	230.92	10.063	.24537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125696-A-1-A Acquired: 10/16/2017 12:04:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**42.792**	**4.3822**	**.00086**	**.79660**	**.22274**
Stddev	.055	.0037	.00017	.01025	.00034
%RSD	.12949	.08366	20.268	1.2873	.15164
#1	42.831	4.3848	.00074	.80385	.22298
#2	42.753	4.3796	.00098	.78935	.22250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.11026**	**16.140**	**-.01493**	**.00506**	**5.9644**
Stddev	.00165	.019	.00416	.00007	.1555
%RSD	1.5009	.12058	27.897	1.4284	2.6063
#1	.11143	16.126	-.01787	.00511	6.0743
#2	.10909	16.154	-.01198	.00501	5.8544
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00668**	**.06165**	**1.5477**	**-.00140**	**.12233**
Stddev	.00088	.00011	.0009	.00093	.00018
%RSD	13.135	.17467	.06036	66.767	.14436
#1	.00730	.06158	1.5471	-.00074	.12220
#2	.00606	.06173	1.5484	-.00206	.12245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125696-A-1-A Acquired: 10/16/2017 12:04:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.98274
Stddev	.00142
%RSD	.14464
#1	.98174
#2	.98375
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3428.9	2786.2	23092.	4267.8
Stddev	6.3	6.8	66.	18.4
%RSD	.18493	.24250	.28492	.43219
#1	3433.4	2791.0	23138.	4280.8
#2	3424.4	2781.4	23045.	4254.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.398%	108.11%	105.11%	112.02%
Range				

Sample Name: 480-125579-E-1-B Acquired: 10/16/2017 12:07:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00218	131.65	.15802	.20659	1.5686
Stddev	.00011	.26	.00200	.00016	.0031
%RSD	4.9955	.19564	1.2673	.07567	.19669
#1	.00211	131.84	.15661	.20648	1.5708
#2	.00226	131.47	.15944	.20670	1.5664
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00817	222.94	.00948	.4002	.11212
Stddev	.00004	.22	.00009	.0034	.00036
%RSD	.45110	.09747	.95918	.8402	.32036
#1	.00815	223.10	.00941	.4026	.11186
#2	.00820	222.79	.00954	.3978	.11237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.26729	.51693	213.58	36.784	.26806
Stddev	.00029	.00499	.00	.103	.00159
%RSD	.10839	.96465	.00142	.27966	.59265
#1	.26749	.51341	213.59	36.857	.26918
#2	.26708	.52046	213.58	36.711	.26693
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-B Acquired: 10/16/2017 12:07:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**50.095**	**2.6302**	**.00828**	**4.8258**	**.33420**
Stddev	.196	.0119	.00012	.0160	.00003
%RSD	.39078	.45385	1.5014	.33183	.00813
#1	49.957	2.6218	.00819	4.8371	.33422
#2	50.233	2.6387	.00836	4.8145	.33418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.7986**	**11.439**	**-.00453**	**.03385**	**12.223**
Stddev	.0024	.011	.00008	.00375	.460
%RSD	.04185	.09785	1.7462	11.077	3.7670
#1	5.8004	11.447	-.00448	.03650	12.549
#2	5.7969	11.432	-.00459	.03120	11.898
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.74438**	**.61715**	**.94970**	**.00160**	**.24886**
Stddev	.00101	.00121	.00795	.00105	.00002
%RSD	.13578	.19680	.83710	65.944	.01000
#1	.74509	.61801	.95533	.00234	.24884
#2	.74366	.61629	.94408	.00085	.24888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-B Acquired: 10/16/2017 12:07:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**4.1128**
Stddev	.0042
%RSD	.10275
#1	4.1098
#2	4.1158
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3106.2**	**2711.5**	**22569.**	**4325.6**
Stddev	1.5	1.4	57.	14.3
%RSD	.04863	.05005	.25426	.33113
#1	3107.3	2712.4	22610.	4315.4
#2	3105.1	2710.5	22529.	4335.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.701%	105.21%	102.73%	113.54%
Range				

Sample Name: 480-125579-E-1-BSD@5 Acquired: 10/16/2017 12:11:27 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00127**	**28.935**	**.03272**	**.04877**	**.34573**
Stddev	.00055	.194	.00035	.00027	.00021
%RSD	43.385	.67153	1.0547	.55255	.06105
#1	.00166	28.798	.03296	.04896	.34588
#2	.00088	29.073	.03248	.04858	.34558
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00191**	**49.160**	**.00221**	**.0829**	**.02197**
Stddev	.00005	.210	.00008	.0066	.00007
%RSD	2.4511	.42685	3.6763	7.912	.32852
#1	.00194	49.012	.00227	.0783	.02192
#2	.00187	49.309	.00216	.0875	.02202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.06117**	**.11083**	**47.870**	**8.0982**	**.05822**
Stddev	.00125	.00016	.009	.0188	.00069
%RSD	2.0441	.14735	.01831	.23187	1.1866
#1	.06205	.11095	47.864	8.0849	.05773
#2	.06028	.11072	47.877	8.1115	.05871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-BSD@5 Acquired: 10/16/2017 12:11:27 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.164**	**.58634**	**.00155**	**1.0574**	**.06593**
Stddev	.017	.00095	.00002	.0037	.00019
%RSD	.14977	.16241	1.2464	.34867	.28074
#1	11.175	.58702	.00154	1.0548	.06580
#2	11.152	.58567	.00156	1.0600	.06606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.1513**	**2.4251**	**-.00139**	**.00902**	**3.6107**
Stddev	.0011	.0017	.00020	.00207	.1057
%RSD	.09329	.07131	14.071	22.886	2.9269
#1	1.1506	2.4238	-.00125	.01048	3.5359
#2	1.1521	2.4263	-.00153	.00756	3.6854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.14525**	**.13601**	**.24063**	**.00114**	**.05487**
Stddev	.00065	.00022	.00547	.00070	.00042
%RSD	.44856	.16407	2.2717	61.707	.76478
#1	.14479	.13585	.23676	.00163	.05457
#2	.14571	.13616	.24450	.00064	.05517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-BSD@5 Acquired: 10/16/2017 12:11:27 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.93526
Stddev	.00065
%RSD	.06968
#1	.93572
#2	.93480
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3494.7	2623.0	21915.	4008.7
Stddev	1.6	.4	32.	10.5
%RSD	.04614	.01662	.14599	.26276
#1	3495.8	2622.7	21893.	4016.1
#2	3493.5	2623.4	21938.	4001.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.169%	101.78%	99.758%	105.22%
Range				

Sample Name: 480-125579-E-1-BPDS Acquired: 10/16/2017 12:14:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.09799	140.22	.53764	.43549	1.7554
Stddev	.00110	.15	.00063	.00005	.0015
%RSD	1.1231	.10627	.11793	.01225	.08703
#1	.09721	140.12	.53809	.43553	1.7565
#2	.09876	140.33	.53719	.43545	1.7544
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.38576	233.32	.38904	.3872	.51632
Stddev	.00111	.31	.00077	.0057	.00049
%RSD	.28792	.13488	.19753	1.463	.09548
#1	.38498	233.10	.38850	.3913	.51597
#2	.38655	233.55	.38959	.3832	.51666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.62263	.87992	224.64	47.790	.50742
Stddev	.00009	.00269	.23	.063	.00075
%RSD	.01409	.30612	.10112	.13194	.14749
#1	.62257	.88182	224.48	47.834	.50795
#2	.62269	.87801	224.80	47.745	.50689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-BPDS Acquired: 10/16/2017 12:14:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**67.178**	**2.9053**	**.38203**	**16.726**	**.73703**
Stddev	.071	.0001	.00027	.004	.00193
%RSD	.10632	.00426	.06982	.02175	.26188
#1	67.127	2.9054	.38222	16.729	.73567
#2	67.228	2.9052	.38184	16.724	.73840
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.0266**	**11.130**	**.36568**	**.41728**	**12.737**
Stddev	.0094	.023	.00204	.00013	.334
%RSD	.15639	.21012	.55897	.03105	2.6185
#1	6.0199	11.113	.36423	.41718	12.973
#2	6.0332	11.146	.36712	.41737	12.501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.1378**	**.83465**	**1.3456**	**.41032**	**.63088**
Stddev	.0014	.00172	.0039	.00311	.00067
%RSD	.12686	.20643	.28720	.75861	.10619
#1	1.1368	.83587	1.3484	.41252	.63136
#2	1.1388	.83344	1.3429	.40812	.63041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-BPDS Acquired: 10/16/2017 12:14:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**4.2978**
Stddev	.0063
%RSD	.14540
#1	4.3023
#2	4.2934
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3070.6**	**2688.2**	**22440.**	**4321.8**
Stddev	2.7	.8	64.	14.8
%RSD	.08833	.02830	.28564	.34228
#1	3072.5	2687.6	22395.	4332.2
#2	3068.7	2688.7	22486.	4311.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.743%	104.31%	102.15%	113.44%
Range				

Sample Name: 480-125579-F-1-F MS Acquired: 10/16/2017 12:18:25 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09797**	**224.41**	**.51039**	**.78206**	**2.4307**
Stddev	.00000	.48	.00080	.00211	.0080
%RSD	.00396	.21399	.15724	.27012	.33003
#1	.09797	224.07	.50982	.78355	2.4251
#2	.09796	224.75	.51096	.78057	2.4364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.36632**	**313.23**	**.37804**	**.4373**	**.50889**
Stddev	.00034	3.78	.00091	.0163	.00066
%RSD	.09255	1.2053	.24055	3.731	.12997
#1	.36608	310.56	.37868	.4257	.50936
#2	.36656	315.90	.37739	.4488	.50842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.67076**	**1.1027**	**195.24**	**82.498**	**.62485**
Stddev	.00040	.0001	.71	.136	.00059
%RSD	.06008	.01311	.36332	.16459	.09448
#1	.67104	1.1028	194.74	82.402	.62527
#2	.67047	1.1026	195.74	82.594	.62443
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-F-1-F MS Acquired: 10/16/2017 12:18:25 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**89.537**	**3.2147**	**.35163**	**23.716**	**.69887**
Stddev	.260	.0058	.00097	.068	.00059
%RSD	.29073	.18119	.27573	.28545	.08409
#1	89.721	3.2188	.35232	23.668	.69928
#2	89.353	3.2106	.35095	23.764	.69845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.0742**	**27.352**	**.18778**	**.39953**	**7.3372**
Stddev	.0065	.075	.00238	.00170	.0464
%RSD	.15883	.27310	1.2676	.42558	.63225
#1	4.0788	27.404	.18947	.39833	7.3700
#2	4.0696	27.299	.18610	.40073	7.3044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.73482**	**1.1708**	**2.2483**	**.39352**	**.75787**
Stddev	.00041	.0042	.0046	.00025	.00132
%RSD	.05580	.35801	.20436	.06345	.17395
#1	.73511	1.1679	2.2450	.39370	.75693
#2	.73453	1.1738	2.2515	.39334	.75880
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-F-1-F MS Acquired: 10/16/2017 12:18:25 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**3.5211**
Stddev	.0087
%RSD	.24721
#1	3.5272
#2	3.5149
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2955.1**	**2675.5**	**22036.**	**4370.5**
Stddev	.5	1.7	19.	21.4
%RSD	.01767	.06396	.08676	.49075
#1	2955.5	2674.3	22050.	4385.7
#2	2954.7	2676.7	22023.	4355.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.630%	103.82%	100.31%	114.72%
Range				

Sample Name: 480-125579-E-1-C MSD Acquired: 10/16/2017 12:21:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09647**	**234.47**	**.48482**	**.82138**	**2.1052**
Stddev	.00037	.31	.00383	.00098	.0011
%RSD	.37855	.13158	.79090	.11954	.05299
#1	.09621	234.69	.48753	.82069	2.1060
#2	.09673	234.25	.48211	.82208	2.1044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.36542**	**227.57**	**.37254**	**.4563**	**.50317**
Stddev	.00035	.09	.00021	.0243	.00015
%RSD	.09643	.04129	.05544	5.317	.02887
#1	.36517	227.64	.37269	.4734	.50328
#2	.36566	227.51	.37239	.4391	.50307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.69535**	**.79526**	**230.79**	**84.970**	**.65458**
Stddev	.00087	.00304	.34	.081	.00045
%RSD	.12450	.38269	.14939	.09488	.06839
#1	.69597	.79741	231.03	84.913	.65489
#2	.69474	.79311	230.54	85.027	.65426
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-C MSD Acquired: 10/16/2017 12:21:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**79.382**	**2.8736**	**.35324**	**23.311**	**.69876**
Stddev	.078	.0006	.00063	.014	.00103
%RSD	.09801	.02254	.17767	.05928	.14678
#1	79.327	2.8741	.35279	23.320	.69803
#2	79.437	2.8732	.35368	23.301	.69948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.6087**	**26.805**	**.19784**	**.38311**	**6.8536**
Stddev	.0001	.002	.00298	.00076	.0859
%RSD	.00174	.00930	1.5065	.19712	1.2537
#1	4.6087	26.803	.19995	.38364	6.7928
#2	4.6086	26.807	.19574	.38258	6.9143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.62979**	**.93868**	**2.4280**	**.39531**	**.76574**
Stddev	.00063	.00095	.0150	.00312	.00423
%RSD	.10048	.10113	.61980	.78805	.55209
#1	.62934	.93935	2.4174	.39751	.76275
#2	.63023	.93801	2.4386	.39311	.76873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-E-1-C MSD Acquired: 10/16/2017 12:21:58 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**2.8795**
Stddev	.0083
%RSD	.28860
#1	2.8737
#2	2.8854
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2981.5**	**2708.9**	**22216.**	**4321.0**
Stddev	.7	4.8	19.	5.5
%RSD	.02249	.17643	.08406	.12685
#1	2981.0	2705.6	22203.	4317.1
#2	2981.9	2712.3	22229.	4324.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	80.341%	105.11%	101.13%	113.42%
Range				

Sample Name: 480-125579-F-2-B Acquired: 10/16/2017 12:25:25 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00127**	**127.83**	**.01913**	**.25636**	**.38820**
Stddev	.00084	.41	.00149	.00003	.00001
%RSD	66.730	.32391	7.7647	.01256	.00136
#1	-.00067	127.54	.02018	.25634	.38821
#2	-.00186	128.13	.01808	.25638	.38820
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00751**	**141.81**	**-.00014**	**.2491**	**.07515**
Stddev	.00001	.40	.00016	.0141	.00008
%RSD	.15519	.28368	114.29	5.673	.10286
#1	.00750	141.53	-.00025	.2391	.07520
#2	.00751	142.10	-.00003	.2591	.07509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18482**	**.22192**	**151.59**	**36.771**	**.29868**
Stddev	.00038	.00125	.49	.026	.00031
%RSD	.20749	.56225	.32609	.06987	.10439
#1	.18509	.22280	151.24	36.789	.29846
#2	.18455	.22104	151.94	36.753	.29890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-F-2-B Acquired: 10/16/2017 12:25:25 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**45.896**	**1.4678**	**.00178**	**3.4811**	**.28192**
Stddev	.094	.0010	.00031	.0108	.00016
%RSD	.20503	.06580	17.260	.31077	.05627
#1	45.830	1.4671	.00157	3.4735	.28203
#2	45.963	1.4685	.00200	3.4888	.28181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.07472**	**1.2396**	**-.00938**	**.00396**	**17.236**
Stddev	.00018	.0020	.00386	.00515	.064
%RSD	.23483	.16149	41.150	129.80	.37374
#1	.07459	1.2382	-.01211	.00760	17.281
#2	.07484	1.2410	-.00665	.00033	17.190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08324**	**.33754**	**.56847**	**-.00116**	**.19031**
Stddev	.00119	.00039	.02487	.00188	.00012
%RSD	1.4330	.11693	4.3746	161.56	.06328
#1	.08240	.33782	.55089	.00017	.19039
#2	.08408	.33726	.58606	-.00249	.19022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-F-2-B Acquired: 10/16/2017 12:25:25 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.30371
Stddev	.00074
%RSD	.24469
#1	.30423
#2	.30318
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3215.2	2660.5	21869.	4095.2
Stddev	2.2	.5	12.	10.0
%RSD	.06963	.01796	.05691	.24457
#1	3216.8	2660.9	21877.	4088.1
#2	3213.6	2660.2	21860.	4102.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.638%	103.23%	99.546%	107.49%
Range				

Sample Name: CCV-4278259 Acquired: 10/16/2017 12:28:55 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52409**	**25.229**	**.52207**	**.51845**	**.50052**
Stddev	.00127	.064	.00337	.00097	.00241
%RSD	.24196	.25190	.64496	.18739	.48221
#1	.52320	25.184	.52445	.51776	.50222
#2	.52499	25.274	.51968	.51914	.49881
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53033**	**26.390**	**.51228**	**.0079**	**.51392**
Stddev	.00015	.061	.00073	.0103	.00043
%RSD	.02914	.22958	.14249	130.2	.08354
#1	.53022	26.433	.51176	.0006	.51422
#2	.53044	26.347	.51279	.0152	.51362
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52003**	**.50408**	**25.987**	**25.411**	**.51893**
Stddev	.00199	.00104	.060	.079	.00075
%RSD	.38293	.20571	.23119	.30950	.14391
#1	.51862	.50335	26.030	25.355	.51840
#2	.52144	.50481	25.945	25.466	.51946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 12:28:55 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.753**	**.52493**	**.52612**	**25.575**	**.51978**
Stddev	.015	.00079	.00004	.045	.00036
%RSD	.05911	.14994	.00666	.17581	.06872
#1	25.742	.52438	.52609	25.544	.51952
#2	25.764	.52549	.52614	25.607	.52003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51833**	**25.936**	**.51427**	**.52863**	**22.540**
Stddev	.00278	.009	.00141	.00312	.028
%RSD	.53606	.03616	.27338	.58992	.12550
#1	.51636	25.929	.51328	.52642	22.560
#2	.52029	25.942	.51527	.53083	22.520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53101**	**.51194**	**.52984**	**.53125**	**.53091**
Stddev	.00055	.00082	.00072	.00104	.00120
%RSD	.10328	.15991	.13535	.19533	.22665
#1	.53062	.51136	.52933	.53199	.53177
#2	.53140	.51252	.53035	.53052	.53006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 12:28:55 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	**.52459**
Stddev	.00044
%RSD	.08460
#1	.52428
#2	.52491
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3455.8**	**2578.5**	**21600.**	**3912.1**
Stddev	4.3	3.3	59.	13.5
%RSD	.12561	.12797	.27239	.34405
#1	3452.8	2576.2	21642.	3902.6
#2	3458.9	2580.9	21559.	3921.6

Sample Name: CCB-4278202 Acquired: 10/16/2017 12:32:22 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**.03062**	**.00153**	**.00057**	**.00024**
Stddev	.00056	.00167	.00023	.00006	.00003
%RSD	222.84	5.4542	15.105	9.8791	13.702
#1	-.00015	.02944	.00169	.00061	.00026
#2	.00065	.03180	.00136	.00053	.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.04200**	**.00017**	**.0011**	**.00002**
Stddev	.00003	.00031	.00007	.0003	.00004
%RSD	19.314	.73579	41.197	28.31	191.25
#1	.00016	.04178	.00012	.0009	-.00001
#2	.00012	.04222	.00022	.0013	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**-.00042**	**.03592**	**.03558**	**.00008**
Stddev	.00033	.00101	.00156	.01694	.00001
%RSD	236.03	241.45	4.3549	47.620	8.6089
#1	-.00009	.00030	.03481	.04756	.00008
#2	.00037	-.00113	.03703	.02360	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 12:32:22 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01878**	**.00039**	**-.00010**	**-.00015**	**.00019**
Stddev	.00184	.00003	.00027	.01043	.00033
%RSD	9.7759	7.6576	263.04	6857.1	168.38
#1	.02008	.00037	-.00029	-.00753	.00043
#2	.01749	.00041	.00009	.00723	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**-.00463**	**-.00026**	**-.00076**	**.00309**
Stddev	.00010	.00214	.00029	.00186	.00001
%RSD	23.677	46.233	114.96	244.71	.22381
#1	.00035	-.00312	-.00005	-.00207	.00310
#2	.00050	-.00614	-.00046	.00055	.00309
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**.00014**	**.00011**	**.00063**	**.00034**
Stddev	.00022	.00012	.00057	.00019	.00001
%RSD	32.807	83.543	544.10	30.429	2.9391
#1	.00052	.00006	.00051	.00077	.00033
#2	.00084	.00022	-.00030	.00050	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 12:32:22 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.00057
Stddev	.00003
%RSD	5.1859
#1	.00055
#2	.00059
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3782.2	2650.2	22480.	3948.9
Stddev	2.4	.8	38.	3.8
%RSD	.06404	.02932	.16691	.09556
#1	3784.0	2650.8	22506.	3951.5
#2	3780.5	2649.7	22453.	3946.2

Sample Name: ccvl-4278204 Acquired: 10/16/2017 12:36:02 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00648**	**.19619**	**.01659**	**.01981**	**.00228**
Stddev	.00046	.02684	.00206	.00022	.00002
%RSD	7.1000	13.678	12.438	1.0934	.84833
#1	.00680	.21517	.01513	.01966	.00230
#2	.00615	.17722	.01805	.01997	.00227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00219**	**.55167**	**.00220**	**.0066**	**.00383**
Stddev	.00000	.00048	.00015	.0276	.00010
%RSD	.14119	.08777	6.9539	416.5	2.5151
#1	.00219	.55133	.00231	.0261	.00377
#2	.00220	.55201	.00210	-.0129	.00390
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00397**	**.01051**	F **.08419**	**.54727**	**.03111**
Stddev	.00005	.00084	.00040	.01142	.00098
%RSD	1.2673	7.9566	.47958	2.0872	3.1468
#1	.00400	.01110	.08448	.53920	.03181
#2	.00393	.00992	.08391	.55535	.03042
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value			.05000		
Range			50.000%		

Sample Name: ccvl-4278204 Acquired: 10/16/2017 12:36:02 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.22275**	**.00343**	**.01015**	**1.0064**	**.00986**
Stddev	.00923	.00000	.00019	.0039	.00018
%RSD	4.1425	.00880	1.8791	.38541	1.8078
#1	.22927	.00343	.01001	1.0092	.00998
#2	.21622	.00343	.01028	1.0037	.00973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01205**	**.18553**	**.01982**	**.02928**	**.46595**
Stddev	.00030	.00030	.00084	.00003	.00594
%RSD	2.4903	.15941	4.2154	.09119	1.2753
#1	.01226	.18574	.01923	.02926	.47016
#2	.01184	.18532	.02041	.02930	.46175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01053**	**.00511**	**.00543**	**.02174**	**.00596**
Stddev	.00064	.00007	.00043	.00048	.00017
%RSD	6.0960	1.3308	7.8469	2.2279	2.9288
#1	.01099	.00506	.00574	.02140	.00608
#2	.01008	.00516	.00513	.02209	.00584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 12:36:02 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.01131
Stddev	.00014
%RSD	1.2041
#1	.01140
#2	.01121
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3773.1	2648.4	22406.	3914.8
Stddev	11.4	1.8	3.	13.3
%RSD	.30325	.06781	.01317	.34072
#1	3765.0	2647.1	22408.	3924.3
#2	3781.1	2649.7	22404.	3905.4

Sample Name: 480-125579-F-3-B Acquired: 10/16/2017 12:39:40 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00036**	**178.33**	**.05324**	**.32189**	**.54631**
Stddev	.00036	.41	.00101	.00028	.00407
%RSD	99.805	.23044	1.8981	.08638	.74439
#1	-.00010	178.62	.05395	.32169	.54919
#2	-.00061	178.04	.05252	.32208	.54343
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01042**	**212.18**	**-.00054**	**.3780**	**.16009**
Stddev	.00003	.51	.00008	.0092	.00026
%RSD	.33589	.23928	15.441	2.421	.15977
#1	.01044	212.54	-.00048	.3715	.16027
#2	.01039	211.82	-.00060	.3845	.15991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.26651**	**.37974**	**258.33**	**48.295**	**.37158**
Stddev	.00180	.00018	1.05	.043	.00076
%RSD	.67556	.04620	.40831	.09007	.20533
#1	.26524	.37962	259.07	48.325	.37212
#2	.26778	.37987	257.58	48.264	.37104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-F-3-B Acquired: 10/16/2017 12:39:40 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**71.106**	**2.8442**	**.00428**	**3.9509**	**.46647**
Stddev	.066	.0006	.00008	.0080	.00033
%RSD	.09283	.02068	1.7922	.20127	.07017
#1	71.060	2.8446	.00433	3.9565	.46624
#2	71.153	2.8438	.00422	3.9453	.46670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.16949**	**1.6563**	**-.01650**	**.00270**	**13.170**
Stddev	.00081	.0049	.00198	.00121	.351
%RSD	.48059	.29584	11.975	44.709	2.6674
#1	.16891	1.6528	-.01510	.00356	13.419
#2	.17007	1.6597	-.01789	.00185	12.922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01555**	**.49851**	**.43710**	**-.00096**	**.25806**
Stddev	.00017	.00001	.01951	.00054	.00124
%RSD	1.0721	.00116	4.4631	56.122	.48103
#1	.01567	.49850	.45089	-.00058	.25719
#2	.01543	.49851	.42330	-.00134	.25894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125579-F-3-B Acquired: 10/16/2017 12:39:40 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.44232
Stddev	.00072
%RSD	.16247
#1	.44181
#2	.44282
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3093.8	2729.8	22646.	4361.8
Stddev	1.8	4.7	22.	10.2
%RSD	.05894	.17109	.09922	.23472
#1	3095.1	2733.1	22631.	4354.6
#2	3092.5	2726.5	22662.	4369.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	83.367%	105.92%	103.09%	114.49%
Range				

Sample Name: 480-125631-B-1-A Acquired: 10/16/2017 12:43:12 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00257**	**75.274**	**.55866**	**.01717**	**.42119**
Stddev	.00033	.056	.00184	.00017	.00171
%RSD	12.917	.07504	.32920	.97864	.40624
#1	-.00233	75.234	.55996	.01705	.42240
#2	-.00280	75.314	.55736	.01729	.41998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00989**	**24.626**	**.00104**	**.6093**	**.04006**
Stddev	.00005	.030	.00007	.0028	.00010
%RSD	.53402	.12280	6.3961	.4583	.25787
#1	.00993	24.647	.00109	.6113	.03999
#2	.00986	24.605	.00100	.6073	.04013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.10588**	**.06747**	**120.58**	**11.827**	**.05697**
Stddev	.00078	.00014	.24	.055	.00045
%RSD	.73715	.20223	.19834	.46800	.79804
#1	.10533	.06756	120.41	11.866	.05664
#2	.10643	.06737	120.75	11.787	.05729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-1-A Acquired: 10/16/2017 12:43:12 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.117**	**1.5677**	**.00528**	**2.0476**	**.07267**
Stddev	.035	.0011	.00008	.0013	.00043
%RSD	.17639	.07076	1.4565	.06271	.59731
#1	20.142	1.5685	.00523	2.0467	.07298
#2	20.092	1.5669	.00534	2.0485	.07237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.14473**	**1.0557**	**-.00671**	**.00383**	**8.1585**
Stddev	.00036	.0008	.00129	.00152	.1687
%RSD	.25185	.07592	19.249	39.708	2.0683
#1	.14447	1.0552	-.00580	.00276	8.0392
#2	.14499	1.0563	-.00763	.00491	8.2778
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01598**	**.22437**	**6.4079**	**-.00606**	**.20516**
Stddev	.00042	.00055	.0034	.00028	.00146
%RSD	2.6594	.24596	.05357	4.5737	.71329
#1	.01628	.22476	6.4103	-.00626	.20619
#2	.01568	.22398	6.4054	-.00587	.20412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-1-A Acquired: 10/16/2017 12:43:12 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**.48880**
Stddev	.00164
%RSD	.33477
#1	.48995
#2	.48764
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3462.3**	**2868.9**	**24005.**	**4424.9**
Stddev	1.3	2.6	60.	10.5
%RSD	.03627	.08900	.24813	.23659
#1	3463.2	2870.7	23963.	4417.5
#2	3461.4	2867.1	24047.	4432.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.298%	111.32%	109.27%	116.14%
Range				

Sample Name: 480-125631-C-2-B Acquired: 10/16/2017 12:46:48 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00260**	**69.821**	**.26024**	**.01715**	**.39039**
Stddev	.00033	.237	.00073	.00006	.00009
%RSD	12.614	.33882	.27979	.37133	.02225
#1	-.00283	69.988	.25973	.01720	.39045
#2	-.00237	69.653	.26076	.01711	.39032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00399**	**24.160**	**.00105**	**.4376**	**.04583**
Stddev	.00005	.060	.00006	.0180	.00034
%RSD	1.3681	.24956	5.7797	4.107	.74405
#1	.00403	24.203	.00109	.4249	.04607
#2	.00395	24.118	.00100	.4503	.04559
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.15919**	**.08617**	**113.94**	**14.453**	**.06356**
Stddev	.00064	.00068	.49	.030	.00071
%RSD	.40059	.79168	.43378	.20806	1.1113
#1	.15964	.08569	114.29	14.474	.06306
#2	.15874	.08665	113.59	14.432	.06405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-C-2-B Acquired: 10/16/2017 12:46:48 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**22.955**	**2.0744**	**.00373**	**2.3470**	**.11674**
Stddev	.094	.0063	.00022	.0291	.00096
%RSD	.40987	.30602	5.9959	1.2383	.81847
#1	23.021	2.0789	.00358	2.3675	.11607
#2	22.888	2.0700	.00389	2.3264	.11742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.11071**	**.61766**	**-.00164**	**.00134**	**6.6205**
Stddev	.00050	.00434	.00128	.00024	.3191
%RSD	.44962	.70266	78.023	18.137	4.8199
#1	.11035	.61459	-.00074	.00116	6.8462
#2	.11106	.62073	-.00255	.00151	6.3949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01270**	**.18270**	**5.5218**	**-.00333**	**.18668**
Stddev	.00021	.00086	.0119	.00128	.00032
%RSD	1.6347	.47221	.21577	38.543	.16894
#1	.01256	.18331	5.5302	-.00423	.18690
#2	.01285	.18209	5.5133	-.00242	.18645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-C-2-B Acquired: 10/16/2017 12:46:48 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**.42058**
Stddev	.00481
%RSD	1.1433
#1	.42398
#2	.41718
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3517.8**	**2882.8**	**24095.**	**4372.9**
Stddev	4.5	8.5	112.	13.5
%RSD	.12755	.29485	.46673	.30895
#1	3520.9	2888.8	24015.	4363.4
#2	3514.6	2876.8	24174.	4382.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.792%	111.86%	109.68%	114.78%
Range				

Sample Name: 480-125631-B-3-B Acquired: 10/16/2017 12:50:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00270**	**28.176**	**.01780**	**.00123**	**.12796**
Stddev	.00027	.057	.00138	.00006	.00010
%RSD	10.006	.20245	7.7820	4.6335	.07960
#1	-.00289	28.216	.01878	.00119	.12789
#2	-.00250	28.135	.01682	.00127	.12803
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00279**	**13.473**	**.00021**	**.6880**	**.02376**
Stddev	.00005	.031	.00007	.0081	.00011
%RSD	1.7099	.23231	32.318	1.170	.44266
#1	.00276	13.495	.00026	.6937	.02384
#2	.00283	13.451	.00016	.6823	.02369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04572**	**.02733**	**63.459**	**4.3762**	**.02853**
Stddev	.00028	.00002	.217	.0189	.00002
%RSD	.62209	.07088	.34150	.43245	.08160
#1	.04593	.02734	63.612	4.3896	.02855
#2	.04552	.02731	63.306	4.3628	.02851
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-3-B Acquired: 10/16/2017 12:50:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.462**	**1.0606**	**.00127**	**.50727**	**.03464**
Stddev	.043	.0006	.00009	.00070	.00004
%RSD	.41329	.05798	7.3389	.13790	.10631
#1	10.492	1.0610	.00120	.50677	.03467
#2	10.431	1.0602	.00133	.50776	.03462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08658**	**.03594**	**-.00319**	**.00045**	**1.9335**
Stddev	.00025	.00031	.00151	.00052	.0136
%RSD	.28408	.85756	47.171	115.55	.70536
#1	.08675	.03616	-.00426	.00008	1.9239
#2	.08641	.03572	-.00213	.00082	1.9432
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00435**	**.11945**	**4.9749**	**-.00575**	**.10760**
Stddev	.00069	.00023	.0024	.00004	.00027
%RSD	15.880	.19436	.04821	.74737	.24677
#1	.00484	.11961	4.9766	-.00579	.10741
#2	.00386	.11929	4.9732	-.00572	.10779
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-3-B Acquired: 10/16/2017 12:50:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**.14884**
Stddev	.00062
%RSD	.41753
#1	.14927
#2	.14840
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3587.7**	**2893.6**	**24462.**	**4389.1**
Stddev	7.7	1.7	31.	6.5
%RSD	.21466	.05802	.12839	.14923
#1	3582.2	2892.4	24440.	4384.4
#2	3593.1	2894.8	24484.	4393.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.676%	112.28%	111.35%	115.20%
Range				

Sample Name: 480-125631-B-4-B Acquired: 10/16/2017 12:53:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00202**	**44.207**	**.05212**	**.00059**	**.17926**
Stddev	.00115	.008	.00026	.00012	.00018
%RSD	57.138	.01762	.50395	19.984	.10270
#1	-.00120	44.202	.05231	.00051	.17939
#2	-.00283	44.213	.05194	.00067	.17913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00456**	**18.547**	**.00006**	**.3600**	**.03275**
Stddev	.00005	.056	.00031	.0140	.00029
%RSD	1.1196	.30330	525.15	3.884	.87928
#1	.00460	18.507	.00028	.3699	.03296
#2	.00452	18.587	-.00016	.3501	.03255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08710**	**.06239**	**95.603**	**5.6648**	**.05201**
Stddev	.00014	.00033	.278	.0177	.00014
%RSD	.16266	.53651	.29062	.31249	.26354
#1	.08700	.06216	95.406	5.6523	.05191
#2	.08720	.06263	95.799	5.6773	.05210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-4-B Acquired: 10/16/2017 12:53:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.018**	**.98370**	**.00238**	**.91635**	**.06074**
Stddev	.155	.00508	.00017	.00570	.00001
%RSD	.77238	.51604	7.2819	.62252	.01053
#1	19.908	.98011	.00226	.91232	.06074
#2	20.127	.98729	.00251	.92039	.06075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04427**	**.16105**	**-.00512**	**-.00139**	**4.8682**
Stddev	.00056	.00319	.00112	.00068	.0990
%RSD	1.2582	1.9785	21.901	48.934	2.0334
#1	.04388	.16330	-.00592	-.00091	4.7982
#2	.04466	.15880	-.00433	-.00187	4.9382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00616**	**.14056**	**5.9829**	**-.00466**	**.15649**
Stddev	.00009	.00049	.0121	.00002	.00042
%RSD	1.5035	.35203	.20189	.52654	.26991
#1	.00623	.14021	5.9743	-.00468	.15679
#2	.00610	.14090	5.9914	-.00465	.15619
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-4-B Acquired: 10/16/2017 12:53:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.27381
Stddev	.00337
%RSD	1.2316
#1	.27143
#2	.27620
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3509.1	2779.9	23429.	4266.2
Stddev	1.1	1.5	118.	13.9
%RSD	.03081	.05515	.50167	.32693
#1	3509.9	2778.8	23512.	4276.1
#2	3508.4	2781.0	23346.	4256.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.560%	107.86%	106.65%	111.98%
Range				

Sample Name: 480-125631-B-6-B Acquired: 10/16/2017 12:57:28 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00239**	**70.558**	**.81219**	**.01423**	**.36423**
Stddev	.00072	.268	.00393	.00007	.00016
%RSD	29.972	.37986	.48366	.46163	.04257
#1	-.00290	70.748	.81496	.01428	.36433
#2	-.00188	70.368	.80941	.01419	.36412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00447**	**25.011**	**.00078**	**.4812**	**.05134**
Stddev	.00008	.091	.00017	.0170	.00001
%RSD	1.6885	.36334	21.391	3.532	.02010
#1	.00441	25.075	.00066	.4933	.05133
#2	.00452	24.947	.00089	.4692	.05135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.13847**	**.11542**	**139.16**	**10.966**	**.06309**
Stddev	.00004	.00159	.05	.029	.00135
%RSD	.03027	1.3813	.03365	.26504	2.1421
#1	.13850	.11654	139.13	10.945	.06404
#2	.13844	.11429	139.19	10.986	.06213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-6-B Acquired: 10/16/2017 12:57:28 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.049**	**2.1325**	**.01060**	**1.9024**	**.08204**
Stddev	.089	.0049	.00016	.0034	.00034
%RSD	.37151	.22790	1.5388	.17853	.41935
#1	23.986	2.1290	.01071	1.9000	.08180
#2	24.112	2.1359	.01048	1.9048	.08228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.14380**	**.66262**	**-.00796**	**.00221**	**8.2223**
Stddev	.00011	.00167	.00035	.00143	.0047
%RSD	.07610	.25230	4.4027	64.362	.05684
#1	.14373	.66381	-.00772	.00322	8.2256
#2	.14388	.66144	-.00821	.00121	8.2190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01705**	**.21428**	**6.3449**	**-.00561**	**.22049**
Stddev	.00030	.00030	.0013	.00099	.00111
%RSD	1.7425	.14009	.02008	17.561	.50505
#1	.01684	.21407	6.3440	-.00631	.22128
#2	.01726	.21449	6.3458	-.00491	.21971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125631-B-6-B Acquired: 10/16/2017 12:57:28 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**.49633**
Stddev	.00301
%RSD	.60572
#1	.49421
#2	.49846
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3444.2**	**2817.9**	**23545.**	**4296.8**
Stddev	3.3	1.2	2.	42.9
%RSD	.09512	.04165	.00774	.99865
#1	3446.6	2818.8	23544.	4266.4
#2	3441.9	2817.1	23546.	4327.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.811%	109.34%	107.18%	112.78%
Range				

Sample Name: 480-125681-A-1-D Acquired: 10/16/2017 13:00:56 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00566**	**191.09**	**.09371**	**.90862**	**3.0387**
Stddev	.00028	1.15	.00245	.00048	.0067
%RSD	5.0021	.60269	2.6148	.05299	.22225
#1	.00546	190.27	.09544	.90828	3.0339
#2	.00586	191.90	.09198	.90896	3.0434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00264**	**603.06**	**.03329**	**.1819**	**1.6780**
Stddev	.00006	.99	.00018	.0092	.0021
%RSD	2.1340	.16439	.55424	5.077	.12340
#1	.00268	602.36	.03316	.1885	1.6766
#2	.00260	603.76	.03342	.1754	1.6795
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.58000**	**9.6968**	**448.62**	**22.439**	**.12202**
Stddev	.00233	.0335	1.35	.061	.00112
%RSD	.40102	.34573	.30096	.27115	.91772
#1	.57835	9.6731	447.67	22.396	.12123
#2	.58164	9.7205	449.58	22.482	.12281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-1-D Acquired: 10/16/2017 13:00:56 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**78.389**	**4.5683**	**.27853**	**64.140**	**.32267**
Stddev	.054	.0013	.00029	.197	.00055
%RSD	.06933	.02890	.10289	.30779	.17183
#1	78.350	4.5673	.27873	64.001	.32228
#2	78.427	4.5692	.27832	64.280	.32307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.0093**	**33.642**	**.10094**	**.00276**	**.88327**
Stddev	.0038	.035	.00248	.00066	.00759
%RSD	.19111	.10500	2.4618	23.857	.85919
#1	2.0066	33.667	.09918	.00229	.88863
#2	2.0120	33.617	.10269	.00322	.87790
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.0247**	**1.5525**	F **24.055**	**-.01660**	**.15481**
Stddev	.0006	.0045	.187	.00210	.00057
%RSD	.02074	.28882	.77773	12.650	.36603
#1	3.0252	1.5493	24.187	-.01512	.15521
#2	3.0243	1.5557	23.923	-.01809	.15441
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-1-D Acquired: 10/16/2017 13:00:56 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**10.008**
Stddev	.012
%RSD	.12185
#1	10.017
#2	9.9996
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2810.3**	**2528.4**	**21150.**	**4136.1**
Stddev	5.9	2.4	26.	23.7
%RSD	.20895	.09635	.12066	.57317
#1	2814.5	2530.2	21132.	4152.9
#2	2806.2	2526.7	21168.	4119.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.729%	98.108%	96.274%	108.56%
Range				

Sample Name: 480-125681-A-2-D Acquired: 10/16/2017 13:04:43 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.69164**	**178.06**	**.10827**	**.57437**	**3.3114**
Stddev	.00185	.68	.00302	.00063	.0055
%RSD	.26789	.37966	2.7911	.11000	.16536
#1	.69295	177.58	.11040	.57482	3.3076
#2	.69033	178.54	.10613	.57393	3.3153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00171**	**559.84**	**.04275**	**.1313**	**.18748**
Stddev	.00010	7.43	.00006	.0105	.00018
%RSD	5.6335	1.3264	.13354	8.004	.09572
#1	.00178	554.59	.04279	.1387	.18736
#2	.00164	565.09	.04271	.1239	.18761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.76809**	F **179.12**	F **556.86**	**23.594**	**.06418**
Stddev	.00808	1.22	4.74	.003	.00130
%RSD	1.0514	.68364	.85165	.01089	2.0315
#1	.76238	178.25	553.51	23.592	.06510
#2	.77380	179.98	560.21	23.596	.06326
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit		23.000	540.00		
Low Limit		-.01000	-.05000		

Sample Name: 480-125681-A-2-D Acquired: 10/16/2017 13:04:43 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**84.552**	**3.9625**	**.05488**	**64.561**	**.43797**
Stddev	.212	.0131	.00052	.055	.00070
%RSD	.25075	.33079	.94301	.08472	.16073
#1	84.402	3.9533	.05451	64.599	.43847
#2	84.701	3.9718	.05524	64.522	.43747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.4895**	**46.523**	**.10256**	**-.00153**	**.81834**
Stddev	.0059	.077	.00243	.00931	.00586
%RSD	.23716	.16617	2.3731	607.13	.71605
#1	2.4937	46.578	.10428	.00505	.81419
#2	2.4854	46.468	.10084	-.00811	.82248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.0441**	**1.2688**	**17.474**	**-.00994**	**.12367**
Stddev	.0131	.0036	.012	.00125	.00060
%RSD	.64056	.28460	.06968	12.556	.48480
#1	2.0534	1.2663	17.483	-.00906	.12409
#2	2.0348	1.2714	17.466	-.01082	.12324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-2-D Acquired: 10/16/2017 13:04:43 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**10.631**
Stddev	.068
%RSD	.64090
#1	10.583
#2	10.679
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2817.5**	**2370.0**	**20647.**	**4048.8**
Stddev	6.9	7.2	62.	51.8
%RSD	.24357	.30381	.30140	1.2802
#1	2822.3	2375.1	20691.	4085.4
#2	2812.6	2364.9	20603.	4012.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.921%	91.960%	93.984%	106.27%
Range				

Sample Name: 480-125681-A-3-D Acquired: 10/16/2017 13:08:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	k **.01971**	k **133.61**	k **.39344**	**2.3410**	**5.2996**
Stddev	.00029	.04	.00190	.0030	.0121
%RSD	1.4848	.03339	.48334	.12719	.22758
#1	k .01991	k 133.64	k .39210	2.3389	5.2910
#2	k .01950	k 133.58	k .39478	2.3431	5.3081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	kF **-.01343**	**624.51**	k **.02319**	**-.3476**	k **.41363**
Stddev	.00007	1.64	.00006	.0416	.00171
%RSD	.50136	.26216	.27996	11.96	.41377
#1	k -.01348	623.35	k .02324	-.3182	k .41484
#2	k -.01339	625.67	k .02315	-.3770	k .41242
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	23.000				
Low Limit	-.00200				

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	k **3.2912**	k **16.195**	F **1424.3**	**29.690**	**.08873**
Stddev	.0006	.012	.5	.003	.00050
%RSD	.01712	.07352	.03206	.00889	.56799
#1	k 3.2908	k 16.187	1424.0	29.688	.08838
#2	k 3.2916	k 16.204	1424.7	29.691	.08909
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			540.00		
Low Limit			-.05000		

Sample Name: 480-125681-A-3-D Acquired: 10/16/2017 13:08:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	k **81.830**	kF **89.632**	**.05390**	**126.63**	**4.4722**
Stddev	.050	.310	.00001	.01	.0170
%RSD	.06052	.34623	.01089	.00793	.38032
#1	k 81.865	k 89.851	.05390	126.64	4.4842
#2	k 81.795	k 89.413	.05390	126.62	4.4602
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000			
Low Limit		-.00300			

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	k **1.6354**	**32.139**	k **.20053**	k **.06503**	**.90824**
Stddev	.0023	.011	.00293	.00319	.00766
%RSD	.13924	.03389	1.4595	4.9106	.84336
#1	k 1.6370	32.132	k .20260	k .06277	.90282
#2	k 1.6337	32.147	k .19846	k .06729	.91366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.76550**	**4.4994**	kF **22.168**	k **.09160**	k **.19698**
Stddev	.00337	.1001	.024	.00084	.00050
%RSD	.43989	2.2250	.10782	.91660	.25405
#1	.76788	4.5702	k 22.185	k .09100	k .19733
#2	.76312	4.4286	k 22.152	k .09219	k .19662
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-3-D Acquired: 10/16/2017 13:08:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	kF **51.151**
Stddev	.161
%RSD	.31513
#1	k 51.265
#2	k 51.037
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2439.9**	**2382.9**	**19982.**	**3978.0**
Stddev	2.1	2.2	65.	17.4
%RSD	.08747	.09141	.32702	.43788
#1	2438.4	2384.4	19936.	3965.7
#2	2441.5	2381.3	20028.	3990.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	65.749%	92.459%	90.958%	104.41%
Range				

Sample Name: CCV-4278259 Acquired: 10/16/2017 13:12:33 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52474**	**25.311**	**.52025**	**.52093**	**.49865**
Stddev	.00223	.054	.00138	.00000	.00544
%RSD	.42455	.21170	.26491	.00057	1.0909
#1	.52317	25.273	.52123	.52093	.49481
#2	.52632	25.348	.51928	.52093	.50250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53151**	**26.471**	**.51370**	**-.0056**	**.51472**
Stddev	.00132	.136	.00055	.0168	.00002
%RSD	.24783	.51466	.10768	298.3	.00390
#1	.53058	26.375	.51331	.0062	.51470
#2	.53245	26.568	.51409	-.0175	.51473
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52711**	**.51495**	**25.960**	**25.461**	**.51928**
Stddev	.00100	.00053	.103	.036	.00086
%RSD	.18971	.10285	.39733	.13971	.16510
#1	.52640	.51457	25.887	25.436	.51867
#2	.52782	.51532	26.033	25.486	.51988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 13:12:33 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**25.971**	**.53563**	**.52326**	**25.581**	**.52121**
Stddev	.210	.00142	.00060	.085	.00041
%RSD	.81020	.26519	.11561	.33303	.07855
#1	25.822	.53462	.52283	25.521	.52150
#2	26.120	.53663	.52369	25.642	.52092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.51783**	**25.934**	**.51223**	**.52652**	**22.667**
Stddev	.00173	.032	.00039	.00506	.154
%RSD	.33332	.12291	.07690	.96130	.68055
#1	.51661	25.912	.51195	.52294	22.558
#2	.51905	25.957	.51250	.53010	22.776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53331**	**.50901**	**.53621**	**.52832**	**.53304**
Stddev	.00014	.00171	.00223	.00061	.00037
%RSD	.02680	.33663	.41661	.11602	.06880
#1	.53341	.50780	.53463	.52875	.53278
#2	.53320	.51022	.53779	.52789	.53330
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 13:12:33 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.53563
Stddev	.00385
%RSD	.71839
#1	.53291
#2	.53835
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3464.0	2583.0	21523.	3850.3
Stddev	.1	1.0	154.	33.0
%RSD	.00339	.04010	.71523	.85775
#1	3464.0	2582.3	21632.	3873.7
#2	3463.9	2583.8	21415.	3827.0

Sample Name: CCB-4278202 Acquired: 10/16/2017 13:16:00 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**.00725**	**-.00078**	**.00123**	**.00027**
Stddev	.00043	.02078	.00044	.00036	.00001
%RSD	50.577	286.77	56.596	29.256	3.0318
#1	.00116	.02194	-.00047	.00149	.00027
#2	.00055	-.00745	-.00109	.00098	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.04737**	**.00003**	**.0046**	**-.00009**
Stddev	.00006	.00200	.00004	.0109	.00016
%RSD	495.74	4.2121	150.96	236.0	176.57
#1	.00003	.04596	-.00000	-.0031	.00002
#2	-.00005	.04878	.00006	.0123	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.00476**	F **.06843**	**.03499**	**.00044**
Stddev	.00042	.00046	.00169	.01750	.00063
%RSD	230.01	9.7272	2.4666	50.010	143.61
#1	-.00048	.00443	.06724	.02262	-.00001
#2	.00012	.00509	.06963	.04736	.00089
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.05000		
Low Limit			-.05000		

Sample Name: CCB-4278202 Acquired: 10/16/2017 13:16:00 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00877**	F **.00566**	**-.00017**	**.00718**	**.00020**
Stddev	.00109	.00013	.00003	.00190	.00017
%RSD	12.425	2.3145	17.747	26.433	85.583
#1	.00954	.00557	-.00019	.00583	.00032
#2	.00800	.00575	-.00015	.00852	.00008
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.00300			
Low Limit		-.00300			

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**-.00299**	**-.00109**	**-.00120**	**.01299**
Stddev	.00013	.00229	.00043	.00191	.00357
%RSD	40.766	76.453	38.953	159.23	27.484
#1	.00022	-.00461	-.00139	.00015	.01046
#2	.00040	-.00138	-.00079	-.00255	.01551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00080**	**.00019**	**.00181**	**-.00016**	**.00029**
Stddev	.00040	.00005	.00043	.00008	.00036
%RSD	49.407	24.293	23.869	49.992	127.07
#1	.00052	.00022	.00151	-.00021	.00054
#2	.00108	.00016	.00212	-.00010	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 13:16:00 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.00270
Stddev	.00026
%RSD	9.6728
#1	.00289
#2	.00252
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3796.6	2657.3	22467.	3933.6
Stddev	4.5	.5	65.	14.3
%RSD	.11904	.01753	.29093	.36414
#1	3793.4	2657.6	22421.	3923.5
#2	3799.8	2656.9	22514.	3943.7

Sample Name: ccvl-4278204 Acquired: 10/16/2017 13:19:40 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00623**	**.21634**	**.01502**	**.02069**	**.00259**
Stddev	.00031	.01107	.00101	.00011	.00001
%RSD	5.0429	5.1169	6.6952	.50891	.20298
#1	.00646	.20851	.01573	.02077	.00259
#2	.00601	.22417	.01431	.02062	.00259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00215**	**.61294**	**.00220**	**.0111**	**.00421**
Stddev	.00006	.01321	.00017	.0067	.00002
%RSD	3.0178	2.1554	7.8640	60.96	.56202
#1	.00220	.60360	.00232	.0063	.00423
#2	.00211	.62228	.00208	.0158	.00419
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00437**	F **.01836**	F **.16510**	**.52863**	**.03117**
Stddev	.00008	.00089	.01006	.00032	.00059
%RSD	1.8366	4.8393	6.0938	.06118	1.8860
#1	.00432	.01899	.15799	.52886	.03158
#2	.00443	.01773	.17222	.52840	.03075
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value		.01000	.05000		
Range		50.000%	50.000%		

Sample Name: ccvl-4278204 Acquired: 10/16/2017 13:19:40 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.22241**	F **.01210**	**.01005**	**1.0247**	**.01064**
Stddev	.00544	.00006	.00017	.0019	.00035
%RSD	2.4471	.50130	1.6605	.18533	3.2833
#1	.22626	.01214	.00993	1.0261	.01089
#2	.21856	.01206	.01016	1.0234	.01039
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value		.00300			
Range		50.000%			

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01039**	**.19410**	**.02091**	**.02555**	**.45994**
Stddev	.00075	.00169	.00046	.00027	.00369
%RSD	7.1758	.87021	2.2165	1.0495	.80311
#1	.01092	.19530	.02058	.02574	.45733
#2	.00986	.19291	.02124	.02536	.46255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01074**	**.00542**	F **.00805**	**.02166**	**.00542**
Stddev	.00009	.00010	.00001	.00029	.00012
%RSD	.80569	1.8445	.08808	1.3283	2.2723
#1	.01080	.00535	.00806	.02186	.00533
#2	.01068	.00549	.00805	.02145	.00551
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value			.00500		
Range			50.000%		

Sample Name: ccvl-4278204 Acquired: 10/16/2017 13:19:40 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	W .01478
Stddev	.00033
%RSD	2.2599
#1	.01502
#2	.01455
Check ?	Chk Warn
Value	.01000
Range	30.000%

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3784.0	2656.3	22240.	3846.8
Stddev	2.7	2.2	38.	15.4
%RSD	.07211	.08395	.16893	.39913
#1	3782.1	2654.8	22213.	3836.0
#2	3786.0	2657.9	22266.	3857.7

Sample Name: 480-125681-A-4-D Acquired: 10/16/2017 13:23:17 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00896**	**202.47**	**.08754**	**1.3894**	**5.3512**
Stddev	.00133	1.37	.00105	.0006	.0013
%RSD	14.843	.67417	1.1958	.04658	.02440
#1	.00802	203.44	.08828	1.3898	5.3502
#2	.00991	201.51	.08680	1.3889	5.3521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00201**	**774.20**	**.06490**	F **5.939**	**.18221**
Stddev	.00012	15.20	.00047	.011	.00147
%RSD	6.1314	1.9628	.72004	.1801	.80573
#1	.00192	784.94	.06523	5.932	.18325
#2	.00209	763.45	.06457	5.947	.18118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				3.000	
Low Limit				-.5000	

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0884**	**10.281**	**458.93**	**32.880**	**.09227**
Stddev	.0047	.004	2.01	.060	.00075
%RSD	.43593	.03796	.43713	.18376	.81083
#1	1.0851	10.278	460.35	32.923	.09174
#2	1.0918	10.284	457.52	32.837	.09280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-4-D Acquired: 10/16/2017 13:23:17 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576-2	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}2	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**72.383**	F **69.087**	**.07198**	**129.68**	**1.0012**
Stddev	.079	.624	.00018	.00	.0037
%RSD	.10946	.90350	.25052	.00214	.36694
#1	72.327	68.646	.07185	129.68	1.0038
#2	72.439	69.528	.07211	129.68	.99860
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000			
Low Limit		-.00300			

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.2280**	**44.279**	**.13405**	**-.01209**	**2.5623**
Stddev	.0166	.035	.00039	.00302	.0428
%RSD	.31768	.07906	.29406	24.950	1.6716
#1	5.2398	44.304	.13433	-.01422	2.5320
#2	5.2163	44.254	.13377	-.00996	2.5926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.92582**	**1.9526**	F **26.205**	**-.01305**	**.15251**
Stddev	.00417	.0009	.073	.00050	.00107
%RSD	.45037	.04427	.27916	3.8065	.70104
#1	.92877	1.9532	26.153	-.01269	.15175
#2	.92287	1.9520	26.257	-.01340	.15326
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-4-D Acquired: 10/16/2017 13:23:17 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	F **42.943**
Stddev	.214
%RSD	.49729
#1	42.792
#2	43.094
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2688.9**	**2459.7**	**20591.**	**4031.3**
Stddev	9.2	3.9	84.	42.9
%RSD	.34235	.15716	.40599	1.0649
#1	2682.4	2456.9	20651.	4001.0
#2	2695.4	2462.4	20532.	4061.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.457%	95.439%	93.732%	105.81%
Range				

Sample Name: 480-125681-A-5-I Acquired: 10/16/2017 13:27:14 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02889**	**327.30**	**.06813**	**1.9647**	F **10.772**
Stddev	.00012	.95	.00052	.0020	.115
%RSD	.41619	.29016	.75791	.10101	1.0648
#1	.02897	327.97	.06849	1.9633	10.691
#2	.02880	326.62	.06776	1.9661	10.853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					9.0000
Low Limit					-.00200

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00342**	**773.39**	**.05093**	**.3466**	**.11471**
Stddev	.00018	8.54	.00001	.0233	.00037
%RSD	5.1430	1.1040	.02444	6.708	.32574
#1	.00329	767.35	.05092	.3631	.11445
#2	.00354	779.43	.05093	.3302	.11497
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52040**	**5.3620**	**234.49**	**29.120**	**.11553**
Stddev	.00028	.0115	1.73	.011	.00093
%RSD	.05422	.21499	.73717	.03711	.80073
#1	.52060	5.3702	233.27	29.113	.11619
#2	.52020	5.3539	235.72	29.128	.11488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-5-I Acquired: 10/16/2017 13:27:14 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**86.365**	**4.3333**	**.14091**	**88.003**	**.34720**
Stddev	.303	.0075	.00021	.007	.00025
%RSD	.35058	.17228	.15116	.00743	.07143
#1	86.151	4.3281	.14076	88.008	.34737
#2	86.579	4.3386	.14107	87.999	.34702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.6190**	**37.610**	**.14364**	**.00517**	**1.1794**
Stddev	.0048	.022	.00506	.00159	.0047
%RSD	.18479	.05965	3.5223	30.782	.39822
#1	2.6225	37.626	.14006	.00405	1.1760
#2	2.6156	37.594	.14722	.00630	1.1827
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.57149**	**1.8037**	F **22.970**	**-.01273**	**.19770**
Stddev	.00118	.0008	.148	.00243	.00052
%RSD	.20672	.04193	.64268	19.051	.26517
#1	.57065	1.8032	22.865	-.01445	.19808
#2	.57232	1.8042	23.074	-.01102	.19733
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-5-I Acquired: 10/16/2017 13:27:14 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**14.828**
Stddev	.062
%RSD	.41835
#1	14.784
#2	14.871
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2761.2**	**2559.8**	**21090.**	**4218.7**
Stddev	.7	1.4	79.	35.2
%RSD	.02507	.05469	.37303	.83337
#1	2761.7	2560.8	21145.	4243.6
#2	2760.7	2558.8	21034.	4193.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.405%	99.324%	96.001%	110.73%
Range				

Sample Name: 480-125681-A-6-D@5 Acquired: 10/16/2017 13:42:48 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00236**	**136.26**	**.01169**	**.14857**	**1.1093**
Stddev	.00125	.89	.00134	.00036	.0021
%RSD	53.139	.65455	11.429	.24497	.18694
#1	.00147	136.89	.01263	.14832	1.1108
#2	.00324	135.63	.01075	.14883	1.1079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**147.25**	**.01079**	**.0325**	**.02176**
Stddev	.00002	.99	.00016	.0290	.00026
%RSD	3.5189	.67456	1.4548	89.08	1.1898
#1	.00045	147.96	.01068	.0120	.02157
#2	.00043	146.55	.01090	.0530	.02194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.13755**	**1.9937**	**70.920**	**5.1407**	**.01658**
Stddev	.00097	.0101	.470	.0573	.00070
%RSD	.70335	.50765	.66341	1.1150	4.2403
#1	.13686	1.9865	71.252	5.1812	.01608
#2	.13823	2.0008	70.587	5.1001	.01708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-6-D@5 Acquired: 10/16/2017 13:42:48 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**13.974**	**3.0843**	**.00868**	**22.776**	**.05247**
Stddev	.002	.0085	.00006	.097	.00017
%RSD	.01727	.27419	.70450	.42496	.32744
#1	13.976	3.0783	.00864	22.844	.05260
#2	13.973	3.0903	.00873	22.707	.05235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.57059**	**7.9947**	**.03119**	**-.00033**	**.27709**
Stddev	.00112	.0130	.00054	.00205	.00106
%RSD	.19651	.16204	1.7416	631.51	.38239
#1	.56979	7.9855	.03158	.00113	.27783
#2	.57138	8.0039	.03081	-.00178	.27634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.11329**	**.39132**	**5.1778**	**-.00187**	**.04322**
Stddev	.00001	.00015	.0034	.00073	.00016
%RSD	.01128	.03759	.06630	39.204	.38036
#1	.11330	.39143	5.1753	-.00135	.04310
#2	.11328	.39122	5.1802	-.00239	.04334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-6-D@5 Acquired: 10/16/2017 13:42:48 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**4.9391**
Stddev	.0049
%RSD	.09941
#1	4.9356
#2	4.9425
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3304.9**	**2579.2**	**21208.**	**3953.1**
Stddev	2.5	2.3	28.	43.7
%RSD	.07559	.09104	.13193	1.1063
#1	3303.2	2577.6	21228.	3922.2
#2	3306.7	2580.9	21188.	3984.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.057%	100.08%	96.538%	103.76%
Range				

Sample Name: 480-125681-A-7-D@5 Acquired: 10/16/2017 13:46:22 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00214**	**65.074**	**.01058**	**.18816**	**.87994**
Stddev	.00020	.212	.00235	.00103	.00260
%RSD	9.3678	.32570	22.244	.54490	.29566
#1	.00200	65.224	.01225	.18888	.87810
#2	.00228	64.925	.00892	.18743	.88178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**130.87**	**.00833**	**.0453**	**.02013**
Stddev	.00012	.19	.00009	.0015	.00020
%RSD	28.918	.14434	1.0416	3.228	1.0054
#1	.00033	130.74	.00827	.0442	.01999
#2	.00051	131.00	.00840	.0463	.02028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18558**	**3.7068**	**120.47**	**4.9682**	**.02152**
Stddev	.00038	.0053	.30	.0124	.00001
%RSD	.20449	.14434	.24749	.25057	.06493
#1	.18531	3.7031	120.68	4.9770	.02153
#2	.18585	3.7106	120.26	4.9594	.02151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-7-D@5 Acquired: 10/16/2017 13:46:22 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.748**	**1.4787**	**.01224**	**14.849**	**.07820**
Stddev	.046	.0001	.00011	.037	.00023
%RSD	.25877	.00414	.92731	.24824	.29260
#1	17.715	1.4788	.01216	14.822	.07836
#2	17.780	1.4787	.01232	14.875	.07804
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.40000**	**7.3552**	**.02411**	**.00053**	**.19428**
Stddev	.00179	.0171	.00302	.00223	.00889
%RSD	.44732	.23216	12.549	417.69	4.5734
#1	.39873	7.3673	.02197	-.00104	.18800
#2	.40126	7.3431	.02624	.00211	.20056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08804**	**.29555**	**4.8896**	**-.00314**	**.04183**
Stddev	.00007	.00063	.0057	.00095	.00030
%RSD	.07893	.21297	.11633	30.134	.72396
#1	.08809	.29511	4.8856	-.00381	.04162
#2	.08799	.29600	4.8936	-.00247	.04205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-7-D@5 Acquired: 10/16/2017 13:46:22 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**6.4774**
Stddev	.0067
%RSD	.10360
#1	6.4727
#2	6.4822
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3342.8**	**2567.3**	**21388.**	**3952.3**
Stddev	3.2	.1	28.	.2
%RSD	.09640	.00291	.13066	.00380
#1	3345.1	2567.4	21407.	3952.2
#2	3340.5	2567.3	21368.	3952.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.077%	99.616%	97.356%	103.74%
Range				

Sample Name: 480-125681-A-8-E@5 Acquired: 10/16/2017 13:49:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00438**	**37.732**	**.01726**	**.22967**	**1.5433**
Stddev	.00101	.164	.00420	.00071	.0065
%RSD	22.968	.43503	24.324	.30705	.42191
#1	.00510	37.848	.02022	.23017	1.5479
#2	.00367	37.616	.01429	.22917	1.5387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00054**	**152.56**	**.01623**	**.0586**	**.03963**
Stddev	.00000	.10	.00008	.0306	.00002
%RSD	.50206	.06678	.48461	52.23	.05084
#1	.00053	152.63	.01628	.0370	.03962
#2	.00054	152.49	.01617	.0803	.03965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0275**	**10.805**	**124.44**	**6.1204**	**.01682**
Stddev	.0096	.069	.26	.0443	.00183
%RSD	.93402	.63544	.20598	.72312	10.865
#1	1.0207	10.756	124.26	6.1517	.01811
#2	1.0343	10.853	124.62	6.0891	.01553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-8-E@5 Acquired: 10/16/2017 13:49:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.559**	**2.0586**	**.01459**	**15.529**	**.11680**
Stddev	.059	.0016	.00019	.073	.00008
%RSD	.47057	.07595	1.3248	.47202	.07102
#1	12.517	2.0597	.01445	15.581	.11674
#2	12.601	2.0575	.01472	15.477	.11686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52590**	**13.079**	**.04247**	**.00066**	**.19044**
Stddev	.00075	.007	.00229	.00253	.00144
%RSD	.14331	.05012	5.3843	383.73	.75833
#1	.52644	13.084	.04409	.00245	.18941
#2	.52537	13.074	.04086	-.00113	.19146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.15732**	**.37609**	**4.3405**	**-.00020**	**.03664**
Stddev	.00031	.00129	.0016	.00077	.00006
%RSD	.19433	.34187	.03697	382.89	.16822
#1	.15711	.37700	4.3416	.00034	.03659
#2	.15754	.37518	4.3393	-.00074	.03668
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-8-E@5 Acquired: 10/16/2017 13:49:57 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**3.6396**
Stddev	.0122
%RSD	.33622
#1	3.6310
#2	3.6483
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3341.3**	**2554.2**	**21389.**	**3892.5**
Stddev	2.8	3.6	16.	10.6
%RSD	.08505	.14142	.07439	.27289
#1	3339.3	2551.7	21400.	3900.0
#2	3343.3	2556.8	21378.	3885.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.037%	99.108%	97.362%	102.17%
Range				

Sample Name: 480-125681-A-9-D@5 Acquired: 10/16/2017 13:53:29 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00177**	**42.952**	**.01931**	**.25886**	**1.5523**
Stddev	.00010	.176	.00113	.00085	.0021
%RSD	5.4527	.40893	5.8608	.32948	.13538
#1	.00183	42.828	.01851	.25946	1.5508
#2	.00170	43.076	.02011	.25826	1.5537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**164.46**	**.00969**	**.0872**	**.03728**
Stddev	.00001	.57	.00000	.0172	.00023
%RSD	1.4282	.34830	.02306	19.77	.62921
#1	.00050	164.05	.00969	.0993	.03712
#2	.00049	164.86	.00969	.0750	.03745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.1920**	**1.7179**	**136.24**	**5.5473**	**.01084**
Stddev	.0151	.0008	.23	.0402	.00000
%RSD	.68828	.04961	.16800	.72537	.02821
#1	2.1814	1.7173	136.08	5.5189	.01084
#2	2.2027	1.7185	136.41	5.5758	.01085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-9-D@5 Acquired: 10/16/2017 13:53:29 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.478**	**1.2300**	**.01849**	**21.297**	**.17915**
Stddev	.039	.0035	.00018	.035	.00025
%RSD	.27214	.28207	.97265	.16510	.13953
#1	14.450	1.2275	.01862	21.273	.17897
#2	14.506	1.2324	.01837	21.322	.17932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.63987**	**9.7308**	**.06695**	**.00209**	**.20843**
Stddev	.00130	.0001	.00011	.00181	.00090
%RSD	.20365	.00098	.16779	86.395	.42985
#1	.63895	9.7308	.06703	.00081	.20906
#2	.64079	9.7309	.06687	.00337	.20780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12419**	**2.3239**	**5.9541**	**-.00352**	**.05316**
Stddev	.00015	.0050	.0130	.00040	.00058
%RSD	.12046	.21358	.21797	11.411	1.0817
#1	.12429	2.3204	5.9449	-.00380	.05276
#2	.12408	2.3274	5.9633	-.00324	.05357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-9-D@5 Acquired: 10/16/2017 13:53:29 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	1.8702
Stddev	.0120
%RSD	.63956
#1	1.8617
#2	1.8786
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3289.9	2562.9	21374.	3887.7
Stddev	3.0	4.7	126.	7.0
%RSD	.09026	.18308	.59142	.18099
#1	3287.8	2559.6	21464.	3892.7
#2	3292.0	2566.2	21285.	3882.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.653%	99.444%	97.295%	102.04%
Range				

Sample Name: 480-125681-A-10-A@5 Acquired: 10/16/2017 13:57:02 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00251**	**43.486**	**.01638**	**.23331**	**.82463**
Stddev	.00015	.161	.00121	.00015	.00137
%RSD	5.8335	.37049	7.3651	.06315	.16636
#1	.00241	43.600	.01552	.23321	.82560
#2	.00262	43.372	.01723	.23342	.82366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**132.59**	**.01755**	**.0395**	F **25.565**
Stddev	.00001	.24	.00004	.0291	.021
%RSD	3.7644	.17974	.20990	73.55	.08375
#1	.00037	132.42	.01758	.0190	25.550
#2	.00039	132.75	.01752	.0601	25.580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					18.000
Low Limit					-.00400

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12232**	**8.1171**	**188.33**	**4.6066**	**.98409**
Stddev	.00065	.0444	.20	.0048	.00095
%RSD	.53295	.54725	.10478	.10355	.09684
#1	.12186	8.1485	188.19	4.6032	.98477
#2	.12278	8.0857	188.47	4.6100	.98342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-10-A@5 Acquired: 10/16/2017 13:57:02 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**15.465**	**1.3126**	**.01384**	**13.364**	**.07940**
Stddev	.028	.0023	.00007	.021	.00007
%RSD	.18352	.17367	.50628	.15933	.08691
#1	15.445	1.3110	.01379	13.379	.07935
#2	15.485	1.3142	.01389	13.349	.07945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0767**	**10.729**	**.02178**	**-.00418**	**.20681**
Stddev	.0012	.004	.00084	.00242	.00056
%RSD	.11422	.04028	3.8619	57.923	.27081
#1	1.0758	10.732	.02118	-.00247	.20720
#2	1.0775	10.726	.02237	-.00589	.20641
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.25307**	**.29033**	**4.7804**	**-.00131**	**.06697**
Stddev	.00053	.00075	.0021	.00079	.00003
%RSD	.21054	.25924	.04444	60.371	.03736
#1	.25345	.29086	4.7819	-.00075	.06699
#2	.25270	.28979	4.7789	-.00187	.06695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-10-A@5 Acquired: 10/16/2017 13:57:02 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**3.7794**
Stddev	.0233
%RSD	.61627
#1	3.7630
#2	3.7959
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3330.6**	**2535.5**	**21235.**	**3893.2**
Stddev	1.5	2.4	77.	16.9
%RSD	.04411	.09662	.36383	.43496
#1	3329.6	2533.7	21290.	3905.2
#2	3331.7	2537.2	21181.	3881.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.749%	98.381%	96.662%	102.19%
Range				

Sample Name: 480-124142-A-1-K Acquired: 10/16/2017 14:00:34 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.02593**	**.00107**	**.02389**	**.01852**
Stddev	.00048	.03026	.00089	.00007	.00008
%RSD	334.03	116.73	82.622	.28800	.44990
#1	-.00019	.00453	.00045	.02394	.01858
#2	.00048	.04733	.00170	.02384	.01846
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**3.4130**	**.00059**	**-.0094**	**.00326**
Stddev	.00006	.0097	.00007	.0030	.00012
%RSD	1252.7	.28437	11.494	32.17	3.6064
#1	.00004	3.4061	.00064	-.0073	.00317
#2	-.00005	3.4199	.00054	-.0116	.00334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01549**	**.02360**	**.26520**	**22.076**	**.00050**
Stddev	.00020	.00006	.00027	.014	.00161
%RSD	1.2832	.27280	.10290	.06229	324.24
#1	.01563	.02364	.26539	22.066	-.00064
#2	.01535	.02355	.26501	22.085	.00163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-124142-A-1-K Acquired: 10/16/2017 14:00:34 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.5458**	**.44102**	**.00130**	**.05177**	**.00320**
Stddev	.0014	.00045	.00012	.00227	.00003
%RSD	.05668	.10272	9.1427	4.3868	.89289
#1	2.5468	.44134	.00139	.05017	.00322
#2	2.5448	.44070	.00122	.05338	.00318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00200**	**2.3827**	**.00097**	**.00161**	**.05019**
Stddev	.00032	.0026	.00049	.00030	.01083
%RSD	16.076	.10724	50.919	18.874	21.583
#1	.00178	2.3808	.00132	.00139	.04253
#2	.00223	2.3845	.00062	.00182	.05785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00130**	**.01072**	**.00546**	**.00028**	**.00027**
Stddev	.00033	.00001	.00011	.00022	.00023
%RSD	25.832	.13748	1.9254	80.398	83.840
#1	.00153	.01073	.00554	.00012	.00011
#2	.00106	.01071	.00539	.00044	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-124142-A-1-K Acquired: 10/16/2017 14:00:34 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.03331
Stddev	.00044
%RSD	1.3266
#1	.03362
#2	.03299
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3706.9	2616.3	22121.	3936.9
Stddev	6.2	.6	10.	9.8
%RSD	.16654	.02205	.04341	.24930
#1	3711.3	2616.7	22114.	3943.8
#2	3702.6	2615.9	22128.	3929.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.889%	101.52%	100.69%	103.33%
Range				

Sample Name: LCS 480-381758/26-A Acquired: 10/16/2017 14:04:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.10104**	**20.372**	**.40358**	**.38611**	**.39015**
Stddev	.00043	.039	.00052	.00076	.00056
%RSD	.42491	.19101	.12973	.19669	.14231
#1	.10073	20.345	.40321	.38665	.39055
#2	.10134	20.400	.40395	.38558	.38976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.41005**	**20.687**	**.40570**	**-.0121**	**.38937**
Stddev	.00065	.002	.00030	.0001	.00051
%RSD	.15814	.01155	.07283	1.159	.12995
#1	.41051	20.685	.40591	-.0122	.38901
#2	.40959	20.689	.40549	-.0120	.38973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.41299**	**.39363**	**20.561**	**19.585**	**.40590**
Stddev	.00159	.00009	.028	.013	.00098
%RSD	.38406	.02301	.13639	.06631	.24083
#1	.41187	.39369	20.581	19.576	.40659
#2	.41411	.39356	20.541	19.594	.40521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-381758/26-A Acquired: 10/16/2017 14:04:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.183**	**.41711**	**.41073**	**19.762**	**.39295**
Stddev	.011	.00086	.00091	.048	.00029
%RSD	.05358	.20720	.22240	.24433	.07477
#1	20.175	.41650	.41138	19.796	.39274
#2	20.191	.41772	.41008	19.728	.39316
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.40555**	**19.701**	**.39641**	**.40840**	**8.1713**
Stddev	.00103	.048	.00128	.00309	.0076
%RSD	.25387	.24605	.32298	.75737	.09320
#1	.40482	19.736	.39732	.41059	8.1660
#2	.40627	19.667	.39551	.40622	8.1767
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.40064**	**.39235**	**.41630**	**.40091**	**.41855**
Stddev	.00097	.00096	.00039	.00015	.00147
%RSD	.24296	.24406	.09466	.03824	.35165
#1	.39995	.39303	.41603	.40102	.41751
#2	.40133	.39167	.41658	.40080	.41959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-381758/26-A Acquired: 10/16/2017 14:04:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**.41439**
Stddev	.00019
%RSD	.04624
#1	.41452
#2	.41425
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3507.6**	**2570.0**	**21491.**	**3893.0**
Stddev	1.3	3.6	26.	19.1
%RSD	.03701	.14201	.12025	.49108
#1	3508.5	2567.5	21473.	3906.6
#2	3506.7	2572.6	21509.	3879.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.518%	99.722%	97.827%	102.18%
Range				

Sample Name: CCV-4278259 Acquired: 10/16/2017 14:07:34 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52426**	**25.320**	**.52258**	**.51830**	**.49919**
Stddev	.00179	.013	.00027	.00011	.00105
%RSD	.34054	.05257	.05115	.02153	.21089
#1	.52553	25.310	.52239	.51838	.49845
#2	.52300	25.329	.52277	.51822	.49994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53309**	**26.557**	**.51438**	**-.0128**	**.51640**
Stddev	.00018	.022	.00012	.0108	.00076
%RSD	.03399	.08161	.02326	84.31	.14658
#1	.53322	26.572	.51447	-.0052	.51694
#2	.53296	26.542	.51430	-.0204	.51587
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52760**	**.50956**	**26.069**	**25.558**	**.52194**
Stddev	.00002	.00005	.065	.030	.00026
%RSD	.00394	.01023	.24980	.11645	.04929
#1	.52761	.50952	26.023	25.537	.52176
#2	.52758	.50960	26.115	25.579	.52212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 14:07:34 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.052**	**.53114**	**.52711**	**25.718**	**.52195**
Stddev	.017	.00009	.00028	.025	.00058
%RSD	.06623	.01731	.05385	.09866	.11119
#1	26.064	.53107	.52731	25.736	.52154
#2	26.040	.53120	.52691	25.700	.52236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52214**	**26.077**	**.51441**	**.53264**	**22.734**
Stddev	.00200	.040	.00070	.00247	.013
%RSD	.38291	.15154	.13573	.46336	.05758
#1	.52356	26.105	.51490	.53438	22.744
#2	.52073	26.049	.51392	.53089	22.725
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53396**	**.51373**	**.53373**	**.53118**	**.53642**
Stddev	.00056	.00032	.00037	.00019	.00036
%RSD	.10536	.06140	.06947	.03543	.06703
#1	.53436	.51350	.53399	.53104	.53617
#2	.53356	.51395	.53346	.53131	.53668
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 14:07:34 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.53960
Stddev	.00041
%RSD	.07570
#1	.53989
#2	.53931
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3459.4	2582.3	21456.	3853.0
Stddev	.6	.4	50.	3.0
%RSD	.01799	.01543	.23155	.07883
#1	3458.9	2582.0	21421.	3855.1
#2	3459.8	2582.6	21491.	3850.8

Sample Name: CCB-4278202 Acquired: 10/16/2017 14:11:02 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00069**	**.15483**	**.00113**	**.00001**	**.00065**
Stddev	.00026	.22780	.00114	.00004	.00010
%RSD	36.977	147.13	100.62	291.93	15.482
#1	.00087	.31591	.00194	-.00001	.00073
#2	.00051	-.00624	.00033	.00004	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**.41070**	**.00008**	**.0110**	**.00115**
Stddev	.00151	.48632	.00005	.0179	.00021
%RSD	114.36	118.41	67.259	163.8	18.043
#1	.00239	.75458	.00004	-.0017	.00129
#2	.00025	.06682	.00012	.0236	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.00284**	F **.39694**	**.12224**	**.00320**
Stddev	.00010	.00014	.47374	.09905	.00245
%RSD	39.363	5.0343	119.35	81.030	76.643
#1	.00034	.00274	.73193	.19229	.00493
#2	.00019	.00294	.06196	.05220	.00146
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.05000		
Low Limit			-.05000		

Sample Name: CCB-4278202 Acquired: 10/16/2017 14:11:02 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01569**	**.00135**	**.00001**	**.09640**	**-.00012**
Stddev	.00002	.00024	.00011	.11144	.00003
%RSD	.10097	17.742	807.48	115.60	29.411
#1	.01568	.00152	-.00006	.17521	-.00009
#2	.01570	.00118	.00009	.01760	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00206**	**-.00529**	**-.00082**	**.00061**	**.04334**
Stddev	.00030	.00121	.00045	.00106	.04982
%RSD	14.683	22.868	54.921	173.24	114.95
#1	.00185	-.00443	-.00050	-.00014	.07857
#2	.00228	-.00614	-.00113	.00136	.00811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**.00319**	**.00230**	**.00082**	**.00017**
Stddev	.00017	.00374	.00038	.00033	.00033
%RSD	29.129	117.32	16.562	40.271	193.96
#1	.00048	.00584	.00257	.00059	-.00006
#2	.00072	.00054	.00203	.00105	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 14:11:02 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.00174
Stddev	.00032
%RSD	18.621
#1	.00197
#2	.00151
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3812.5	2675.0	22499.	3947.4
Stddev	1.2	2.5	47.	19.2
%RSD	.03081	.09169	.20736	.48589
#1	3811.7	2676.7	22466.	3961.0
#2	3813.3	2673.2	22532.	3933.9

Sample Name: ccvl-4278204 Acquired: 10/16/2017 14:14:41 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00662**	**.18783**	**.01676**	**.02014**	**.00226**
Stddev	.00070	.00169	.00227	.00043	.00006
%RSD	10.557	.90123	13.542	2.1286	2.6248
#1	.00711	.18663	.01836	.02045	.00230
#2	.00612	.18903	.01515	.01984	.00222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00220**	**.54554**	**.00216**	**-.0074**	**.00436**
Stddev	.00004	.00159	.00002	.0284	.00010
%RSD	1.9303	.29076	1.0543	384.6	2.2131
#1	.00223	.54666	.00215	.0127	.00429
#2	.00217	.54442	.00218	-.0274	.00443
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00439**	**.01107**	W **.06812**	**.51937**	**.03165**
Stddev	.00016	.00035	.00494	.00405	.00177
%RSD	3.5737	3.1332	7.2530	.77883	5.5979
#1	.00428	.01132	.07161	.52223	.03290
#2	.00450	.01083	.06463	.51651	.03039
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
Value			.05000		
Range			30.000%		

Sample Name: ccvl-4278204 Acquired: 10/16/2017 14:14:41 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21327**	**.00345**	**.01021**	**1.0148**	**.01003**
Stddev	.00527	.00009	.00011	.0056	.00010
%RSD	2.4703	2.4847	1.1081	.55206	.97217
#1	.21700	.00352	.01029	1.0109	.00996
#2	.20955	.00339	.01013	1.0188	.01009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01099**	**.18936**	**.02006**	**.02544**	**.46378**
Stddev	.00004	.00182	.00138	.00143	.00207
%RSD	.33737	.96078	6.8785	5.6252	.44649
#1	.01101	.19065	.02104	.02443	.46231
#2	.01096	.18807	.01909	.02645	.46524
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01029**	**.00510**	**.00555**	**.02189**	**.00505**
Stddev	.00008	.00004	.00019	.00102	.00010
%RSD	.77037	.86465	3.4476	4.6499	1.9391
#1	.01024	.00506	.00568	.02117	.00498
#2	.01035	.00513	.00541	.02261	.00512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 14:14:41 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.01160
Stddev	.00130
%RSD	11.183
#1	.01252
#2	.01068
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3780.2	2651.9	22303.	3872.6
Stddev	.7	.7	62.	4.7
%RSD	.01975	.02538	.27909	.12101
#1	3779.7	2651.4	22259.	3875.9
#2	3780.8	2652.4	22347.	3869.3

Sample Name: LCSD 480-381758/27-A Acquired: 10/16/2017 14:18:19 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.10104**	**20.214**	**.40479**	**.38534**	**.39335**
Stddev	.00172	.005	.00041	.00077	.00027
%RSD	1.7019	.02411	.10246	.19861	.06868
#1	.09982	20.211	.40449	.38480	.39354
#2	.10226	20.218	.40508	.38588	.39316
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.40909**	**20.698**	**.40474**	**-.0026**	**.38963**
Stddev	.00065	.004	.00001	.0113	.00014
%RSD	.15830	.01831	.00268	442.6	.03551
#1	.40864	20.695	.40475	.0055	.38973
#2	.40955	20.700	.40474	-.0106	.38954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.41531**	**.39762**	**20.720**	**19.864**	**.40569**
Stddev	.00176	.00230	.016	.031	.00001
%RSD	.42361	.57889	.07836	.15745	.00216
#1	.41407	.39599	20.709	19.886	.40569
#2	.41656	.39924	20.732	19.842	.40570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCSD 480-381758/27-A Acquired: 10/16/2017 14:18:19 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.328**	**.41832**	**.40957**	**19.852**	**.39569**
Stddev	.053	.00067	.00077	.008	.00004
%RSD	.26076	.16083	.18888	.04082	.01089
#1	20.291	.41784	.41012	19.847	.39572
#2	20.366	.41879	.40903	19.858	.39566
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.40773**	**19.639**	**.39464**	**.40838**	**7.1258**
Stddev	.00129	.019	.00133	.00171	.0220
%RSD	.31647	.09913	.33716	.41975	.30889
#1	.40682	19.653	.39558	.40960	7.1102
#2	.40864	19.625	.39370	.40717	7.1414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.40465**	**.39725**	**.41515**	**.40181**	**.41627**
Stddev	.00139	.00067	.00236	.00074	.00117
%RSD	.34381	.16872	.56817	.18518	.28103
#1	.40563	.39772	.41348	.40129	.41544
#2	.40366	.39678	.41682	.40234	.41710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCSD 480-381758/27-A Acquired: 10/16/2017 14:18:19 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**.41719**
Stddev	.00166
%RSD	.39728
#1	.41602
#2	.41836
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3511.9**	**2585.2**	**21592.**	**3893.4**
Stddev	2.4	.4	69.	18.3
%RSD	.06712	.01701	.32145	.46881
#1	3513.6	2584.9	21641.	3880.5
#2	3510.3	2585.5	21543.	3906.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.635%	100.31%	98.287%	102.19%
Range				

Sample Name: 480-125681-A-1-D@5 Acquired: 10/16/2017 14:21:42 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00095**	**40.518**	**.01947**	**.19903**	**.64225**
Stddev	.00052	.174	.00137	.00006	.00308
%RSD	54.965	.42980	7.0241	.03082	.48009
#1	.00058	40.395	.01850	.19907	.64443
#2	.00131	40.642	.02043	.19898	.64007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00065**	**136.78**	**.00690**	**.0423**	**.32489**
Stddev	.00013	.45	.00015	.0304	.00004
%RSD	19.101	.32867	2.2213	71.87	.01115
#1	.00074	136.47	.00701	.0208	.32486
#2	.00057	137.10	.00679	.0638	.32491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12836**	**1.9896**	**100.82**	**4.7077**	**.02718**
Stddev	.00004	.0004	.35	.0678	.00149
%RSD	.03409	.02062	.35023	1.4411	5.4826
#1	.12839	1.9899	100.57	4.6597	.02613
#2	.12833	1.9893	101.07	4.7556	.02823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-1-D@5 Acquired: 10/16/2017 14:21:42 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.168**	**1.0099**	**.06127**	**13.634**	**.06253**
Stddev	.039	.0009	.00015	.053	.00019
%RSD	.22609	.09157	.24586	.39212	.29951
#1	17.196	1.0105	.06138	13.596	.06240
#2	17.141	1.0092	.06116	13.672	.06267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.39417**	**6.9700**	**.02008**	**.00224**	**.19222**
Stddev	.00055	.0116	.00000	.00288	.00083
%RSD	.14043	.16613	.01578	128.54	.43436
#1	.39457	6.9618	.02007	.00427	.19163
#2	.39378	6.9782	.02008	.00020	.19281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.58643**	**.33388**	**5.2595**	**-.00114**	**.03382**
Stddev	.00085	.00100	.0247	.00115	.00002
%RSD	.14516	.29923	.46950	101.05	.06778
#1	.58703	.33317	5.2770	-.00196	.03380
#2	.58582	.33459	5.2420	-.00033	.03383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-1-D@5 Acquired: 10/16/2017 14:21:42 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**2.3067**
Stddev	.0084
%RSD	.36485
#1	2.3126
#2	2.3007
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3354.7**	**2572.1**	**21539.**	**3931.8**
Stddev	.9	.6	74.	7.0
%RSD	.02810	.02444	.34314	.17801
#1	3355.4	2571.6	21487.	3936.8
#2	3354.0	2572.5	21591.	3926.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.398%	99.801%	98.045%	103.20%
Range				

Sample Name: 480-125681-A-2-D@5 Acquired: 10/16/2017 14:25:15 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.13800**	**36.861**	**.01984**	**.11790**	**.68099**
Stddev	.00070	.079	.00566	.00018	.00176
%RSD	.50806	.21456	28.505	.14854	.25912
#1	.13751	36.917	.01584	.11802	.68223
#2	.13850	36.805	.02384	.11777	.67974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**123.34**	**.00846**	**.0398**	**.03580**
Stddev	.00000	.14	.00012	.0027	.00021
%RSD	.37537	.11506	1.3902	6.768	.58924
#1	.00033	123.44	.00854	.0417	.03595
#2	.00033	123.24	.00838	.0379	.03565
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.16430**	F **38.584**	**121.79**	**4.8140**	**.01299**
Stddev	.00062	.484	.37	.0158	.00077
%RSD	.37752	1.2554	.30311	.32754	5.9469
#1	.16474	38.927	121.53	4.8251	.01244
#2	.16386	38.242	122.06	4.8028	.01353
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		23.000			
Low Limit		-.01000			

Sample Name: 480-125681-A-2-D@5 Acquired: 10/16/2017 14:25:15 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.116**	**.85092**	**.01111**	**13.364**	**.08440**
Stddev	.018	.00033	.00009	.045	.00028
%RSD	.09862	.03837	.79086	.33632	.33375
#1	18.129	.85069	.01117	13.396	.08460
#2	18.104	.85116	.01105	13.333	.08420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.47029**	**9.1307**	**.01853**	**.00217**	**.16260**
Stddev	.00174	.0100	.00090	.00138	.00458
%RSD	.37005	.10959	4.8601	63.789	2.8149
#1	.46906	9.1237	.01917	.00314	.15937
#2	.47152	9.1378	.01789	.00119	.16584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.39143**	**.26476**	**3.6675**	**-.00210**	**.02578**
Stddev	.00325	.00084	.0072	.00215	.00049
%RSD	.82987	.31739	.19652	102.23	1.9029
#1	.39373	.26536	3.6726	-.00058	.02613
#2	.38913	.26417	3.6624	-.00362	.02543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-2-D@5 Acquired: 10/16/2017 14:25:15 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**2.3893**
Stddev	.0107
%RSD	.44823
#1	2.3969
#2	2.3818
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3373.2**	**2546.2**	**21483.**	**3947.7**
Stddev	.1	2.4	3.	23.5
%RSD	.00422	.09596	.01176	.59612
#1	3373.3	2547.9	21485.	3931.0
#2	3373.1	2544.5	21481.	3964.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.896%	98.796%	97.791%	103.62%
Range				

Sample Name: 480-125681-A-2-D@10 Acquired: 10/16/2017 14:28:59 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.06799**	**18.652**	**.00900**	**.05902**	**.35140**
Stddev	.00013	.131	.00008	.00038	.00007
%RSD	.18995	.70048	.89788	.63836	.02054
#1	.06790	18.560	.00906	.05929	.35145
#2	.06808	18.745	.00894	.05876	.35135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**62.577**	**.00427**	**-.0039**	**.01786**
Stddev	.00001	.155	.00015	.0295	.00001
%RSD	2.8091	.24762	3.5225	751.0	.07187
#1	.00023	62.468	.00438	.0169	.01786
#2	.00024	62.687	.00417	-.0248	.01785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08463**	**19.634**	**62.352**	**2.4201**	**.00671**
Stddev	.00019	.006	.203	.0243	.00113
%RSD	.22630	.03246	.32595	1.0043	16.886
#1	.08476	19.639	62.496	2.4373	.00751
#2	.08449	19.630	62.208	2.4029	.00591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-2-D@10 Acquired: 10/16/2017 14:28:59 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.2523**	**.43786**	**.00532**	**6.7478**	**.04210**
Stddev	.0015	.00016	.00015	.0348	.00005
%RSD	.01665	.03701	2.8885	.51620	.10707
#1	9.2512	.43797	.00543	6.7232	.04207
#2	9.2534	.43774	.00521	6.7724	.04213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.23558**	**4.5453**	**.01027**	**-.00092**	**.08446**
Stddev	.00148	.0157	.00015	.00099	.01203
%RSD	.62765	.34465	1.4661	107.54	14.243
#1	.23454	4.5564	.01038	-.00022	.07595
#2	.23663	4.5342	.01016	-.00163	.09297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19628**	**.13515**	**1.8718**	**-.00025**	**.01360**
Stddev	.00193	.00030	.0005	.00029	.00015
%RSD	.98172	.22014	.02747	114.57	1.1237
#1	.19492	.13536	1.8714	-.00005	.01370
#2	.19765	.13494	1.8722	-.00046	.01349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-2-D@10 Acquired: 10/16/2017 14:28:59 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**1.2290**
Stddev	.0006
%RSD	.04561
#1	1.2286
#2	1.2294
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3514.8**	**2586.5**	**21821.**	**3951.5**
Stddev	5.2	2.1	7.	9.5
%RSD	.14754	.08088	.03174	.24080
#1	3518.5	2588.0	21826.	3958.2
#2	3511.1	2585.1	21816.	3944.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.713%	100.36%	99.331%	103.72%
Range				

Sample Name: 480-125681-A-3-D@5 Acquired: 10/16/2017 14:32:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**27.934**	**.09166**	**.51359**	**1.1165**
Stddev	.00008	.061	.00190	.00083	.0004
%RSD	12.425	.21809	2.0780	.16118	.03156
#1	.00061	27.891	.09301	.51301	1.1167
#2	.00072	27.977	.09032	.51418	1.1162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**143.03**	**.00428**	**-.0625**	**.06795**
Stddev	.00002	.01	.00012	.0091	.00066
%RSD	4.3398	.00736	2.8993	14.63	.97328
#1	.00039	143.04	.00437	-.0689	.06842
#2	.00042	143.02	.00419	-.0560	.06749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.72310**	**3.2205**	**319.52**	**6.1748**	**.01738**
Stddev	.00139	.0088	.51	.0138	.00114
%RSD	.19208	.27428	.15933	.22293	6.5535
#1	.72408	3.2268	319.88	6.1845	.01818
#2	.72212	3.2143	319.16	6.1651	.01657
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-3-D@5 Acquired: 10/16/2017 14:32:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576-2	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}2	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.433**	**40.452**	**.01150**	**26.684**	**.83048**
Stddev	.001	.044	.00031	.064	.00119
%RSD	.00637	.10910	2.7228	.23956	.14384
#1	18.434	40.484	.01172	26.639	.83133
#2	18.432	40.421	.01128	26.729	.82964
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.30735**	**6.7219**	**.02739**	**.00408**	**.18898**
Stddev	.00091	.0049	.00085	.00264	.00737
%RSD	.29704	.07273	3.1006	64.729	3.9015
#1	.30799	6.7253	.02679	.00221	.18377
#2	.30670	6.7184	.02799	.00594	.19420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.14161**	**.97092**	**4.8033**	**-.00168**	**.03640**
Stddev	.00087	.00040	.0013	.00061	.00051
%RSD	.61339	.04099	.02657	36.524	1.3937
#1	.14223	.97120	4.8042	-.00211	.03604
#2	.14100	.97064	4.8024	-.00124	.03676
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-3-D@5 Acquired: 10/16/2017 14:32:35 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**12.951**
Stddev	.007
%RSD	.05683
#1	12.956
#2	12.946
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3225.8**	**2531.6**	**21003.**	**3873.0**
Stddev	13.2	6.6	36.	1.3
%RSD	.41072	.26079	.17061	.03349
#1	3216.5	2526.9	20977.	3872.1
#2	3235.2	2536.2	21028.	3873.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.926%	98.229%	95.604%	101.66%
Range				

Sample Name: 480-125681-A-4-D@5 Acquired: 10/16/2017 14:36:13 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00282**	**43.235**	**.01854**	**.31089**	**1.1543**
Stddev	.00034	.002	.00088	.00108	.0002
%RSD	11.872	.00527	4.7373	.34824	.01827
#1	.00306	43.237	.01792	.31012	1.1542
#2	.00259	43.233	.01916	.31165	1.1545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00057**	**178.71**	**.01381**	**1.261**	**.03561**
Stddev	.00002	.19	.00005	.014	.00012
%RSD	3.4082	.10641	.35507	1.121	.34970
#1	.00059	178.85	.01384	1.271	.03552
#2	.00056	178.58	.01377	1.251	.03570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.24716**	**2.1230**	**104.69**	**6.9582**	**.01804**
Stddev	.00107	.0002	.23	.0311	.00103
%RSD	.43320	.00955	.21622	.44711	5.7223
#1	.24641	2.1229	104.85	6.9802	.01877
#2	.24792	2.1232	104.53	6.9362	.01731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-4-D@5 Acquired: 10/16/2017 14:36:13 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mn2576-2	Mo2020	Na5895
Line	279.079 {121}2	257.610 {131}	257.610 {131}2	202.030 {467}	589.592 { 57}
IS Ref	(Y_3600)	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.601**	**14.101**	**15.047**	**.01599**	**28.153**
Stddev	.059	.046	.041	.00030	.009
%RSD	.35423	.32555	.27339	1.8658	.03173
#1	16.559	14.134	15.018	.01620	28.160
#2	16.643	14.069	15.076	.01578	28.147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Ni2316	Pb2203	S_1820	Sb2068	Se1960
Line	231.604 {446}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(In2306)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20168**	**1.0663**	**9.4821**	**.02726**	**-.00163**
Stddev	.00030	.0022	.0483	.00012	.00122
%RSD	.15007	.20822	.50936	.43766	74.661
#1	.20146	1.0647	9.4479	.02735	-.00249
#2	.20189	1.0678	9.5162	.02718	-.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Ti3349	Tl1908
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53226**	**.18613**	**.42273**	**5.8649**	**-.00223**
Stddev	.00105	.00071	.00019	.0041	.00141
%RSD	.19671	.38332	.04446	.07052	63.214
#1	.53300	.18563	.42259	5.8620	-.00323
#2	.53152	.18664	.42286	5.8679	-.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-4-D@5 Acquired: 10/16/2017 14:36:13 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	V_2924	Zn2062
Line	292.402 {115}	206.200 {163}
IS Ref	(Y_3600)	(Y_3600)
Units	ppm	ppm
Avg	.03411	10.887
Stddev	.00005	.049
%RSD	.13479	.44978
#1	.03414	10.853
#2	.03408	10.922
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3257.9	2533.7	21052.	3899.6
Stddev	.5	3.0	6.	13.8
%RSD	.01590	.11998	.02932	.35457
#1	3257.6	2535.9	21048.	3889.8
#2	3258.3	2531.6	21057.	3909.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.790%	98.313%	95.830%	102.35%
Range				

Sample Name: 480-125681-A-5-I@5 Acquired: 10/16/2017 14:39:51 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00630**	**69.894**	**.01807**	**.43503**	**2.4152**
Stddev	.00051	.076	.00108	.00245	.0013
%RSD	8.0609	.10934	5.9494	.56252	.05397
#1	.00666	69.948	.01883	.43330	2.4161
#2	.00594	69.840	.01731	.43676	2.4142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00070**	**181.23**	**.01085**	**.0677**	**.02183**
Stddev	.00011	.13	.00009	.0022	.00014
%RSD	15.165	.06972	.78989	3.214	.62899
#1	.00063	181.32	.01079	.0692	.02174
#2	.00078	181.14	.01091	.0661	.02193
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.11671**	**1.0994**	**54.179**	**6.2413**	**.02357**
Stddev	.00014	.0046	.433	.0325	.00100
%RSD	.12270	.42048	.79921	.51995	4.2394
#1	.11661	1.1026	54.485	6.2642	.02427
#2	.11681	1.0961	53.872	6.2184	.02286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-5-I@5 Acquired: 10/16/2017 14:39:51 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.357**	**.97281**	**.03140**	**19.266**	**.06835**
Stddev	.077	.00346	.00003	.010	.00018
%RSD	.39961	.35562	.10253	.05440	.26274
#1	19.302	.97036	.03142	19.274	.06847
#2	19.411	.97526	.03137	19.259	.06822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52081**	**7.9093**	**.02971**	**-.00019**	**.25962**
Stddev	.00281	.0204	.00290	.00060	.00594
%RSD	.53995	.25806	9.7439	308.47	2.2871
#1	.52280	7.8949	.02766	.00023	.25542
#2	.51882	7.9237	.03176	-.00062	.26382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.11207**	**.39495**	**5.0700**	**-.00276**	**.04333**
Stddev	.00045	.00059	.0125	.00114	.00017
%RSD	.40380	.14980	.24664	41.433	.38353
#1	.11239	.39537	5.0611	-.00357	.04321
#2	.11175	.39453	5.0788	-.00195	.04345
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-5-I@5 Acquired: 10/16/2017 14:39:51 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**3.5445**
Stddev	.0541
%RSD	1.5272
#1	3.5063
#2	3.5828
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3289.7**	**2566.4**	**21440.**	**3936.4**
Stddev	8.2	1.3	34.	35.8
%RSD	.24875	.04918	.15814	.90962
#1	3283.9	2565.5	21416.	3911.1
#2	3295.4	2567.3	21463.	3961.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.646%	99.580%	97.592%	103.32%
Range				

Sample Name: 480-125681-A-10-A@10 Acquired: 10/16/2017 14:43:26 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00192**	**21.959**	**.00711**	**.11855**	**.41791**
Stddev	.00006	.093	.00206	.00036	.00200
%RSD	3.0026	.42498	28.922	.30757	.47884
#1	.00197	22.025	.00856	.11881	.41649
#2	.00188	21.894	.00565	.11829	.41932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**67.059**	**.00902**	**.0026**	**12.863**
Stddev	.00001	.051	.00010	.0159	.018
%RSD	2.9948	.07637	1.0944	601.2	.14327
#1	.00019	67.023	.00909	.0139	12.876
#2	.00020	67.096	.00895	-.0086	12.850
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.06190**	**4.1036**	**96.553**	**2.3261**	**.49913**
Stddev	.00021	.0136	.275	.0014	.00198
%RSD	.33136	.33247	.28524	.05974	.39741
#1	.06205	4.0940	96.359	2.3271	.49773
#2	.06176	4.1133	96.748	2.3251	.50053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-10-A@10 Acquired: 10/16/2017 14:43:26 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.9767**	**.67271**	**.00696**	**6.7687**	**.03940**
Stddev	.0018	.00079	.00020	.0323	.00062
%RSD	.02262	.11673	2.8102	.47768	1.5696
#1	7.9780	.67216	.00683	6.7459	.03984
#2	7.9754	.67327	.00710	6.7916	.03896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53958**	**5.3626**	**.01185**	**-.00176**	**.10606**
Stddev	.00093	.0115	.00041	.00486	.00228
%RSD	.17163	.21429	3.4507	276.14	2.1452
#1	.54023	5.3707	.01214	-.00520	.10767
#2	.53892	5.3545	.01157	.00168	.10446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12652**	**.14896**	**2.4281**	**-.00226**	**.03410**
Stddev	.00010	.00094	.0012	.00144	.00053
%RSD	.07754	.63172	.05058	63.553	1.5550
#1	.12659	.14829	2.4272	-.00125	.03372
#2	.12645	.14962	2.4289	-.00328	.03447
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-10-A@10 Acquired: 10/16/2017 14:43:26 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	1.9329
Stddev	.0040
%RSD	.20918
#1	1.9357
#2	1.9300
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3491.9	2584.1	21684.	3947.9
Stddev	1.1	.3	32.	.5
%RSD	.03191	.01161	.14980	.01215
#1	3491.1	2584.3	21661.	3947.5
#2	3492.7	2583.9	21707.	3948.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.096%	100.27%	98.706%	103.62%
Range				

Sample Name: blank Acquired: 10/16/2017 14:47:00 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.01581**	**-.00037**	**.00174**	**.00103**
Stddev	.00074	.02284	.00002	.00005	.00011
%RSD	13396.	144.49	6.2249	2.9695	11.125
#1	.00053	-.00034	-.00038	.00177	.00111
#2	-.00052	.03196	-.00035	.00170	.00095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.08910**	**.00073**	**-.0116**	**.00059**
Stddev	.00000	.04737	.00004	.0222	.00053
%RSD	23.758	53.170	5.1027	191.4	88.783
#1	-.00001	.05560	.00070	.0041	.00096
#2	-.00002	.12260	.00075	-.0272	.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00265**	**.00577**	**.07431**	**.01579**	**-.00059**
Stddev	.00011	.00175	.04246	.02726	.00094
%RSD	4.1250	30.250	57.146	172.64	160.32
#1	.00273	.00700	.04428	.03507	-.00125
#2	.00258	.00453	.10434	-.00349	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 14:47:00 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01478**	**.00659**	**.00023**	**.02661**	**-.00053**
Stddev	.00197	.00075	.00019	.00174	.00024
%RSD	13.337	11.361	82.999	6.5577	45.189
#1	.01617	.00712	.00010	.02537	-.00069
#2	.01339	.00606	.00037	.02784	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**-.01147**	**.00391**	**.00065**	**.21176**
Stddev	.00017	.00122	.00093	.00013	.03352
%RSD	12.975	10.634	23.734	19.689	15.827
#1	.00120	-.01061	.00457	.00056	.23546
#2	.00145	-.01234	.00326	.00074	.18806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00141**	**.00023**	**.00486**	**-.00385**	**.00034**
Stddev	.00045	.00014	.00074	.00107	.00062
%RSD	32.029	59.778	15.304	27.772	185.32
#1	.00173	.00013	.00538	-.00309	-.00010
#2	.00109	.00032	.00433	-.00461	.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 14:47:00 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00413
Stddev	.00065
%RSD	15.779
#1	.00459
#2	.00367
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3509.6	2327.5	20671.	3655.7
Stddev	7.8	7.5	58.	5.1
%RSD	.22176	.32306	.28291	.14067
#1	3504.1	2322.2	20713.	3652.0
#2	3515.1	2332.8	20630.	3659.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.572%	90.311%	94.096%	95.953%
Range				

Sample Name: CCV-4278259 Acquired: 10/16/2017 14:50:39 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52619**	**25.413**	**.52555**	**.52002**	**.49863**
Stddev	.00071	.072	.00019	.00033	.00325
%RSD	.13508	.28442	.03701	.06425	.65089
#1	.52569	25.362	.52569	.52026	.49633
#2	.52669	25.464	.52542	.51979	.50092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53636**	**26.822**	**.51654**	**-.0060**	**.51966**
Stddev	.00152	.073	.00035	.0006	.00068
%RSD	.28258	.27372	.06825	10.73	.13128
#1	.53529	26.874	.51629	-.0065	.51917
#2	.53743	26.770	.51679	-.0056	.52014
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53173**	**.50546**	**26.191**	**25.646**	**.52273**
Stddev	.00078	.00219	.031	.039	.00341
%RSD	.14581	.43333	.11792	.15337	.65258
#1	.53118	.50701	26.169	25.673	.52032
#2	.53228	.50391	26.213	25.618	.52514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 14:50:39 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.152**	**.53378**	**.52943**	**25.928**	**.52450**
Stddev	.031	.00027	.00054	.046	.00143
%RSD	.11925	.04971	.10130	.17671	.27170
#1	26.130	.53397	.52981	25.896	.52349
#2	26.174	.53359	.52905	25.961	.52551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.52436**	**26.197**	**.51565**	**.53300**	**22.900**
Stddev	.00041	.050	.00194	.00704	.023
%RSD	.07810	.19035	.37553	1.3215	.09876
#1	.52465	26.161	.51428	.52802	22.884
#2	.52407	26.232	.51702	.53798	22.916
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53768**	**.51402**	**.53556**	**.53496**	**.53899**
Stddev	.00057	.00105	.00119	.00139	.00164
%RSD	.10646	.20396	.22182	.25945	.30359
#1	.53809	.51328	.53472	.53398	.53783
#2	.53728	.51476	.53640	.53594	.54014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: CCV-4278259 Acquired: 10/16/2017 14:50:39 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	**.54476**
Stddev	.00223
%RSD	.41024
#1	.54318
#2	.54634
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3501.3**	**2615.9**	**21810.**	**3877.2**
Stddev	9.2	6.5	98.	17.9
%RSD	.26321	.24815	.44809	.46264
#1	3507.8	2620.5	21879.	3864.5
#2	3494.8	2611.3	21740.	3889.9

Sample Name: CCB-4278202 Acquired: 10/16/2017 14:54:07 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**-.00609**	**.00071**	**-.00013**	**.00012**
Stddev	.00024	.01777	.00157	.00013	.00000
%RSD	118.79	291.89	220.48	100.95	3.7556
#1	.00037	.00648	-.00040	-.00004	.00012
#2	.00003	-.01865	.00182	-.00023	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.02526**	**.00015**	**-.0131**	**.00026**
Stddev	.00001	.00642	.00002	.0314	.00006
%RSD	45.748	25.408	12.486	240.3	24.325
#1	.00002	.02979	.00014	-.0352	.00022
#2	.00003	.02072	.00016	.0091	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.00008**	**.01677**	**.06643**	**-.00023**
Stddev	.00002	.00003	.00203	.02537	.00086
%RSD	6.2887	39.502	12.120	38.199	380.86
#1	-.00030	.00006	.01821	.08437	-.00084
#2	-.00033	.00011	.01533	.04848	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 14:54:07 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01010**	**.00072**	**.00019**	**.00843**	**.00002**
Stddev	.00321	.00004	.00022	.00833	.00015
%RSD	31.776	5.9818	118.20	98.854	953.80
#1	.00783	.00069	.00034	.01432	-.00009
#2	.01236	.00075	.00003	.00254	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**-.00668**	**.00070**	**.00090**	**.00684**
Stddev	.00031	.00144	.00062	.00220	.00281
%RSD	52.073	21.490	88.211	243.27	41.106
#1	.00082	-.00567	.00114	.00246	.00485
#2	.00038	-.00770	.00026	-.00065	.00882
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.00008**	**.00045**	**-.00043**	**.00021**
Stddev	.00009	.00006	.00030	.00043	.00004
%RSD	24.229	80.135	67.329	99.665	18.634
#1	.00042	.00012	.00023	-.00013	.00018
#2	.00030	.00003	.00066	-.00074	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: CCB-4278202 Acquired: 10/16/2017 14:54:07 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.00089
Stddev	.00057
%RSD	64.123
#1	.00130
#2	.00049
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3827.5	2677.7	22661.	3969.7
Stddev	1.8	3.7	77.	1.9
%RSD	.04792	.13770	.33871	.04777
#1	3828.8	2675.1	22606.	3968.3
#2	3826.2	2680.3	22715.	3971.0

Sample Name: ccvl-4278204 Acquired: 10/16/2017 14:57:47 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00639**	**.18340**	**.01508**	**.01968**	**.00215**
Stddev	.00027	.00262	.00164	.00001	.00002
%RSD	4.2315	1.4280	10.882	.05095	.87128
#1	.00658	.18155	.01624	.01969	.00213
#2	.00620	.18525	.01392	.01967	.00216
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00227**	**.54291**	**.00218**	**.0067**	**.00413**
Stddev	.00004	.00158	.00015	.0017	.00005
%RSD	1.7956	.29028	6.7965	25.10	1.1203
#1	.00224	.54180	.00228	.0055	.00416
#2	.00230	.54403	.00207	.0079	.00410
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value					
Range					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00410**	**.01086**	**.06421**	**.53199**	**.03071**
Stddev	.00053	.00027	.00003	.00160	.00086
%RSD	12.933	2.4856	.04056	.29993	2.8158
#1	.00448	.01105	.06419	.53312	.03010
#2	.00373	.01066	.06423	.53086	.03133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 14:57:47 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21660**	**.00350**	**.01020**	**1.0235**	**.00994**
Stddev	.00241	.00003	.00027	.0013	.00006
%RSD	1.1133	.76133	2.6789	.12757	.55413
#1	.21489	.00348	.01039	1.0244	.00991
#2	.21830	.00352	.01001	1.0226	.00998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01167**	**.18559**	**.02161**	**.02724**	**.48005**
Stddev	.00014	.00209	.00064	.00190	.00283
%RSD	1.1810	1.1246	2.9664	6.9696	.58878
#1	.01177	.18411	.02116	.02590	.47805
#2	.01157	.18706	.02206	.02858	.48205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01021**	**.00511**	**.00515**	**.02219**	**.00533**
Stddev	.00032	.00014	.00013	.00060	.00026
%RSD	3.1318	2.7371	2.4753	2.6910	4.9632
#1	.00999	.00501	.00525	.02261	.00551
#2	.01044	.00521	.00506	.02177	.00514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Sample Name: ccvl-4278204 Acquired: 10/16/2017 14:57:47 Type: QC
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
Units	ppm
Avg	.01152
Stddev	.00013
%RSD	1.1691
#1	.01143
#2	.01162
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3792.1	2664.9	22445.	3885.9
Stddev	.9	.2	105.	13.9
%RSD	.02258	.00676	.46668	.35790
#1	3792.7	2665.0	22371.	3895.7
#2	3791.5	2664.7	22519.	3876.0

Sample Name: 480-125681-A-6-D Acquired: 10/16/2017 15:01:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01081**	F **614.94**	**.05552**	**.64107**	**4.9569**
Stddev	.00090	1.10	.00411	.00341	.0089
%RSD	8.2933	.17915	7.4031	.53162	.17884
#1	.01018	615.72	.05261	.63866	4.9507
#2	.01145	614.16	.05842	.64348	4.9632
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		540.00			
Low Limit		-.20000			

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00200**	**620.87**	**.04861**	**.2061**	**.10858**
Stddev	.00012	1.21	.00007	.0124	.00072
%RSD	5.7670	.19547	.13483	6.012	.66401
#1	.00192	621.72	.04865	.2149	.10909
#2	.00209	620.01	.04856	.1973	.10807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.59712**	**9.3978**	**298.94**	**23.200**	**.07763**
Stddev	.00139	.0025	.03	.009	.00021
%RSD	.23221	.02643	.01090	.04021	.26430
#1	.59810	9.3961	298.92	23.193	.07778
#2	.59614	9.3996	298.96	23.206	.07749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-125681-A-6-D Acquired: 10/16/2017 15:01:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**60.535**	**12.889**	**.03833**	**100.69**	**.25261**
Stddev	.014	.051	.00002	.03	.00028
%RSD	.02258	.39202	.03982	.03164	.11078
#1	60.526	12.854	.03832	100.67	.25281
#2	60.545	12.925	.03834	100.71	.25241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.7084**	**36.223**	**.14675**	**.00267**	**1.2152**
Stddev	.0075	.098	.00206	.00167	.0045
%RSD	.27671	.27103	1.4045	62.415	.37382
#1	2.7137	36.154	.14529	.00149	1.2185
#2	2.7031	36.292	.14821	.00385	1.2120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.55128**	**1.7411**	F **22.984**	**-.01194**	**.19369**
Stddev	.00077	.0045	.168	.00464	.00070
%RSD	.13975	.25720	.73083	38.890	.36284
#1	.55183	1.7379	22.865	-.00866	.19319
#2	.55074	1.7442	23.103	-.01523	.19419
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-6-D Acquired: 10/16/2017 15:01:24 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	F **20.565**
Stddev	.039
%RSD	.19151
#1	20.537
#2	20.593
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2772.7**	**2522.5**	**20373.**	**4165.3**
Stddev	2.6	1.6	38.	4.9
%RSD	.09276	.06203	.18747	.11834
#1	2770.9	2523.6	20400.	4168.7
#2	2774.5	2521.4	20346.	4161.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.715%	97.877%	92.735%	109.33%
Range				

Sample Name: 480-125681-A-7-D Acquired: 10/16/2017 15:05:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00861	318.66	.07096	.89761	4.2859
Stddev	.00035	.53	.00132	.00062	.0289
%RSD	4.0388	.16613	1.8592	.06938	.67512
#1	.00836	318.29	.07003	.89717	4.2654
#2	.00885	319.04	.07189	.89805	4.3063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00179	593.58	.04138	.1514	.11262
Stddev	.00016	4.45	.00009	.0091	.00077
%RSD	8.6826	.74962	.21580	6.037	.68476
#1	.00168	596.73	.04132	.1449	.11316
#2	.00190	590.44	.04145	.1579	.11207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.85983	18.855	F 555.04	24.356	.10221
Stddev	.00098	.046	2.33	.165	.00095
%RSD	.11413	.24504	.42041	.67938	.92674
#1	.86052	18.822	553.39	24.239	.10154
#2	.85913	18.887	556.69	24.473	.10288
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			540.00		
Low Limit			-.05000		

Sample Name: 480-125681-A-7-D Acquired: 10/16/2017 15:05:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**84.291**	**6.8272**	**.05893**	**72.006**	**.41796**
Stddev	.140	.0101	.00017	.457	.00124
%RSD	.16606	.14838	.28207	.63464	.29667
#1	84.192	6.8343	.05904	71.683	.41884
#2	84.390	6.8200	.05881	72.329	.41708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.1184**	**36.945**	**.13036**	**.00097**	**.94652**
Stddev	.0050	.024	.00084	.00150	.00636
%RSD	.23833	.06544	.64594	154.32	.67156
#1	2.1220	36.928	.13096	.00203	.95101
#2	2.1148	36.962	.12977	-.00009	.94202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.47285**	**1.4280**	F **23.363**	**-.01913**	**.20021**
Stddev	.00380	.0090	.234	.00002	.00007
%RSD	.80422	.63283	1.0016	.10517	.03312
#1	.47554	1.4217	23.197	-.01915	.20017
#2	.47016	1.4344	23.528	-.01912	.20026
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-7-D Acquired: 10/16/2017 15:05:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	F **28.365**
Stddev	.005
%RSD	.01634
#1	28.362
#2	28.368
Check ?	Chk Fail
High Limit	18.000
Low Limit	-.01000

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2776.0**	**2520.9**	**20930.**	**4142.6**
Stddev	5.8	.1	47.	2.0
%RSD	.21058	.00510	.22623	.04802
#1	2771.9	2520.8	20963.	4141.2
#2	2780.2	2521.0	20896.	4144.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.805%	97.814%	95.272%	108.73%
Range				

Sample Name: 480-125681-A-8-E Acquired: 10/16/2017 15:09:07 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02069**	**176.94**	**.09110**	**1.0721**	**7.3000**
Stddev	.00031	.11	.00129	.0024	.0366
%RSD	1.5111	.06491	1.4150	.22129	.50130
#1	.02091	177.02	.09019	1.0737	7.3259
#2	.02046	176.85	.09202	1.0704	7.2742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00237**	**670.99**	**.07898**	**.2061**	**.20925**
Stddev	.00008	2.58	.00058	.0150	.00075
%RSD	3.3643	.38507	.72914	7.303	.35970
#1	.00243	672.81	.07939	.2167	.20978
#2	.00231	669.16	.07857	.1954	.20871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.6543**	F **52.777**	F **554.80**	**29.477**	**.08412**
Stddev	.0097	.508	.31	.059	.00059
%RSD	.20848	.96256	.05644	.20144	.69552
#1	4.6611	52.418	554.57	29.519	.08371
#2	4.6474	53.137	555.02	29.435	.08453
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit		23.000	540.00		
Low Limit		-.01000	-.05000		

Sample Name: 480-125681-A-8-E Acquired: 10/16/2017 15:09:07 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**56.710**	**9.0578**	**.06853**	**73.382**	**.60513**
Stddev	.156	.0029	.00064	.055	.00150
%RSD	.27444	.03225	.93820	.07469	.24766
#1	56.820	9.0557	.06899	73.343	.60619
#2	56.600	9.0599	.06808	73.420	.60407
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.6947**	**63.986**	**.21256**	**.00690**	**.88769**
Stddev	.0078	.135	.00237	.00247	.00327
%RSD	.29073	.21043	1.1146	35.761	.36809
#1	2.7002	64.081	.21089	.00516	.88538
#2	2.6891	63.891	.21424	.00865	.89000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.81566**	**1.7854**	F **20.183**	**-.01140**	**.17070**
Stddev	.00310	.0020	.075	.00013	.00002
%RSD	.38063	.11418	.37221	1.1829	.01188
#1	.81785	1.7869	20.236	-.01131	.17069
#2	.81346	1.7840	20.130	-.01150	.17072
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-8-E Acquired: 10/16/2017 15:09:07 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**15.562**
Stddev	.111
%RSD	.71205
#1	15.640
#2	15.484
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2784.7**	**2485.0**	**21038.**	**4197.7**
Stddev	2.2	2.8	49.	12.6
%RSD	.07732	.11464	.23075	.30118
#1	2786.2	2487.0	21004.	4188.7
#2	2783.2	2482.9	21073.	4206.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.039%	96.421%	95.766%	110.18%
Range				

Sample Name: 480-125681-A-9-D Acquired: 10/16/2017 15:13:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00730**	**193.95**	**.11190**	**1.1523**	**7.0159**
Stddev	.00098	.72	.00032	.0010	.0707
%RSD	13.354	.36957	.28710	.08761	1.0083
#1	.00799	193.45	.11213	1.1530	6.9659
#2	.00661	194.46	.11168	1.1516	7.0659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00206**	**691.18**	**.04443**	**.2901**	**.20157**
Stddev	.00012	1.41	.00018	.0222	.00026
%RSD	5.9464	.20419	.39891	7.654	.13132
#1	.00215	690.19	.04456	.2744	.20175
#2	.00198	692.18	.04431	.3058	.20138
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **9.4693**	**8.1660**	F **578.06**	**25.626**	**.05569**
Stddev	.0149	.0177	1.22	.003	.00135
%RSD	.15758	.21707	.21021	.01022	2.4295
#1	9.4587	8.1534	577.20	25.628	.05665
#2	9.4798	8.1785	578.92	25.624	.05473
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	9.0000		540.00		
Low Limit	-.00400		-.05000		

Sample Name: 480-125681-A-9-D Acquired: 10/16/2017 15:13:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**62.577**	**5.3210**	**.08232**	**96.238**	**.91887**
Stddev	.003	.0016	.00014	.059	.00220
%RSD	.00522	.03047	.16806	.06088	.23933
#1	62.579	5.3222	.08242	96.196	.92043
#2	62.575	5.3199	.08222	96.279	.91732
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.2404**	**45.694**	**.32718**	**.00106**	**.94626**
Stddev	.0010	.051	.00434	.00179	.00475
%RSD	.03203	.11086	1.3280	168.29	.50188
#1	3.2397	45.729	.33025	.00233	.94290
#2	3.2412	45.658	.32410	-.00020	.94962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.63715**	F **10.320**	F **26.293**	**-.01692**	**.23531**
Stddev	.00372	.138	.064	.00131	.00007
%RSD	.58415	1.3395	.24290	7.7299	.02921
#1	.63978	10.417	26.247	-.01784	.23536
#2	.63451	10.222	26.338	-.01599	.23526
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit		9.0000	18.000		
Low Limit		-.00500	-.00500		

Sample Name: 480-125681-A-9-D Acquired: 10/16/2017 15:13:09 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**7.6832**
Stddev	.0021
%RSD	.02756
#1	7.6847
#2	7.6817
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2706.0**	**2545.8**	**21570.**	**4260.2**
Stddev	2.6	1.4	43.	1.7
%RSD	.09706	.05588	.20133	.04051
#1	2707.8	2546.8	21601.	4261.4
#2	2704.1	2544.8	21540.	4258.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	72.917%	98.782%	98.188%	111.82%
Range				

Sample Name: 480-125681-A-10-A Acquired: 10/16/2017 15:17:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01219**	**202.72**	**.07224**	**1.0749**	**3.8828**
Stddev	.00057	.11	.00611	.0059	.0056
%RSD	4.6648	.05517	8.4526	.54585	.14487
#1	.01179	202.80	.07656	1.0790	3.8788
#2	.01259	202.64	.06793	1.0707	3.8868
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00159**	**574.36**	**.08674**	**.1981**	F **123.71**
Stddev	.00006	.68	.00037	.0090	.94
%RSD	3.8470	.11863	.43107	4.527	.75779
#1	.00155	573.88	.08700	.2044	123.04
#2	.00164	574.84	.08647	.1917	124.37
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit					18.000
Low Limit					-.00400

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.54393**	F **39.857**	F **829.77**	**21.686**	**4.7024**
Stddev	.00100	.097	.60	.022	.0018
%RSD	.18438	.24384	.07206	.10376	.03855
#1	.54322	39.788	829.35	21.670	4.7011
#2	.54463	39.926	830.19	21.702	4.7037
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
High Limit		23.000	540.00		
Low Limit		-.01000	-.05000		

Sample Name: 480-125681-A-10-A Acquired: 10/16/2017 15:17:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**69.521**	**5.8788**	**.06540**	**62.344**	**.39989**
Stddev	.061	.0080	.00081	.315	.00122
%RSD	.08787	.13613	1.2382	.50479	.30615
#1	69.478	5.8731	.06598	62.122	.40076
#2	69.564	5.8844	.06483	62.567	.39903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.3377**	**51.793**	**.11606**	**.00271**	**.97349**
Stddev	.0178	.227	.00008	.00379	.01834
%RSD	.33372	.43842	.06692	139.74	1.8834
#1	5.3503	51.954	.11611	.00540	.98646
#2	5.3251	51.633	.11600	.00003	.96053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.2733**	**1.3535**	F **22.067**	**.02425**	**.30928**
Stddev	.0083	.0037	.033	.00643	.00026
%RSD	.64943	.27671	.14807	26.535	.08280
#1	1.2791	1.3508	22.044	.02880	.30946
#2	1.2674	1.3561	22.090	.01970	.30910
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			18.000		
Low Limit			-.00500		

Sample Name: 480-125681-A-10-A Acquired: 10/16/2017 15:17:06 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	**15.863**
Stddev	.014
%RSD	.09079
#1	15.853
#2	15.873
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2816.6**	**2440.3**	**20950.**	**4194.7**
Stddev	.9	2.4	33.	1.9
%RSD	.03326	.09922	.15726	.04514
#1	2816.0	2438.6	20974.	4196.1
#2	2817.3	2442.1	20927.	4193.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.899%	94.690%	95.366%	110.10%
Range				

Sample Name: blank Acquired: 10/16/2017 15:21:08 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00015**	**.04306**	**-.00158**	**.00195**	**.00091**
Stddev	.00046	.02241	.00076	.00031	.00001
%RSD	304.52	52.047	48.015	15.717	.63883
#1	-.00017	.05891	-.00104	.00174	.00091
#2	.00047	.02722	-.00211	.00217	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.14461**	**.00005**	**.0325**	**.01159**
Stddev	.00003	.00162	.00005	.0018	.00128
%RSD	76.255	1.1203	106.96	5.526	11.052
#1	-.00002	.14347	.00001	.0312	.01250
#2	-.00006	.14576	.00008	.0338	.01069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**.00467**	**.15005**	**.06405**	**.00241**
Stddev	.00016	.00072	.00882	.04736	.00161
%RSD	26.995	15.378	5.8768	73.933	67.076
#1	.00047	.00518	.14382	.03057	.00355
#2	.00069	.00416	.15629	.09754	.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:21:08 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01463**	**.00110**	**-.00003**	**.02571**	**.00002**
Stddev	.00177	.00000	.00008	.00647	.00001
%RSD	12.090	.42396	278.70	25.158	71.335
#1	.01338	.00110	-.00008	.03029	.00003
#2	.01588	.00109	.00003	.02114	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00153**	**.00883**	**.00147**	**.00123**	**-.00232**
Stddev	.00012	.00052	.00076	.00086	.00393
%RSD	7.7115	5.8931	51.602	69.907	169.14
#1	.00144	.00920	.00094	.00184	.00046
#2	.00161	.00846	.00201	.00062	-.00510
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00499**	**.00084**	**.00633**	**-.00002**	**.00037**
Stddev	.00023	.00006	.00024	.00031	.00013
%RSD	4.6867	7.0857	3.7191	1291.3	34.442
#1	.00482	.00079	.00616	-.00024	.00046
#2	.00515	.00088	.00649	.00020	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:21:08 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00366
Stddev	.00082
%RSD	22.325
#1	.00308
#2	.00424
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3787.7	2659.7	22438.	3911.3
Stddev	6.4	2.6	128.	6.1
%RSD	.17016	.09590	.57039	.15601
#1	3783.2	2657.9	22528.	3915.7
#2	3792.3	2661.5	22347.	3907.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.07%	103.20%	102.14%	102.66%
Range				

Sample Name: blank Acquired: 10/16/2017 15:24:46 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00076**	**.01703**	**.00024**	**.00079**	**.00079**
Stddev	.00043	.01721	.00167	.00015	.00008
%RSD	57.254	101.02	691.92	19.132	10.247
#1	.00106	.02920	.00142	.00068	.00085
#2	.00045	.00487	-.00094	.00089	.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.12108**	**.00006**	**-.0047**	**.00615**
Stddev	.00000	.00207	.00004	.0233	.00000
%RSD	17.396	1.7066	73.185	496.1	.04300
#1	-.00000	.12255	.00009	-.0211	.00615
#2	-.00001	.11962	.00003	.0118	.00615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.00408**	**.12261**	**.03208**	**.00105**
Stddev	.00047	.00020	.00205	.02263	.00082
%RSD	142.89	4.8986	1.6698	70.548	77.845
#1	-.00000	.00422	.12406	.04809	.00047
#2	.00066	.00394	.12116	.01608	.00163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:24:46 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01444**	**.00115**	**-.00003**	**.01417**	**.00038**
Stddev	.00402	.00001	.00005	.00377	.00011
%RSD	27.807	1.1643	191.24	26.624	28.344
#1	.01728	.00116	.00001	.01684	.00045
#2	.01160	.00114	-.00006	.01151	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00117**	**-.00226**	**.00012**	**.00234**	**-.00422**
Stddev	.00046	.00053	.00113	.00012	.01541
%RSD	39.605	23.542	901.75	5.0196	364.99
#1	.00084	-.00263	-.00067	.00243	-.01512
#2	.00150	-.00188	.00092	.00226	.00668
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.00068**	**.00402**	**.00006**	**-.00013**
Stddev	.00011	.00008	.00052	.00026	.00028
%RSD	19.345	12.345	12.881	415.86	206.72
#1	.00068	.00074	.00438	-.00012	-.00033
#2	.00051	.00062	.00365	.00025	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:24:46 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00256
Stddev	.00003
%RSD	1.3395
#1	.00254
#2	.00259
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3781.1	2656.7	22378.	3865.6
Stddev	3.6	1.9	63.	12.6
%RSD	.09504	.07199	.28133	.32681
#1	3778.6	2658.1	22423.	3856.6
#2	3783.7	2655.4	22334.	3874.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.89%	103.08%	101.87%	101.46%
Range				

Sample Name: blank Acquired: 10/16/2017 15:40:29 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**-.02491**	**.00041**	**-.00052**	**.00030**
Stddev	.00040	.03107	.00038	.00011	.00002
%RSD	769.34	124.74	92.363	21.862	7.3854
#1	-.00023	-.00294	.00014	-.00060	.00029
#2	.00033	-.04688	.00068	-.00044	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.04720**	**-.00001**	**-.0122**	**.00167**
Stddev	.00002	.00050	.00008	.0113	.00009
%RSD	21.837	1.0537	755.80	92.14	5.3200
#1	.00007	.04685	.00004	-.0043	.00161
#2	.00009	.04756	-.00006	-.0202	.00174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00105**	**.04222**	**.04412**	**.00129**
Stddev	.00058	.00064	.00329	.02215	.00054
%RSD	1019.1	60.516	7.7969	50.213	41.592
#1	-.00036	.00150	.03989	.02845	.00091
#2	.00047	.00060	.04455	.05978	.00166
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:40:29 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00837**	**.00054**	**-.00006**	**.00591**	**.00007**
Stddev	.00383	.00002	.00004	.00149	.00014
%RSD	45.765	3.5088	63.318	25.295	184.80
#1	.00566	.00056	-.00003	.00485	.00017
#2	.01108	.00053	-.00009	.00697	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00113**	**-.00909**	**-.00031**	**-.00091**	**-.00952**
Stddev	.00026	.00025	.00045	.00233	.00071
%RSD	23.029	2.7017	147.31	257.16	7.4455
#1	.00095	-.00926	-.00063	-.00256	-.01003
#2	.00132	-.00892	.00001	.00074	-.00902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.00023**	**.00188**	**-.00021**	**.00031**
Stddev	.00012	.00009	.00022	.00048	.00041
%RSD	17.473	40.336	11.538	229.93	131.74
#1	.00059	.00029	.00172	.00013	.00002
#2	.00076	.00016	.00203	-.00055	.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:40:29 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00083
Stddev	.00003
%RSD	3.9902
#1	.00081
#2	.00086
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3783.8	2665.6	22564.	3913.3
Stddev	1.7	1.7	61.	11.9
%RSD	.04466	.06220	.26857	.30398
#1	3785.0	2666.7	22521.	3921.7
#2	3782.6	2664.4	22607.	3904.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.96%	103.43%	102.71%	102.71%
Range				

Sample Name: blank Acquired: 10/16/2017 15:44:07 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00077**	**-.00702**	**-.00040**	**-.00088**	**.00011**
Stddev	.00026	.00544	.00018	.00030	.00001
%RSD	33.871	77.435	45.344	34.294	10.717
#1	.00059	-.01086	-.00053	-.00066	.00010
#2	.00095	-.00318	-.00027	-.00109	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.02255**	**.00002**	**-.0014**	**.00084**
Stddev	.00010	.00185	.00011	.0020	.00010
%RSD	1559.4	8.2139	705.69	142.0	12.210
#1	.00007	.02386	.00009	-.0028	.00091
#2	-.00008	.02124	-.00006	.0000	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.00093**	**.01619**	**.01001**	**.00135**
Stddev	.00005	.00026	.00118	.01579	.00053
%RSD	14.197	28.309	7.3099	157.76	39.243
#1	-.00034	.00074	.01535	-.00116	.00173
#2	-.00042	.00112	.01702	.02118	.00098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:44:07 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00185**	**.00021**	**-.00013**	**-.00245**	**-.00008**
Stddev	.00132	.00003	.00006	.00675	.00009
%RSD	71.346	14.737	48.062	275.99	117.65
#1	.00092	.00024	-.00008	.00233	-.00001
#2	.00278	.00019	-.00017	-.00722	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

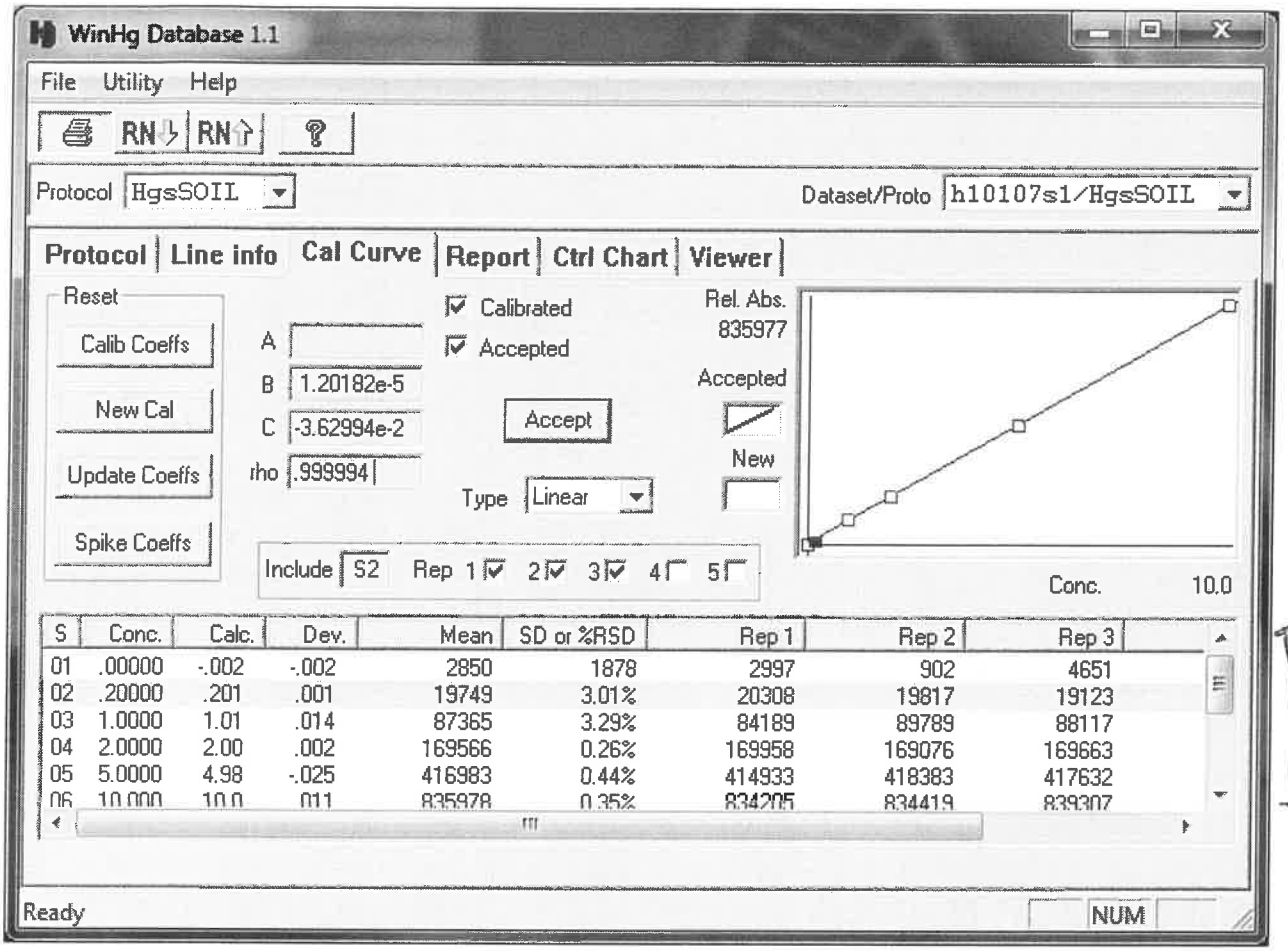
Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}2
IS Ref	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00142**	**-.00959**	**-.00029**	**-.00071**	**.00783**
Stddev	.00035	.00201	.00016	.00053	.00400
%RSD	24.778	20.935	55.956	74.614	51.093
#1	.00167	-.01101	-.00018	-.00034	.00500
#2	.00117	-.00817	-.00041	-.00109	.01066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Line	189.989 {477}	407.771 { 83}	334.904 {101}	190.856 {477}	292.402 {115}
IS Ref	(In2306)	(Y_3774)	(Y_3600)	(In2306)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.00004**	**.00081**	**.00151**	**.00030**
Stddev	.00044	.00000	.00007	.00136	.00010
%RSD	189.31	8.4870	9.0934	90.170	33.751
#1	-.00008	.00005	.00075	.00248	.00023
#2	.00055	.00004	.00086	.00055	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 10/16/2017 15:44:07 Type: Unk
Method: ICAP2 June 2017(v154) Mode: CONC Corr. Factor: 1.000000
User: jrk Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn2062
Line	206.200 {163}
IS Ref	(Y_3600)
Units	ppm
Avg	.00046
Stddev	.00030
%RSD	66.257
#1	.00067
#2	.00024
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3793.1	2666.6	22387.	3893.2
Stddev	1.9	.4	54.	14.2
%RSD	.05114	.01551	.23952	.36586
#1	3791.7	2666.3	22425.	3883.1
#2	3794.5	2666.9	22349.	3903.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.21%	103.47%	101.91%	102.19%
Range				



L2
10-10-17

4291237

cal: H10107cs
Run: H10107s1
Batch: 381100

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 2 Ck2ICV Seq: 1 14:54:22 10 Oct 17 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		95.5	2.87	3.00	ppb	.000

BB 10-10-17

*** Check Standard: 1 Ck1CCB Seq: 2 14:56:33 10 Oct 17 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.009	.200	ppb	.000

4291236

BB 10-10-17

*** Check Standard: 4 Ck4ICVL Seq: 3 14:58:04 10 Oct 17 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		77.6	.155	.200	ppb	.000

*** Check Standard: 3 Ck3CCV Seq: 4 14:59:36 10 Oct 17 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		93.0	1.86	2.00	ppb	.000

*** Check Standard: 1 Ck1CCB Seq: 5 15:00:56 10 Oct 17 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.036	.200	ppb	.000

*** Sample ID: Seq: 6 15:02:31 10 Oct 17 HG
MB 480-381100/1-A

Hg	-.004	ppb	.000	-.004

*** Sample ID: Seq: 7 15:04:10 10 Oct 17 HG
LCSSRM 480-381100/2- at 10
BB 10-10-17

Hg	3.57	ppb	.000	3.57

*** Sample ID: Seq: 8 15:05:34 10 Oct 17 HG
480-125458-B-3-C

Hg	.138	ppb	.000	.138

*** Sample ID: Seq: 9 15:07:35 10 Oct 17 HG
480-125543-A-1-A

Hg	.132	ppb	.000	.132

*** Sample ID: Seq: 10 15:09:15 10 Oct 17 HG
480-125542-A-1-A

Hg	.630	ppb	.000	.630

*** Sample ID: Seq: 11 15:10:36 10 Oct 17 HG
480-125579-F-1-A

Hg	3.42	ppb	.000	3.42

*** Sample ID: Seq: 12 15:12:08 10 Oct 17 HG
480-125579-F-1-Asd@5

Hg	.657	ppb	.000	.657

*** Sample ID: Seq: 13 15:13:38 10 Oct 17 HG
480-125579-F-1-B MS

Hg	7.78	ppb	.000	7.78

*** Sample ID: Seq: 14 15:15:21 10 Oct 17 HG
480-125579-F-1-C MSD

Hg	7.48	ppb	.000	7.48

*** Sample ID: Seq: 15 15:16:42 10 Oct 17 HG
480-125579-F-2-A

Hg	.130	ppb	.000	.130

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 3 Ck3CCV Seq: 16 15:18:25 10 Oct 17 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.0	1.92	2.00	ppb	.000

*** Check Standard: 1 Ck1CCB Seq: 17 15:21:18 10 Oct 17 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.033	.200	ppb	.000

*** Sample ID: Seq: 18 15:22:50 10 Oct 17 HG
480-125579-F-3-A

Hg	.422	ppb	.000	.422

*** Check Standard: 3 Ck3CCV Seq: 19 15:24:11 10 Oct 17 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		95.8	1.92	2.00	ppb	.000

*** Check Standard: 1 Ck1CCB Seq: 20 15:25:32 10 Oct 17 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.029	.200	ppb	.000

*** Check Standard: 4 Ck4CCVL Seq: 21 15:27:07 10 Oct 17 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		92.5	.185	.200	ppb	.000

METALS BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Batch Number: 381758 Batch Start Date: 10/13/17 16:34 Batch Analyst: Weiland, Mackenzie J

Batch Method: 3050B Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	MED_01_Si 00103	MED_01_W1 00046	MED_02_W2 00042
MB 480-381758/1		3050B, 6010C		CALC NOT SET TO RUN	+0.5283 g	50 mL			
LCSSRM 480-381758/2		3050B, 6010C		CALC NOT SET TO RUN	+0.5026 g	50 mL			
LCDSRM 480-381758/3		3050B, 6010C		CALC NOT SET TO RUN	+0.4988 g	50 mL			
480-125579-E-1	MW-8 (4-6)	3050B, 6010C	T	CALC NOT SET TO RUN	+0.5060 g	50 mL			
480-125579-F-1 MS	MW-8 (4-6)	3050B, 6010C	T	CALC NOT SET TO RUN	+0.5206 g	50 mL	0.5 mL	0.5 mL	0.5 mL
480-125579-E-1 MSD	MW-8 (4-6)	3050B, 6010C	T	CALC NOT SET TO RUN	+0.5145 g	50 mL	0.5 mL	0.5 mL	0.5 mL
480-125579-F-2	MW-8 (13-14)	3050B, 6010C	T	CALC NOT SET TO RUN	+0.5181 g	50 mL			
480-125579-F-3	DUP-100817	3050B, 6010C	T	CALC NOT SET TO RUN	+0.4950 g	50 mL			
LCS 480-381758/26		3050B, 6010C		CALC NOT SET TO RUN	+0.4991 g	50 mL	0.5 mL	0.5 mL	0.5 mL
LCSD 480-381758/27		3050B, 6010C		CALC NOT SET TO RUN	+0.5066 g	50 mL	0.5 mL	0.5 mL	0.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MED_03_Ag 00117	MED_04_Sn 00104	MED_05_S 00062	MED_SRM_D087 00012		
MB 480-381758/1		3050B, 6010C							
LCSSRM 480-381758/2		3050B, 6010C					+0.5026 g		
LCDSRM 480-381758/3		3050B, 6010C					+0.4988 g		
480-125579-E-1	MW-8 (4-6)	3050B, 6010C	T						
480-125579-F-1 MS	MW-8 (4-6)	3050B, 6010C	T	0.5 mL	0.5 mL	0.5 mL			
480-125579-E-1 MSD	MW-8 (4-6)	3050B, 6010C	T	0.5 mL	0.5 mL	0.5 mL			
480-125579-F-2	MW-8 (13-14)	3050B, 6010C	T						
480-125579-F-3	DUP-100817	3050B, 6010C	T						
LCS 480-381758/26		3050B, 6010C		0.5 mL	0.5 mL	0.5 mL			
LCSD 480-381758/27		3050B, 6010C		0.5 mL	0.5 mL	0.5 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Batch Number: 381758 Batch Start Date: 10/13/17 16:34 Batch Analyst: Weiland, Mackenzie J

Batch Method: 3050B Batch End Date:

Batch Notes	
Balance ID	25850472
Batch Comment	70613759 (Push Filters)
Blank Soil Lot Number	3978952
First End time	2341
Lot # of hydrochloric acid	4265790
Lot # of Nitric Acid	4276984
Hot Block ID	F
Oven, Bath or Block Temperature 2	Auto Degrees C
First Start time	1634
Thermometer ID	151913830
Digestion Tube/Cup ID	1705110
Uncorrected Temperature	92.493.3 Celsius
Uncorrected Temperature 2	Auto Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Batch Number: 381100 Batch Start Date: 10/10/17 13:30 Batch Analyst: Booth, Bryan M

Batch Method: 7471B Batch End Date: 10/10/17 14:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MED_SRM_D087 00006	MEH_HG1_WKG 01592		
MB 480-381100/1		7471B, 7471B		+0.5849 g	50 mL				
LCSSRM 480-381100/2		7471B, 7471B		+0.1598 g	50 mL	+0.1598 g			
480-125579-F-1	MW-8 (4-6)	7471B, 7471B	T	+0.5835 g	50 mL				
480-125579-F-1 MS	MW-8 (4-6)	7471B, 7471B	T	+0.5961 g	50 mL		2 mL		
480-125579-F-1 MSD	MW-8 (4-6)	7471B, 7471B	T	+0.5859 g	50 mL		2 mL		
480-125579-F-2	MW-8 (13-14)	7471B, 7471B	T	+0.6071 g	50 mL				
480-125579-F-3	DUP-100817	7471B, 7471B	T	+0.6417 g	50 mL				

Batch Notes	
Hydroxylamine Hydrochloride ID	4164262
Batch Comment	1 & 2 Prep 1050
Digestion End Time	1400
Digestion Start Time	1330
Lot # of hydrochloric acid	4086368
Lot # of Nitric Acid	4185732
Hot Block ID	HG-C
Potassium Persulfate ID	4140298
Potassium Permanganate ID	4187796
Oven, Bath or Block Temperature 1	94.7
Pipette ID	AN-6 for Std 1+2
Stannous Chloride ID	4176187
Thermometer ID	160510054
Digestion Tube/Cup ID	1605323
Uncorrected Temperature	95.5 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG No.:

Project: RGE - Park St.

Client Sample ID	Lab Sample ID
MW-8 (4-6)	480-125579-1
MW-8 (13-14)	480-125579-2
DUP-100817	480-125579-3

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 08/17/2009 12:10

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Buffalo Job Number: 480-125579-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 08/17/2009 12:10

Analyte	Wavelength/ Mass	XRL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 10/11/2017 04:49 End Date: 10/11/2017 04:49

Lab Sample ID	D/F	Type	Time	Analytes: %Sol	Moist
ZZZZZZ			04:49		
ZZZZZZ			04:49		
ZZZZZZ			04:49		
480-125579-1	1	T	04:49	X	X
480-125579-1 MS	1	T	04:49	X	X
480-125579-1 MSD	1	T	04:49	X	X
480-125579-2	1	T	04:49	X	X
480-125579-3	1	T	04:49	X	X
ZZZZZZ			04:49		
ZZZZZZ			04:49		
ZZZZZZ			04:49		
ZZZZZZ			04:49		
ZZZZZZ			04:49		
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ZZZZZZ			04:49		
ZZZZZZ			04:49		

Prep Types

T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Buffalo Job No.: 480-125579-1

SDG No.:

Batch Number: 381195 Batch Start Date: 10/11/17 04:49 Batch Analyst: Williams, Christopher S

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
480-125579-A-1	MW-8 (4-6)	Moisture	T	4	4.40 g	10.29 g	9.37 g		
480-125579-A-1 MS	MW-8 (4-6)	Moisture	T	4	4.40 g	10.29 g	9.37 g		
480-125579-A-1 MSD	MW-8 (4-6)	Moisture	T	4	4.40 g	10.29 g	9.37 g		
480-125579-A-2	MW-8 (13-14)	Moisture	T	5	4.40 g	12.30 g	10.85 g		
480-125579-A-3	DUP-100817	Moisture	T	6	4.40 g	7.79 g	7.27 g		

Batch Notes	
Date samples were placed in the oven	11OCT2017
Time samples were place in the oven	0500

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record

187970

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	
Company Name:	RGE/Arcadis
Address:	295 Woodcliff Drive
City/State/Zip:	Fairport NY 14429
Phone:	585.385-0090
Fax:	
Project Name:	RGE Park St
Site:	
P O #	

Project Manager: Brian Ahrens
Tel/Fax:
Site Contact: Klaus Beyrle
Lab Contact: Melissa Deyo
Date: 10/8/17
Carrier:
COC No: 1 of 1 COCs
Sampler:

Analysis Turnaround Time
☐ CALENDAR DAYS ☐ WORKING DAYS
TAT if different from Below Standard
☐ 2 weeks
☐ 1 week
☐ 2 days
☐ 1 day

For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:
480-125579 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	VOC TCL	SVOC TCL	TAL Metals	Hg	Sample Specific Notes:
MW-8 (4-6)	10/8/17	1130		S	6			X	X	X	X	
MW-8 (13-14)	↓	1200		S	18		X	X	X	X	X	
DUP-100817	↓	–		S	6			X	X	X	X	
TRIP BLANK	–	–		W	2			X				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Per Contract
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☒ Yes ☐ No
Custody Seal No.:
Cooler Temp. (°C): Obs'd: 2.1 Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Nicholas Beyrle	Arcadis	10/9/17 1330	[signature]	TA	10/10/17 0950
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-125579-1

Login Number: 125579
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	False	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	FROZE 10/10/17 1030
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	arcadis
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Appendix I

Deed Restriction

Mary F. Strickland , County Clerk
Livingston County Government Center
6 Court Street, Room 201
Geneseo, New York 14454
(585) 243-7010 ~ Fax (585) 243-7928

Livingston County Clerk Recording Page

Received From:
BARCLAY DAMON LLP

Return To:

No Envelope

Document Type: **DECLARATION OF COVENANTS AND RESTRICTIONS**

Receipt Number: 00609279

Grantor	Grantee
NEW YORK STATE UNIVERSITY OF	NEW YORK STATE UNIVERSITY OF

Recorded Information:

Recording Fee	$45.00
Pages Fee	$40.00
Mortage Tax Affidavit	$0.00
Total Fees:	$85.00

Property Located in Town of **Geneseo**
Village of **Geneseo**

State of New York
County of Livingston

Recorded on the 29th date of June, 2018 at 01:23:47 PM in Liber **1286** of **Deeds** at beginning page **1752**, ending at page **1760** and examined.

Mary F Strickland

Livingston County Clerk

This sheet constitutes the Clerk's endorsement required by section 319 of the Real Property Law of the State of New York

ams 06/29/2018 01:23:48 PM

Do Not Detach

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT, is made the 21 day of June, 2018, by the State University of New York, an agency of the State of New York with offices at University Plaza Albany, New York, by and on behalf of SUNY College at Geneseo, 1 College Circle, Geneseo, New York 14454.

WHEREAS, RG&E Geneseo-Park St Former MGP Site ("Site"), Site No.: V00731, is the subject of a Voluntary Cleanup Agreement executed by Rochester Gas and Electric Corporation ("RG&E") and the New York State Department of Environmental Conservation ("Department"), namely those parcels of real property formerly known as 4 and 6 Park Street in the Village of Geneseo, County of Livingston, State of New York, being the same as (or part of) that property conveyed to The People of the State of New York, acting by and through the Board of Trustees of the State University of New York by Gary L. Least by two deeds dated September 27, 2001 and recorded on October 31, 2001 in the Livingston County Clerk's office in Liber 1053 Page 241and Liber 1053 Page 246, and being more particularly described in Schedule "A", attached to this declaration and made a part hereof, and hereinafter referred to as "the Restricted Property"; and

WHEREAS, the Site may at one time have been the location of a former Manufactured Gas Plant ("MGP") operated by the historic predecessor entities which, by merger and/or consolidation, led to the corporate existence of RG&E, and the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the Existing Contamination (as defined hereafter) disposed at the Restricted Property and such remedy requires that the Restricted Property be subject to restrictive covenants; and

WHEREAS, said "Existing Contamination," as defined in the Voluntary Cleanup Agreement Section I. B., is: "any substance which is identified and characterized to the Department's satisfaction; provided that such substance either:

1) is included on the list of hazardous substances promulgated pursuant to ECL § 37-0103, and is a component of the manufactured gas plant wastes associated with the MGP operations believed to have been operated in the past at the Site, or otherwise resulted from the operations of RG&E or its predecessor entities; or

2) is included on the list of hazardous substances promulgated pursuant to ECL § 37-0103, and is commingled or intermingled with wastes which are a component of manufactured gas plant wastes associated with the MGP operations believed to have been operated in the past at the Site, or which otherwise resulted from the operations of RG&E or its predecessor entities, in a circumstance whereby the level of contamination set forth in Subparagraph 1 supra, if present alone, would independently require the implementation of remedial action."

NOW, THEREFORE, The People of the State of New York, acting by and through the Board of Trustees of the State University of New York, for itself and its successors and/or assigns, covenants that:

First, the Restricted Property subject to this Declaration of Covenants and Restrictions, is as shown on a map attached to this declaration as Schedule "B" and made a part hereof.

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, where Existing Contamination remains at the Restricted Property subject to the provisions of the Site Management Plan ("SMP"), there shall be no construction, use or occupancy of the Restricted Property that results in the disturbance or excavation of the Restricted Property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils. The SMP may be obtained from the New York State Department of Environmental Conservation, Division of Environmental Remediation, Site Control Section, 625 Broadway, Albany, NY 12233.

Third, the owner of the Restricted Property shall not disturb, remove, or otherwise interfere with the installation, use, operation, and maintenance of engineering controls required for the Remedy, which are described in the SMP, unless in each instance the owner first obtains a written waiver of such prohibition from the Department or Relevant Agency.

Fourth, the owner of the Restricted Property shall prohibit the Restricted Property from ever being used for purposes other than non-residential uses, such as a parking lot, and Commercial uses as described in 6 NYCRR Part 375-1.8(g)(2)(iii) and Industrial uses as described in 6 NYCRR 375-1.8(g)(2)(iv), without the express written waiver of such prohibition by the Department or Relevant Agency.

Fifth, the use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Livingston County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department or Relevant Agency.

Sixth, the owner of the Restricted Property shall provide a periodic certification, prepared and submitted by a professional engineer or environmental professional acceptable to the Department or Relevant Agency, which will certify that the institutional and engineering controls put in place are unchanged from the previous certification, comply with the SMP, and have not been impaired.

Seventh, the owner of the Restricted Property shall continue in full force and effect any institutional and engineering controls required for the Remedy and maintain such controls, unless the owner first obtains permission to discontinue such controls from the Department or Relevant Agency, in compliance with the approved SMP, which is incorporated and made enforceable hereto, subject to modifications as approved by the Department or Relevant Agency.

Eighth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Restricted Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Department or Relevant Agency of the prohibitions and restrictions that the Voluntary Cleanup Agreement requires to be recorded, and hereby covenant not to contest the authority of the Department or Relevant Agency to seek enforcement.

Ninth, any deed of conveyance of the Restricted Property, or any portion thereof, shall recite, unless the Department or Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

State University of New York

By: Denise C Battles

Print Name: Denise Battles

Title: President

Date: 6/29/18

Grantor's Acknowledgment

STATE OF NEW YORK
) ss:
COUNTY OF LIVINGSTON

On the 29th day of June, in the year 2018, before me, the undersigned, personally appeared Denise Battles, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public State of New York

Sherri L. Bush

Sherri L. Bush, Notary Public
State of New York, Wyoming County
Reg No. 01BU6020854
Commission Expires Mar 22, 20 19

SCHEDULE "A"
to
Declaration of Covenants and Restrictions
For RG&E Geneseo-Park St Former MGP Site
Site No. V00731

METES AND BOUNDS DESCRIPTION OF RESTRICTED PROPERTY AS FILED IN LIVINGSTON COUNTY CLERK'S OFFICE AT LIBER 1053 PAGE 241 & LIBER 1053 PAGE 246

Property Address: 4 Park Street
Tax Map No. 80.16-1-34

ALL THAT TRACT OR PARCEL OF LAND, situate in the Village of Geneseo, Livingston County, New York, bounded and described as follows:

Beginning in the north line of Park Street, at the southeast corner of lands formerly of Frank K. Cook;

Running thence northerly, on the east line of said Cook, and a continuation thereof, 3 chains and 18 links, more or less, to land, now or formerly of Caroline Foote;

Running thence easterly, on the south line of said Foote's land, 1 chain and 18 links to the west line of Village Lots fronting on the west side of Main Street;

Running thence southerly, on the west line of said Village Lots, and parallel with the first mentioned line, 3 chains and 18 links, more or less, to the north line of Park Street; and

Running thence westerly, on the last mentioned line, 1 chain and 18 links to the place of beginning.

Containing 0.36 of an acre of land, more or less.

Being and intending to convey Parcel 2 as set out in a Bargain and Sale Deed from Paul J. Least to Gary L. Least dated September 15, 1977 and recorded in the Livingston County Clerks' Office on the same date in Liber 513 of Deeds at Page 205.

Property Address: 6 Park Street
Tax Map No. 80.16-1-33

ALL THAT TRACT OR PARCEL OF LAND, situated on the north side of Park Street in the Village of Geneseo, County of Livingston and the State of New York, bounded and described as follows:

Commencing at a point in the north line of Park Street, said point being located 178.6 feet, more or less, westerly from the west edge of the sidewalk on the west side of Main Street,

said point also being the southwesterly corner of lands of C. Leslie Brion as described in a Deed recorded in the Office of the Livingston County Clerk in Liber 316 of Deeds, Page 180;

Thence (1) North 77° 30' 00" West and along the north line of Park Street for a distance of 81.18 feet to an iron pipe, said point being the intersection of the northerly line of Park Street with and easterly line of lands of the State of New York (State University College at Geneseo);

Thence (2) North 14° 33' 00" East and along an easterly line of lands of the State of New York for a distance of 214.52 feet to an iron pipe;

Thence (3) South 79° 35' 40" East and along a southerly line of lands of the State of New York for a distance of 28.94 feet to an iron pipe, said point being the southwest corner of lands of Dorothy Wright as described in Liber 373 of Deeds, Page 883;

Thence (4) South 76° 01' 37" East and along the southerly line of said Wright for a distance of 52.27 feet to an iron pipe at the northwest corner of the aforementioned Brion lands;

Thence (5) South 14° 33' 00" West and along the westerly line of said Brion lands for a distance of 214.23 feet to the point of beginning.

Containing 0.40034 acres.

Together with all of the right, title and interest of the Grantor in and to rights of way to and from the said premises as they may exist.

The said premises are more particularly described on a map of a survey made by Denluck, Thomas, McGrail & Associates dated October 5, 1970 which is recorded in the Livingston County Clerk's Office in Liber 407, Page 949.

Being and intending to convey Parcel 3 as set forth in a Bargain and Sale Deed from Paul J. Least to Gary L. Least dated September 15, 1977 and recorded in the Livingston County Clerk's Office on the same date in Liber 513 of Deeds at Page 205.

METES AND BOUNDS DESCRIPTION OF RESTRICTED PROPERTY (AS MEASURED) IN THE INSTRUMENT SURVEY COMPLETED AND SIGNED JUNE 21, 2018 BEING AND INTENDING TO DESCRIBE THE SAME PROPERTY AS THE ABOVE LEGAL DESCRIPTION

TAX ID NO. 80.16 – 1 – 34
AND TAX ID NO. 80.16 – 1 – 33
Area: 0.778 Acres

All that piece or parcel of land situate in the Village of Geneseo, County of Livingston, State of New York and being part bounded and described as follows:

Beginning at a point in the northerly right of way of Park Street (66' wide), said point being 175.8 feet westerly from the westerly right of way of Main Street (N.Y.S. Route 39) (99' wide) at its intersection with the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 34) on the east and the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 33) on the west; thence

1. North 82°50' 41" West, along the northerly right of way of Park Street (66' wide) a distance of 81.18 feet to a point on the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 33) on the east and the lands of The State University of New York (reputed owner) (Tax ID. No. 80.15 – 1 – 1.1) on the west; thence

2. Northerly and Easterly along the last mentioned division line the following two (2) courses and distances:

   1) North 09°12' 19" East, a distance of 214.52 feet to a point; thence

   2) South 84°56' 21" East, a distance of 28.94 feet to a point on the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 33) on the south and the lands of Geneseo Foundation, Inc. (reputed owner) (Tax ID. No. 80.16 – 1 – 32.2) on the north; thence

3. South 81°14' 29" East, along the last mentioned division line and the lands of Caplan Ventures, Barry Caplan (reputed owner) (Tax ID. No. 80.16 – 1 – 32.1) on the north a distance of 52.27 feet to a point on the division line between the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 33) on the west and the lands of The People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 34) on the east; thence

4. South 81°14' 29" East, a distance of 67.56 feet, along the division line between the lands of Caplan Ventures, Barry Caplan (reputed owner) (Tax ID. No. 80.16 – 1 – 32.1) on the north and the lands of the People of the State of New York (reputed owner) (Tax ID. No.

80.16 – 1 – 34) on the south to a point on the division line between the lands of the People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 34) on the south and the lands of 118 Main Street Geneseo, LLC (reputed owner) (Tax ID. No. 80.16 – 1 – 31) on the north; thence

5. South 80°22' 58" East, along the last mentioned division line a distance of 10.28 feet to a point on the division line between the lands of the People of the State of New York (reputed owner) (Tax ID. No. 80.16 – 1 – 34) on the west and the lands of Michael A. Bishop (reputed owner) (Tax ID. No. 80.16 – 1 – 35) on the east; thence

6. South 09°30' 09" West, along the last mentioned division line a distance of 211.82 feet to a point in the northerly right of way of Park Street (66' wide); thence

7. North 82°50' 41" West, along the northerly right of way of Park Street (66' wide) a distance of 76.77 feet to the point of beginning, being 0.778 acres more or less.

SCHEDULE "B"
to
Declaration of Covenants and Restrictions
For RG&E Geneseo-Park St Former MGP Site
Site No. V00731

MAP OF PROPERTY