



December 13, 2016
Project No. 104-0012

Ms. Maria Jon
U.S. Environmental Protection Agency
Emergency and Remedial Response Division
Eastern New York Section
290 Broadway
New York, New York 10007

November 2016 Sampling Report
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Dear Ms. Jon:

Please find enclosed one bound copy and one electronic copy of the *November 2016 Sampling Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York*. The report summarizes the methods and findings of the 2016 groundwater sampling program for Operable Unit 2. The next sampling round is scheduled for the first quarter of 2018.

Do not hesitate to call (412.374.0989) or email bjones@cardinalres.com to discuss the findings, or if you have any other questions about this report.

Sincerely,

CARDINAL RESOURCES

Barbara H. Jones, Principal

cc: Carroll & Dubies PRP Group
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November 2016 Sampling Report

Carroll and Dubies Superfund Site Town of Deerpark, Orange County, New York

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1.0 Introduction

This report summarizes the methods and results of a field sampling program performed on November 1 and 2, 2016 at the Carroll and Dubies Superfund Site (Site), Town of Deerpark, Orange County, New York. Monitoring wells OW-2, OW-5, OW-6, OW-10R, OW-13R, OW-18, OW-19, OW-21, OW-22, and OW-24 were sampled. The purpose of this sampling program is to document volatile organic compound (VOC) concentrations in the outwash aquifer at the Site. The field work followed the August 2005 Supplemental Sampling Work Plan (Cardinal Resources LLC [Cardinal Resources], 2005) approved by the United States Environmental Protection Agency (U.S. EPA), and incorporated the recommendations of the *November 2006 Sampling Report* (Cardinal Resources, 2007). The monitoring program reflects a reduced sampling approach, as agreed to in email exchanges with Ms. Maria Jon of U.S. EPA dated August 12, 2015 and September 16, 2015.

1.1 Site Setting

The three-acre Site is located in the Town of Deerpark in Orange County, New York, which is approximately 3,000 feet northeast of the City of Port Jervis, New York (Figure 1). The Site is situated on the northwestern flank of the Neversink Valley. Gold Creek lies approximately 1,500 feet to the east, and the Neversink River is located approximately 2,500 feet beyond Gold Creek.

The Site is underlain by sand and gravel deposits of glacial and glaciofluvial origin. Groundwater monitoring wells on the Site have been completed in the outwash unit, found above a low-permeability till zone that functions as an aquitard. The outwash unit consists of fine to coarse sand with fine to coarse gravel. The direction of groundwater flow is generally toward the southeast.

1.2 Land and Resource Use

Figure 2 shows land use features in the vicinity of the former Carroll and Dubies lagoons. The immediate surrounding area includes undeveloped woodlands to the north; undeveloped woodlands, quarry ponds, and commercial sand and gravel operations to the northeast; the closed City of Port Jervis landfill, the Orange County Transfer Station, and a concrete products company to the south; and a sparsely

vegetated, shale bedrock hillside to the west. In 2004, the City of Port Jervis began a small sand and gravel operation on land it owns, immediately to the southeast of the former lagoons, in the vicinity of OW-5 and OW-6. These conditions have remained stable during the period of Site investigation and post-remediation monitoring, although truck traffic associated with the sand and gravel operations to the northeast has increased over the past few years. During the November 2016 sampling event, the City of Port Jervis was not actively excavating and screening sand and gravel in the area southeast of OW-5 and OW-6, although it appeared that there had been activity in this area since the previous visit in September 2015.

1.3 History of Waste Disposal and Contamination

In 1971, the three-acre Carroll and Dubies Site began operating as a disposal facility consisting of a series of lagoons. The majority of wastes disposed in the lagoons were septic waste, municipal sewage sludge, and solid waste. The Site also received liquid industrial wastes from approximately 1971 to 1979.

Over time, waste constituents in the lagoons leached into groundwater and affected the outwash aquifer. VOCs were of particular concern because of their dispersion in the aquifer and relative risk. Benzene, vinyl chloride, and other VOCs were found through a series of investigations to exceed Applicable or Relevant and Appropriate Requirements (ARARs) in Site wells.

1.4 Overview of Remedies

The remedies selected for the Site were defined by two operable units (OU), the waste lagoons themselves, and the impacted groundwater. Remedies were selected and executed to remove wastes from the lagoons, restore the Site to a safe and stable condition, and promote and track improvements in groundwater quality.

1.4.1 OU-1 Remedy

The goals of the OU-1 remedy conducted in 1999 were to prevent further leaching of contaminants into groundwater, and to reduce the risks to potential future workers at the Site who could come in contact with lagoon wastes. The steps in this process were:

- Excavation of all wastes from Lagoons 1, 2, 3, 4, 6, 7, and 8, along with surrounding soils that exceeded specified levels for indicator chemicals.

- Appropriate management of all excavated wastes and soils.
- Placement of imported clean fill in the excavations, followed by grading for drainage control and vegetation.

1.4.2 OU-2 Remedy

The goals of the ongoing OU-2 remedy, which was initiated in 1999, are to allow natural attenuation to reduce or eliminate the risks associated with the ingestion of Site groundwater for future Site workers and to protect Gold Creek from Site-related impacts. A monitoring program was designed to address concerns primarily related to determining whether the source removal was successful and the Site was becoming stabilized. The steps in the OU-2 remedy are:

- Execution of a groundwater monitoring program in accordance with Work Plans and other documents prepared for the project and approved by the U.S. EPA.
- With each sampling round, a report is prepared for U.S. EPA that documents the progress made in achieving the remedial goals.

1.5 Overview of 2006 Groundwater Monitoring Program

A supplemental sampling program was initiated in February 2006 in response to the 2005 five-year review. Part of the program was to install two new monitoring wells, OW-24 and OW-25, east and south of OW-2, OW-5, and OW-6 (Figure 3), to determine the extent of the chlorinated VOC plume in the vicinity of OW-2, OW-5, and OW-6. Two existing monitoring wells that were not part of the ongoing groundwater monitoring network, OW-17 and OW-23, downgradient and to the west of OW-2, OW-5, and OW-6, were also redeveloped and sampled.

Groundwater was sampled three more times in 2006: in May, August, and November. The purpose of quarterly sampling of the wells in the vicinity of the chlorinated VOC plume was to evaluate trends through an entire hydrologic cycle. In all four sampling rounds, the results for the chlorinated VOC plume were consistent. Tetrachloroethene (PCE) and trichloroethene (TCE) and their degradation products (chloroethane, 1,2-dichloroethene, and vinyl chloride) were nondetectable in OW-24 and OW-25. In OW-17 and OW-23, chlorinated VOCs were occasionally detected at low, estimated concentrations below the reporting limit, and below state and federal groundwater criteria. Chlorinated VOC impacts at OW-2, OW-5, and OW-6 remained localized.

1.6 Resumption of Annual Monitoring Program

In June 2007, the annual groundwater monitoring program resumed, and continued in 2008, 2009, 2010, and 2011.

1.7 Modified Sampling Frequency

In 2011, a program was initiated to cover the entire hydrologic cycle over the next five-year period through sampling every five quarters. This enhancement to the sampling program was described in a letter to the U.S. EPA dated November 2, 2010. Based on this rotation, the November 2016 sampling program (fourth quarter) follows the September 2015 sampling round (third quarter).

1.8 Reduced Sampling Approach

As part of the 2015 Five Year Review, U.S. EPA agreed to a reduced sampling approach. This approach, outlined in email exchanges (August 12, 2015; September 16, 2015), includes a schedule for sample media:

- 3rd quarter 2015 groundwater, surface water/sediment
- 4th quarter 2016 groundwater
- 1st quarter 2018 groundwater, surface water/sediment
- 2nd quarter 2019 groundwater

The groundwater monitoring network will include the following 10 wells:

OW-2	OW-18
OW-5	OW-19
OW-6	OW-21
OW-10R	OW-22
OW-13R	OW-24

Monitoring parameters will include:

- 3rd quarter 2015 groundwater VOCs, redox, dissolved oxygen, pH, temperature, turbidity, and ethane/ethene; VOCs for surface water and sediment
- 4th quarter 2016 groundwater VOCs, redox, dissolved oxygen, pH, temperature, and turbidity

- 1st quarter 2018 groundwater VOCs, redox, dissolved oxygen, pH, temperature, and turbidity; VOCs for surface water and sediment
- 2nd quarter 2019 groundwater VOCs, redox, dissolved oxygen, pH, temperature, and turbidity

2.0 Groundwater Sample Collection

This section describes methods used to collect groundwater samples for analysis. The results of the groundwater sampling program are provided in Section 3.0.

2.1 Groundwater Elevations

Groundwater elevations were measured on November 1 and 2 as each well was sampled, and in other wells that were not part of the monitoring network. The depth to groundwater was measured from the reference point elevation using an electronic water-level meter and recorded on a monitoring well sampling form.

2.2 Wells and Equipment

Dedicated low-flow bladder pumps were used to purge and sample the monitoring well network, with the exception of wells OW-13R, OW-18, OW-19, and OW-24, which were sampled with a portable bladder pump. OW-18 and OW-19 formerly had dedicated bladder pumps but the pumps are no longer operating. OW-13R and OW-24 have always been sampled with a portable bladder pump. The portable bladder pump was decontaminated initially and after sampling each well by:

- Washing with low phosphate detergent and tap water
- Rinsing with tap water
- Rinsing with deionized water
- Air drying

Clean disposable tubing and a clean disposable bladder were used for each well sampled with the bladder pump.

2.3 Well Purging and Sampling

All wells were purged using low-flow techniques (between 100 and 200 milliliters per minute [mL/min]). During purging of each monitoring well, temperature, dissolved oxygen, reduction/oxidation (redox) potential, conductivity, pH, and turbidity were monitored and recorded on field forms in average intervals of 5 minutes.

The groundwater field parameters were measured with a YSI Model 556 MPS-10 multi-parameter unit equipped with a flow-through cell, and a LaMotte 2020e turbidity meter. All equipment was calibrated prior to use in the field. The goal was to obtain three

consecutive readings of the field parameters within the following ranges:

- ± 1.0 degree centigrade ($^{\circ}\text{C}$) for temperature
- ± 10 percent (%) for dissolved oxygen
- ± 10 millivolts (mV) for redox potential
- $\pm 3\%$ for conductivity
- ± 0.1 for pH
- $\pm 10\%$ nephelometric turbidity units (NTUs) for turbidity

The final stabilized readings prior to sample collection for each of the monitoring wells are provided in Table 1.

Groundwater purged from wells sampled with the bladder pump were initially turbid but cleared with low-flow purging. Groundwater from OW-21 and OW-22, installed in the closed municipal landfill, was odorous. OW-10R was pumped dry within less than 10 minutes. It was allowed to recharge for approximately 30 minutes, then sampled. Samples were shipped on ice to TestAmerica Laboratories, North Canton, Ohio on November 3, 2016 for overnight delivery.

3.0 Groundwater Results

This section describes the results of the November 2016 groundwater sampling event and presents a discussion of site-wide groundwater conditions.

3.1 Groundwater Elevations

The groundwater elevations for this sampling round are presented in Table 2. Associated groundwater elevation contours are shown in Figure 3.

The groundwater elevations in the wells were on the average 0.82 foot lower than measured in September 2015. The direction and gradient of groundwater flow toward the southeast and Gold Creek were about the same. The gradient from OW-15 southwest of the former lagoons to OW-22 in the closed landfill was about 0.10 in November 2016. From OW-22 to OW-18, near Gold Creek, the gradient was essentially flat. In fact, for the 16 monitoring wells downgradient of the former lagoons all the way down to Gold Creek, the differences in groundwater elevations were less than 0.8 foot. The steeper gradient on the western side of the site is due to the depth to bedrock along the valley wall. As the depth to bedrock increases towards the valley floor, the thickness of the alluvial fill increases and the groundwater gradient flattens.

3.2 Summary of Groundwater Quality Results

VOCs detected in groundwater analysis in the November 2016 sampling event are presented in Table 3. Laboratory analytical reports, including marked Form Is from the data validation process, are included in Appendix A in hard copy. An electronic copy of the entire data package is also provided. Historical data of detected organic compounds have been combined with the most recent data and are presented in Table B-1, Appendix B.

Seven VOCs were detected in various wells during this sampling event. Five of the VOCs (benzene; chlorobenzene; cis-1,2-dichloroethene; tetrachloroethene; trichloroethene) exceeded regulatory limits. Regulatory exceedances of VOCs in groundwater are reported in Table 4 and plotted in Figure 4.

VOC concentrations in monitoring wells in November 2016 were generally comparable to the 2015 results, and within ranges previously observed. In the remainder of this

section, specific groundwater trends and conditions are discussed in greater detail, including:

- Concentration trends for chlorinated VOCs
- Concentration trends for benzene
- Achievement of regulatory limits in monitoring wells
- MNA trends

3.3 Trends for Chlorinated VOCs

The chlorinated VOCs 1,2-dichloroethene, trichloroethene, and tetrachloroethene, are the predominant constituents on the eastern side of the site in OW-2, OW-5, and OW-6 (Figure 4).

Compared to OW-2, OW-5, and OW-6, groundwater on the western side (OW-13R, OW-18, OW-19, OW-21, OW-22) typically has lower redox and dissolved oxygen (is more reduced), and is more amenable to reductive dechlorination. In these wells, chlorinated VOCs in general showed a downward trend over time once OU-1 actions were complete. For example, while the concentration of chlorinated VOCs was higher in OW-13/OW-13R in 1999-2000 compared to OW-5 (Figure 5), favorable geochemical conditions resulted in a rapid and smooth decline. Chlorinated VOCs have not exceeded criteria at OW-13/13R since 2004, and were not detected in 2016. In OW-5, conditions for degradation have been somewhat less favorable and the decline has been slower and more variable (Figure 5).

In OW-2 and OW-6, the rate of decline in chlorinated VOC concentrations has been slowed by unfavorable geochemical conditions. Concentrations appeared to peak in the years following OU-1 actions, and since 2006 concentrations have been flat to gradually declining (Figure 6).

Chlorobenzene is another compound that has exceeded the New York State Standard or Guidance Value (NYSDEC SGV) of 5 ug/L (but not the federal Maximum Contaminant Level [MCL] of 100 ug/L) in groundwater, in OW-18 and OW-19. The suspected main source of chlorobenzene in groundwater is the historic closed municipal landfill located between OW-10R to the northwest and OW-18 and OW-19 to the south (Figures 2 and 4). OW-22 is midway in between OW-10R and the downgradient monitoring wells. The closed landfill is suspected as the source because of the

consistently higher concentrations within or downgradient of the landfill compared to upgradient concentrations, as shown below:

Position Relative to Closed Landfill	Monitoring Well	Chlorobenzene Average ug/L 2008-2015
Upgradient	OW-10R	2.3
Downgradient	OW-18	11.4
Downgradient	OW-19	9.5
Within	OW-22	7.2

3.4 Benzene Concentration Trends

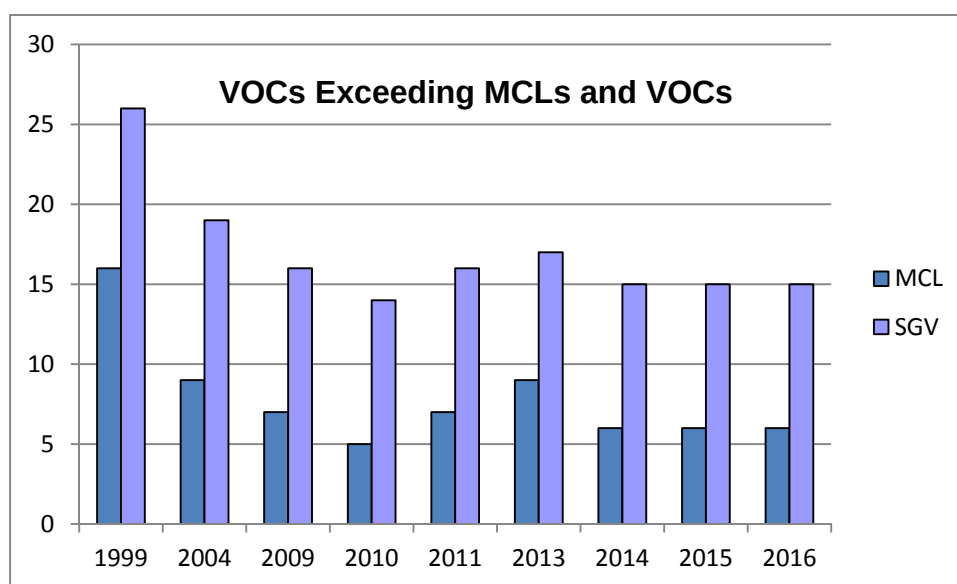
As was described in detail in the *Supporting Documentation for Five-Year Review* (Cardinal Resources, 2005), different VOCs have predominated in different areas downgradient of the former lagoons. Benzene has predominated in several monitoring wells in the southwestern areas of the Site, with historically the highest concentrations observed in OW-10R and OW-13R. In November 2016, the highest benzene concentration was measured in groundwater at OW-18, at 5.0 micrograms per liter (ug/L), the same as the U.S. EPA Maximum Contaminant Level (MCL) of 5 ug/L; the MCL was not exceeded in any monitoring well. Benzene was below the MCL of 5 ug/L in November 2016 in OW-10R, OW-13R, OW-21, and OW-22, although above the SGV of 1 ug/L.

Benzene has exhibited an overall downward trend in OW-13R and OW-22, individual wells with historically high concentrations, as shown in Figure 7. There has also been a flattening and mass decline of the benzene plume along the groundwater flow path, illustrated in Figure 8. This depiction shows how the benzene concentration in OW-13/13R has declined by two orders of magnitude between 2000 and 2016, to 4.3 ug/L in November 2016. The decline in the benzene concentration in the former source area reflects both degradation and dispersion of benzene within the plume to the south and west toward OW-22. Figure 9 depicts benzene concentrations in groundwater in November 2016.

3.5 Achievement of MCLs and SGVs

Since completion of OU-1 remediation in 1999, some of the MCLs and state groundwater SGVs had been met in groundwater wells downgradient of the former lagoons. Table 4 summarizes these findings through the current sampling round. In 2016, 6 MCLs and 15 SGVs were exceeded within the monitoring network.

From 1999 through 2009 there was a substantial reduction in MCL and SGV exceedances; since 2009, conditions have remained about the same, indicating stable conditions:



3.6 Monitored Natural Attenuation Trends

The number of MNA parameters has been reduced with U.S. EPA approval for this and future sampling rounds. Field parameters shown in Table 1 include dissolved oxygen and redox. Reduced conditions as indicated by low dissolved oxygen and redox are favorable for reductive dechlorination of chlorinated VOCs.

The patterns seen in November 2016 are consistent with the observations presented previously, with the areas predicted to be most amenable to degradation of chlorinated VOCs in monitoring wells to the south and west (OW-13R, OW-18, OW-19, OW-21, OW-22). In these wells:

- Low dissolved oxygen and/or redox potential indicating reduced conditions were found; and
- Chlorinated VOCs were not present or present in low concentrations.

By comparison, in OW-2 and OW-6, dissolved oxygen and redox were relatively high, and chlorinated VOCs were found.

4.0 Data Quality Review

Data quality review was performed on the analytical data package to assure that quality and usability requirements were met.

4.1 Introduction

A Tier II data quality review of the sample data package was completed using U.S. EPA guidelines. The Tier II data evaluation consisted of a review of data package completeness and a quality control (QC) review, as summarized in the QC forms provided by the laboratory, covering:

- Signed transmittal page
- Data package narrative
- Sample transmittal documentation
- Reagent traceability summary
- Standard VOC QC forms for:
 - System monitoring compound (surrogate recovery)
 - Matrix spike/matrix spike duplicate (MS/MSD) recovery
 - Laboratory control samples
 - Method blank summary
 - Instrument performance check
 - Internal standard summary and retention time (RT) summary
 - Initial calibration data
 - Continuing calibration data
- Form Is and raw data for field samples, blanks, laboratory control samples, MS/MSDs
- Copies of logbook pages documenting sample preparation, extract transfer, instruments, and sample tracking
- Holding times
- Form Is and raw data for field and QC samples
- Field duplicates and field, trip, and equipment rinsate blanks

A checklist documenting the review of the data package is provided in Appendix C.

4.2 Results of Data Review

The hand-marked, qualified Form Is are provided in Appendix A with the laboratory reports. Results in B-1 reflect the qualified data. The data qualifier for this analytical package is:

- UJ - The analyte was not detected above the reported quantitation limit, but the reported quantitation limit is approximate.

The data package was complete and appropriately organized, and all relevant supporting information was provided.

4.2.1 Field QC Samples

Sample Collection Blanks: Three blanks related to sample collection (different from the method blanks conducted by the laboratory for internal QA/QC) were analyzed as part of this sampling round, and all were nondetectable at the laboratory reporting limits:

- Field Blank (FB): One field blank was collected. Field blanks are prepared at the sampling site by pouring deionized water provided by the laboratory into laboratory-prepared VOA (volatile organic analyte) bottles, shipping the bottles with field samples, and having the samples analyzed along with field samples. These blanks are used as an indicator of airborne or other type of contamination occurring during the sampling process that could compromise sample quality.
- Trip Blank (TB): One trip blank was shipped with the samples. Trip blanks are prepared in the laboratory by pouring deionized water into laboratory-prepared VOA bottles. The filled containers are shipped with the sample containers to the site, remain in the sample coolers throughout the sampling process, are shipped back to the laboratory along with the field samples, and are analyzed along with the field samples. A trip blank is used as an indicator of airborne or other type of contamination that could occur during the shipping process to compromise sample quality.
- Rinsate Pump Blank: One pump rinsate blank was collected. This blank was collected to check cleaning methods for the portable bladder pump used to sample several of the monitoring wells, to verify that sampling equipment and methods do not compromise sample quality. The pump was cleaned initially and after sampling four of the wells. After sampling OW-24 and before sampling OW-19, deionized water was poured through and onto the pump body, then collected in VOA bottles. The samples were then stored, shipped, and analyzed along with the other field samples.

Field Duplicate: A field duplicate was collected for groundwater (OW-5 and OW-5DUP).

The field duplicate is checked for relative percent difference (RPD) as:

$$\frac{|A - B| \times 100}{\frac{1}{2} (A + B)}, \quad \text{where A is sample value and B is duplicate value.}$$

The RPD for aqueous samples is to be within 30%. For OW-5/OW-5 DUP VOA analysis (three detections), the maximum RPD was 4.7%, so there were no qualifications.

Field MS/MSD Sample: A field matrix spike/matrix spike duplicate (MS/MSD) sample was collected for groundwater (OW-6 MS/OW-6 MSD).

With a matrix spike, a compound of known concentration is added to the sample, and the sample is analyzed. The detected concentration is compared to the amount added. This procedure provides an indication about how the sample matrix (physical/chemical properties inherent to the sample) could affect the ability to detect target compounds.

For OW-6 MS/OW-6 MSD, spike recoveries and relative percent differences (RPDs) were all within limits and there were no qualifications.

4.2.2 Other Data Qualification

The only data qualification for this data set was placed on the acetone results for OW-6, OW-19, OW-18, and OW-13R (see Table B-1). The acetone results were nondetectable for these samples but were qualified as UJ, indicating nondetectable but with approximate reporting limits. This qualification was indicated by the low recovery in the associated Laboratory Control Sample (LCS).

4.2.3 Data Quality and Usability

Although there were qualifications for one constituent in four samples (nondetectable with an estimated reporting limit), the analytical results are usable and of acceptable quality; no results have been rejected.

5.0 Summary and Conclusions

The results of the 2016 sampling program for the Carroll and Dubies Site show:

- Groundwater elevations were lower on average by 0.82 foot, compared to the September 2015 groundwater elevations. Sampling has been conducted every fifth quarter in recent years to evaluate conditions throughout the hydrologic cycle. For the past five sampling rounds, there has been no clear link between the concentrations of VOCs in groundwater and the season and/or groundwater elevations.
- Benzene was detected in five monitoring wells (OW-10R, OW-13R, OW-18, OW-21, and OW-22), but did not exceed the U.S. EPA MCL of 5 ug/L in any well. The NYSDEC SGV of 1 ug/L for benzene was exceeded in four of the five monitoring wells. The concentration trends in these wells, particularly OW-10R and OW-13R, where concentrations were once highest, is slowly downward. The benzene concentrations in these wells declined 39% and 41%, respectively, when comparing 2006-2009 average results with 2010-2016 average results.
- Total chlorinated VOC (tetrachloroethene, trichloroethene, and 1,2-dichloroethene) concentrations in OW-2, OW-5, and OW-6 continue to exceed MCLs and SGVs, with relatively flat but stable concentration trends over the past ten years.

The many years of monitoring results demonstrate that natural attenuation has degraded VOCs, and the rates of degradation are slow to flat as the concentrations decline. This is the expected result, as the declining contaminant concentrations reduce the driving force for the attenuation processes. As the rate of attenuation continues to slow, it may be years before MCLs and SGVs are met in all monitoring wells throughout the plume, but Site conditions will continue to be stable. With stable to declining groundwater concentrations and institutional controls in place, conditions will continue to be protective of human health and the environment, with no exposure pathways that could result in unacceptable risks.

The OU2 groundwater remediation ROD, written in 1996, stated that natural attenuation of organic contaminants should achieve treatment of groundwater “to below federal drinking water and state groundwater standards through naturally occurring removal processes” and that “groundwater modeling estimated that contaminants would attenuate to these standards within five years of completion of the remedy selected for the lagoons.” The pre-1996 modeling results referenced in the OU2 ROD have not proven out, however, much more is known about natural attenuation trends and benefits than 20 years ago.

6.0 References

Cardinal Resources Inc., December 2015, *September 2015 Sampling Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York*, Prepared for Kolmar Laboratories, Inc. and Wickhen Products, Inc.

Cardinal Resources LLC, November 2006, *August 2006 Sampling Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York*.

Cardinal Resources, Inc., August 2005, *Supplemental Sampling Work Plan, Carroll and Dubies Superfund Site*, Prepared for Kolmar Laboratories, Inc. and Wickhen Products, Inc.

Cardinal Resources, Inc., March 2005, *Supporting Documentation for Five-Year Review, Carroll and Dubies Superfund Site*, Prepared for Kolmar Laboratories, Inc. and Wickhen Products, Inc.

United States Environmental Protection Agency, 2015, *Five-Year Review Report, Carroll and Dubies Superfund Site, Town of Deerpark, Orange County, New York*, Prepared by U.S. EPA Region 2, New York, New York.

Tables

Table 1
Groundwater Field Stabilization Parameters
November 2016
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Well ID	Date	Temperature (°C)	Dissolved Oxygen (mg/L)	Redox (mV)	Conductivity (uS/cm)	pH (standard units)	Turbidity (NTUs)
OW-2	11/01/16	9.13	2.72	116.7	154	6.01	0.00
OW-5	11/01/16	10.14	0.44	111.3	137	6.17	0.00
OW-6	11/01/16	9.31	3.03	98.8	70	6.04	0.18
OW-10R**	11/01/16	10.01	2.13	12.1	411	6.17	11.3
OW-13R*	11/02/16	10.35	0.37	-67.8	238	6.95	27.4
OW-18*	11/02/16	11.50	0.39	-55.4	240	6.34	6.67
OW-19*	11/02/16	11.80	0.31	-54.2	211	6.44	3.35
OW-21	11/01/16	10.70	0.29	-14.3	269	6.61	0.15
OW-22	11/01/16	10.30	0.45	-36.6	294	6.88	0.00
OW-24*	11/02/16	10.05	1.89	36.1	151	7.24	32.2

Notes:

mg/L = milligrams per liter

mV = millivolts

uS/cm = microSiemens per centimeter

NTU = nephelometric turbidity units

* Sampled with bladder pump

**OW-10R pumped dry in less than 10 minutes; the pump was shut off and the water level was allowed to recover before collecting the sample

Table 2
Groundwater Elevation Data⁽¹⁾
November 1-2, 2016
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Well No.	Top of Casing Elevation	Screened Interval	Depth to Groundwater	Groundwater Elevation
MW-4	470.13	35.3 - 50.3	39.25	430.88
OW-2	472.33	30.0 - 47.0	41.67	430.66
OW-3	472.70	30.0 - 46.5	41.99	430.71
OW-4	473.33	26.5 - 37.5	Not Measured	Not Measured
OW-5	459.85	25.5 - 45.5	29.15	430.70
OW-6	464.40	31.4 - 51.4	33.70	430.70
OW-8	464.63	34.6 - 54.6	33.82	430.81
OW-9	472.91	25.3 - 35.3	32.39	440.52
OW-10R	469.27	29.0 - 39.0	33.60	435.67
OW-13R	457.69	25.0 - 35.0	26.95	430.74
OW-15	472.05	22.0 - 32.0	15.05	457.00
OW-16	453.90	18.0 - 28.0	23.55	430.35
OW-17	447.18	11.0 - 21.0	16.47	430.71
OW-18	444.57	11.0 - 21.0	14.16	430.41
OW-19	438.69	5.0 - 15.0	8.33	430.36
OW-21	467.46	37.1 - 47.1	37.29	430.17
OW-22	467.10	38.0 - 48.0	37.00	430.10
OW-23	444.73	29.0 - 39.0	14.15	430.58
OW-24	446.77	14.4 - 24.4	16.22	430.55
OW-25	452.47	20.0 - 30.0	21.90	430.57

⁽¹⁾Data reported in feet; elevations relative - mean sea level; 1988 National Geodetic Vertical Datum.

⁽²⁾Top of casing elevations surveyed by Maser Consulting P.A.

Table 3
Summary of Detected TCL Volatile Organic Compounds in Groundwater (ug/L)
November 2016
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Compound	NYSDEC	U.S. EPA	OW-2	OW-5	OW-5-DUP	OW-6	OW-10R	OW-13R
	SGV	MCL	11/01/16	11/01/16	11/01/16	11/01/16	11/01/16	11/02/16
Benzene	1 (S)	5	2.5 U	1.3 U	1.3 U	2.0 U	2.4	4.3
Chlorobenzene	5 (S)*	100	2.5 U	1.3 U	1.3 U	2.0 U	1.0 U	1.0 U
Chloroethane	5 (S)*	NE	2.5 U	1.3 U	1.3 U	2.0 U	3.4	1.0 U
Cis 1,2-Dichloroethene	5 (S)*	70	63	34	33	14	1.0 U	1.0 U
Methylene Chloride	5 (S)	5	2.5 U	1.3 U	1.3 U	2.4	1.0 U	1.0 U
Tetrachloroethene	5 (S)*	5	68	22	21	42	1.0 U	1.0 U
Trichloroethene	5 (S)*	5	9.9	5.1	5.0	7.7	1.0 U	1.0 U

Compound	NYSDEC	U.S. EPA	OW-18	OW-19	OW-21	OW-22	OW-24
	SGV	MCL	11/02/16	11/02/16	11/01/16	11/01/16	11/02/16
Benzene	1 (S)	5	5.0	1.0 U	1.0	1.8	1.0 U
Chlorobenzene	5 (S)*	100	14	5.3	1.0 U	2.8	1.0 U
Chloroethane	5 (S)*	NE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cis 1,2-Dichloroethene	5 (S)*	70	1.0 U	1.0	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3 (S)	75	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5 (S)*	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5 (S)*	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5 (S)*	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:

TCL = Target Compound List

NYSDEC SGV = New York State Department of Environmental Conservation Standards (S) and Guidance (G) Values (V) for groundwater.

U.S. EPA MCL = United States Environmental Protection Agency Maximum Contaminant Level for drinking/groundwater.

U = The analyte was analyzed for, but was not detected above the reported quantitation limit.

* = The principal organic contaminant (POC) standard for groundwater of 5 ug/L applies to this substance.

NE = Not established; no criteria specified

Red = Concentrations detected above regulatory limit

Blue = Analyte detected at or below the regulatory limit, or analyte detected but no regulatory criteria specified

Table 4
MCL and SGV Exceedances - 1999, 2004, and 2008 through 2016
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Well	Compound	MCL ug/L	SGV ug/L	1999		2004		Jul-08		Jul-09		Jul-10		Oct-11		Feb-13		Jun-14		Sep-15		Nov-16	
				MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV
OW-2	Benzene	5	1				X																
	Tetrachloroethene (PCE)	5	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Trichloroethene (TCE)	5	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	1,2-Dichloroethene (1,2-DCE)	70	5	X	X	X	X		X		X		X	X	X	X	X		X		X		X
OW-5	Tetrachloroethene (PCE)	5	5	X	X	X	X													X	X	X	X
	Trichloroethene (TCE)	5	5	X	X																	X	X
	1,2-Dichloroethene (1,2-DCE)	70	5		X		X		X									X		X			X
OW-6	Tetrachloroethene (PCE)	5	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Trichloroethene (TCE)	5	5			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	1,2-Dichloroethene	70	5		X		X		X		X		X		X		X		X		X		X
OW-10R ⁽¹⁾	Benzene	5	1	X	X	X	X	X	X		X		X		X		X	Dry	Dry		X		X
	Chlorobenzene	100	5		X										X		X						
	Methylene chloride	5	5	X	X																		
	Toluene	1,000	5		X																		

Table 4
MCL and SGV Exceedances - 1999, 2004, and 2008 through 2016
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

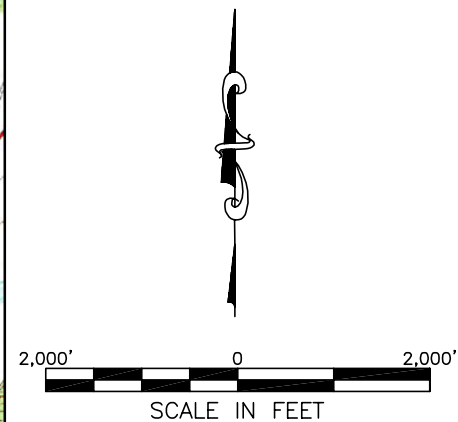
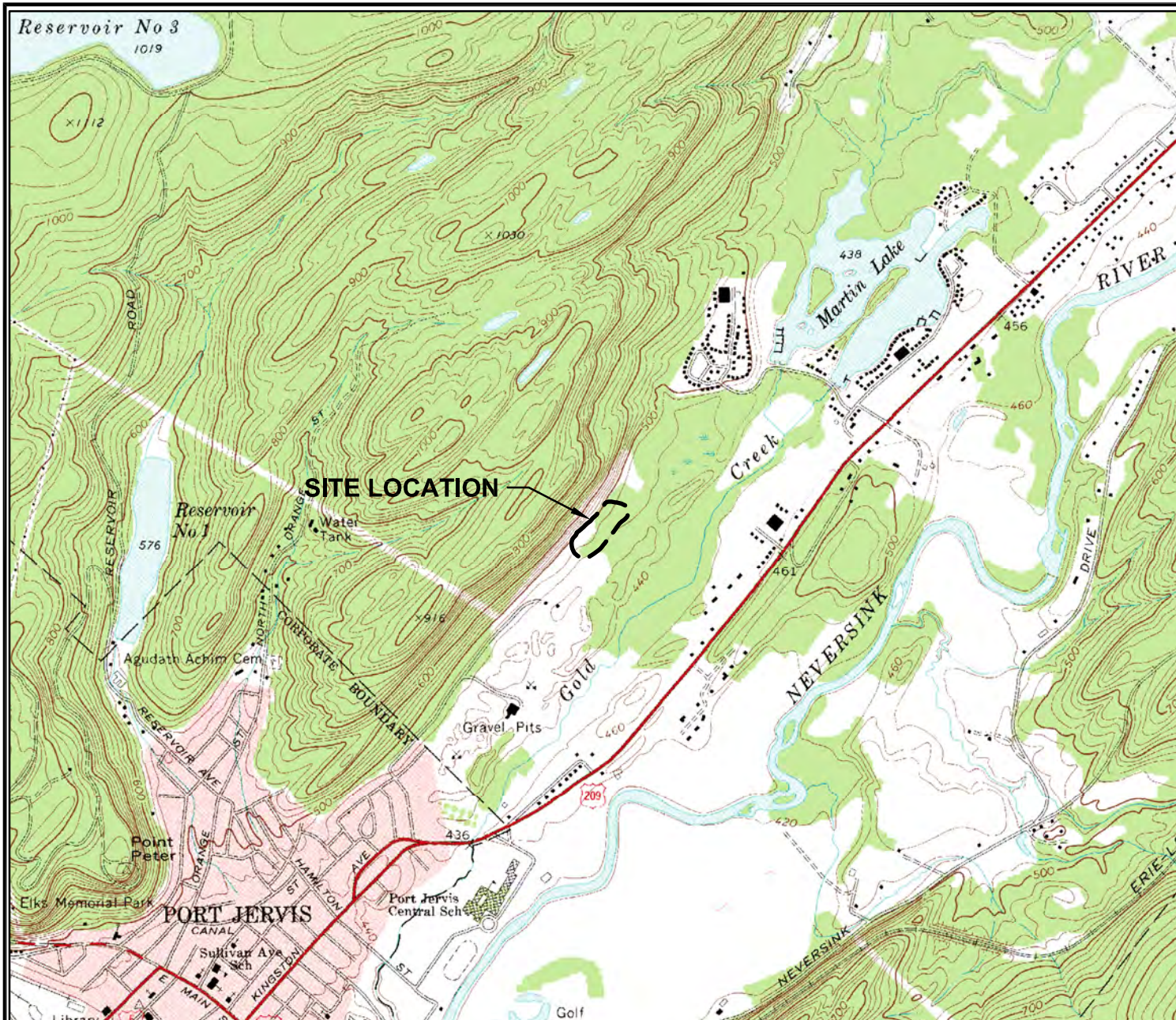
Well	Compound	MCL ug/L	SGV ug/L	1999		2004		Jul-08		Jul-09		Jul-10		Oct-11		Feb-13		Jun-14		Sep-15		Nov-16	
				MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV	MCL	SGV
OW-13 / OW-13R ⁽²⁾	Benzene	5	1	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X		X
	1,2-Dichloroethene (1,2-DCE)	70	5		X																		
	Methylene chloride	5	5	X	X																		
	Toluene	1,000	5		X																		
	Vinyl chloride	2	2	X	X	X	X																
OW-18	Benzene	5	1		X		X		X		X		X		X		X		X		X	X	X
	Chlorobenzene	100	5				X		X		X		X		X		X		X		X		X
	Xylenes (total)	10 ⁴	5																				
OW-19	Benzene	5	1	X	X		X		X		X		X		X	X	X		X				
	Chlorobenzene	100	5		X		X		X		X		X		X		X		X		X		X
	Chloroethane	NA	5		X																		
	Vinyl chloride	2	2	X	X					X	X			X	X	X	X						
OW-21	Benzene	5	1	X	X		X		X		X		X		X		X		X		X		X
OW-22	Benzene	5	1	X	X		X		X	X	X		X	X	X	X	X	X	X		X		X
	Chlorobenzene	100	5		X		X				X				X		X		X				
	Vinyl chloride	2	2	X	X																		
Total				16	26	9	19	6	15	7	16	5	14	7	16	9	17	6	15	6	15	6	15

Notes:

⁽¹⁾OW-10 was replaced with OW-10R in 2000. OW-10 was abandoned because it was within the OU1 construction area.

⁽²⁾OW-13R was installed in February 2006 to replace OW-13.

Figures



LEGEND:

--- APPROXIMATE
SITE BOUNDARY

SOURCE:
USGS TOPOGRAPHIC QUADRANGLE MAP
PORT JERVIS NORTH, NEW YORK, DATED 1991.



CARROLL AND DUBIES SUPERFUND SITE TOWN OF DEERPARK, ORANGE COUNTY, NEW YORK

105-0035

FIGURE 1

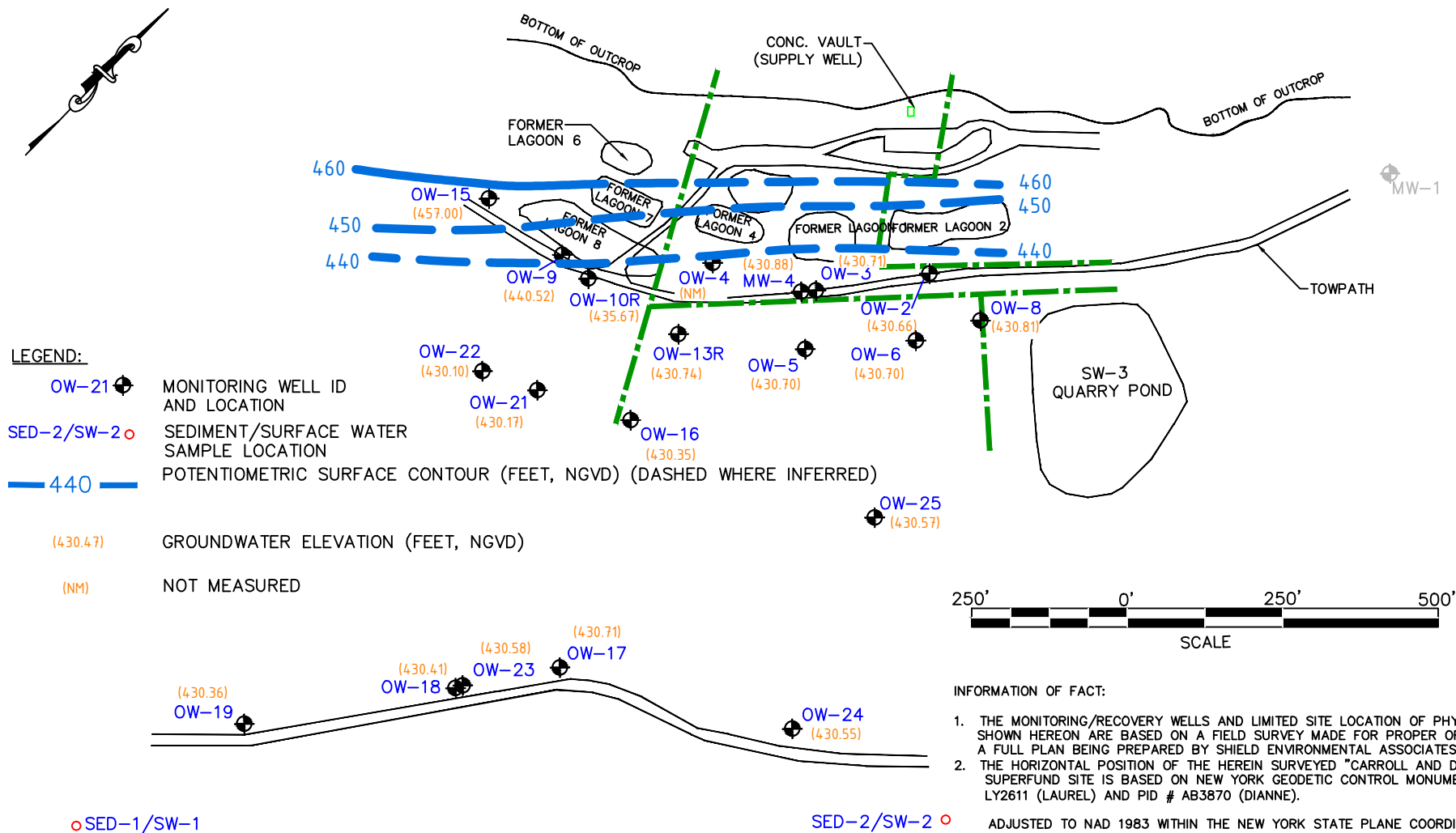
SITE LOCATION MAP

1									
0	ECM								
NO	DRWN	DATE	REVISION	CHKD	DATE	APPVD	DATE		

CADD FILE	9005	SCALE	AS NOTED	CURRENT DATE	03-07-2005
DRAWING NO.	105-0035-0300-01			REVISION	0



Figure 2
Land and Resource Use
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York



CARROLL AND DUBIES SUPERFUND SITE
TOWN OF DEERPARK, ORANGE COUNTY, NEW YORK
104-0012

FIGURE 3
GROUNDWATER ELEVATION CONTOURS
NOVEMBER 2016

CARDINAL

CURRENT DATE 11-28-2016

CB

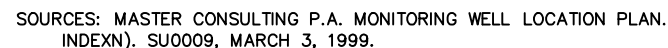
DRAWING NO. 104-0012 - C&D OU2\NOV 2016

SCALE

AS NOTED

REVISION

ALL CONCENTRATIONS ug/L
VALUES SHOWN EXCEED SGV OR MCL



NOVEMBER 2016

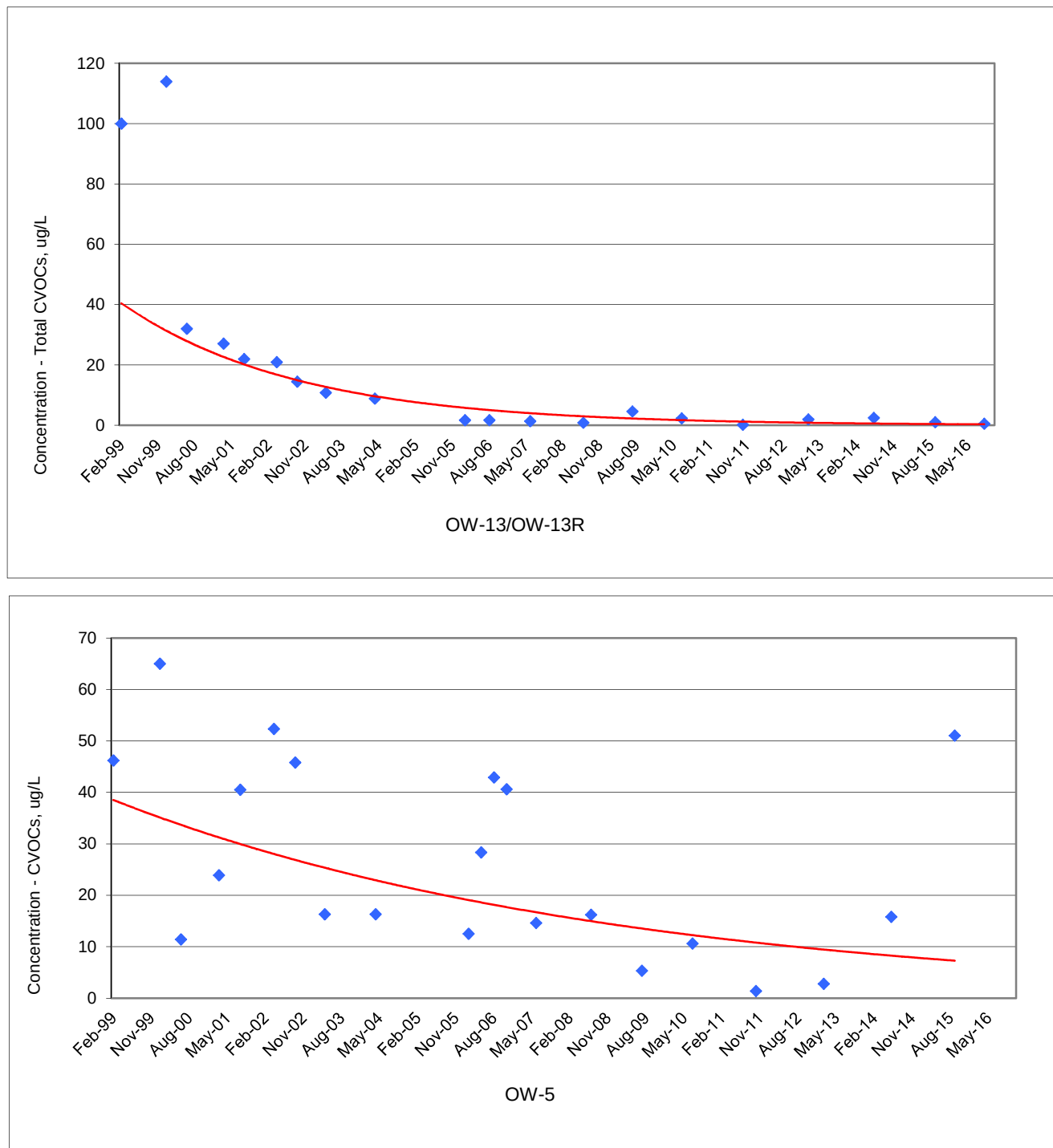
104-0012

REVISION



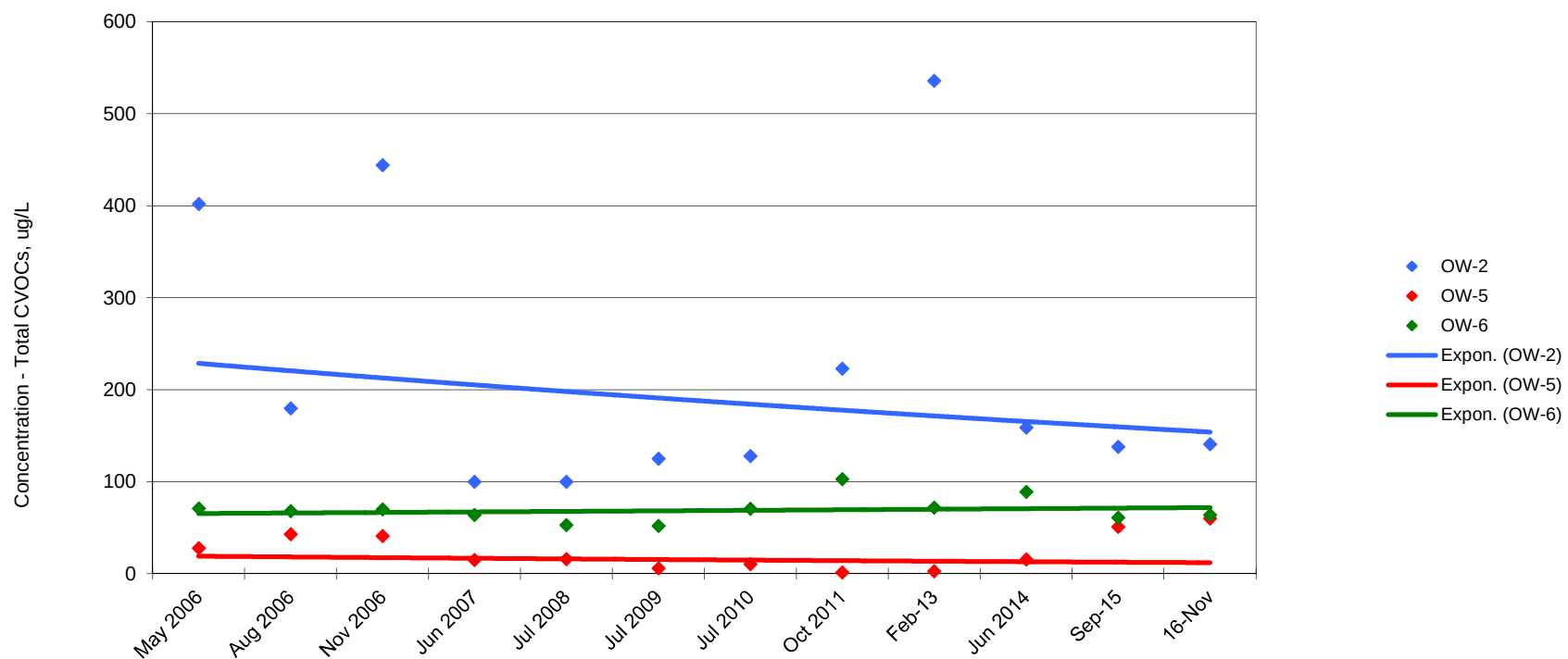
CARDINAL

Figure 5
Chlorinated VOC⁽¹⁾ Trends in OW-13/13R and OW-5
Pre-Excavation to November 2016



⁽¹⁾Sum of vinyl chloride, 1,2-dichloroethene, trichloroethene, and tetrachloroethene.

Figure 6
Chlorinated VOC⁽¹⁾ Trends in OW-2, OW-5, and OW-6
2006 - 2016



⁽¹⁾Sum of vinyl chloride, 1,2-dichloroethene, trichloroethene, and tetrachloroethene

Figure 7
Benzene Concentration Trends in OW-13/OW-13R and OW-22
Pre-Excavation to November 2016

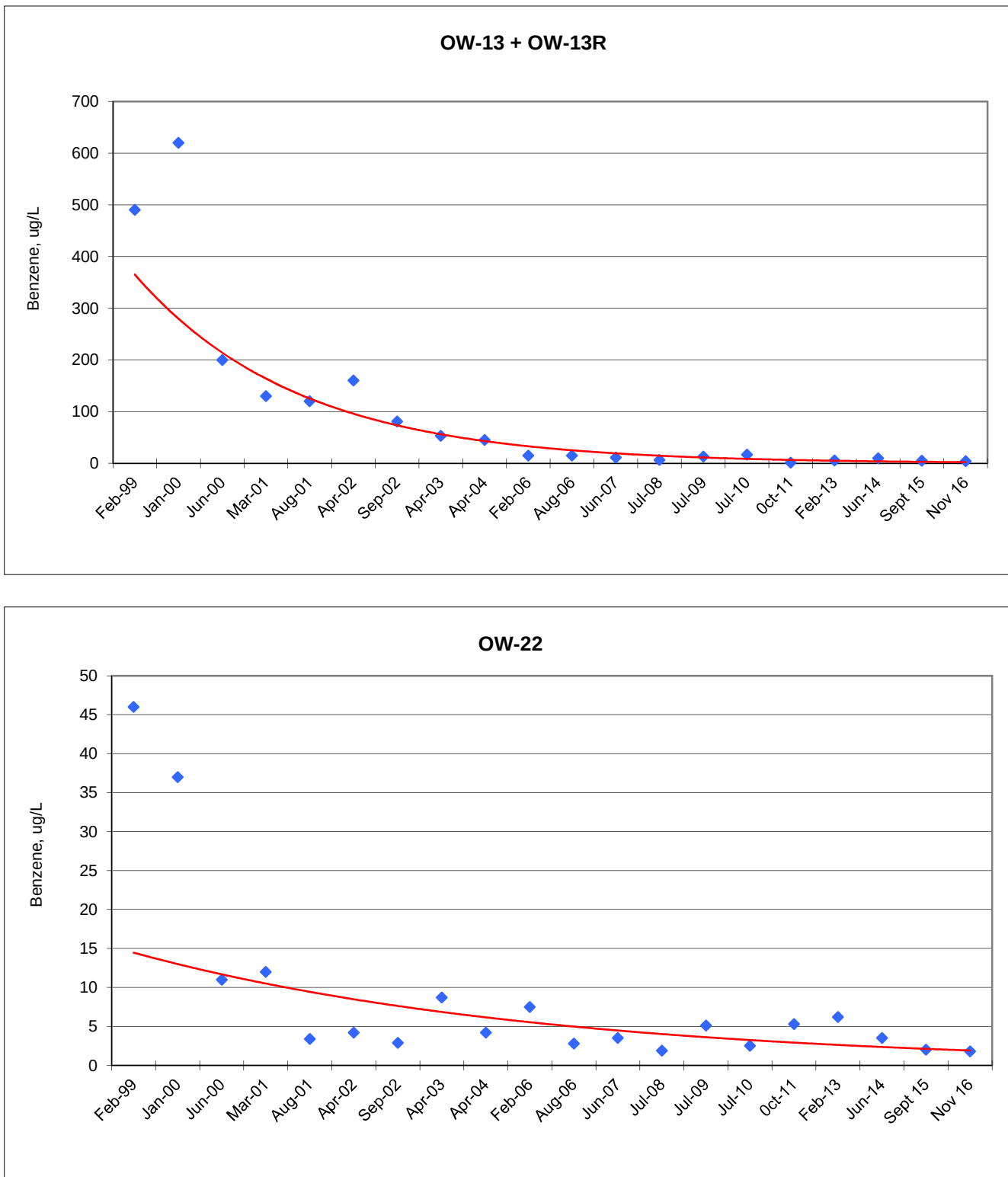
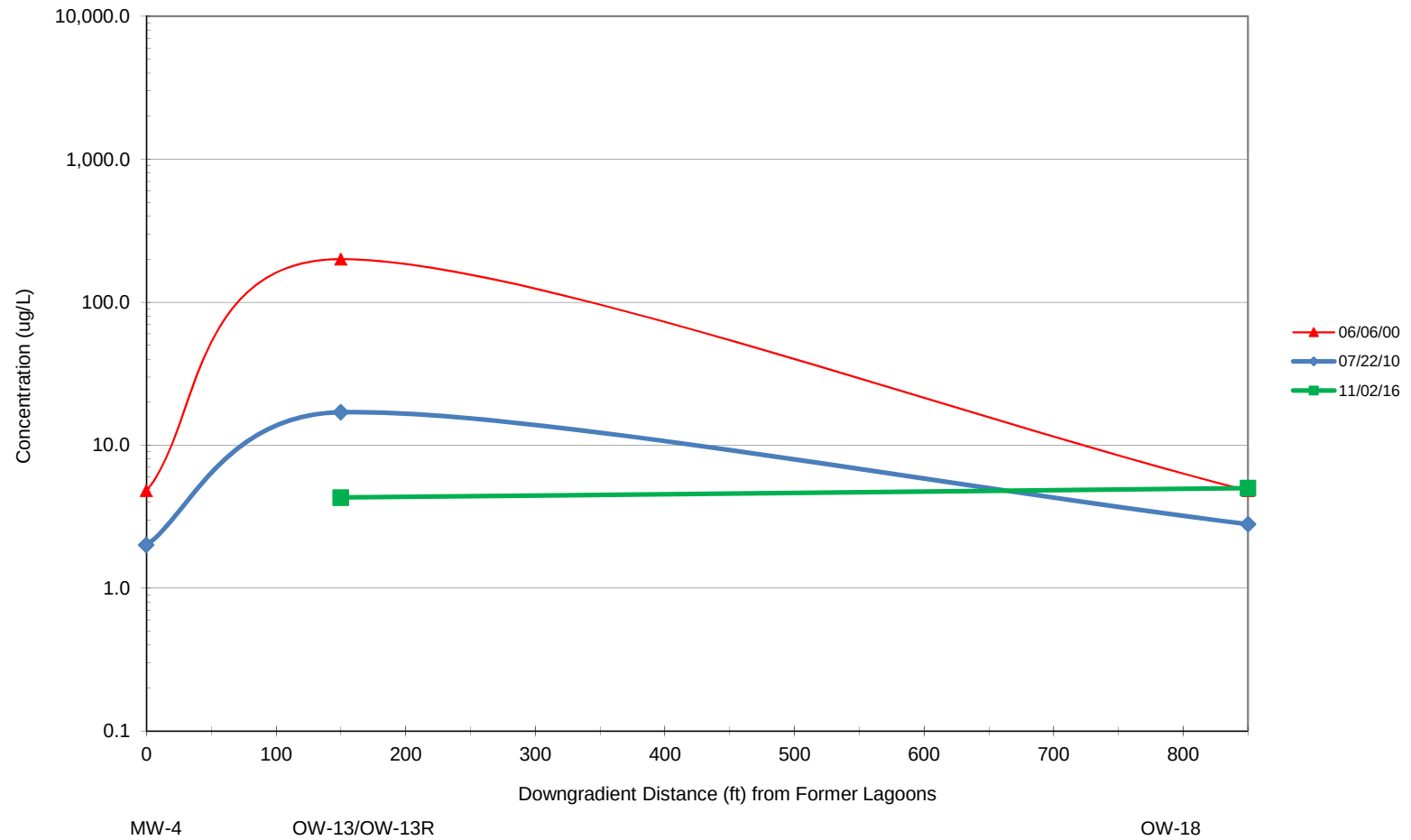
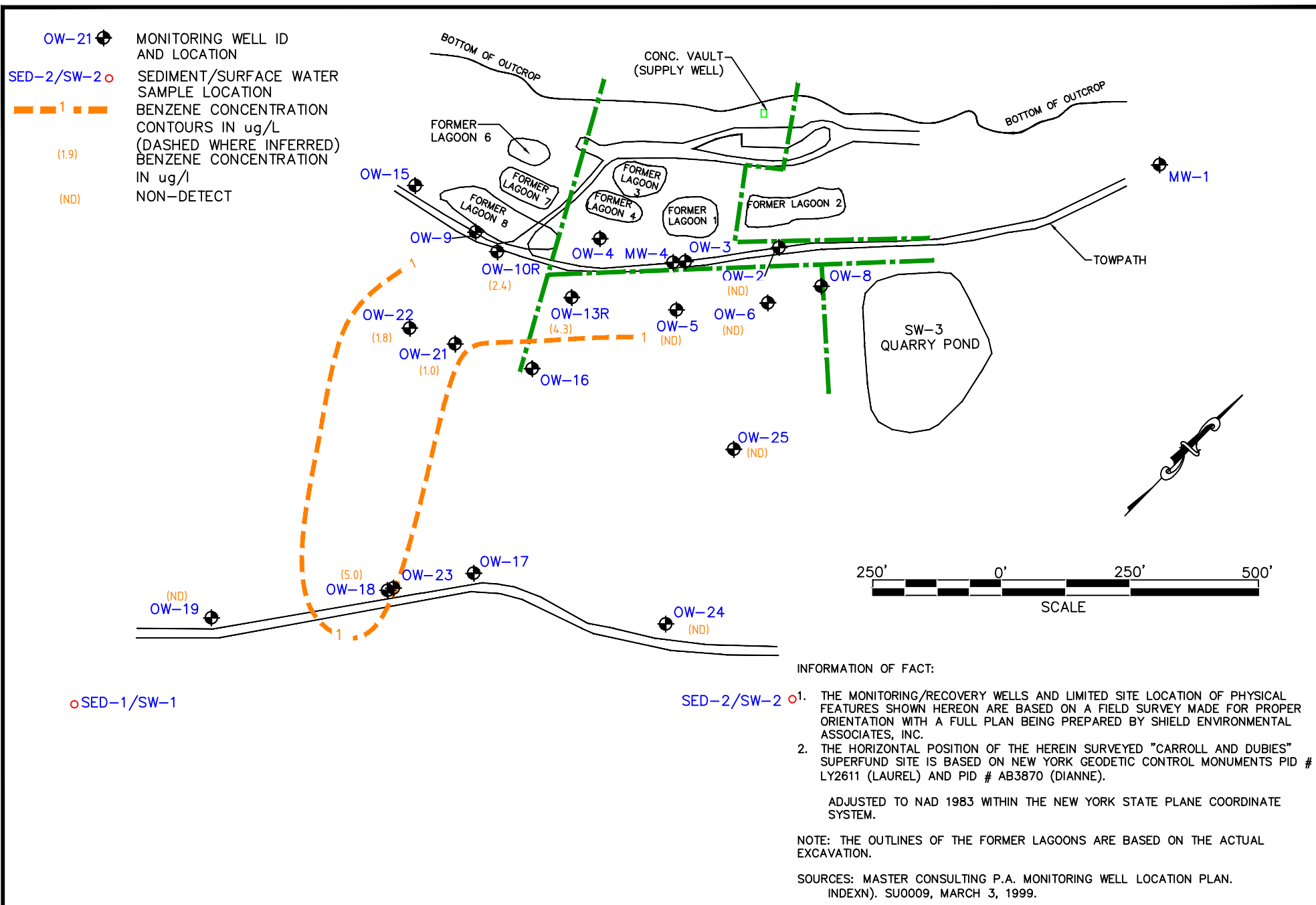


Figure 8
Benzene Concentration Trends Based on Distance from Source



C:\Projects\104-0012\Nov 16\Figure 8 - Benzene with Distance



CARROLL AND DUBIES SUPERFUND SITE
TOWN OF DEER PARK, ORANGE COUNTY, NEW YORK

104-0012

FIGURE 9
BENZENE CONCENTRATIONS
IN GROUNDWATER

NOVEMBER 2016

CARDINAL

CURRENT DATE 11-28-16

CB

DRAWING NO. 104-0012-0300-09 NOV 16

SCALE

AS NOTED

REVISION

Appendix A
Laboratory Reports with Marked Form Is
From Data Review

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-71709-1

Client Project/Site: C & D GW Sampling - 2016

For:

Cardinal Resources

201 Penn Center Blvd

Suite 400

Pittsburgh, Pennsylvania 15235

Attn: Barbara Jones



Authorized for release by:

11/16/2016 1:42:42 PM

Leslie Howell, Project Manager I

(330)497-9396

leslie.howell@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Case Narrative

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Job ID: 240-71709-1

Laboratory: TestAmerica Canton

Narrative

Job Narrative 240-71709-1

Comments

No additional comments.

Receipt

The samples were received on 11/4/2016 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for 255552 recovered outside control limits for the following analytes: Acetone and/or Trichlorofluoromethane and/or 1,4-Dioxane. These analytes have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed: OW-6 (240-71709-1), OW-19 (240-71709-12), OW-18 (240-71709-13), OW-13R (240-71709-14) and (LCS 240-255552/4).

Method(s) 8260B: The laboratory control sample (LCS) for 255552 recovered outside control limits for the following analyte: Carbon Tetrachloride. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported: OW-6 (240-71709-1), OW-19 (240-71709-12), OW-18 (240-71709-13), OW-13R (240-71709-14) and (LCS 240-255552/4).

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

VOA Prep

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

Method Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71709-1	OW-6	Water	11/01/16 09:00	11/04/16 09:10
240-71709-2	OW-2	Water	11/01/16 10:45	11/04/16 09:10
240-71709-3	OW-5	Water	11/01/16 11:35	11/04/16 09:10
240-71709-4	OW-5 DUP	Water	11/01/16 11:35	11/04/16 09:10
240-71709-5	OW-10R	Water	11/01/16 13:20	11/04/16 09:10
240-71709-6	OW-22	Water	11/01/16 15:10	11/04/16 09:10
240-71709-7	OW-21	Water	11/01/16 16:15	11/04/16 09:10
240-71709-8	TRIP BLANK	Water	11/02/16 08:30	11/04/16 09:10
240-71709-9	FIELD BLANK	Water	11/02/16 09:35	11/04/16 09:10
240-71709-10	OW-24	Water	11/02/16 09:50	11/04/16 09:10
240-71709-11	PUMP RINSATE	Water	11/02/16 10:10	11/04/16 09:10
240-71709-12	OW-19	Water	11/02/16 11:30	11/04/16 09:10
240-71709-13	OW-18	Water	11/02/16 13:30	11/04/16 09:10
240-71709-14	OW-13R	Water	11/02/16 15:00	11/04/16 09:10

Detection Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6

Lab Sample ID: 240-71709-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.4		2.0		ug/L	2		8260B	Total/NA
Tetrachloroethene	42		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	7.7		2.0		ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	14		2.0		ug/L	2		8260B	Total/NA

Client Sample ID: OW-2

Lab Sample ID: 240-71709-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	68		2.5		ug/L	2.5		8260B	Total/NA
Trichloroethene	9.9		2.5		ug/L	2.5		8260B	Total/NA
cis-1,2-Dichloroethene	63		2.5		ug/L	2.5		8260B	Total/NA

Client Sample ID: OW-5

Lab Sample ID: 240-71709-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	22		1.3		ug/L	1.25		8260B	Total/NA
Trichloroethene	5.1		1.3		ug/L	1.25		8260B	Total/NA
cis-1,2-Dichloroethene	34		1.3		ug/L	1.25		8260B	Total/NA

Client Sample ID: OW-5 DUP

Lab Sample ID: 240-71709-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	21		1.3		ug/L	1.25		8260B	Total/NA
Trichloroethene	5.0		1.3		ug/L	1.25		8260B	Total/NA
cis-1,2-Dichloroethene	33		1.3		ug/L	1.25		8260B	Total/NA

Client Sample ID: OW-10R

Lab Sample ID: 240-71709-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.4		1.0		ug/L	1		8260B	Total/NA
Chloroethane	3.4		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-22

Lab Sample ID: 240-71709-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.8		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	2.8		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-21

Lab Sample ID: 240-71709-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-71709-8

No Detections.

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-71709-9

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-24

Lab Sample ID: 240-71709-10

No Detections.

Client Sample ID: PUMP RINSATE

Lab Sample ID: 240-71709-11

No Detections.

Client Sample ID: OW-19

Lab Sample ID: 240-71709-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	5.3		1.0		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.0		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-18

Lab Sample ID: 240-71709-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.0		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	14		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-13R

Lab Sample ID: 240-71709-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.3		1.0		ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6

Lab Sample ID: 240-71709-1

Date Collected: 11/01/16 09:00

Matrix: Water

Date Received: 11/04/16 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	20		ug/L			11/14/16 12:41	2
Benzene	ND		2.0		ug/L			11/14/16 12:41	2
Dichlorobromomethane	ND		2.0		ug/L			11/14/16 12:41	2
Bromoform	ND		2.0		ug/L			11/14/16 12:41	2
Bromomethane	ND		2.0		ug/L			11/14/16 12:41	2
2-Butanone (MEK)	ND		20		ug/L			11/14/16 12:41	2
Carbon disulfide	ND		2.0		ug/L			11/14/16 12:41	2
Carbon tetrachloride	ND	*	2.0		ug/L			11/14/16 12:41	2
Chlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
Chloroethane	ND		2.0		ug/L			11/14/16 12:41	2
Chloroform	ND		2.0		ug/L			11/14/16 12:41	2
Chloromethane	ND		2.0		ug/L			11/14/16 12:41	2
1,1-Dichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,1-Dichloroethene	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dichloropropane	ND		2.0		ug/L			11/14/16 12:41	2
cis-1,3-Dichloropropene	ND		2.0		ug/L			11/14/16 12:41	2
trans-1,3-Dichloropropene	ND		2.0		ug/L			11/14/16 12:41	2
Ethylbenzene	ND		2.0		ug/L			11/14/16 12:41	2
2-Hexanone	ND		20		ug/L			11/14/16 12:41	2
Methylene Chloride	2.4		2.0		ug/L			11/14/16 12:41	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			11/14/16 12:41	2
Styrene	ND		2.0		ug/L			11/14/16 12:41	2
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			11/14/16 12:41	2
Tetrachloroethene	42		2.0		ug/L			11/14/16 12:41	2
Toluene	ND		2.0		ug/L			11/14/16 12:41	2
Trichloroethene	7.7		2.0		ug/L			11/14/16 12:41	2
Vinyl chloride	ND		2.0		ug/L			11/14/16 12:41	2
Xylenes, Total	ND		4.0		ug/L			11/14/16 12:41	2
1,1,1-Trichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,1,2-Trichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
Cyclohexane	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dibromo-3-Chloropropane	ND		4.0		ug/L			11/14/16 12:41	2
Ethylene Dibromide	ND		2.0		ug/L			11/14/16 12:41	2
Dichlorodifluoromethane	ND		2.0		ug/L			11/14/16 12:41	2
cis-1,2-Dichloroethene	14		2.0		ug/L			11/14/16 12:41	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			11/14/16 12:41	2
Isopropylbenzene	ND		2.0		ug/L			11/14/16 12:41	2
Methyl acetate	ND		20		ug/L			11/14/16 12:41	2
Methyl tert-butyl ether	ND		2.0		ug/L			11/14/16 12:41	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
1,3-Dichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
1,4-Dichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
Trichlorofluoromethane	ND	*	2.0		ug/L			11/14/16 12:41	2
Chlorodibromomethane	ND		2.0		ug/L			11/14/16 12:41	2
Methylcyclohexane	ND		2.0		ug/L			11/14/16 12:41	2

Handwritten notes:
ND based on GC/MS 11/29/16

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6

Date Collected: 11/01/16 09:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-1

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	99		63 - 132		11/14/16 12:41	2
4-Bromofluorobenzene (Surr)	102		73 - 120		11/14/16 12:41	2
Toluene-d8 (Surr)	100		73 - 124		11/14/16 12:41	2
Dibromofluoromethane (Surr)	102		80 - 120		11/14/16 12:41	2

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-2
Date Collected: 11/01/16 10:45
Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			11/11/16 16:23	2.5
Benzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Dichlorobromomethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Bromoform	ND		2.5		ug/L			11/11/16 16:23	2.5
Bromomethane	ND		2.5		ug/L			11/11/16 16:23	2.5
2-Butanone (MEK)	ND		25		ug/L			11/11/16 16:23	2.5
Carbon disulfide	ND		2.5		ug/L			11/11/16 16:23	2.5
Carbon tetrachloride	ND		2.5		ug/L			11/11/16 16:23	2.5
Chlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Chloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Chloroform	ND		2.5		ug/L			11/11/16 16:23	2.5
Chloromethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1-Dichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1-Dichloroethene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dichloropropane	ND		2.5		ug/L			11/11/16 16:23	2.5
cis-1,3-Dichloropropene	ND		2.5		ug/L			11/11/16 16:23	2.5
trans-1,3-Dichloropropene	ND		2.5		ug/L			11/11/16 16:23	2.5
Ethylbenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
2-Hexanone	ND		25		ug/L			11/11/16 16:23	2.5
Methylene Chloride	ND		2.5		ug/L			11/11/16 16:23	2.5
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			11/11/16 16:23	2.5
Styrene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Tetrachloroethene	68		2.5		ug/L			11/11/16 16:23	2.5
Toluene	ND		2.5		ug/L			11/11/16 16:23	2.5
Trichloroethene	9.9		2.5		ug/L			11/11/16 16:23	2.5
Vinyl chloride	ND		2.5		ug/L			11/11/16 16:23	2.5
Xylenes, Total	ND		5.0		ug/L			11/11/16 16:23	2.5
1,1,1-Trichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1,2-Trichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Cyclohexane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/11/16 16:23	2.5
Ethylene Dibromide	ND		2.5		ug/L			11/11/16 16:23	2.5
Dichlorodifluoromethane	ND		2.5		ug/L			11/11/16 16:23	2.5
cis-1,2-Dichloroethene	63		2.5		ug/L			11/11/16 16:23	2.5
trans-1,2-Dichloroethene	ND		2.5		ug/L			11/11/16 16:23	2.5
Isopropylbenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Methyl acetate	ND		25		ug/L			11/11/16 16:23	2.5
Methyl tert-butyl ether	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2,4-Trichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,3-Dichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,4-Dichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Trichlorofluoromethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Chlorodibromomethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Methylcyclohexane	ND		2.5		ug/L			11/11/16 16:23	2.5

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-2

Date Collected: 11/01/16 10:45

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-2

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	90		63 - 132		11/11/16 16:23	2.5
4-Bromofluorobenzene (Surr)	87		73 - 120		11/11/16 16:23	2.5
Toluene-d8 (Surr)	83		73 - 124		11/11/16 16:23	2.5
Dibromofluoromethane (Surr)	88		80 - 120		11/11/16 16:23	2.5

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-5

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13		ug/L			11/11/16 16:46	1.25
Benzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Dichlorobromomethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Bromoform	ND		1.3		ug/L			11/11/16 16:46	1.25
Bromomethane	ND		1.3		ug/L			11/11/16 16:46	1.25
2-Butanone (MEK)	ND		13		ug/L			11/11/16 16:46	1.25
Carbon disulfide	ND		1.3		ug/L			11/11/16 16:46	1.25
Carbon tetrachloride	ND		1.3		ug/L			11/11/16 16:46	1.25
Chlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Chloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Chloroform	ND		1.3		ug/L			11/11/16 16:46	1.25
Chloromethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1-Dichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1-Dichloroethene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dichloropropane	ND		1.3		ug/L			11/11/16 16:46	1.25
cis-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 16:46	1.25
trans-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 16:46	1.25
Ethylbenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
2-Hexanone	ND		13		ug/L			11/11/16 16:46	1.25
Methylene Chloride	ND		1.3		ug/L			11/11/16 16:46	1.25
4-Methyl-2-pentanone (MIBK)	ND		13		ug/L			11/11/16 16:46	1.25
Styrene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1,2,2-Tetrachloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Tetrachloroethene	22		1.3		ug/L			11/11/16 16:46	1.25
Toluene	ND		1.3		ug/L			11/11/16 16:46	1.25
Trichloroethene	5.1		1.3		ug/L			11/11/16 16:46	1.25
Vinyl chloride	ND		1.3		ug/L			11/11/16 16:46	1.25
Xylenes, Total	ND		2.5		ug/L			11/11/16 16:46	1.25
1,1,1-Trichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1,2-Trichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Cyclohexane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dibromo-3-Chloropropane	ND		2.5		ug/L			11/11/16 16:46	1.25
Ethylene Dibromide	ND		1.3		ug/L			11/11/16 16:46	1.25
Dichlorodifluoromethane	ND		1.3		ug/L			11/11/16 16:46	1.25
cis-1,2-Dichloroethene	34		1.3		ug/L			11/11/16 16:46	1.25
trans-1,2-Dichloroethene	ND		1.3		ug/L			11/11/16 16:46	1.25
Isopropylbenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Methyl acetate	ND		13		ug/L			11/11/16 16:46	1.25
Methyl tert-butyl ether	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2,4-Trichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,3-Dichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,4-Dichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Trichlorofluoromethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Chlorodibromomethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Methylcyclohexane	ND		1.3		ug/L			11/11/16 16:46	1.25

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-5

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-3

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		63 - 132		11/11/16 16:46	1.25
4-Bromofluorobenzene (Surr)	89		73 - 120		11/11/16 16:46	1.25
Toluene-d8 (Surr)	87		73 - 124		11/11/16 16:46	1.25
Dibromofluoromethane (Surr)	91		80 - 120		11/11/16 16:46	1.25

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-5 DUP

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13		ug/L			11/11/16 17:09	1.25
Benzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Dichlorobromomethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Bromoform	ND		1.3		ug/L			11/11/16 17:09	1.25
Bromomethane	ND		1.3		ug/L			11/11/16 17:09	1.25
2-Butanone (MEK)	ND		13		ug/L			11/11/16 17:09	1.25
Carbon disulfide	ND		1.3		ug/L			11/11/16 17:09	1.25
Carbon tetrachloride	ND		1.3		ug/L			11/11/16 17:09	1.25
Chlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Chloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Chloroform	ND		1.3		ug/L			11/11/16 17:09	1.25
Chloromethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1-Dichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1-Dichloroethene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dichloropropane	ND		1.3		ug/L			11/11/16 17:09	1.25
cis-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 17:09	1.25
trans-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 17:09	1.25
Ethylbenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
2-Hexanone	ND		13		ug/L			11/11/16 17:09	1.25
Methylene Chloride	ND		1.3		ug/L			11/11/16 17:09	1.25
4-Methyl-2-pentanone (MIBK)	ND		13		ug/L			11/11/16 17:09	1.25
Styrene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1,2,2-Tetrachloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Tetrachloroethene	21		1.3		ug/L			11/11/16 17:09	1.25
Toluene	ND		1.3		ug/L			11/11/16 17:09	1.25
Trichloroethene	5.0		1.3		ug/L			11/11/16 17:09	1.25
Vinyl chloride	ND		1.3		ug/L			11/11/16 17:09	1.25
Xylenes, Total	ND		2.5		ug/L			11/11/16 17:09	1.25
1,1,1-Trichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1,2-Trichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Cyclohexane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dibromo-3-Chloropropane	ND		2.5		ug/L			11/11/16 17:09	1.25
Ethylene Dibromide	ND		1.3		ug/L			11/11/16 17:09	1.25
Dichlorodifluoromethane	ND		1.3		ug/L			11/11/16 17:09	1.25
cis-1,2-Dichloroethene	33		1.3		ug/L			11/11/16 17:09	1.25
trans-1,2-Dichloroethene	ND		1.3		ug/L			11/11/16 17:09	1.25
Isopropylbenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Methyl acetate	ND		13		ug/L			11/11/16 17:09	1.25
Methyl tert-butyl ether	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2,4-Trichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,3-Dichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,4-Dichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Trichlorofluoromethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Chlorodibromomethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Methylcyclohexane	ND		1.3		ug/L			11/11/16 17:09	1.25

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-5 DUP

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-4

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		63 - 132		11/11/16 17:09	1.25
4-Bromofluorobenzene (Surr)	89		73 - 120		11/11/16 17:09	1.25
Toluene-d8 (Surr)	86		73 - 124		11/11/16 17:09	1.25
Dibromofluoromethane (Surr)	92		80 - 120		11/11/16 17:09	1.25

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-10R

Date Collected: 11/01/16 13:20

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 17:32	1
Benzene	2.4		1.0		ug/L			11/11/16 17:32	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 17:32	1
Bromoform	ND		1.0		ug/L			11/11/16 17:32	1
Bromomethane	ND		1.0		ug/L			11/11/16 17:32	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 17:32	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 17:32	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 17:32	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
Chloroethane	3.4		1.0		ug/L			11/11/16 17:32	1
Chloroform	ND		1.0		ug/L			11/11/16 17:32	1
Chloromethane	ND		1.0		ug/L			11/11/16 17:32	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 17:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:32	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:32	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 17:32	1
2-Hexanone	ND		10		ug/L			11/11/16 17:32	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 17:32	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 17:32	1
Styrene	ND		1.0		ug/L			11/11/16 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 17:32	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 17:32	1
Toluene	ND		1.0		ug/L			11/11/16 17:32	1
Trichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 17:32	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 17:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
Cyclohexane	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 17:32	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 17:32	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 17:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 17:32	1
Methyl acetate	ND		10		ug/L			11/11/16 17:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 17:32	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 17:32	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 17:32	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-10R

Date Collected: 11/01/16 13:20

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-5

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		63 - 132		11/11/16 17:32	1
4-Bromofluorobenzene (Surr)	87		73 - 120		11/11/16 17:32	1
Toluene-d8 (Surr)	84		73 - 124		11/11/16 17:32	1
Dibromofluoromethane (Surr)	89		80 - 120		11/11/16 17:32	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-22

Date Collected: 11/01/16 15:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 17:56	1
Benzene	1.8		1.0		ug/L			11/11/16 17:56	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 17:56	1
Bromoform	ND		1.0		ug/L			11/11/16 17:56	1
Bromomethane	ND		1.0		ug/L			11/11/16 17:56	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 17:56	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 17:56	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 17:56	1
Chlorobenzene	2.8		1.0		ug/L			11/11/16 17:56	1
Chloroethane	ND		1.0		ug/L			11/11/16 17:56	1
Chloroform	ND		1.0		ug/L			11/11/16 17:56	1
Chloromethane	ND		1.0		ug/L			11/11/16 17:56	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 17:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:56	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 17:56	1
2-Hexanone	ND		10		ug/L			11/11/16 17:56	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 17:56	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 17:56	1
Styrene	ND		1.0		ug/L			11/11/16 17:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 17:56	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 17:56	1
Toluene	ND		1.0		ug/L			11/11/16 17:56	1
Trichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 17:56	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 17:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
Cyclohexane	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 17:56	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 17:56	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 17:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 17:56	1
Methyl acetate	ND		10		ug/L			11/11/16 17:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 17:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 17:56	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 17:56	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 17:56	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-22

Date Collected: 11/01/16 15:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-6

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	93		63 - 132		11/11/16 17:56	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/11/16 17:56	1
Toluene-d8 (Surr)	84		73 - 124		11/11/16 17:56	1
Dibromofluoromethane (Surr)	90		80 - 120		11/11/16 17:56	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-21

Date Collected: 11/01/16 16:15

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 18:19	1
Benzene	1.0		1.0		ug/L			11/11/16 18:19	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 18:19	1
Bromoform	ND		1.0		ug/L			11/11/16 18:19	1
Bromomethane	ND		1.0		ug/L			11/11/16 18:19	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 18:19	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 18:19	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 18:19	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
Chloroethane	ND		1.0		ug/L			11/11/16 18:19	1
Chloroform	ND		1.0		ug/L			11/11/16 18:19	1
Chloromethane	ND		1.0		ug/L			11/11/16 18:19	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 18:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:19	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:19	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 18:19	1
2-Hexanone	ND		10		ug/L			11/11/16 18:19	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 18:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 18:19	1
Styrene	ND		1.0		ug/L			11/11/16 18:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 18:19	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 18:19	1
Toluene	ND		1.0		ug/L			11/11/16 18:19	1
Trichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 18:19	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 18:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
Cyclohexane	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 18:19	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 18:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 18:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 18:19	1
Methyl acetate	ND		10		ug/L			11/11/16 18:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 18:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 18:19	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 18:19	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 18:19	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-21

Date Collected: 11/01/16 16:15

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-7

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		63 - 132		11/11/16 18:19	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/11/16 18:19	1
Toluene-d8 (Surr)	86		73 - 124		11/11/16 18:19	1
Dibromofluoromethane (Surr)	91		80 - 120		11/11/16 18:19	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: TRIP BLANK

Date Collected: 11/02/16 08:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 18:42	1
Benzene	ND		1.0		ug/L			11/11/16 18:42	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 18:42	1
Bromoform	ND		1.0		ug/L			11/11/16 18:42	1
Bromomethane	ND		1.0		ug/L			11/11/16 18:42	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 18:42	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 18:42	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 18:42	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
Chloroethane	ND		1.0		ug/L			11/11/16 18:42	1
Chloroform	ND		1.0		ug/L			11/11/16 18:42	1
Chloromethane	ND		1.0		ug/L			11/11/16 18:42	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 18:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:42	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:42	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 18:42	1
2-Hexanone	ND		10		ug/L			11/11/16 18:42	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 18:42	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 18:42	1
Styrene	ND		1.0		ug/L			11/11/16 18:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 18:42	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 18:42	1
Toluene	ND		1.0		ug/L			11/11/16 18:42	1
Trichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 18:42	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 18:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
Cyclohexane	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 18:42	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 18:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 18:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 18:42	1
Methyl acetate	ND		10		ug/L			11/11/16 18:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 18:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 18:42	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 18:42	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 18:42	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: TRIP BLANK

Date Collected: 11/02/16 08:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-8

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	95		63 - 132		11/11/16 18:42	1
4-Bromofluorobenzene (Surr)	91		73 - 120		11/11/16 18:42	1
Toluene-d8 (Surr)	86		73 - 124		11/11/16 18:42	1
Dibromofluoromethane (Surr)	91		80 - 120		11/11/16 18:42	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-71709-9

Date Collected: 11/02/16 09:35

Matrix: Water

Date Received: 11/04/16 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 19:05	1
Benzene	ND		1.0		ug/L			11/11/16 19:05	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 19:05	1
Bromoform	ND		1.0		ug/L			11/11/16 19:05	1
Bromomethane	ND		1.0		ug/L			11/11/16 19:05	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 19:05	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 19:05	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 19:05	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
Chloroethane	ND		1.0		ug/L			11/11/16 19:05	1
Chloroform	ND		1.0		ug/L			11/11/16 19:05	1
Chloromethane	ND		1.0		ug/L			11/11/16 19:05	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 19:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 19:05	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 19:05	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 19:05	1
2-Hexanone	ND		10		ug/L			11/11/16 19:05	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 19:05	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 19:05	1
Styrene	ND		1.0		ug/L			11/11/16 19:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 19:05	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 19:05	1
Toluene	ND		1.0		ug/L			11/11/16 19:05	1
Trichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 19:05	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 19:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
Cyclohexane	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 19:05	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 19:05	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 19:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 19:05	1
Methyl acetate	ND		10		ug/L			11/11/16 19:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 19:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 19:05	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 19:05	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 19:05	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-71709-9

Date Collected: 11/02/16 09:35

Matrix: Water

Date Received: 11/04/16 09:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	92		63 - 132		11/11/16 19:05	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/11/16 19:05	1
Toluene-d8 (Surr)	85		73 - 124		11/11/16 19:05	1
Dibromofluoromethane (Surr)	92		80 - 120		11/11/16 19:05	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-24

Date Collected: 11/02/16 09:50

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 21:23	1
Benzene	ND		1.0		ug/L			11/11/16 21:23	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 21:23	1
Bromoform	ND		1.0		ug/L			11/11/16 21:23	1
Bromomethane	ND		1.0		ug/L			11/11/16 21:23	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 21:23	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 21:23	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 21:23	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
Chloroethane	ND		1.0		ug/L			11/11/16 21:23	1
Chloroform	ND		1.0		ug/L			11/11/16 21:23	1
Chloromethane	ND		1.0		ug/L			11/11/16 21:23	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 21:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:23	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 21:23	1
2-Hexanone	ND		10		ug/L			11/11/16 21:23	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 21:23	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 21:23	1
Styrene	ND		1.0		ug/L			11/11/16 21:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 21:23	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 21:23	1
Toluene	ND		1.0		ug/L			11/11/16 21:23	1
Trichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 21:23	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 21:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
Cyclohexane	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 21:23	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 21:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 21:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 21:23	1
Methyl acetate	ND		10		ug/L			11/11/16 21:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 21:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 21:23	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 21:23	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 21:23	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-24

Date Collected: 11/02/16 09:50

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-10

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		63 - 132		11/11/16 21:23	1
4-Bromofluorobenzene (Surr)	89		73 - 120		11/11/16 21:23	1
Toluene-d8 (Surr)	85		73 - 124		11/11/16 21:23	1
Dibromofluoromethane (Surr)	91		80 - 120		11/11/16 21:23	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: PUMP RINSATE

Lab Sample ID: 240-71709-11

Date Collected: 11/02/16 10:10

Matrix: Water

Date Received: 11/04/16 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 21:46	1
Benzene	ND		1.0		ug/L			11/11/16 21:46	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 21:46	1
Bromoform	ND		1.0		ug/L			11/11/16 21:46	1
Bromomethane	ND		1.0		ug/L			11/11/16 21:46	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 21:46	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 21:46	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 21:46	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
Chloroethane	ND		1.0		ug/L			11/11/16 21:46	1
Chloroform	ND		1.0		ug/L			11/11/16 21:46	1
Chloromethane	ND		1.0		ug/L			11/11/16 21:46	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 21:46	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:46	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:46	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 21:46	1
2-Hexanone	ND		10		ug/L			11/11/16 21:46	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 21:46	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 21:46	1
Styrene	ND		1.0		ug/L			11/11/16 21:46	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 21:46	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 21:46	1
Toluene	ND		1.0		ug/L			11/11/16 21:46	1
Trichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 21:46	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 21:46	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
Cyclohexane	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 21:46	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 21:46	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 21:46	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 21:46	1
Methyl acetate	ND		10		ug/L			11/11/16 21:46	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 21:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 21:46	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 21:46	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 21:46	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: PUMP RINSATE

Lab Sample ID: 240-71709-11

Date Collected: 11/02/16 10:10

Matrix: Water

Date Received: 11/04/16 09:10

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	89		63 - 132		11/11/16 21:46	1
4-Bromofluorobenzene (Surr)	86		73 - 120		11/11/16 21:46	1
Toluene-d8 (Surr)	84		73 - 124		11/11/16 21:46	1
Dibromofluoromethane (Surr)	88		80 - 120		11/11/16 21:46	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-19

Lab Sample ID: 240-71709-12

Date Collected: 11/02/16 11:30

Matrix: Water

Date Received: 11/04/16 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	10		ug/L			11/14/16 13:03	1
Benzene	ND		1.0		ug/L			11/14/16 13:03	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 13:03	1
Bromoform	ND		1.0		ug/L			11/14/16 13:03	1
Bromomethane	ND		1.0		ug/L			11/14/16 13:03	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 13:03	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 13:03	1
Carbon tetrachloride	ND	*	1.0		ug/L			11/14/16 13:03	1
Chlorobenzene	5.3		1.0		ug/L			11/14/16 13:03	1
Chloroethane	ND		1.0		ug/L			11/14/16 13:03	1
Chloroform	ND		1.0		ug/L			11/14/16 13:03	1
Chloromethane	ND		1.0		ug/L			11/14/16 13:03	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 13:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:03	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 13:03	1
2-Hexanone	ND		10		ug/L			11/14/16 13:03	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 13:03	1
Styrene	ND		1.0		ug/L			11/14/16 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 13:03	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 13:03	1
Toluene	ND		1.0		ug/L			11/14/16 13:03	1
Trichloroethene	ND		1.0		ug/L			11/14/16 13:03	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 13:03	1
Xylenes, Total	ND		2.0		ug/L			11/14/16 13:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
Cyclohexane	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 13:03	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 13:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 13:03	1
cis-1,2-Dichloroethene	1.0		1.0		ug/L			11/14/16 13:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:03	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 13:03	1
Methyl acetate	ND		10		ug/L			11/14/16 13:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 13:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
Trichlorofluoromethane	ND	*	1.0		ug/L			11/14/16 13:03	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 13:03	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 13:03	1

Handwritten notes:
UJ, based on L.C.S. B.N.G. 11/29/16

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-19

Date Collected: 11/02/16 11:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-12

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	100		63 - 132		11/14/16 13:03	1
4-Bromofluorobenzene (Surr)	106		73 - 120		11/14/16 13:03	1
Toluene-d8 (Surr)	98		73 - 124		11/14/16 13:03	1
Dibromofluoromethane (Surr)	102		80 - 120		11/14/16 13:03	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-18

Lab Sample ID: 240-71709-13

Date Collected: 11/02/16 13:30

Matrix: Water

Date Received: 11/04/16 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	10		ug/L			11/14/16 13:26	1
Benzene	5.0		1.0		ug/L			11/14/16 13:26	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 13:26	1
Bromoform	ND		1.0		ug/L			11/14/16 13:26	1
Bromomethane	ND		1.0		ug/L			11/14/16 13:26	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 13:26	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 13:26	1
Carbon tetrachloride	ND	*	1.0		ug/L			11/14/16 13:26	1
Chlorobenzene	14		1.0		ug/L			11/14/16 13:26	1
Chloroethane	ND		1.0		ug/L			11/14/16 13:26	1
Chloroform	ND		1.0		ug/L			11/14/16 13:26	1
Chloromethane	ND		1.0		ug/L			11/14/16 13:26	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 13:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:26	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:26	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 13:26	1
2-Hexanone	ND		10		ug/L			11/14/16 13:26	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 13:26	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 13:26	1
Styrene	ND		1.0		ug/L			11/14/16 13:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 13:26	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 13:26	1
Toluene	ND		1.0		ug/L			11/14/16 13:26	1
Trichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 13:26	1
Xylenes, Total	ND		2.0		ug/L			11/14/16 13:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
Cyclohexane	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 13:26	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 13:26	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 13:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 13:26	1
Methyl acetate	ND		10		ug/L			11/14/16 13:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 13:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
Trichlorofluoromethane	ND	*	1.0		ug/L			11/14/16 13:26	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 13:26	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 13:26	1

Handwritten notes:
UJ,
baseline
LCS
BXN
11/29/16

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-18

Date Collected: 11/02/16 13:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-13

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	100		63 - 132		11/14/16 13:26	1
4-Bromofluorobenzene (Surr)	110		73 - 120		11/14/16 13:26	1
Toluene-d8 (Surr)	100		73 - 124		11/14/16 13:26	1
Dibromofluoromethane (Surr)	102		80 - 120		11/14/16 13:26	1

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-13R

Lab Sample ID: 240-71709-14

Date Collected: 11/02/16 15:00

Matrix: Water

Date Received: 11/04/16 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	10		ug/L			11/14/16 13:48	1
Benzene	4.3		1.0		ug/L			11/14/16 13:48	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 13:48	1
Bromoform	ND		1.0		ug/L			11/14/16 13:48	1
Bromomethane	ND		1.0		ug/L			11/14/16 13:48	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 13:48	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 13:48	1
Carbon tetrachloride	ND	*	1.0		ug/L			11/14/16 13:48	1
Chlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
Chloroethane	ND		1.0		ug/L			11/14/16 13:48	1
Chloroform	ND		1.0		ug/L			11/14/16 13:48	1
Chloromethane	ND		1.0		ug/L			11/14/16 13:48	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 13:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:48	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:48	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 13:48	1
2-Hexanone	ND		10		ug/L			11/14/16 13:48	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 13:48	1
Styrene	ND		1.0		ug/L			11/14/16 13:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 13:48	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 13:48	1
Toluene	ND		1.0		ug/L			11/14/16 13:48	1
Trichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 13:48	1
Xylenes, Total	ND		2.0		ug/L			11/14/16 13:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
Cyclohexane	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 13:48	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 13:48	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 13:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 13:48	1
Methyl acetate	ND		10		ug/L			11/14/16 13:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
Trichlorofluoromethane	ND	*	1.0		ug/L			11/14/16 13:48	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 13:48	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 13:48	1

*uJ based on LCS
BXG
11/29/16*

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-13R

Date Collected: 11/02/16 15:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-14

Matrix: Water

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	100		63 - 132		11/14/16 13:48	1
4-Bromofluorobenzene (Surr)	100		73 - 120		11/14/16 13:48	1
Toluene-d8 (Surr)	101		73 - 124		11/14/16 13:48	1
Dibromofluoromethane (Surr)	103		80 - 120		11/14/16 13:48	1

Surrogate Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (63-132)	BFB (73-120)	TOL (73-124)	DBFM (80-120)
240-71709-1	OW-6	99	102	100	102
240-71709-1 MS	OW-6	99	116	102	106
240-71709-1 MSD	OW-6	95	115	101	105
240-71709-2	OW-2	90	87	83	88
240-71709-3	OW-5	95	89	87	91
240-71709-4	OW-5 DUP	92	89	86	92
240-71709-5	OW-10R	94	87	84	89
240-71709-6	OW-22	93	88	84	90
240-71709-7	OW-21	95	88	86	91
240-71709-8	TRIP BLANK	95	91	86	91
240-71709-9	FIELD BLANK	92	88	85	92
240-71709-10	OW-24	94	89	85	91
240-71709-11	PUMP RINSATE	89	86	84	88
240-71709-12	OW-19	100	106	98	102
240-71709-13	OW-18	100	110	100	102
240-71709-14	OW-13R	100	100	101	103
LCS 240-255306/5	Lab Control Sample	90	90	88	89
LCS 240-255552/4	Lab Control Sample	96	106	110	105
MB 240-255306/8	Method Blank	94	88	83	88
MB 240-255552/6	Method Blank	99	105	100	101

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: MB 240-255306/8

Matrix: Water

Analysis Batch: 255306

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 12:34	1
Benzene	ND		1.0		ug/L			11/11/16 12:34	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 12:34	1
Bromoform	ND		1.0		ug/L			11/11/16 12:34	1
Bromomethane	ND		1.0		ug/L			11/11/16 12:34	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 12:34	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 12:34	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 12:34	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
Chloroethane	ND		1.0		ug/L			11/11/16 12:34	1
Chloroform	ND		1.0		ug/L			11/11/16 12:34	1
Chloromethane	ND		1.0		ug/L			11/11/16 12:34	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 12:34	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 12:34	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 12:34	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 12:34	1
2-Hexanone	ND		10		ug/L			11/11/16 12:34	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 12:34	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 12:34	1
Styrene	ND		1.0		ug/L			11/11/16 12:34	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 12:34	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 12:34	1
Toluene	ND		1.0		ug/L			11/11/16 12:34	1
Trichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 12:34	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 12:34	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
Cyclohexane	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 12:34	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 12:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 12:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 12:34	1
Methyl acetate	ND		10		ug/L			11/11/16 12:34	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 12:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 12:34	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 12:34	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 12:34	1

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 132		11/11/16 12:34	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/11/16 12:34	1
Toluene-d8 (Surr)	83		73 - 124		11/11/16 12:34	1
Dibromofluoromethane (Surr)	88		80 - 120		11/11/16 12:34	1

Lab Sample ID: LCS 240-255306/5

Matrix: Water

Analysis Batch: 255306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	40.0	45.2		ug/L		113	46 - 120
Benzene	20.0	19.1		ug/L		96	80 - 120
Dichlorobromomethane	20.0	18.8		ug/L		94	76 - 125
Bromoform	20.0	21.3		ug/L		107	52 - 157
Bromomethane	20.0	18.3		ug/L		91	24 - 160
2-Butanone (MEK)	40.0	46.3		ug/L		116	54 - 122
Carbon disulfide	20.0	19.5		ug/L		98	58 - 160
Carbon tetrachloride	20.0	18.4		ug/L		92	69 - 149
Chlorobenzene	20.0	17.6		ug/L		88	80 - 120
Chloroethane	20.0	19.4		ug/L		97	24 - 147
Chloroform	20.0	19.3		ug/L		97	80 - 120
Chloromethane	20.0	16.3		ug/L		82	50 - 135
1,1-Dichloroethane	20.0	19.5		ug/L		97	77 - 121
1,2-Dichloroethane	20.0	19.5		ug/L		97	76 - 130
1,1-Dichloroethene	20.0	20.0		ug/L		100	70 - 141
1,2-Dichloropropane	20.0	19.2		ug/L		96	79 - 121
cis-1,3-Dichloropropene	20.0	18.7		ug/L		94	75 - 120
trans-1,3-Dichloropropene	20.0	18.7		ug/L		93	65 - 120
Ethylbenzene	20.0	18.2		ug/L		91	80 - 120
2-Hexanone	40.0	48.3		ug/L		121	56 - 124
Methylene Chloride	20.0	18.5		ug/L		93	68 - 136
4-Methyl-2-pentanone (MIBK)	40.0	45.9		ug/L		115	60 - 131
Styrene	20.0	18.4		ug/L		92	80 - 120
1,1,2,2-Tetrachloroethane	20.0	22.6		ug/L		113	61 - 130
Tetrachloroethene	20.0	18.1		ug/L		90	80 - 123
Toluene	20.0	18.7		ug/L		93	80 - 121
Trichloroethene	20.0	18.7		ug/L		93	80 - 122
Vinyl chloride	20.0	17.6		ug/L		88	60 - 129
Xylenes, Total	40.0	35.5		ug/L		89	80 - 120
1,1,1-Trichloroethane	20.0	18.3		ug/L		92	79 - 133
1,1,2-Trichloroethane	20.0	20.3		ug/L		101	80 - 120
Cyclohexane	20.0	18.6		ug/L		93	66 - 135
1,2-Dibromo-3-Chloropropane	20.0	21.6		ug/L		108	46 - 140
Ethylene Dibromide	20.0	21.2		ug/L		106	80 - 126
Dichlorodifluoromethane	20.0	12.7		ug/L		64	32 - 140
cis-1,2-Dichloroethene	20.0	19.5		ug/L		98	80 - 120
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	80 - 123
Isopropylbenzene	20.0	17.9		ug/L		90	80 - 120
Methyl acetate	100	122		ug/L		122	65 - 124
Methyl tert-butyl ether	20.0	20.3		ug/L		102	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.4		ug/L		92	65 - 151
1,2,4-Trichlorobenzene	20.0	17.4		ug/L		87	53 - 137
1,2-Dichlorobenzene	20.0	17.9		ug/L		89	80 - 120

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: LCS 240-255306/5

Matrix: Water

Analysis Batch: 255306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	20.0	17.0		ug/L		85	80 - 120
1,4-Dichlorobenzene	20.0	17.1		ug/L		86	80 - 120
Trichlorofluoromethane	20.0	16.4		ug/L		82	56 - 161
Chlorodibromomethane	20.0	19.7		ug/L		98	68 - 131
Methylcyclohexane	20.0	16.9		ug/L		84	71 - 122
m-Xylene & p-Xylene	20.0	17.8		ug/L		89	80 - 120
o-Xylene	20.0	17.7		ug/L		88	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		63 - 132
4-Bromofluorobenzene (Surr)	90		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	89		80 - 120

Lab Sample ID: MB 240-255552/6

Matrix: Water

Analysis Batch: 255552

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/14/16 12:19	1
Benzene	ND		1.0		ug/L			11/14/16 12:19	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 12:19	1
Bromoform	ND		1.0		ug/L			11/14/16 12:19	1
Bromomethane	ND		1.0		ug/L			11/14/16 12:19	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 12:19	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 12:19	1
Carbon tetrachloride	ND		1.0		ug/L			11/14/16 12:19	1
Chlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
Chloroethane	ND		1.0		ug/L			11/14/16 12:19	1
Chloroform	ND		1.0		ug/L			11/14/16 12:19	1
Chloromethane	ND		1.0		ug/L			11/14/16 12:19	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 12:19	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 12:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 12:19	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 12:19	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 12:19	1
2-Hexanone	ND		10		ug/L			11/14/16 12:19	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 12:19	1
Styrene	ND		1.0		ug/L			11/14/16 12:19	1
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 12:19	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 12:19	1
Toluene	ND		1.0		ug/L			11/14/16 12:19	1
Trichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 12:19	1
Xylenes, Total	ND		2.0		ug/L			11/14/16 12:19	1

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: MB 240-255552/6

Matrix: Water

Analysis Batch: 255552

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		ug/L			11/14/16 12:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 12:19	1
Cyclohexane	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 12:19	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 12:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 12:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 12:19	1
Methyl acetate	ND		10		ug/L			11/14/16 12:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 12:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 12:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
Trichlorofluoromethane	ND		1.0		ug/L			11/14/16 12:19	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 12:19	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 12:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		63 - 132		11/14/16 12:19	1
4-Bromofluorobenzene (Surr)	105		73 - 120		11/14/16 12:19	1
Toluene-d8 (Surr)	100		73 - 124		11/14/16 12:19	1
Dibromofluoromethane (Surr)	101		80 - 120		11/14/16 12:19	1

Lab Sample ID: LCS 240-255552/4

Matrix: Water

Analysis Batch: 255552

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	8.42	J *	ug/L		42	46 - 120
Benzene	10.0	10.1		ug/L		101	80 - 120
Dichlorobromomethane	10.0	10.3		ug/L		103	76 - 125
Bromoform	10.0	10.2		ug/L		102	52 - 157
Bromomethane	10.0	4.49		ug/L		45	24 - 160
2-Butanone (MEK)	20.0	15.2		ug/L		76	54 - 122
Carbon disulfide	10.0	10.3		ug/L		103	58 - 160
Carbon tetrachloride	10.0	15.1	*	ug/L		151	69 - 149
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
Chloroethane	10.0	4.47		ug/L		45	24 - 147
Chloroform	10.0	10.4		ug/L		104	80 - 120
Chloromethane	10.0	8.61		ug/L		86	50 - 135
1,1-Dichloroethane	10.0	9.73		ug/L		97	77 - 121
1,2-Dichloroethane	10.0	9.77		ug/L		98	76 - 130
1,1-Dichloroethene	10.0	10.5		ug/L		105	70 - 141
1,2-Dichloropropane	10.0	10.3		ug/L		103	79 - 121
cis-1,3-Dichloropropene	10.0	9.48		ug/L		95	75 - 120

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QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: LCS 240-255552/4

Matrix: Water

Analysis Batch: 255552

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	10.0	9.35		ug/L		94	65 - 120
Ethylbenzene	10.0	10.2		ug/L		102	80 - 120
2-Hexanone	20.0	18.0		ug/L		90	56 - 124
Methylene Chloride	10.0	10.7		ug/L		107	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	17.3		ug/L		87	60 - 131
Styrene	10.0	10.5		ug/L		105	80 - 120
1,1,2,2-Tetrachloroethane	10.0	8.38		ug/L		84	61 - 130
Tetrachloroethene	10.0	11.5		ug/L		115	80 - 123
Toluene	10.0	10.7		ug/L		107	80 - 121
Trichloroethene	10.0	10.8		ug/L		108	80 - 122
Vinyl chloride	10.0	8.54		ug/L		85	60 - 129
Xylenes, Total	20.0	19.5		ug/L		98	80 - 120
1,1,1-Trichloroethane	10.0	12.6		ug/L		126	79 - 133
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	80 - 120
Cyclohexane	10.0	10.6		ug/L		106	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	9.08		ug/L		91	46 - 140
Ethylene Dibromide	10.0	10.8		ug/L		108	80 - 126
Dichlorodifluoromethane	10.0	10.4		ug/L		104	32 - 140
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	80 - 120
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	80 - 123
Isopropylbenzene	10.0	10.4		ug/L		104	80 - 120
Methyl acetate	50.0	43.7		ug/L		87	65 - 124
Methyl tert-butyl ether	10.0	10.2		ug/L		102	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	13.4		ug/L		134	65 - 151
1,2,4-Trichlorobenzene	10.0	9.46		ug/L		95	53 - 137
1,2-Dichlorobenzene	10.0	9.58		ug/L		96	80 - 120
1,3-Dichlorobenzene	10.0	9.48		ug/L		95	80 - 120
1,4-Dichlorobenzene	10.0	9.60		ug/L		96	80 - 120
Trichlorofluoromethane	10.0	16.4	*	ug/L		164	56 - 161
Chlorodibromomethane	10.0	11.1		ug/L		111	68 - 131
Methylcyclohexane	10.0	10.6		ug/L		106	71 - 122
m-Xylene & p-Xylene	10.0	9.61		ug/L		96	80 - 120
o-Xylene	10.0	9.91		ug/L		99	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	106		73 - 120
Toluene-d8 (Surr)	110		73 - 124
Dibromofluoromethane (Surr)	105		80 - 120

Lab Sample ID: 240-71709-1 MS

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*	40.0	31.4		ug/L		78	28 - 120
Benzene	ND		20.0	20.5		ug/L		102	67 - 126

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QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: 240-71709-1 MS

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	ND		20.0	21.3		ug/L		106	64 - 127
Bromoform	ND		20.0	21.6		ug/L		108	40 - 149
Bromomethane	ND		20.0	11.9		ug/L		59	10 - 169
2-Butanone (MEK)	ND		40.0	33.7		ug/L		84	38 - 123
Carbon disulfide	ND		20.0	18.9		ug/L		95	43 - 172
Carbon tetrachloride	ND	*	20.0	25.6		ug/L		128	51 - 154
Chlorobenzene	ND		20.0	20.1		ug/L		101	58 - 128
Chloroethane	ND		20.0	11.7		ug/L		58	10 - 162
Chloroform	ND		20.0	21.5		ug/L		108	67 - 133
Chloromethane	ND		20.0	17.5		ug/L		88	30 - 143
1,1-Dichloroethane	ND		20.0	19.9		ug/L		99	57 - 135
1,2-Dichloroethane	ND		20.0	20.7		ug/L		103	62 - 137
1,1-Dichloroethene	ND		20.0	19.7		ug/L		99	50 - 156
1,2-Dichloropropane	ND		20.0	20.6		ug/L		103	66 - 130
cis-1,3-Dichloropropene	ND		20.0	18.1		ug/L		91	58 - 120
trans-1,3-Dichloropropene	ND		20.0	16.5		ug/L		83	48 - 120
Ethylbenzene	ND		20.0	19.4		ug/L		97	66 - 123
2-Hexanone	ND		40.0	36.6		ug/L		92	41 - 135
Methylene Chloride	2.4		20.0	24.6		ug/L		111	48 - 138
4-Methyl-2-pentanone (MIBK)	ND		40.0	40.4		ug/L		101	43 - 143
Styrene	ND		20.0	21.9		ug/L		109	62 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	16.4		ug/L		82	48 - 134
Tetrachloroethene	42		20.0	57.5		ug/L		78	54 - 138
Toluene	ND		20.0	19.5		ug/L		98	63 - 130
Trichloroethene	7.7		20.0	28.0		ug/L		102	58 - 139
Vinyl chloride	ND		20.0	15.9		ug/L		79	38 - 147
Xylenes, Total	ND		40.0	40.5		ug/L		101	60 - 126
1,1,1-Trichloroethane	ND		20.0	23.8		ug/L		119	55 - 150
1,1,2-Trichloroethane	ND		20.0	20.6		ug/L		103	65 - 130
Cyclohexane	ND		20.0	16.9		ug/L		85	36 - 144
1,2-Dibromo-3-Chloropropane	ND		20.0	20.7		ug/L		103	37 - 139
Ethylene Dibromide	ND		20.0	21.0		ug/L		105	64 - 137
Dichlorodifluoromethane	ND		20.0	16.6		ug/L		83	16 - 140
cis-1,2-Dichloroethene	14		20.0	35.1		ug/L		105	64 - 134
trans-1,2-Dichloroethene	ND		20.0	21.6		ug/L		108	70 - 137
Isopropylbenzene	ND		20.0	20.9		ug/L		104	57 - 132
Methyl acetate	ND		100	102		ug/L		102	46 - 135
Methyl tert-butyl ether	ND		20.0	22.1		ug/L		110	50 - 137
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	20.7		ug/L		103	41 - 149
1,2,4-Trichlorobenzene	ND		20.0	20.0		ug/L		100	35 - 140
1,2-Dichlorobenzene	ND		20.0	19.8		ug/L		99	62 - 123
1,3-Dichlorobenzene	ND		20.0	18.5		ug/L		93	59 - 122
1,4-Dichlorobenzene	ND		20.0	18.6		ug/L		93	60 - 122
Trichlorofluoromethane	ND	*	20.0	27.8		ug/L		139	26 - 175
Chlorodibromomethane	ND		20.0	21.4		ug/L		107	56 - 132
Methylcyclohexane	ND		20.0	16.6		ug/L		83	31 - 139
m-Xylene & p-Xylene	ND		20.0	19.7		ug/L		98	58 - 127

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: 240-71709-1 MS

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	ND		20.0	20.8		ug/L		104	61 - 126
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	99		63 - 132						
4-Bromofluorobenzene (Surr)	116		73 - 120						
Toluene-d8 (Surr)	102		73 - 124						
Dibromofluoromethane (Surr)	106		80 - 120						

Lab Sample ID: 240-71709-1 MSD

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*	40.0	32.3		ug/L		81	28 - 120	3	35
Benzene	ND		20.0	21.1		ug/L		105	67 - 126	3	31
Dichlorobromomethane	ND		20.0	21.5		ug/L		108	64 - 127	1	35
Bromoform	ND		20.0	20.8		ug/L		104	40 - 149	4	35
Bromomethane	ND		20.0	13.5		ug/L		67	10 - 169	13	35
2-Butanone (MEK)	ND		40.0	31.5		ug/L		79	38 - 123	7	35
Carbon disulfide	ND		20.0	20.9		ug/L		104	43 - 172	10	35
Carbon tetrachloride	ND	*	20.0	29.4		ug/L		147	51 - 154	14	35
Chlorobenzene	ND		20.0	21.0		ug/L		105	58 - 128	4	35
Chloroethane	ND		20.0	12.6		ug/L		63	10 - 162	7	35
Chloroform	ND		20.0	21.8		ug/L		109	67 - 133	1	35
Chloromethane	ND		20.0	17.5		ug/L		88	30 - 143	0	35
1,1-Dichloroethane	ND		20.0	20.5		ug/L		103	57 - 135	3	35
1,2-Dichloroethane	ND		20.0	20.5		ug/L		103	62 - 137	1	35
1,1-Dichloroethene	ND		20.0	21.3		ug/L		107	50 - 156	8	35
1,2-Dichloropropane	ND		20.0	21.2		ug/L		106	66 - 130	3	35
cis-1,3-Dichloropropene	ND		20.0	18.1		ug/L		91	58 - 120	0	35
trans-1,3-Dichloropropene	ND		20.0	16.3		ug/L		81	48 - 120	2	35
Ethylbenzene	ND		20.0	20.9		ug/L		104	66 - 123	7	34
2-Hexanone	ND		40.0	33.9		ug/L		85	41 - 135	8	35
Methylene Chloride	2.4		20.0	25.3		ug/L		114	48 - 138	3	35
4-Methyl-2-pentanone (MIBK)	ND		40.0	38.6		ug/L		97	43 - 143	4	35
Styrene	ND		20.0	22.6		ug/L		113	62 - 131	3	35
1,1,2,2-Tetrachloroethane	ND		20.0	15.7		ug/L		79	48 - 134	4	35
Tetrachloroethene	42		20.0	57.7		ug/L		79	54 - 138	0	35
Toluene	ND		20.0	20.4		ug/L		102	63 - 130	4	33
Trichloroethene	7.7		20.0	29.3		ug/L		108	58 - 139	4	35
Vinyl chloride	ND		20.0	16.8		ug/L		84	38 - 147	6	35
Xylenes, Total	ND		40.0	42.4		ug/L		106	60 - 126	5	35
1,1,1-Trichloroethane	ND		20.0	25.9		ug/L		130	55 - 150	9	35
1,1,2-Trichloroethane	ND		20.0	20.1		ug/L		101	65 - 130	2	35
Cyclohexane	ND		20.0	20.8		ug/L		104	36 - 144	21	35
1,2-Dibromo-3-Chloropropane	ND		20.0	21.3		ug/L		106	37 - 139	3	35
Ethylene Dibromide	ND		20.0	20.6		ug/L		103	64 - 137	2	35
Dichlorodifluoromethane	ND		20.0	18.7		ug/L		94	16 - 140	12	35

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: 240-71709-1 MSD

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	14		20.0	35.2		ug/L		106	64 - 134	0	35
trans-1,2-Dichloroethene	ND		20.0	22.6		ug/L		113	70 - 137	5	25
Isopropylbenzene	ND		20.0	22.9		ug/L		114	57 - 132	9	35
Methyl acetate	ND		100	97.5		ug/L		97	46 - 135	5	34
Methyl tert-butyl ether	ND		20.0	21.7		ug/L		108	50 - 137	2	35
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	24.8		ug/L		124	41 - 149	18	35
1,2,4-Trichlorobenzene	ND		20.0	23.7		ug/L		119	35 - 140	17	35
1,2-Dichlorobenzene	ND		20.0	20.9		ug/L		104	62 - 123	5	35
1,3-Dichlorobenzene	ND		20.0	19.7		ug/L		98	59 - 122	6	35
1,4-Dichlorobenzene	ND		20.0	19.7		ug/L		99	60 - 122	6	35
Trichlorofluoromethane	ND	*	20.0	30.7		ug/L		154	26 - 175	10	35
Chlorodibromomethane	ND		20.0	21.2		ug/L		106	56 - 132	1	35
Methylcyclohexane	ND		20.0	20.3		ug/L		101	31 - 139	20	35
m-Xylene & p-Xylene	ND		20.0	20.8		ug/L		104	58 - 127	6	35
o-Xylene	ND		20.0	21.6		ug/L		108	61 - 126	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 132
4-Bromofluorobenzene (Surr)	115		73 - 120
Toluene-d8 (Surr)	101		73 - 124
Dibromofluoromethane (Surr)	105		80 - 120

TestAmerica Canton

QC Association Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

GC/MS VOA

Analysis Batch: 255306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71709-2	OW-2	Total/NA	Water	8260B	
240-71709-3	OW-5	Total/NA	Water	8260B	
240-71709-4	OW-5 DUP	Total/NA	Water	8260B	
240-71709-5	OW-10R	Total/NA	Water	8260B	
240-71709-6	OW-22	Total/NA	Water	8260B	
240-71709-7	OW-21	Total/NA	Water	8260B	
240-71709-8	TRIP BLANK	Total/NA	Water	8260B	
240-71709-9	FIELD BLANK	Total/NA	Water	8260B	
240-71709-10	OW-24	Total/NA	Water	8260B	
240-71709-11	PUMP RINSATE	Total/NA	Water	8260B	
MB 240-255306/8	Method Blank	Total/NA	Water	8260B	
LCS 240-255306/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 255552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71709-1	OW-6	Total/NA	Water	8260B	
240-71709-12	OW-19	Total/NA	Water	8260B	
240-71709-13	OW-18	Total/NA	Water	8260B	
240-71709-14	OW-13R	Total/NA	Water	8260B	
MB 240-255552/6	Method Blank	Total/NA	Water	8260B	
LCS 240-255552/4	Lab Control Sample	Total/NA	Water	8260B	
240-71709-1 MS	OW-6	Total/NA	Water	8260B	
240-71709-1 MSD	OW-6	Total/NA	Water	8260B	

Lab Chronicle

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6

Date Collected: 11/01/16 09:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	255552	11/14/16 12:41	LEE	TAL CAN

Client Sample ID: OW-2

Date Collected: 11/01/16 10:45

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	255306	11/11/16 16:23	HMB	TAL CAN

Client Sample ID: OW-5

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.25	255306	11/11/16 16:46	HMB	TAL CAN

Client Sample ID: OW-5 DUP

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.25	255306	11/11/16 17:09	HMB	TAL CAN

Client Sample ID: OW-10R

Date Collected: 11/01/16 13:20

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 17:32	HMB	TAL CAN

Client Sample ID: OW-22

Date Collected: 11/01/16 15:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 17:56	HMB	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-21

Date Collected: 11/01/16 16:15

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 18:19	HMB	TAL CAN

Client Sample ID: TRIP BLANK

Date Collected: 11/02/16 08:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 18:42	HMB	TAL CAN

Client Sample ID: FIELD BLANK

Date Collected: 11/02/16 09:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 19:05	HMB	TAL CAN

Client Sample ID: OW-24

Date Collected: 11/02/16 09:50

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 21:23	HMB	TAL CAN

Client Sample ID: PUMP RINSATE

Date Collected: 11/02/16 10:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 21:46	HMB	TAL CAN

Client Sample ID: OW-19

Date Collected: 11/02/16 11:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255552	11/14/16 13:03	LEE	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-18

Date Collected: 11/02/16 13:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255552	11/14/16 13:26	LEE	TAL CAN

Client Sample ID: OW-13R

Date Collected: 11/02/16 15:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255552	11/14/16 13:48	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-17
Kansas	NELAP	7	E-10336	01-31-17
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (VW)	State Program	4	98016	12-31-16 *
Minnesota	NELAP	5	039-999-348	12-31-16 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17
Nevada	State Program	9	OH-000482008A	07-31-17
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-13-00319	11-26-16 *
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

* Certification renewal pending - certification considered valid.

TestAmerica Canton

Client Information						Analysis Requested						Special Instructions/Note:											
Company: Cardinal Resources Address: 201 Penn Center Blvd Suite 400 City: Pittsburgh State: Zip: PA, 15235 Phone: Email: bjones@cardinalres.com Project Name: C & D GW Sampling - 2016 Site:			Lab PM: Howell, Leslie E-Mail: leslie.howell@testamericainc.com Page: Page 1 of 2 Job #:			Carrier Tracking No(s): 240-38186-16744																	
Due Date Requested:												Total Number of containers											
TAT Requested (days): Standard TAT												Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:											
PO #: Advance Payment Required WO #:												Special Instructions/Note:											
Project #: 24017187 SSOW#												Special Instructions/Note:											
Sample Identification												Field Filtered Sample (Yes or No)											
Sample Date												Perform MS/MSD (Yes or No)											
Sample Time												Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)											
Sample Type (C=Comp, G=grab)												Preservation Code:											
CW-6												Water											
CW-6 MS												Water											
CW-6 MSD												Water											
CW-2												Water											
CW-5/OW-5 DUP												Water											
CW-OR												Water											
OW-22												Water											
OW-21												Water											
TRIP BLANK												Water											
Field Blank												Water											
OW-24												Water											
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological												Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months											
Deliverable Requested: I, II, III, IV, Other (specify)												Special Instructions/QC Requirements:											
Empty Kit Relinquished by:												Method of Shipment:											
Relinquished by: William J. Jones												Date/Time: 11/3/2016 11AM											
Relinquished by:												Date/Time: 11/4/16 0900 TB											
Relinquished by:												Date/Time:											
Custody Seals Intact: A Yes A No												Cooler Temperature(s) °C and Other Remarks:											

Phone (330) 497-9396 Fax (330) 497-0772

Chain of Custody Record

[illegible]

TestAmerica Canton Sample Receipt Form/Narrative

 Login # : 77709
Canton Facility

 Client Cardinal Resources Site Name _____

Cooler unpacked by:

 Cooler Received on 11/4/16 Opened on 11/4/16
 FedEx: 1st Grd ☒ Exp ☐ UPS ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other _____

Darry Burns
Receipt After-hours: Drop-off Date/Time _____

Storage Location _____

 TestAmerica Cooler # _____ Foam Box ☐ ~~Client Cooler~~ Box ☐ Other _____
 Packing material used: Bubble Wrap Foam ☐ Plastic Bag ☐ None ☐ Other _____
 COOLANT: Wet Ice Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

 1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
 IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp 3.8 °C Corrected Cooler Temp 4.2 °C
 IR GUN #36 (CF +1.3 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity Yes No ☐
 -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA ☐
 -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No ☐
3. Shippers' packing slip attached to the cooler(s)? Yes No ☐
4. Did custody papers accompany the sample(s)? Yes No ☐
5. Were the custody papers relinquished & signed in the appropriate place? Yes No ☐
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes No ☐
8. Could all bottle labels be reconciled with the COC? Yes No ☐
9. Were correct bottle(s) used for the test(s) indicated? Yes No ☐
10. Sufficient quantity received to perform indicated analyses? Yes No ☐
11. Are these work share samples?
 If yes, Questions 11-15 have been checked at the originating laboratory.

11. Were sample(s) at the correct pH upon receipt? Yes No ☐ pH Strip Lot# HC682547
12. Were VOAs on the COC? Yes No ☐
13. Were air bubbles >6 mm in any VOA vials? Yes No NA ☐
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered Yes No ☐
15. Was a LL Hg or Me Hg trip blank present? Yes No ☐

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

17. SAMPLE CONDITION

 Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

 Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

Part # 156297V-435 RIT2 APV EXP 09/17 :: 544J2/25C6/14EB

SHIP DATE: 03NOV16
ACTWT: 37.70 LB
CAD: 006893730/SSFE1722
DIMS: 23x13x13 IN
BILL CREDIT CARD

ORIGIN ID:AVPA (412) 374-0989
BARBARA JONES
CARDINAL RESOURCES
201 PENN CTR BLVD
STE 400
PITTSBURGH, PA 15235
UNITED STATES US

TO DENISE HOWELL
TESTAMERICA
4101 SHUFFEL ST NW

NORTH CANTON OH 44720

(330) 497-8396

INVT:
PO:

DEPT:



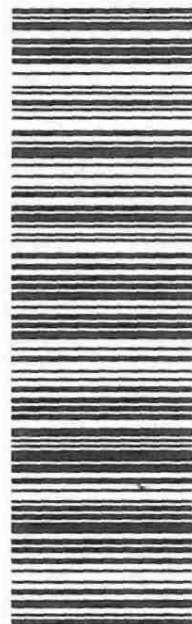
FRI - 04 NOV 3:00P
STANDARD OVERNIGHT

TRK# 7845 3984 7576

0201

ES PHDA

44720
OH-US CLE



Appendix B
Historic Groundwater Results

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)	
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*	
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000	
Well ID	Date																						
MW-1	03/22/93	NR	0.9 J	NR	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NR	<0.1 B	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	
	09/26/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10	
	04/20/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	
	02/18/99	<10	0.66 J	<1.0	<1.0	0.40 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	01/05/00	<10	0.65 J,B	<1.0	<1.0	0.37 J	<2.0	0.083 J	<2.0	<1.0	<1.0	0.22 J	<1.0	0.14 J	<10	0.35 J,B	<1.0	<1.0	-	0.097 J	<1.0	<2.0	<1.0
	06/06/00	<10	0.57 J	<1.0	<1.0	0.30 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	03/15/01	10 UJ	0.40 J	<1.0	<1.0	0.38 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	08/29/01	<10	<1.0	<1.0	<1.0	0.32 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/25/02	10 U	<1.0	<1.0	<1.0	0.17 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	09/18/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/09/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.24 J	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.0	
	02/15/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	06/13/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/24/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/21/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
MW-4	03/24/93	NR	18 J	NR	<0.5	0.4 J	<0.5	<0.5	<0.5	<0.5	<0.5	0.3 J	<0.5	NR	<4.1 B,J	<0.5	<0.5	-	0.1 J	<0.5	<0.5	<0.5	
	09/26/94	<10	11	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	NR	<10	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	
	04/24/95	<10	15	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	<1.0	
	02/18/99	<10	5.7	<1.0	<1.0	0.20 J	<2.0	<1.0	<2.0	<1.0	<1.0	9.8	<1.0	<1.0	<1.0	<1.0	0.16 J	-	0.16 J	0.20 J	<2.0	<1.0	
	01/05/00	<10	6.9 B	<1.0	<1.0	0.26 J	<2.0	<1.0	<2.0	0.13 J	<1.0	0.45 J	3.3	<1.0	<1.0	0.11 J,B	<1.0	<1.0	-	0.090 J	0.15 J	0.30 J	<1.0
	06/06/00	<10	4.8	<1.0	<1.0	0.20 J	<2.0	<1.0	<2.0	0.11 J	<1.0	<1.0	3.8	<1.0	<1.0	<1.0	0.30 J	-	<1.0	<1.0	0.18 J	<1.0	
	03/14/01	<10	3.6	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	3.2	<1.0	<1.0	<1.0	0.66 J	-	<1.0	0.42 J	<2.0	<1.0	
	08/29/01	<10	12	<1.0	<1.0	0.21 J	<2.0	<1.0	0.26 J	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/25/02	<10	10	<1.0	<1.0	0.21 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	1.0 U	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	09/18/02	<10	7.8	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/09/03	<10	2.2	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.84 J	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/26/04	10 U	2.5	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	0.50 J	<1.0	<1.0	<1.0	0.72 J	-	<1.0	<1.0	<2.0	<1.0	
	02/15/06	10 U	3.8	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.53 J	1.0 U	10 U	1.0 U	1.0 U	0.33 J	-	1.0 U	1.0 U	2.0 U	1.0 U	
	08/29/06	10 U	9.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	06/13/07	10 U	7.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.26 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/24/08	10 U	4.4	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.48 J	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.28 J	2.0 U	1.0 U	
	07/16/09	10 U	1.2	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.34 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/20/10	10 U	2.0	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	10/13/11	10 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
	02/08/13	10 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
	06/11/14	25 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																					
OW-2	03/23/93	NR	<0.5	NR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	55	<0.5	NR	<1.3 B	<0.5	50	-	<0.5	22	<0.5	<0.5
	09/23/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	130	<10	NR	<10	<10	100	-	<10	24	<10	<10
	04/23/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	85	<10	<10	<10	<10	76	-	<10	22	<10	<10
	02/17/99	<50	<5.0	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	130	<5.0	<50	3.6 J,B	<5.0	86	-	<5.0	22	<10	<5.0
	01/05/00	<10	0.46 J	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	150	<5.0	<50	<5.0	<5.0	80	-	<5.0	21	0.72 J	<5.0
	06/06/00	<33	<3.3	<3.3	<3.3	<3.3	<6.7	<3.3	<6.7	<3.3	<3.3	99	<3.3	<33	<3.3	<3.3	80	-	<3.3	19	<6.7	<3.3
	03/15/01	<100	<10	<10	<10	<10	<20	<10	<20	<10	<10	310	<10	<100	4.6 J	<10	160	-	<10	32	<20	<10
	08/29/01	<25	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<5.0	<2.5	<2.5	69	<2.5	<25	<2.5	<2.5	61	-	<2.5	15	<5.0	<2.5
	04/25/02	<25	<2.5	<2.5	<2.5	<2.5	<5.0	<2.5	<5.0	<2.5	<2.5	81	<2.5	<25	1.2 U	<2.5	60	-	<2.5	18	0.95 J	<2.5
	09/18/02	<29	<2.9	<2.9	<2.9	<2.9	<5.7	<2.9	<5.7	<2.9	<2.9	85	<2.9	<29	<2.9	<2.9	68	-	<2.9	18	<5.7	<2.9
	04/09/03	<120	<12	<12	<12	<12	<25	<12	<25	<12	<12	290	<12	<120	<12	<12	160	-	<12	29	<25	<12
	04/26/04	10 U	1.5 J	<6.7	<6.7	<6.7	<13	<6.7	<13	<6.7	<6.7	170	<6.7	<67	<6.7	<6.7	110	-	1.3 J	22	<13	<6.7
	02/15/06	40 U	4.0 U	4.0 U	4.0 U	4.0 U	8.0 U	4.0 U	8.0 U	4.0 U	4.0 U	150	4.0 U	40 U	4.0 U	4.0 U	120	-	4.0 U	20	8.0 U	4.0 U
	05/23/06	80 U	8.0 U	8.0 U	8.0 U	8.0 U	16 U	8.0 U	16 U	8.0 U	8.0 U	250	8.0 U	80 U	8.0 U	8.0 U	130	8.0 U	8.0 U	22	16 U	8.0 U
	08/30/06	25 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	2.5 U	2.5 U	74	2.5 U	25 U	2.5 U	2.5 U	90	2.5 U	2.5 U	16	5.0 U	2.5 U
	11/29/06	120 U	12 U	12 U	12 U	12 U	25 U	12 U	25 U	12 U	12 U	280	12 U	120 U	12 U	12 U	140	12 U	12 U	24	25 U	12 U
	06/13/07	20 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	2.0 U	2.0 U	36	2.0 U	20 U	2.0 U	2.0 U	52	2.0 U	2.0 U	12	4.0 U	2.0 U
	07/24/08	20 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	2.0 U	4.0 U	2.0 U	2.0 U	30	0.96 J	20 U	2.0 U	2.0 U	59	2.0 U	2.0 U	11	4.0 U	1.1 J
	07/16/09	25 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	2.5 U	5.0 U	2.5 U	2.5 U	53	2.5 U	25 U	2.5 U	2.5 U	62	2.5 U	2.5 U	9.7	5.0 U	2.5 U
	07/21/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	39	1.0 U	10 U	1.0 U	1.0 U	77	1.0 U	1.0 U	12	2.0 U	1.0 U
	10/13/11	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	98	2.5 U	2.5 U	2.5 U	2.5 U	110	2.5 U	2.5 U	15	2.5 U	5.0 U
	02/06/13	100 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	330	10 U	10 U	10 U	10 U	180	10 U	10 U	26	10 U	20 U
	06/11/14	25 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	54	1.0 U	10 U	5.0 U	1.0 U	94	1.0 U	1.0 U	11	1.0 U	2.0 U
	09/24/15	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	54	2.5 U	25 U	2.5 U	2.5 U	74	2.5 U	2.5 U	10	2.5 U	5.0 U
	11/01/16	25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	63	2.5 U	25 U	2.5 U	2.5 U	68	2.5 U	2.5 U	9.9	2.5 U	5.0 U
OW-5	03/23/93	NR	<3.0 J	NR	<0.5	0.1 J	<0.5	<0.5	<1.3	<0.5	<0.5	8.0 R	<0.5	NR	<3.8	<0.6	1.0	-	<0.5	<1.3	1.8	<0.6
	09/29/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/25/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	7 J	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/18/99	<17	0.67 J	<1.7	<1.7	0.20 J	<3.3	<1.7	<3.3	<1.7	<1.7	33	<1.7	<17	1.3 J,B	<1.0	7.8	-	<1.7	5.4	<3.3	<1.7
	01/06/00	1.3 J	0.66 J	<1.0	<1.0	0.29 J	<2.0	<1.0	<2.0	<1.0	<1.0	0.20 J	38	<1.0	<10	0.25 J,B	<1.0	18	-	0.041 J	9.0	0.26 J
	06/07/00	<10	0.91 J	<1.0	<1.0	0.19 J	<2.0	<1.0	<2.0	<1.0	<1.0	7.3	<1.0	<10	<1.0	<1.0	2.4	-	<1.0	1.7	<2.0	<1.0
	03/14/01	<10	0.46 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	14	<1.0	<10	<1.0	<1.0	6.2	-	<1.0	3.7	<2.0	<1.0
	08/29/01	<12	<1.2	<1.2	<1.2	0.21 J	<2.5	<1.2	<2.5	<1.2	<1.2	29	<1.2	<12	<1.2	<1.2	7.0	-	<1.2	4.5	<2.5	<1.2
	04/24/02	14 U	0.35 J	<1.4	<1.4	0.20 J	<2.9	<1.4	<2.9	<1.4	<1.4	37	<1.4	<14	1.4 U	<1.4	10	-	<1.4	5.3	<2.9	<1.4
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	31	<1.0	<10	<1.0	<1.0	9.5	-	<1.0	5.3	<2.0	<1.0
	04/10/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	7.8	<1.0	<10	<1.0	<1.0	5.5	-	<1.0	3	<2.0	<1.0
	04/25/04	<10	0.38 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	8.6	<1.0	<10	<1.0	<1.0	5.2	-	<1.0	2.5	<2.0	<1.0
	02/16/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	6.2	1.0 U	10 U	1.0 U	1.0 U	4.3	-	1.0 U	2.0	2.0 U	1.0 U
	05/23/06	10 U	0.69 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	20	1.0 U	10 U	1.0 U	1.0 U	5.7	1.0 U	1.0 U	2.6	0.27 J	1.0 U
	08/29/06	14 U	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	2.9 U	1.4 U	1.4 U	1.4 U	34	1.4 U	14 U	1.4 U	1.4 U	6.1	1.4 U	1.4 U	2.8 J	0.82 J	1.4 U
	11/29/06	10 U	0.26 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	30	1.0 U	10 U	1.0 U	1.0 U	7.1	1.0 U	1.0 U	3.5	2.0 U	1.0 U
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	8.7	1.0 U	10 U	1.0 UJ	1.0 U	4.0	1.0 U	1.0 U	1.9	2.0 U	1.0 U
	07/23/08	1.0 U	0.53 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	10	1.0 U	1.0 U	1.0 U	1.0 U	4.4	1.0 U	1.0 U	1.8	0.28 J	1.0 U
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	3.7	1.0 U	1.0 U	1.5	2.0 U	1.0 U
	07/21/10	10 U	0.37 J	1.0 U	1.0 U	1.0 U	2.0 UJ	1.0 U	2.0 U	1.0 U	1.0 U	4.8	1.0 U	10 U	1.0 U	1.0 U	4.2	1.0 U	1.0 U	1.6	2.0 U	1.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)	
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*	
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000	
Well ID	Date																						
OW-5	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
	02/06/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
	06/11/14	25 U	0.32 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10	1.0 U	10 U	5.0 U	1.0 U	4.0	1.0 U	1.0 U	1.5	1.0 U	2.0 U	
	09/24/15	13 U/17 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	1.3 U/1.7 U	31/33	1.3 U/1.7 U	13 U/17 U	1.3 U/1.7 U	1.3 U/1.7 U	14/16	1.3 U/1.7 U	1.3 U/1.7 U	4.2/4.5	1.3 U/1.7 U	2.7 U/3.3 U	
	11/01/16	13 U/13 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	1.3 U/1.3 U	34/33	1.3 U/1.3 U	13 U/13 U	1.3 U/1.3 U	1.3 U/1.3 U	22/21	1.3 U/1.3 U	1.3 U/1.3 U	5.1/5.0	1.3 U/1.3 U	2.5 U/2.5 U	
OW-6	03/23/93	NR	<1.3 J	NR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.1 J	<1.3 J	<0.5	NR	<0.7 J,B	<0.5	13	-	<0.5	<2.9	1.1	<0.5	
	09/27/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	4 J	<10	NR	<10	<10	17	-	<10	6.0 J	<10	<10	
	04/23/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	-	<10	5.0 J	<10	<10	
	02/18/99	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	-	<1.0	4.6	<2.0	<1.0	
	01/06/00	1.4 J	0.19 J,B	0.58 J	<1.0	<1.0	<2.0	<1.0	0.17 J	<1.0	<1.0	0.28 J	5.1	<1.0	<1.0	0.26 J,B	<1.0	21	-	<1.0	4.6	<2.0	<1.0
	06/07/00	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0	14	-	<1.0	2.6	<2.0	<1.0	
	03/15/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	-	<1.0	3.9	<2.0	<1.0	
	08/29/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12	-	<1.0	2.3	<2.0	<1.0	
	04/24/02	10 U	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	4.7	<1.0	<1.0	1.1 U	<1.0	12	-	<1.0	2.9	<2.0	<1.0	
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	7.8	<1.0	<1.0	<1.0	<1.0	15	-	<1.0	3.9	<2.0	<1.0	
	04/09/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	21	<1.0	<1.0	0.34 J	<1.0	28	-	<1.0	6.8	<2.0	<1.0
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	21	<1.0	<1.0	<1.0	<1.0	32	-	<1.0	6.3	<2.0	<1.0	
	02/16/06	17 U	1.7 U	1.7 U	1.7 U	1.7 U	3.3 U	1.7 U	3.3 U	1.7 U	1.7 U	19	1.7 U	17 U	1.7 U	1.7 U	39	-	1.7 U	7.9	3.3 U	1.7 U	
	05/23/06	17 U	1.7 U	1.7 U	1.7 U	1.7 U	3.3 U	1.7 U	3.3 U	1.7 U	1.7 U	24	1.7 U	17 U	1.7 U	1.7 U	39	1.7 U	1.7 U	7.8	3.3 U	1.7 U	
	08/31/06	14 U	1.4 U	1.4 U	1.4 U	1.4 U	2.9 U	1.4 U	2.9 U	1.4 U	1.4 U	20	1.4 U	14 U	1.4 U	1.4 U	40	1.4 U	1.4 U	7.7	2.9 U	1.4 U	
	11/29/06	17 U	1.7 U	1.7 U	1.7 U	1.7 U	3.3 U	1.7 U	3.3 U	1.7 U	1.7 U	20	1.7 U	17 U	0.75 J	1.7 U	41	1.7 U	1.7 U	8.6	3.3 U	1.7 U	
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	19	1.0 U	10 U	1.0 U	1.0 U	36	1.0 U	1.0 U	9.0	2.0 U	1.0 U	
	07/23/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	16	1.0 U	10 U	1.0 U	1.0 U	31	1.0 U	1.0 U	6.3	2.0 U	1.0 U	
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	16	1.0 U	10 U	1.0 U	1.0 U	30	1.0 U	1.0 U	5.5	2.0 U	1.0 U	
07/21/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	0.31 J	1.0 U	1.0 U	20	1.0 U	10 U	1.0 U	1.0 U	42	1.0 U	1.0 U	8.6	2.0 U	1.0 U		
10/13/11	17 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	40	1.7 U	17 U	1.7 U	1.7 U	52	1.7 U	1.7 U	11	1.7 U	3.3 U		
02/06/13	13 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	19	1.3 U	13 U	1.3 U	1.3 U	44	1.3 U	1.3 U	8.9	1.3 U	2.5 U		
06/11/14	25 U	1.0 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	17	1.0 U	10 U	5.0 U	1.0 U	62	1.0 U	1.0 U	10	1.0 U	2.0 U		
09/24/15	13 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	15	1.3 U	13 U	1.3 U	1.3 U	38	1.3 U	1.3 U	7.7	1.3 U	2.5 U		
11/01/16	20 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	14	2.0 U	20 U	2.4	2.0 U	42	2.0 U	2.0 U	7.7	2.0 U	4.0 U		
OW-8	03/23/93	NR	<0.5	NR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NR	<0.8 B	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	
	09/26/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10	
	04/20/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	
	02/18/99	<10	0.32 J	0.17 J	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.32 J	<1.0	0.17 J	-	<1.0	<1.0	<2.0	<1.0	
	01/06/00	<10	0.49 J	<1.0	<1.0	0.37 J	<2.0	0.083 J	<2.0	<1.0	<1.0	0.22 J	<1.0	0.14 J	<1.0	0.35 J,B	<1.0	<1.0	-	0.097 J	<1.0	<2.0	<1.0
	06/07/00	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	03/15/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	08/29/01	<10	0.20 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/24/02	10 U	0.20 J	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/09/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	02/16/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U	
	08/31/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/23/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/14/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																					
OW-8	07/20/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/06/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-10	10/29/93	NR	37	NR	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	NR	2.9 B	<1.0	<1.0	-	0.5 J	<1.0	<1.0	<1.0
	09/25/94	68	1,100	<10	<10	4 J	<10	<10	<10	<10	<10	<10	9 J	NR	<10	<10	<10	-	8 J	<10	<10	53
	04/27/95	<50	2,600	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	-	<50	<50	<50	30 J
OW-10R	02/16/99	<2,000	1,900	<200	<200	23 J	<400	<200	<400	<200	<200	<200	<200	<2,000	100 J,B	<200	<200	-	25 J	<200	<400	<200
	01/07/00	610	400	<17	<17	3.6 J,B	<33	<17	<33	<17	<17	<17	4.3 J	<170	<17	<17	<17	-	8.5 J	<17	10 J	6.2 J
	06/06/00	<50	130 J	<5.0	<5.0	3.0 J	<10	<5.0	<10	<5.0	<5.0	<5.0	2.2 J	<50	<5.0	<5.0	<5.0	-	0.52 J	<5.0	2.2 J	<5.0
	03/14/01	<10	35	<1.0	<1.0	3.6	0.80 J	<1.0	<2.0	<1.0	<1.0	<1.0	1.0	0.89 J	<10	<1.0	<1.0	<1.0	-	0.44 J	<1.0	2.4
	08/29/01	<20	55	<2.0	<2.0	1.4 J	1.1 J	<2.0	<4.0	<2.0	<1.0	<1.0	3.5	<1.0	<20	<1.0	<2.0	<2.0	-	<1.0	<2.0	9.5
	04/25/02	<10	30	<1.0	<1.0	4.0	2.8	<1.0	<2.0	<1.0	<1.0	<1.0	2.7	2.0 U	<10	1.2 U	<1.0	<1.0	-	1.0 U	<1.0	4.5
	09/19/02	<10	17	<1.0	<1.0	2.9	1.3 J	<1.0	<2.0	<1.0	<1.0	<1.0	1.5	0.91 J	<10	<1.0	<1.0	<1.0	-	0.39 J	<1.0	6.3
	04/09/03	<10	6.8	<1.0	<1.0	3.1	0.54 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.43 J	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.72 J
	04/26/04	<10	8.1	<1.0	<1.0	2.2	0.80 J	<1.0	<2.0	<1.0	<1.0	<1.0	0.57 J	0.22 J	<10	1.0 U	<1.0	<1.0	-	0.27 J	<1.0	0.99 J
	02/15/06	10 U	3.2	1.0 U	1.0 U	1.4	0.52 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.47 J	1.3 U
	08/29/06	10 U	9.9	1.0 U	1.0 U	1.4	0.92 J	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	0.59 J	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.7 J	1.0 U
	06/13/07	10 U	4.7	1.0 U	1.0 U	1.4	0.94 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.47 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.89 J	1.0 U
	07/22/08	10 U	5.7	1.0 U	1.0 U	0.71 J	0.48 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.46 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.80 J	1.0 U
	07/15/09	10 U	2.7	1.0 U	1.0 U	2.3	0.62 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.33 J	1.0 U
	07/20/10	10 U	4.6	1.0 U	1.0 U	0.88 J	0.87 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.66 J	1.0 U
	10/13/11	10 U	2.4	1.0 U	1.0 U	5.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/08/13	10 U	2.8	1.0 U	1.0 U	6.0	1.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	09/24/15	10 U	3.8	1.0 U	1.0 U	1.3	2.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
11/01/16	10 U	2.4	1.0 U	1.0 U	1.0 U	3.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
OW-13	10/28/93	NR	230	NR	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.4 J	<1.0	0.2 J	NR	1.2 J,B	<1.0	<1.0	-	4.8	0.9 J	<1.0	0.8 J
	09/29/94	<10	40	<10	<10	<10	<10	<10	<10	<10	<10	<10	6 J	<10	NR	<10	<10	-	<10	<10	9 J	<10
	04/25/95	<10	350	<10	<10	<10	<10	<10	<10	<10	<10	<10	20	<10	<10	<10	<10	-	<10	<10	34	<10
	02/16/99	<330	490	<33	<33	<33	<67	<33	<67	<33	<33	<33	52	<33	<330	18 J,B	<33	<33	-	7.6 J	<33	48 J
	01/06/00	<200	620	<20	<20	<20	<40	3.5 J,B	<40	<20	<20	<20	56	2.3 J	<200	<20	<20	<20	-	2.7 J,B	1.3 J	58
	06/07/00	<83	200	<8.3	<8.3	0.84 J	<17	<8.3	<17	<8.3	<8.3	<8.3	15	5.5 J	<83	<8.3	<8.3	<8.3	-	<8.3	<8.3	17
	03/14/01	<50	130	<5.0	<5.0	<5.0	<10	<5.0	<10	<5.0	<5.0	<5.0	15	4.0 J	<50	3.0 J	<5.0	<5.0	-	<5.0	<5.0	12
	08/29/01	<62	120	<6.2	<6.2	<6.2	<12	<6.2	<12	<6.2	<6.2	<6.2	12	<6.2	<62	<6.2	<6.2	<6.2	-	<6.2	1.1 J	9.9 J
	04/24/02	<56	160	<5.6	<5.6	<5.6	<11	<5.6	<11	<5.6	<5.6	<5.6	11	<5.6	<56	<5.6	<5.6	<5.6	-	5.6 U	1.2 J	9.9 J
	09/19/02	<33	81	<3.3	<3.3	<3.3	<6.7	<3.3	<6.7	<3.3	<3.3	<3.3	8.5	1.8 J	24 J	<3.3	<3.3	<3.3	-	<3.3	<3.3	5.9 J
	04/10/03	<25	53	<2.5	<2.5	<2.5	<5.0	<2.5	<5.0	<2.5	<2.5	<2.5	5.9	1.6 J	<25	<2.5	<2.5	<2.5	-	<2.5	<2.5	4.9 J
	04/25/04	<17	45	<1.7	<1.7	0.38 J	<3.3	<1.7	<3.3	<1.7	<1.7	<1.7	4.9	1.0 J	<17	<1.7	<1.7	<1.7	-	0.31 J	0.67 J	3.2 J
OW-13R	02/20/06	10 U	15	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	0.60 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	0.29 J	1.0 U	1.1 J	1.0 U
	08/29/06	10 U	15	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.40 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3 J	1.0 U
	06/12/07	10 U	11	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.42 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.86 J	1.0 U
	07/22/08	10 U/10 U	6.5 J/6.8 J	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.70 J/0.70 J	1.0 U/1.0 U
	07/14/09	10 U/10 U	13/12	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.4/2.3	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.64 J/0.63 J	1.6 J/1.6 J
	07/21/10	10 U/10 U/3	17/17	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	2.0 U/2.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.70 J/0.78 J	1.0 U/1.0 U	10 U/10 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.35 J/0.35 J	1.2 J/1.2 J
	10/13/11	10 U/10 U	1.0 U/1.3 J	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U
	02/08/13	10 U/10 U	5.4/5.0	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.9/1.8	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	2.0 U/2.0 U
	06/11/14	25 U/25 U	9.8/10	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.47 J/0.47 J	1.0 U/1.0 U	10 U/10 U	5.0 U/5.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	1.0 U/1.0 U	0.22 J/0.24 J	0.80 J/0.97 J
	09/23/15	10 U	5.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10 U	10 U	10 U	10 U	10 U	1		

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																					
OW-15	09/24/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/26/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/16/99	<10	1.1	<1.0	<1.0	0.52 J	<2.0	<1.0	<2.0	0.25 J	<1.0	0.38 J	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.5 J	<1.0
	01/07/00	1.3 J	1.0 B	0.92 J	<1.0	0.64 J	<2.0	<1.0	<2.0	0.31 J	<1.0	0.57 J	<1.0	<1.0	0.35 J,B	0.15 J,B	<1.0	-	0.074 J	<1.0	1.4 J	<1.0
	06/06/00	<10	0.91 J	<1.0	<1.0	0.60 J	<2.0	<1.0	<2.0	0.28 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.0 J	<1.0
	03/14/01	<10	1.2	<1.0	<1.0	0.67 J	<2.0	<1.0	<2.0	<1.0	<1.0	0.37 J	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.1 J	<1.0
	08/28/01	2.2 J,B	0.61 J	<1.0	<1.0	0.35 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.52 J	<1.0
	04/25/02	<10	0.99 J	<1.0	<1.0	0.47 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0 U	<1.0	<1.0	-	<1.0	<1.0	0.91 J	<1.0
	09/18/02	<10	0.69 J	<1.0	<1.0	0.43 J	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/08/03	<10	1.2	<1.0	<1.0	0.67 J	<2.0	<1.0	<2.0	0.33 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0 J	<1.0
	04/23/04	<10	1.2	<1.0	<1.0	0.67 J	<2.0	<1.0	<2.0	0.29 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.90 J	<1.0
	02/15/06	10 U	0.88 J	1.0 U	1.0 U	0.53 J	2.0 U	1.0 U	2.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.73 J	1.3 U
	08/29/06	10 U	0.78 J	1.0 U	1.0 U	0.51 J	2.0 U	1.0 U	0.37 J	0.22 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 J	1.0 U
OW-16	09/24/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/26/95	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/17/99	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	01/06/00	1.4 J	0.082 J,B	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	0.61 J	<1.0	<1.0	0.30 J,B	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	06/07/00	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	03/14/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	08/28/01	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	0.36 J	<1.0	<1.0	0.80 J	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/24/02	10 U	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	09/19/02	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/10/03	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	04/25/04	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0
	02/17/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.37 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U
	08/31/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.35 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
OW-17	02/20/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.0 U	1.0 U
	05/24/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	0.20 J	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	11/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)	
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*	
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000	
Well ID	Date																						
OW-18	09/23/94	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10	
	04/29/95	<10	12	<10	<10	10 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	1 J	<10	<10	29	
	02/17/99	<17	4.7	<1.7	<1.7	3.4	1.0 J	<1.7	<3.3	<1.7	<1.7	0.54 J	<1.7	<17	1.0 J,B	<1.7	<1.7	-	<1.7	<1.7	<3.3	1.1 J	
	01/07/00	2.7 J	5.6 B	1.0	<1.0	4.5	3.0	<1.0	<2.0	0.66 J	<1.0	0.29 J	<1.0	<10	0.40 J,B	<1.0	<1.0	-	0.22 J	0.14 J	0.29 J	1.8	
	06/08/00	<10	4.8	<1.0	<1.0	4.6	1.3 J	<1.0	<2.0	0.24 J	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	03/16/01	10 UJ	3.1	<1.0	<1.0	3.0	<2.0	<1.0	<2.0	<1.0	<1.0	0.38 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.4	
	08/28/01	2.3 J,B	2.4 J	<1.0	<1.0	3.6 J	<2.0	<1.0	<2.0	0.18 J	<1.0	0.38 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.3 J	
	04/24/02	10 U	1.5	<1.0	<1.0	4.3	<2.0	<1.0	<2.0	<1.0	<1.0	0.28 J	<1.0	<10	1.6 U	<1.0	<1.0	-	1.0 U	<1.0	<2.0	1.7	
	09/17/02	<10	2.9	<1.0	<1.0	5.5	1.3 J	<1.0	<2.0	0.36 J	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	2.0	
	04/08/03	2.6 J	2.9	<1.0	<1.0	5.6	1.2 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.2	
	04/23/04	10 U	3.3	<1.0	<1.0	7.3	0.74 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.2	
	02/17/06	10 U	5.1	1.0 U	1.0 U	10	3.2	1.0 U	2.0 U	1.6	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	0.49 J	1.0 U	2.0 U	10	
	08/30/06	10 U	3.7	1.0 U	1.0 U	7.8	0.91 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	06/14/07	10 U	1.2	1.0 U	1.0 U	6.5	0.46 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/22/08	10 U	1.5	1.0 U	1.0 U	6.9	0.40 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/16/09	10 U	2.3	1.0 U	1.0 U	9.6	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.34 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	
	07/22/10	1.6 J	2.8	1.0 U	1.0 U	11	0.41 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	0.63 J	
	10/13/11	10 U	3.7	1.0 U	1.0 U	8.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	2.0 U	
	02/07/13	10 U	5.1	1.0 U	1.0 U	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1	2.0 U	
	06/11/14	25 U	3.2	1.0 U	1.0 U	16	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32 J	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	0.29 J	1.0 U	1.0 U	2.0 U	
	09/23/15	10 U	3.5	1.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
	11/02/16	10 UJ	5.0	1.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
OW-19	09/27/94	<10	10 J	<10	<10	5 J	15	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10	
	04/28/95	<10	8 J	<10	<10	6 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10	
	02/17/99	<10	5.8	<1.0	<1.0	7.1	6.1	<1.0	<2.0	0.27 J	<1.0	3.3	<1.0	<10	0.16 J,B	<1.0	<1.0	-	0.16 J	0.14 J	10	<1.0	
	01/05/00	0.94 J	3.7 B	<1.0	<1.0	10	2.7	<1.0	<2.0	0.16 J	0.27 J	<1.0	1.5	<1.0	<10	0.25 J,B	<1.0	<1.0	-	0.15 J	0.15 J	2.1	<1.0
	06/08/00	<10	2.3	<1.0	<1.0	5.2	1.9 J	<1.0	<2.0	<1.0	<1.0	1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	03/16/01	10 UJ	1.7	<1.0	<1.0	3.8	1.4 J	<1.0	<2.0	<1.0	<1.0	0.96 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	1.3 J	<1.0	
	08/28/01	2.7 J,B	1.9 J	<1.0	<1.0	7.2 J	0.92 J	<1.0	<2.0	<1.0	<1.0	0.35 J	0.46 J	<1.0	<10	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/23/02	10 U	1.3	<1.0	<1.0	6.5	0.71 J	<1.0	<2.0	<1.0	<1.0	0.43 J	<1.0	<10	1.0 U	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	09/17/02	<10	0.64 J	<1.0	<1.0	4.9	0.73 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	<1.0	
	04/08/03	2.5 J	3	<1.0	<1.0	4.9	1.7 J	<1.0	<2.0	<1.0	<1.0	0.81 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.68 J	<1.0	
	04/24/04	10 U	2.1	<1.0	<1.0	6	1.3 J	<1.0	<2.0	<1.0	<1.0	0.58 J	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.56 J	<1.0	
	02/17/06	10 U	3.4	1.0 U	1.0 U	5.6	1.9 J	1.0 U	<2.0	1.0 U	1.0 U	1.3	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	2.9	1.0 U	
	08/31/06	3.1 J	3.3	1.0 U	1.0 U	13	1.8 J	1.0 U	2.0 U	1.0 U	1.0 U	0.85 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.1	1.0 U	
	06/14/07	10 U	2.1	1.0 U	1.0 U	8.8 J	1.3 J	1.0 U	2.0 U	1.0 U	1.0 U	0.73 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.87 J	1.0 U	
	07/22/08	10 U	1.4	1.0 U	1.0 U	11	0.91 J	1.0 U	2.0 U	1.0 U	1.0 U	0.49 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.62 J	1.0 U	
	07/15/09	10 U	1.9	1.0 U	1.0 U	7.9	1.0 J	1.0 U	2.0 U	1.0 U	1.0 U	0.94 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.1	1.0 U	
	07/22/10	1.3 J	1.2	1.0 U	1.0 U	11	0.85 J	1.0 U	2.0 U	1.0 U	1.0 U	0.65 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.63 J	1.0 U	
	10/13/11	10 U	3	1.0 U	1.0 U	8.4	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3	2.0 U	
	02/07/13	10 U	2.5	1.0 U	1.0 U	14	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.1	2.0 U	
	06/11/14	25 U	1.4	1.0 U	1.0 U	12	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	2.0 U	
	09/23/15	10 U	1.0 U	1.0 U	1.0 U	6.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	
	11/02/16	10 UJ	1.0 U	1.0 U	1.0 U	5.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																					
OW-21	09/22/94	6 J	5 J	<10	<10	<10	<10	10 J	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	<10
	04/29/95	<10	8 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	<10	<10	<10	<10
	02/16/99	<10	5.8	<1.0	<1.0	0.11 J	<2.0	<1.0	<2.0	<1.0	<1.0	0.26 J	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.89 J	<1.0
	01/04/00	<10	3.8 B	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	0.11 J	<1.0	<1.0	<1.0	<1.0	0.10 J,B	<1.0	<1.0	-	0.055 J	<1.0	0.46 J	<1.0
	06/07/00	<10	5.4	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.54 J	<1.0
	03/13/01	10 UJ	4.5	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.70 J	<1.0
	08/30/01	10 U	3.2	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.38 J	<1.0	<1.0	-	<1.0	<1.0	0.25 J	<1.0
	04/25/02	<10	2.4	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.33 J	<1.0
	09/18/02	<10	2.5	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.39 J	<1.0
	04/09/03	<10	3.7	<1.0	<1.0	<1.0	<2.0	<1.0	5.5	<1.0	<1.0	<1.0	<1.0	<1.0	0.51 J	<1.0	<1.0	-	<1.0	<1.0	0.88 J	<1.0
	04/24/04	<10	2.9	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	<1.0	<1.0	0.56 J	<1.0
	02/16/06	10 U	3.0	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.52 J	1.0 U
	08/29/06	10 U	2.4	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	0.27 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.83 J	1.0 U
	06/13/07	10 U	2.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.67 J	1.0 U
	07/23/08	10 U	1.8	1.0 U	1.0 U	1.0 U	<2.0	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 J	1.0 U
	07/15/09	10 U	2.1	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.80 J	1.0 U
	07/20/10	10 U	1.9	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.71 J	1.0 U
	10/13/11	10 U	2.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/08/13	10 U	2.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/10/14	25 U	1.8	0.98 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.27 J	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.78 J	2.0 U
	09/24/15	10 U	1.4	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/01/16	10 U	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-22	09/24/94	<10	100	<10	<10	9 J	<10	<10	<10	<10	<10	<10	<10	NR	<10	<10	<10	-	<10	<10	<10	5 J
	04/28/95	<10	48	<10	<10	10 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	-	1 J	<10	<10	<10
	02/17/99	<25	46	<2.5	<2.5	8.0	<5.0	<2.5	<5.0	<2.5	<2.5	2.4 J	<2.5	<25	1.1 J,B	<2.5	<2.5	-	0.87 J	<2.5	4.2 J	3.5
	01/04/00	1.5 J	37 B	0.41 J	<1.2	5.8	<2.5	<1.2	<2.5	0.21 J	<1.2	<1.2	0.098 J	<12	0.23 J,B	<1.2	<1.2	-	0.58 J	0.073 J	1.5 J	1.7
	06/07/00	<10	11	<1.0	<1.0	5.8	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0	1.4
	03/13/01	10 UJ	12	<1.0	<1.0	8.2	<2.0	<1.0	<2.0	<1.0	<1.0	0.70 J	<1.0	<10	<1.0	<1.0	<1.0	-	0.56 J	<1.0	0.76 J	1.9
	08/30/01	10 U	3.4	<1.0	<1.0	4.6	<2.0	0.34 J	<2.0	<1.0	<1.0	0.36 J	<1.0	<10	0.36 J	<1.0	<1.0	-	0.45 J	<1.0	<2.0	1.7
	04/25/02	<10	4.2	<1.0	<1.0	3.7	<2.0	<1.0	<2.0	<1.0	0.29 J	<1.0	<1.0	<1.0	1.2 U	<1.0	<1.0	-	1.0 U	<1.0	0.39 J	2.7 U
	09/18/02	<10	2.9	<1.0	<1.0	4.2	<2.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	<1.0	<1.0	<2.0	1.8
	04/09/03	<10	8.7	<1.0	<1.0	8.5	0.66 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	0.40 J,B	<1.0	<1.0	-	<1.0	<1.0	0.56 J	1.6
	04/24/04	10 U	4.2	<1.0	<1.0	5.9	0.24 J	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	-	0.23 J	<1.0	0.32 J	1.1
	02/16/06	10 U	7.5	1.0 U	1.0 U	11	0.31 J	1.0 U	2.0 U	1.0 U	1.0 U	0.59 J	1.0 U	<10	0.59 J	1.0 U	1.0 U	-	0.26 J	1.0 U	0.29 J	1.0
	08/31/06	10 U	2.8	1.0 U	1.0 U	5.3	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.37 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.41 J	1.1
	06/14/07	10 U	3.5	1.0 U	1.0 U	4.8	0.26 J	1.0 U	2.0 U	1.0 U	1.0 U	0.50 J	1.0 U	10 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37 J	0.76 J
	07/23/08	10 U	1.9	1.0 U	1.0 U	4.6	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.32 J	0.66 J
	07/15/09	10 U	5.1	1.0 U	1.0 U	7.8	0.34 J	1.0 U	2.0 U	1.0 U	1.0 U	0.53 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.35 J	1.0 U
	07/20/10	10 U	2.5	1.0 U	1.0 U	4.5	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	0.38 J	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.26 J	0.64 J
	10/13/11	10 U	5.3	1.0 U	1.0 U	18	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/08/13	10 U	6.2	1.0 U	1.0 U	9.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	06/10/14	25 U	3.5	1.0 U	1.0 U	5.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.41 J	1.0 U	10 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.37 J	0.39 J
	09/24/15	10 U	2.0	1.0 U	1.0 U	4.3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/01/16	10 U	1.8	1.0 U	1.0 U	2.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U

Table B-1
Historical Summary of Detected TCL Volatile Organic Compounds in Groundwater(ug/L)
Carroll and Dubies Superfund Site
Town of Deerpark, Orange County, New York

Analyte	Acetone	Benzene	Carbon Disulfide	Carbon Tetrachloride	Chloro-benzene	Chloroethane	Chloroform	Chloromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE (total)	Ethylbenzene	2-Hexanone	Methylene Chloride	1,1,2,2-PCA	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Xylenes (total)
NYSDEC SGV	50 (G)	1 (S)	NA	5 (S)	5 (S)*	5 (S)*	7 (S)	1	5 (S)*	0.6 (S)	5 (S)*	5 (S)*	5 (S)*	50 (G)	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	5 (S)*	2 (S)	5 (S)*
U.S. EPA MCL	NA	5	NA	5	100	NA	NA	5	NA	5	7	70	700	NA	5	NA	5	100	1,000	5	2	10,000
Well ID	Date																					
OW-23	02/17/06	10 U	0.38 J	1.0 U	1.0 U	1.0 U	0.31 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	1.0 U	1.0 U	0.66 J	1.0 U
	05/23/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.31 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	0.44 J	1.0 U	1.0 U	0.39 J	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.42 J	1.0 U
	11/30/06	10 U	0.23 J	1.0 U	1.0 U	1.0 U	0.27 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U	0.51 J	1.0 U
OW-24	02/20/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	-	0.22 J	1.0 U	2.0 U	<1.0
	05/24/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	0.45 J	1.0 U	1.0 U	2.0 U	1.0 U
	08/30/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	11/29/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	3.6 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	2.0 U	1.0 U
	07/22/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	0.47 J	1.0 U	1.0 U	1.0 U	1.0 U	10 U	3.6 U	1.0 U	1.0 U	1.0 U	0.18 J	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/07/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	09/23/15	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	11/02/16	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/20/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
OW-25	05/23/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U		2.0 U	1.0 U
	08/31/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	11/29/06	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	06/12/07	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/23/08	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/16/09	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	07/22/10	10 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U
	10/13/11	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U
	02/07/13	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U

Notes:

TCL = Target Compound List

NYSDEC SGV = New York State Department of Environmental Conservation Standards (S) and Guidance (G) Values for groundwater

U.S. EPA MCL= United States Environmental Protection Agency Maximum Contaminant Level for drinking/groundwater

* = The principal organic contaminant (POC) standard for groundwater of 5 ug/L applies to this substance.

U (DATA VALIDATION QUALIFIER) = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

< = Analyte not detected at reporting limit

B = Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Red = Concentrations detected above regulatory limit

Blue = Analyte detected at or below the regulatory limit, or analyte detected but no regulatory criteria specified

UJ = (DATA VALIDATION QUALIFIER) = Analyte not detected above the reporting limit; however, the reporting limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

Pre-1999 data from RETEC 1995

Pre-1999 analysis performed by Method 8240

1999 and later analyses performed by Method 8260B

NA = Not applicable; no criteria specified

NR = Analyte not reported

R = Data rejected during validation

J = Estimated result; result is less than reporting limit.

Appendix C
Data Quality Review
Checklist

Tier II
VOA Organic Data Review Summary

SDG No./Matrix: <u>240-71709-1, water</u>		Completion Date: <u>11-29-2016</u>
Project No.: <u>104-0012</u>		Reviewer: <u>Barbara Jones</u>
Laboratory: <u>TestAmerica, North Canton, OH</u>		
Review Criteria	Data Qualified Yes / No	Samples Qualified
1. Data completeness	No	The complete data package (415 pages) was provided in electronic format.
2. Preservation/holding time	No	All VOA samples were analyzed within the required holding times (within 14 days for acid preserved).
3. GC/MS tuning – Form V	No	Form Vs provided for two instruments and covered all samples. BFB mass spectrum met relative abundance criteria in all cases.
4. Calibration:		
4A – Initial – Form VI	No	Form VIs for two instruments provided, along with backup information; multiple calibration levels.
4B – Continuing – Form VII	No	Form VIIs provided for two instruments, showing % D and ave. RRF. %D exceeded limits for one instrument for three VOCs, but not for VOCs detected in any sample. No qualifications.
5. Blanks:		
5A - Laboratory blanks – Form IV	No	Two method blanks (water) associated with field and QC samples, both nondetectable for all compounds analyzed.
5B - Trip blanks/Field blanks	No	One Trip Blank and one Field Blank, no detections.
5C - Equipment rinsates	No	One Pump Rinsate Blank, no detections.
6. Surrogate recovery – Form II	No	Recoveries for four surrogate compounds were all within QC limits, for all samples.
7. Lab-control sample – Form III	Yes	One of two lab control samples, LCS 240-255552/4, was out of limits for acetone (low); carbon tetrachloride (high), and trichlorofluoromethane (high). These compounds respond poorly with this method. The compounds were nondetectable in the associated samples OW-6, OW-19, OW-18, and OW-13R. Acetone results for these samples are qualified as UJ, nondetectable but results are estimated.
8. Matrix spike/matrix spike duplicates – Form III	No	OW-6 MS/MSD. Recoveries and relative % differences were all within QC limits.
9. Field duplicates	No	OW-5 and OW-5 DUP; three compounds detected, all RPDs less than 5%, compared to acceptance limit of 30%.

10.	Internal standards performance - Form VIII	No	Internal standard area response and retention times were all within QC limits.
11.	Compound quantitation and reporting	No	Spot checked Form Is against quant sheets for OW-5 (dil=1.25) and OW-2 (dil=2.5). Rounding and dilution corrections OK.
12.	Tentatively identified compounds	NA	TIC reporting not required for this project.

ANALYTICAL REPORT

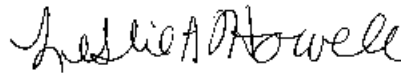
Job Number: 240-71709-1

Job Description: C & D GW Sampling - 2016

For:

Cardinal Resources
201 Penn Center Blvd
Suite 400
Pittsburgh, PA 15235

Attention: Barbara Jones



Approved for release.
Leslie Howell
Project Manager I
11/16/2016 1:46 PM

Leslie Howell, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
leslie.howell@testamericainc.com
11/16/2016

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Definitions/Glossary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Job Narrative
240-71709-1

Comments

No additional comments.

Receipt

The samples were received on 11/4/2016 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) for 255552 recovered outside control limits for the following analytes: Acetone and/or Trichlorofluoromethane and/or 1,4-Dioxane. These analytes have been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed: OW-6 (240-71709-1), OW-19 (240-71709-12), OW-18 (240-71709-13), OW-13R (240-71709-14) and (LCS 240-255552/4).

Method(s) 8260B: The laboratory control sample (LCS) for 255552 recovered outside control limits for the following analyte: Carbon Tetrachloride. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported: OW-6 (240-71709-1), OW-19 (240-71709-12), OW-18 (240-71709-13), OW-13R (240-71709-14) and (LCS 240-255552/4).

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

VOA Prep

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

Detection Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6

Lab Sample ID: 240-71709-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	2.4		2.0		ug/L	2		8260B	Total/NA
Tetrachloroethene	42		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	7.7		2.0		ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	14		2.0		ug/L	2		8260B	Total/NA

Client Sample ID: OW-2

Lab Sample ID: 240-71709-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	68		2.5		ug/L	2.5		8260B	Total/NA
Trichloroethene	9.9		2.5		ug/L	2.5		8260B	Total/NA
cis-1,2-Dichloroethene	63		2.5		ug/L	2.5		8260B	Total/NA

Client Sample ID: OW-5

Lab Sample ID: 240-71709-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	22		1.3		ug/L	1.25		8260B	Total/NA
Trichloroethene	5.1		1.3		ug/L	1.25		8260B	Total/NA
cis-1,2-Dichloroethene	34		1.3		ug/L	1.25		8260B	Total/NA

Client Sample ID: OW-5 DUP

Lab Sample ID: 240-71709-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	21		1.3		ug/L	1.25		8260B	Total/NA
Trichloroethene	5.0		1.3		ug/L	1.25		8260B	Total/NA
cis-1,2-Dichloroethene	33		1.3		ug/L	1.25		8260B	Total/NA

Client Sample ID: OW-10R

Lab Sample ID: 240-71709-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.4		1.0		ug/L	1		8260B	Total/NA
Chloroethane	3.4		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-22

Lab Sample ID: 240-71709-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.8		1.0		ug/L	1		8260B	Total/NA
Chlorobenzene	2.8		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: OW-21

Lab Sample ID: 240-71709-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.0		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK

Lab Sample ID: 240-71709-8

No Detections.

Client Sample ID: FIELD BLANK

Lab Sample ID: 240-71709-9

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-24

Lab Sample ID: 240-71709-10

No Detections.

Client Sample ID: PUMP RINSATE

Lab Sample ID: 240-71709-11

No Detections.

Client Sample ID: OW-19

Lab Sample ID: 240-71709-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Chlorobenzene	5.3		1.0		ug/L		1		8260B	Total/NA
cis-1,2-Dichloroethene	1.0		1.0		ug/L		1		8260B	Total/NA

Client Sample ID: OW-18

Lab Sample ID: 240-71709-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	5.0		1.0		ug/L		1		8260B	Total/NA
Chlorobenzene	14		1.0		ug/L		1		8260B	Total/NA

Client Sample ID: OW-13R

Lab Sample ID: 240-71709-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	4.3		1.0		ug/L		1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6

Date Collected: 11/01/16 09:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	20		ug/L			11/14/16 12:41	2
Benzene	ND		2.0		ug/L			11/14/16 12:41	2
Dichlorobromomethane	ND		2.0		ug/L			11/14/16 12:41	2
Bromoform	ND		2.0		ug/L			11/14/16 12:41	2
Bromomethane	ND		2.0		ug/L			11/14/16 12:41	2
2-Butanone (MEK)	ND		20		ug/L			11/14/16 12:41	2
Carbon disulfide	ND		2.0		ug/L			11/14/16 12:41	2
Carbon tetrachloride	ND	*	2.0		ug/L			11/14/16 12:41	2
Chlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
Chloroethane	ND		2.0		ug/L			11/14/16 12:41	2
Chloroform	ND		2.0		ug/L			11/14/16 12:41	2
Chloromethane	ND		2.0		ug/L			11/14/16 12:41	2
1,1-Dichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,1-Dichloroethene	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dichloropropane	ND		2.0		ug/L			11/14/16 12:41	2
cis-1,3-Dichloropropene	ND		2.0		ug/L			11/14/16 12:41	2
trans-1,3-Dichloropropene	ND		2.0		ug/L			11/14/16 12:41	2
Ethylbenzene	ND		2.0		ug/L			11/14/16 12:41	2
2-Hexanone	ND		20		ug/L			11/14/16 12:41	2
Methylene Chloride	2.4		2.0		ug/L			11/14/16 12:41	2
4-Methyl-2-pentanone (MIBK)	ND		20		ug/L			11/14/16 12:41	2
Styrene	ND		2.0		ug/L			11/14/16 12:41	2
1,1,2,2-Tetrachloroethane	ND		2.0		ug/L			11/14/16 12:41	2
Tetrachloroethene	42		2.0		ug/L			11/14/16 12:41	2
Toluene	ND		2.0		ug/L			11/14/16 12:41	2
Trichloroethene	7.7		2.0		ug/L			11/14/16 12:41	2
Vinyl chloride	ND		2.0		ug/L			11/14/16 12:41	2
Xylenes, Total	ND		4.0		ug/L			11/14/16 12:41	2
1,1,1-Trichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,1,2-Trichloroethane	ND		2.0		ug/L			11/14/16 12:41	2
Cyclohexane	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dibromo-3-Chloropropane	ND		4.0		ug/L			11/14/16 12:41	2
Ethylene Dibromide	ND		2.0		ug/L			11/14/16 12:41	2
Dichlorodifluoromethane	ND		2.0		ug/L			11/14/16 12:41	2
cis-1,2-Dichloroethene	14		2.0		ug/L			11/14/16 12:41	2
trans-1,2-Dichloroethene	ND		2.0		ug/L			11/14/16 12:41	2
Isopropylbenzene	ND		2.0		ug/L			11/14/16 12:41	2
Methyl acetate	ND		20		ug/L			11/14/16 12:41	2
Methyl tert-butyl ether	ND		2.0		ug/L			11/14/16 12:41	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ug/L			11/14/16 12:41	2
1,2,4-Trichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
1,2-Dichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
1,3-Dichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
1,4-Dichlorobenzene	ND		2.0		ug/L			11/14/16 12:41	2
Trichlorofluoromethane	ND	*	2.0		ug/L			11/14/16 12:41	2
Chlorodibromomethane	ND		2.0		ug/L			11/14/16 12:41	2
Methylcyclohexane	ND		2.0		ug/L			11/14/16 12:41	2

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6
Date Collected: 11/01/16 09:00
Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		63 - 132		11/14/16 12:41	2
4-Bromofluorobenzene (Surr)	102		73 - 120		11/14/16 12:41	2
Toluene-d8 (Surr)	100		73 - 124		11/14/16 12:41	2
Dibromofluoromethane (Surr)	102		80 - 120		11/14/16 12:41	2

Client Sample ID: OW-2
Date Collected: 11/01/16 10:45
Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25		ug/L			11/11/16 16:23	2.5
Benzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Dichlorobromomethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Bromoform	ND		2.5		ug/L			11/11/16 16:23	2.5
Bromomethane	ND		2.5		ug/L			11/11/16 16:23	2.5
2-Butanone (MEK)	ND		25		ug/L			11/11/16 16:23	2.5
Carbon disulfide	ND		2.5		ug/L			11/11/16 16:23	2.5
Carbon tetrachloride	ND		2.5		ug/L			11/11/16 16:23	2.5
Chlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Chloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Chloroform	ND		2.5		ug/L			11/11/16 16:23	2.5
Chloromethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1-Dichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1-Dichloroethene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dichloropropane	ND		2.5		ug/L			11/11/16 16:23	2.5
cis-1,3-Dichloropropene	ND		2.5		ug/L			11/11/16 16:23	2.5
trans-1,3-Dichloropropene	ND		2.5		ug/L			11/11/16 16:23	2.5
Ethylbenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
2-Hexanone	ND		25		ug/L			11/11/16 16:23	2.5
Methylene Chloride	ND		2.5		ug/L			11/11/16 16:23	2.5
4-Methyl-2-pentanone (MIBK)	ND		25		ug/L			11/11/16 16:23	2.5
Styrene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1,2,2-Tetrachloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Tetrachloroethene	68		2.5		ug/L			11/11/16 16:23	2.5
Toluene	ND		2.5		ug/L			11/11/16 16:23	2.5
Trichloroethene	9.9		2.5		ug/L			11/11/16 16:23	2.5
Vinyl chloride	ND		2.5		ug/L			11/11/16 16:23	2.5
Xylenes, Total	ND		5.0		ug/L			11/11/16 16:23	2.5
1,1,1-Trichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1,2-Trichloroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Cyclohexane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/L			11/11/16 16:23	2.5
Ethylene Dibromide	ND		2.5		ug/L			11/11/16 16:23	2.5
Dichlorodifluoromethane	ND		2.5		ug/L			11/11/16 16:23	2.5
cis-1,2-Dichloroethene	63		2.5		ug/L			11/11/16 16:23	2.5
trans-1,2-Dichloroethene	ND		2.5		ug/L			11/11/16 16:23	2.5
Isopropylbenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Methyl acetate	ND		25		ug/L			11/11/16 16:23	2.5

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-2

Date Collected: 11/01/16 10:45

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.5		ug/L			11/11/16 16:23	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2,4-Trichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,2-Dichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,3-Dichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
1,4-Dichlorobenzene	ND		2.5		ug/L			11/11/16 16:23	2.5
Trichlorofluoromethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Chlorodibromomethane	ND		2.5		ug/L			11/11/16 16:23	2.5
Methylcyclohexane	ND		2.5		ug/L			11/11/16 16:23	2.5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 132					11/11/16 16:23	2.5
4-Bromofluorobenzene (Surr)	87		73 - 120					11/11/16 16:23	2.5
Toluene-d8 (Surr)	83		73 - 124					11/11/16 16:23	2.5
Dibromofluoromethane (Surr)	88		80 - 120					11/11/16 16:23	2.5

Client Sample ID: OW-5

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13		ug/L			11/11/16 16:46	1.25
Benzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Dichlorobromomethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Bromoform	ND		1.3		ug/L			11/11/16 16:46	1.25
Bromomethane	ND		1.3		ug/L			11/11/16 16:46	1.25
2-Butanone (MEK)	ND		13		ug/L			11/11/16 16:46	1.25
Carbon disulfide	ND		1.3		ug/L			11/11/16 16:46	1.25
Carbon tetrachloride	ND		1.3		ug/L			11/11/16 16:46	1.25
Chlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Chloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Chloroform	ND		1.3		ug/L			11/11/16 16:46	1.25
Chloromethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1-Dichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1-Dichloroethene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dichloropropane	ND		1.3		ug/L			11/11/16 16:46	1.25
cis-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 16:46	1.25
trans-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 16:46	1.25
Ethylbenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
2-Hexanone	ND		13		ug/L			11/11/16 16:46	1.25
Methylene Chloride	ND		1.3		ug/L			11/11/16 16:46	1.25
4-Methyl-2-pentanone (MIBK)	ND		13		ug/L			11/11/16 16:46	1.25
Styrene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1,2,2-Tetrachloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Tetrachloroethene	22		1.3		ug/L			11/11/16 16:46	1.25
Toluene	ND		1.3		ug/L			11/11/16 16:46	1.25
Trichloroethene	5.1		1.3		ug/L			11/11/16 16:46	1.25
Vinyl chloride	ND		1.3		ug/L			11/11/16 16:46	1.25

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-5

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.5		ug/L			11/11/16 16:46	1.25
1,1,1-Trichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1,2-Trichloroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Cyclohexane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dibromo-3-Chloropropane	ND		2.5		ug/L			11/11/16 16:46	1.25
Ethylene Dibromide	ND		1.3		ug/L			11/11/16 16:46	1.25
Dichlorodifluoromethane	ND		1.3		ug/L			11/11/16 16:46	1.25
cis-1,2-Dichloroethene	34		1.3		ug/L			11/11/16 16:46	1.25
trans-1,2-Dichloroethene	ND		1.3		ug/L			11/11/16 16:46	1.25
Isopropylbenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Methyl acetate	ND		13		ug/L			11/11/16 16:46	1.25
Methyl tert-butyl ether	ND		1.3		ug/L			11/11/16 16:46	1.25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2,4-Trichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,2-Dichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,3-Dichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
1,4-Dichlorobenzene	ND		1.3		ug/L			11/11/16 16:46	1.25
Trichlorofluoromethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Chlorodibromomethane	ND		1.3		ug/L			11/11/16 16:46	1.25
Methylcyclohexane	ND		1.3		ug/L			11/11/16 16:46	1.25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 132		11/11/16 16:46	1.25
4-Bromofluorobenzene (Surr)	89		73 - 120		11/11/16 16:46	1.25
Toluene-d8 (Surr)	87		73 - 124		11/11/16 16:46	1.25
Dibromofluoromethane (Surr)	91		80 - 120		11/11/16 16:46	1.25

Client Sample ID: OW-5 DUP

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		13		ug/L			11/11/16 17:09	1.25
Benzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Dichlorobromomethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Bromoform	ND		1.3		ug/L			11/11/16 17:09	1.25
Bromomethane	ND		1.3		ug/L			11/11/16 17:09	1.25
2-Butanone (MEK)	ND		13		ug/L			11/11/16 17:09	1.25
Carbon disulfide	ND		1.3		ug/L			11/11/16 17:09	1.25
Carbon tetrachloride	ND		1.3		ug/L			11/11/16 17:09	1.25
Chlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Chloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Chloroform	ND		1.3		ug/L			11/11/16 17:09	1.25
Chloromethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1-Dichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1-Dichloroethene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dichloropropane	ND		1.3		ug/L			11/11/16 17:09	1.25
cis-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 17:09	1.25

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-5 DUP

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.3		ug/L			11/11/16 17:09	1.25
Ethylbenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
2-Hexanone	ND		13		ug/L			11/11/16 17:09	1.25
Methylene Chloride	ND		1.3		ug/L			11/11/16 17:09	1.25
4-Methyl-2-pentanone (MIBK)	ND		13		ug/L			11/11/16 17:09	1.25
Styrene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1,2,2-Tetrachloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Tetrachloroethene	21		1.3		ug/L			11/11/16 17:09	1.25
Toluene	ND		1.3		ug/L			11/11/16 17:09	1.25
Trichloroethene	5.0		1.3		ug/L			11/11/16 17:09	1.25
Vinyl chloride	ND		1.3		ug/L			11/11/16 17:09	1.25
Xylenes, Total	ND		2.5		ug/L			11/11/16 17:09	1.25
1,1,1-Trichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1,2-Trichloroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Cyclohexane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dibromo-3-Chloropropane	ND		2.5		ug/L			11/11/16 17:09	1.25
Ethylene Dibromide	ND		1.3		ug/L			11/11/16 17:09	1.25
Dichlorodifluoromethane	ND		1.3		ug/L			11/11/16 17:09	1.25
cis-1,2-Dichloroethene	33		1.3		ug/L			11/11/16 17:09	1.25
trans-1,2-Dichloroethene	ND		1.3		ug/L			11/11/16 17:09	1.25
Isopropylbenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Methyl acetate	ND		13		ug/L			11/11/16 17:09	1.25
Methyl tert-butyl ether	ND		1.3		ug/L			11/11/16 17:09	1.25
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2,4-Trichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,2-Dichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,3-Dichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
1,4-Dichlorobenzene	ND		1.3		ug/L			11/11/16 17:09	1.25
Trichlorofluoromethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Chlorodibromomethane	ND		1.3		ug/L			11/11/16 17:09	1.25
Methylcyclohexane	ND		1.3		ug/L			11/11/16 17:09	1.25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		63 - 132		11/11/16 17:09	1.25
4-Bromofluorobenzene (Surr)	89		73 - 120		11/11/16 17:09	1.25
Toluene-d8 (Surr)	86		73 - 124		11/11/16 17:09	1.25
Dibromofluoromethane (Surr)	92		80 - 120		11/11/16 17:09	1.25

Client Sample ID: OW-10R

Date Collected: 11/01/16 13:20

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 17:32	1
Benzene	2.4		1.0		ug/L			11/11/16 17:32	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 17:32	1
Bromoform	ND		1.0		ug/L			11/11/16 17:32	1
Bromomethane	ND		1.0		ug/L			11/11/16 17:32	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 17:32	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-10R

Date Collected: 11/01/16 13:20

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		1.0		ug/L			11/11/16 17:32	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 17:32	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
Chloroethane	3.4		1.0		ug/L			11/11/16 17:32	1
Chloroform	ND		1.0		ug/L			11/11/16 17:32	1
Chloromethane	ND		1.0		ug/L			11/11/16 17:32	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 17:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:32	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:32	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 17:32	1
2-Hexanone	ND		10		ug/L			11/11/16 17:32	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 17:32	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 17:32	1
Styrene	ND		1.0		ug/L			11/11/16 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 17:32	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 17:32	1
Toluene	ND		1.0		ug/L			11/11/16 17:32	1
Trichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 17:32	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 17:32	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 17:32	1
Cyclohexane	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 17:32	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 17:32	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 17:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:32	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 17:32	1
Methyl acetate	ND		10		ug/L			11/11/16 17:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 17:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 17:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:32	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 17:32	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 17:32	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 17:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 132					11/11/16 17:32	1
4-Bromofluorobenzene (Surr)	87		73 - 120					11/11/16 17:32	1
Toluene-d8 (Surr)	84		73 - 124					11/11/16 17:32	1
Dibromofluoromethane (Surr)	89		80 - 120					11/11/16 17:32	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-22

Date Collected: 11/01/16 15:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 17:56	1
Benzene	1.8		1.0		ug/L			11/11/16 17:56	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 17:56	1
Bromoform	ND		1.0		ug/L			11/11/16 17:56	1
Bromomethane	ND		1.0		ug/L			11/11/16 17:56	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 17:56	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 17:56	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 17:56	1
Chlorobenzene	2.8		1.0		ug/L			11/11/16 17:56	1
Chloroethane	ND		1.0		ug/L			11/11/16 17:56	1
Chloroform	ND		1.0		ug/L			11/11/16 17:56	1
Chloromethane	ND		1.0		ug/L			11/11/16 17:56	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 17:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 17:56	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 17:56	1
2-Hexanone	ND		10		ug/L			11/11/16 17:56	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 17:56	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 17:56	1
Styrene	ND		1.0		ug/L			11/11/16 17:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 17:56	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 17:56	1
Toluene	ND		1.0		ug/L			11/11/16 17:56	1
Trichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 17:56	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 17:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 17:56	1
Cyclohexane	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 17:56	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 17:56	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 17:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 17:56	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 17:56	1
Methyl acetate	ND		10		ug/L			11/11/16 17:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 17:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 17:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 17:56	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 17:56	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 17:56	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 17:56	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-22

Date Collected: 11/01/16 15:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 132		11/11/16 17:56	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/11/16 17:56	1
Toluene-d8 (Surr)	84		73 - 124		11/11/16 17:56	1
Dibromofluoromethane (Surr)	90		80 - 120		11/11/16 17:56	1

Client Sample ID: OW-21

Date Collected: 11/01/16 16:15

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 18:19	1
Benzene	1.0		1.0		ug/L			11/11/16 18:19	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 18:19	1
Bromoform	ND		1.0		ug/L			11/11/16 18:19	1
Bromomethane	ND		1.0		ug/L			11/11/16 18:19	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 18:19	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 18:19	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 18:19	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
Chloroethane	ND		1.0		ug/L			11/11/16 18:19	1
Chloroform	ND		1.0		ug/L			11/11/16 18:19	1
Chloromethane	ND		1.0		ug/L			11/11/16 18:19	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 18:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:19	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:19	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 18:19	1
2-Hexanone	ND		10		ug/L			11/11/16 18:19	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 18:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 18:19	1
Styrene	ND		1.0		ug/L			11/11/16 18:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 18:19	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 18:19	1
Toluene	ND		1.0		ug/L			11/11/16 18:19	1
Trichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 18:19	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 18:19	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 18:19	1
Cyclohexane	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 18:19	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 18:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 18:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:19	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 18:19	1
Methyl acetate	ND		10		ug/L			11/11/16 18:19	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-21

Date Collected: 11/01/16 16:15

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 18:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 18:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:19	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 18:19	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 18:19	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 132					11/11/16 18:19	1
4-Bromofluorobenzene (Surr)	88		73 - 120					11/11/16 18:19	1
Toluene-d8 (Surr)	86		73 - 124					11/11/16 18:19	1
Dibromofluoromethane (Surr)	91		80 - 120					11/11/16 18:19	1

Client Sample ID: TRIP BLANK

Date Collected: 11/02/16 08:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 18:42	1
Benzene	ND		1.0		ug/L			11/11/16 18:42	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 18:42	1
Bromoform	ND		1.0		ug/L			11/11/16 18:42	1
Bromomethane	ND		1.0		ug/L			11/11/16 18:42	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 18:42	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 18:42	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 18:42	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
Chloroethane	ND		1.0		ug/L			11/11/16 18:42	1
Chloroform	ND		1.0		ug/L			11/11/16 18:42	1
Chloromethane	ND		1.0		ug/L			11/11/16 18:42	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 18:42	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:42	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 18:42	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 18:42	1
2-Hexanone	ND		10		ug/L			11/11/16 18:42	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 18:42	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 18:42	1
Styrene	ND		1.0		ug/L			11/11/16 18:42	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 18:42	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 18:42	1
Toluene	ND		1.0		ug/L			11/11/16 18:42	1
Trichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 18:42	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: TRIP BLANK

Date Collected: 11/02/16 08:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0		ug/L			11/11/16 18:42	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 18:42	1
Cyclohexane	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 18:42	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 18:42	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 18:42	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 18:42	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 18:42	1
Methyl acetate	ND		10		ug/L			11/11/16 18:42	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 18:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 18:42	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 18:42	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 18:42	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 18:42	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 18:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		63 - 132		11/11/16 18:42	1
4-Bromofluorobenzene (Surr)	91		73 - 120		11/11/16 18:42	1
Toluene-d8 (Surr)	86		73 - 124		11/11/16 18:42	1
Dibromofluoromethane (Surr)	91		80 - 120		11/11/16 18:42	1

Client Sample ID: FIELD BLANK

Date Collected: 11/02/16 09:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 19:05	1
Benzene	ND		1.0		ug/L			11/11/16 19:05	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 19:05	1
Bromoform	ND		1.0		ug/L			11/11/16 19:05	1
Bromomethane	ND		1.0		ug/L			11/11/16 19:05	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 19:05	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 19:05	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 19:05	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
Chloroethane	ND		1.0		ug/L			11/11/16 19:05	1
Chloroform	ND		1.0		ug/L			11/11/16 19:05	1
Chloromethane	ND		1.0		ug/L			11/11/16 19:05	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 19:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 19:05	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: FIELD BLANK

Date Collected: 11/02/16 09:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 19:05	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 19:05	1
2-Hexanone	ND		10		ug/L			11/11/16 19:05	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 19:05	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 19:05	1
Styrene	ND		1.0		ug/L			11/11/16 19:05	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 19:05	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 19:05	1
Toluene	ND		1.0		ug/L			11/11/16 19:05	1
Trichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 19:05	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 19:05	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 19:05	1
Cyclohexane	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 19:05	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 19:05	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 19:05	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 19:05	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 19:05	1
Methyl acetate	ND		10		ug/L			11/11/16 19:05	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 19:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 19:05	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 19:05	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 19:05	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 19:05	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		63 - 132		11/11/16 19:05	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/11/16 19:05	1
Toluene-d8 (Surr)	85		73 - 124		11/11/16 19:05	1
Dibromofluoromethane (Surr)	92		80 - 120		11/11/16 19:05	1

Client Sample ID: OW-24

Date Collected: 11/02/16 09:50

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 21:23	1
Benzene	ND		1.0		ug/L			11/11/16 21:23	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 21:23	1
Bromoform	ND		1.0		ug/L			11/11/16 21:23	1
Bromomethane	ND		1.0		ug/L			11/11/16 21:23	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 21:23	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-24

Date Collected: 11/02/16 09:50

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		1.0		ug/L			11/11/16 21:23	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 21:23	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
Chloroethane	ND		1.0		ug/L			11/11/16 21:23	1
Chloroform	ND		1.0		ug/L			11/11/16 21:23	1
Chloromethane	ND		1.0		ug/L			11/11/16 21:23	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 21:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:23	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 21:23	1
2-Hexanone	ND		10		ug/L			11/11/16 21:23	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 21:23	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 21:23	1
Styrene	ND		1.0		ug/L			11/11/16 21:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 21:23	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 21:23	1
Toluene	ND		1.0		ug/L			11/11/16 21:23	1
Trichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 21:23	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 21:23	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 21:23	1
Cyclohexane	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 21:23	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 21:23	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 21:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:23	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 21:23	1
Methyl acetate	ND		10		ug/L			11/11/16 21:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 21:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 21:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:23	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 21:23	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 21:23	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 132					11/11/16 21:23	1
4-Bromofluorobenzene (Surr)	89		73 - 120					11/11/16 21:23	1
Toluene-d8 (Surr)	85		73 - 124					11/11/16 21:23	1
Dibromofluoromethane (Surr)	91		80 - 120					11/11/16 21:23	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: PUMP RINSATE

Lab Sample ID: 240-71709-11

Date Collected: 11/02/16 10:10

Matrix: Water

Date Received: 11/04/16 09:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 21:46	1
Benzene	ND		1.0		ug/L			11/11/16 21:46	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 21:46	1
Bromoform	ND		1.0		ug/L			11/11/16 21:46	1
Bromomethane	ND		1.0		ug/L			11/11/16 21:46	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 21:46	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 21:46	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 21:46	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
Chloroethane	ND		1.0		ug/L			11/11/16 21:46	1
Chloroform	ND		1.0		ug/L			11/11/16 21:46	1
Chloromethane	ND		1.0		ug/L			11/11/16 21:46	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 21:46	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:46	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 21:46	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 21:46	1
2-Hexanone	ND		10		ug/L			11/11/16 21:46	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 21:46	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 21:46	1
Styrene	ND		1.0		ug/L			11/11/16 21:46	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 21:46	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 21:46	1
Toluene	ND		1.0		ug/L			11/11/16 21:46	1
Trichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 21:46	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 21:46	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 21:46	1
Cyclohexane	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 21:46	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 21:46	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 21:46	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 21:46	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 21:46	1
Methyl acetate	ND		10		ug/L			11/11/16 21:46	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 21:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 21:46	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 21:46	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 21:46	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 21:46	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 21:46	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: PUMP RINSATE

Date Collected: 11/02/16 10:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 132		11/11/16 21:46	1
4-Bromofluorobenzene (Surr)	86		73 - 120		11/11/16 21:46	1
Toluene-d8 (Surr)	84		73 - 124		11/11/16 21:46	1
Dibromofluoromethane (Surr)	88		80 - 120		11/11/16 21:46	1

Client Sample ID: OW-19

Date Collected: 11/02/16 11:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	10		ug/L			11/14/16 13:03	1
Benzene	ND		1.0		ug/L			11/14/16 13:03	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 13:03	1
Bromoform	ND		1.0		ug/L			11/14/16 13:03	1
Bromomethane	ND		1.0		ug/L			11/14/16 13:03	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 13:03	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 13:03	1
Carbon tetrachloride	ND	*	1.0		ug/L			11/14/16 13:03	1
Chlorobenzene	5.3		1.0		ug/L			11/14/16 13:03	1
Chloroethane	ND		1.0		ug/L			11/14/16 13:03	1
Chloroform	ND		1.0		ug/L			11/14/16 13:03	1
Chloromethane	ND		1.0		ug/L			11/14/16 13:03	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 13:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:03	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 13:03	1
2-Hexanone	ND		10		ug/L			11/14/16 13:03	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 13:03	1
Styrene	ND		1.0		ug/L			11/14/16 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 13:03	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 13:03	1
Toluene	ND		1.0		ug/L			11/14/16 13:03	1
Trichloroethene	ND		1.0		ug/L			11/14/16 13:03	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 13:03	1
Xylenes, Total	ND		2.0		ug/L			11/14/16 13:03	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 13:03	1
Cyclohexane	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 13:03	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 13:03	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 13:03	1
cis-1,2-Dichloroethene	1.0		1.0		ug/L			11/14/16 13:03	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:03	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 13:03	1
Methyl acetate	ND		10		ug/L			11/14/16 13:03	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-19

Date Collected: 11/02/16 11:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 13:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 13:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:03	1
Trichlorofluoromethane	ND	*	1.0		ug/L			11/14/16 13:03	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 13:03	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 13:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 132					11/14/16 13:03	1
4-Bromofluorobenzene (Surr)	106		73 - 120					11/14/16 13:03	1
Toluene-d8 (Surr)	98		73 - 124					11/14/16 13:03	1
Dibromofluoromethane (Surr)	102		80 - 120					11/14/16 13:03	1

Client Sample ID: OW-18

Date Collected: 11/02/16 13:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	10		ug/L			11/14/16 13:26	1
Benzene	5.0		1.0		ug/L			11/14/16 13:26	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 13:26	1
Bromoform	ND		1.0		ug/L			11/14/16 13:26	1
Bromomethane	ND		1.0		ug/L			11/14/16 13:26	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 13:26	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 13:26	1
Carbon tetrachloride	ND	*	1.0		ug/L			11/14/16 13:26	1
Chlorobenzene	14		1.0		ug/L			11/14/16 13:26	1
Chloroethane	ND		1.0		ug/L			11/14/16 13:26	1
Chloroform	ND		1.0		ug/L			11/14/16 13:26	1
Chloromethane	ND		1.0		ug/L			11/14/16 13:26	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 13:26	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:26	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:26	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 13:26	1
2-Hexanone	ND		10		ug/L			11/14/16 13:26	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 13:26	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 13:26	1
Styrene	ND		1.0		ug/L			11/14/16 13:26	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 13:26	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 13:26	1
Toluene	ND		1.0		ug/L			11/14/16 13:26	1
Trichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 13:26	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-18

Date Collected: 11/02/16 13:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0		ug/L			11/14/16 13:26	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 13:26	1
Cyclohexane	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 13:26	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 13:26	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 13:26	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:26	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 13:26	1
Methyl acetate	ND		10		ug/L			11/14/16 13:26	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 13:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 13:26	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:26	1
Trichlorofluoromethane	ND	*	1.0		ug/L			11/14/16 13:26	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 13:26	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 132		11/14/16 13:26	1
4-Bromofluorobenzene (Surr)	110		73 - 120		11/14/16 13:26	1
Toluene-d8 (Surr)	100		73 - 124		11/14/16 13:26	1
Dibromofluoromethane (Surr)	102		80 - 120		11/14/16 13:26	1

Client Sample ID: OW-13R

Date Collected: 11/02/16 15:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*	10		ug/L			11/14/16 13:48	1
Benzene	4.3		1.0		ug/L			11/14/16 13:48	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 13:48	1
Bromoform	ND		1.0		ug/L			11/14/16 13:48	1
Bromomethane	ND		1.0		ug/L			11/14/16 13:48	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 13:48	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 13:48	1
Carbon tetrachloride	ND	*	1.0		ug/L			11/14/16 13:48	1
Chlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
Chloroethane	ND		1.0		ug/L			11/14/16 13:48	1
Chloroform	ND		1.0		ug/L			11/14/16 13:48	1
Chloromethane	ND		1.0		ug/L			11/14/16 13:48	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 13:48	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:48	1

TestAmerica Canton

Client Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-13R

Date Collected: 11/02/16 15:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 13:48	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 13:48	1
2-Hexanone	ND		10		ug/L			11/14/16 13:48	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 13:48	1
Styrene	ND		1.0		ug/L			11/14/16 13:48	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 13:48	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 13:48	1
Toluene	ND		1.0		ug/L			11/14/16 13:48	1
Trichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 13:48	1
Xylenes, Total	ND		2.0		ug/L			11/14/16 13:48	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 13:48	1
Cyclohexane	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 13:48	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 13:48	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 13:48	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 13:48	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 13:48	1
Methyl acetate	ND		10		ug/L			11/14/16 13:48	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 13:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 13:48	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 13:48	1
Trichlorofluoromethane	ND	*	1.0		ug/L			11/14/16 13:48	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 13:48	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 132		11/14/16 13:48	1
4-Bromofluorobenzene (Surr)	100		73 - 120		11/14/16 13:48	1
Toluene-d8 (Surr)	101		73 - 124		11/14/16 13:48	1
Dibromofluoromethane (Surr)	103		80 - 120		11/14/16 13:48	1

Default Detection Limits

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	1.0	0.23	ug/L	8260B
1,1,2,2-Tetrachloroethane	1.0	0.32	ug/L	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	0.41	ug/L	8260B
1,1,2-Trichloroethane	1.0	0.34	ug/L	8260B
1,1-Dichloroethane	1.0	0.25	ug/L	8260B
1,1-Dichloroethene	1.0	0.27	ug/L	8260B
1,2,4-Trichlorobenzene	1.0	0.27	ug/L	8260B
1,2-Dibromo-3-Chloropropane	2.0	0.47	ug/L	8260B
1,2-Dichlorobenzene	1.0	0.26	ug/L	8260B
1,2-Dichloroethane	1.0	0.30	ug/L	8260B
1,2-Dichloropropane	1.0	0.30	ug/L	8260B
1,3-Dichlorobenzene	1.0	0.32	ug/L	8260B
1,4-Dichlorobenzene	1.0	0.23	ug/L	8260B
2-Butanone (MEK)	10	1.0	ug/L	8260B
2-Hexanone	10	1.2	ug/L	8260B
4-Methyl-2-pentanone (MIBK)	10	0.71	ug/L	8260B
Acetone	10	1.8	ug/L	8260B
Benzene	1.0	0.28	ug/L	8260B
Bromoform	1.0	0.43	ug/L	8260B
Bromomethane	1.0	0.42	ug/L	8260B
Carbon disulfide	1.0	0.34	ug/L	8260B
Carbon tetrachloride	1.0	0.35	ug/L	8260B
Chlorobenzene	1.0	0.32	ug/L	8260B
Chlorodibromomethane	1.0	0.25	ug/L	8260B
Chloroethane	1.0	0.41	ug/L	8260B
Chloroform	1.0	0.31	ug/L	8260B
Chloromethane	1.0	0.43	ug/L	8260B
cis-1,2-Dichloroethene	1.0	0.30	ug/L	8260B
cis-1,3-Dichloropropene	1.0	0.26	ug/L	8260B
Cyclohexane	1.0	0.44	ug/L	8260B
Dichlorobromomethane	1.0	0.30	ug/L	8260B
Dichlorodifluoromethane	1.0	0.50	ug/L	8260B
Ethylbenzene	1.0	0.26	ug/L	8260B
Ethylene Dibromide	1.0	0.23	ug/L	8260B
Isopropylbenzene	1.0	0.21	ug/L	8260B
Methyl acetate	10	1.4	ug/L	8260B
Methyl tert-butyl ether	1.0	0.27	ug/L	8260B
Methylcyclohexane	1.0	0.45	ug/L	8260B
Methylene Chloride	1.0	0.53	ug/L	8260B
Styrene	1.0	0.23	ug/L	8260B
Tetrachloroethene	1.0	0.30	ug/L	8260B
Toluene	1.0	0.23	ug/L	8260B
trans-1,2-Dichloroethene	1.0	0.29	ug/L	8260B
trans-1,3-Dichloropropene	1.0	0.31	ug/L	8260B
Trichloroethene	1.0	0.33	ug/L	8260B
Trichlorofluoromethane	1.0	0.50	ug/L	8260B
Vinyl chloride	1.0	0.45	ug/L	8260B
Xylenes, Total	2.0	0.24	ug/L	8260B

Surrogate Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (63-132)	BFB (73-120)	TOL (73-124)	DBFM (80-120)
240-71709-1	OW-6	99	102	100	102
240-71709-1 MS	OW-6	99	116	102	106
240-71709-1 MSD	OW-6	95	115	101	105
240-71709-2	OW-2	90	87	83	88
240-71709-3	OW-5	95	89	87	91
240-71709-4	OW-5 DUP	92	89	86	92
240-71709-5	OW-10R	94	87	84	89
240-71709-6	OW-22	93	88	84	90
240-71709-7	OW-21	95	88	86	91
240-71709-8	TRIP BLANK	95	91	86	91
240-71709-9	FIELD BLANK	92	88	85	92
240-71709-10	OW-24	94	89	85	91
240-71709-11	PUMP RINSATE	89	86	84	88
240-71709-12	OW-19	100	106	98	102
240-71709-13	OW-18	100	110	100	102
240-71709-14	OW-13R	100	100	101	103
LCS 240-255306/5	Lab Control Sample	90	90	88	89
LCS 240-255552/4	Lab Control Sample	96	106	110	105
MB 240-255306/8	Method Blank	94	88	83	88
MB 240-255552/6	Method Blank	99	105	100	101

Surrogate Legend

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

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: MB 240-255306/8

Matrix: Water

Analysis Batch: 255306

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/11/16 12:34	1
Benzene	ND		1.0		ug/L			11/11/16 12:34	1
Dichlorobromomethane	ND		1.0		ug/L			11/11/16 12:34	1
Bromoform	ND		1.0		ug/L			11/11/16 12:34	1
Bromomethane	ND		1.0		ug/L			11/11/16 12:34	1
2-Butanone (MEK)	ND		10		ug/L			11/11/16 12:34	1
Carbon disulfide	ND		1.0		ug/L			11/11/16 12:34	1
Carbon tetrachloride	ND		1.0		ug/L			11/11/16 12:34	1
Chlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
Chloroethane	ND		1.0		ug/L			11/11/16 12:34	1
Chloroform	ND		1.0		ug/L			11/11/16 12:34	1
Chloromethane	ND		1.0		ug/L			11/11/16 12:34	1
1,1-Dichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,1-Dichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dichloropropane	ND		1.0		ug/L			11/11/16 12:34	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 12:34	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/11/16 12:34	1
Ethylbenzene	ND		1.0		ug/L			11/11/16 12:34	1
2-Hexanone	ND		10		ug/L			11/11/16 12:34	1
Methylene Chloride	ND		1.0		ug/L			11/11/16 12:34	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/11/16 12:34	1
Styrene	ND		1.0		ug/L			11/11/16 12:34	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/11/16 12:34	1
Tetrachloroethene	ND		1.0		ug/L			11/11/16 12:34	1
Toluene	ND		1.0		ug/L			11/11/16 12:34	1
Trichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
Vinyl chloride	ND		1.0		ug/L			11/11/16 12:34	1
Xylenes, Total	ND		2.0		ug/L			11/11/16 12:34	1
1,1,1-Trichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/11/16 12:34	1
Cyclohexane	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/11/16 12:34	1
Ethylene Dibromide	ND		1.0		ug/L			11/11/16 12:34	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/11/16 12:34	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/11/16 12:34	1
Isopropylbenzene	ND		1.0		ug/L			11/11/16 12:34	1
Methyl acetate	ND		10		ug/L			11/11/16 12:34	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/11/16 12:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/11/16 12:34	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/11/16 12:34	1
Trichlorofluoromethane	ND		1.0		ug/L			11/11/16 12:34	1
Chlorodibromomethane	ND		1.0		ug/L			11/11/16 12:34	1
Methylcyclohexane	ND		1.0		ug/L			11/11/16 12:34	1

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

<i>Surrogate</i>	<i>MB %Recovery</i>	<i>MB Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	94		63 - 132		11/11/16 12:34	1
4-Bromofluorobenzene (Surr)	88		73 - 120		11/11/16 12:34	1
Toluene-d8 (Surr)	83		73 - 124		11/11/16 12:34	1
Dibromofluoromethane (Surr)	88		80 - 120		11/11/16 12:34	1

Lab Sample ID: LCS 240-255306/5

Matrix: Water

Analysis Batch: 255306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec. Limits</i>
Acetone	40.0	45.2		ug/L		113	46 - 120
Benzene	20.0	19.1		ug/L		96	80 - 120
Dichlorobromomethane	20.0	18.8		ug/L		94	76 - 125
Bromoform	20.0	21.3		ug/L		107	52 - 157
Bromomethane	20.0	18.3		ug/L		91	24 - 160
2-Butanone (MEK)	40.0	46.3		ug/L		116	54 - 122
Carbon disulfide	20.0	19.5		ug/L		98	58 - 160
Carbon tetrachloride	20.0	18.4		ug/L		92	69 - 149
Chlorobenzene	20.0	17.6		ug/L		88	80 - 120
Chloroethane	20.0	19.4		ug/L		97	24 - 147
Chloroform	20.0	19.3		ug/L		97	80 - 120
Chloromethane	20.0	16.3		ug/L		82	50 - 135
1,1-Dichloroethane	20.0	19.5		ug/L		97	77 - 121
1,2-Dichloroethane	20.0	19.5		ug/L		97	76 - 130
1,1-Dichloroethene	20.0	20.0		ug/L		100	70 - 141
1,2-Dichloropropane	20.0	19.2		ug/L		96	79 - 121
cis-1,3-Dichloropropene	20.0	18.7		ug/L		94	75 - 120
trans-1,3-Dichloropropene	20.0	18.7		ug/L		93	65 - 120
Ethylbenzene	20.0	18.2		ug/L		91	80 - 120
2-Hexanone	40.0	48.3		ug/L		121	56 - 124
Methylene Chloride	20.0	18.5		ug/L		93	68 - 136
4-Methyl-2-pentanone (MIBK)	40.0	45.9		ug/L		115	60 - 131
Styrene	20.0	18.4		ug/L		92	80 - 120
1,1,2,2-Tetrachloroethane	20.0	22.6		ug/L		113	61 - 130
Tetrachloroethene	20.0	18.1		ug/L		90	80 - 123
Toluene	20.0	18.7		ug/L		93	80 - 121
Trichloroethene	20.0	18.7		ug/L		93	80 - 122
Vinyl chloride	20.0	17.6		ug/L		88	60 - 129
Xylenes, Total	40.0	35.5		ug/L		89	80 - 120
1,1,1-Trichloroethane	20.0	18.3		ug/L		92	79 - 133
1,1,2-Trichloroethane	20.0	20.3		ug/L		101	80 - 120
Cyclohexane	20.0	18.6		ug/L		93	66 - 135
1,2-Dibromo-3-Chloropropane	20.0	21.6		ug/L		108	46 - 140
Ethylene Dibromide	20.0	21.2		ug/L		106	80 - 126
Dichlorodifluoromethane	20.0	12.7		ug/L		64	32 - 140
cis-1,2-Dichloroethene	20.0	19.5		ug/L		98	80 - 120
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	80 - 123
Isopropylbenzene	20.0	17.9		ug/L		90	80 - 120
Methyl acetate	100	122		ug/L		122	65 - 124
Methyl tert-butyl ether	20.0	20.3		ug/L		102	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.4		ug/L		92	65 - 151
1,2,4-Trichlorobenzene	20.0	17.4		ug/L		87	53 - 137
1,2-Dichlorobenzene	20.0	17.9		ug/L		89	80 - 120

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: LCS 240-255306/5

Matrix: Water

Analysis Batch: 255306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	20.0	17.0		ug/L		85	80 - 120
1,4-Dichlorobenzene	20.0	17.1		ug/L		86	80 - 120
Trichlorofluoromethane	20.0	16.4		ug/L		82	56 - 161
Chlorodibromomethane	20.0	19.7		ug/L		98	68 - 131
Methylcyclohexane	20.0	16.9		ug/L		84	71 - 122
m-Xylene & p-Xylene	20.0	17.8		ug/L		89	80 - 120
o-Xylene	20.0	17.7		ug/L		88	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		63 - 132
4-Bromofluorobenzene (Surr)	90		73 - 120
Toluene-d8 (Surr)	88		73 - 124
Dibromofluoromethane (Surr)	89		80 - 120

Lab Sample ID: MB 240-255552/6

Matrix: Water

Analysis Batch: 255552

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10		ug/L			11/14/16 12:19	1
Benzene	ND		1.0		ug/L			11/14/16 12:19	1
Dichlorobromomethane	ND		1.0		ug/L			11/14/16 12:19	1
Bromoform	ND		1.0		ug/L			11/14/16 12:19	1
Bromomethane	ND		1.0		ug/L			11/14/16 12:19	1
2-Butanone (MEK)	ND		10		ug/L			11/14/16 12:19	1
Carbon disulfide	ND		1.0		ug/L			11/14/16 12:19	1
Carbon tetrachloride	ND		1.0		ug/L			11/14/16 12:19	1
Chlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
Chloroethane	ND		1.0		ug/L			11/14/16 12:19	1
Chloroform	ND		1.0		ug/L			11/14/16 12:19	1
Chloromethane	ND		1.0		ug/L			11/14/16 12:19	1
1,1-Dichloroethane	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dichloroethane	ND		1.0		ug/L			11/14/16 12:19	1
1,1-Dichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dichloropropane	ND		1.0		ug/L			11/14/16 12:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 12:19	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			11/14/16 12:19	1
Ethylbenzene	ND		1.0		ug/L			11/14/16 12:19	1
2-Hexanone	ND		10		ug/L			11/14/16 12:19	1
Methylene Chloride	ND		1.0		ug/L			11/14/16 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		10		ug/L			11/14/16 12:19	1
Styrene	ND		1.0		ug/L			11/14/16 12:19	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			11/14/16 12:19	1
Tetrachloroethene	ND		1.0		ug/L			11/14/16 12:19	1
Toluene	ND		1.0		ug/L			11/14/16 12:19	1
Trichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
Vinyl chloride	ND		1.0		ug/L			11/14/16 12:19	1
Xylenes, Total	ND		2.0		ug/L			11/14/16 12:19	1

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: MB 240-255552/6

Matrix: Water

Analysis Batch: 255552

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		ug/L			11/14/16 12:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			11/14/16 12:19	1
Cyclohexane	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dibromo-3-Chloropropane	ND		2.0		ug/L			11/14/16 12:19	1
Ethylene Dibromide	ND		1.0		ug/L			11/14/16 12:19	1
Dichlorodifluoromethane	ND		1.0		ug/L			11/14/16 12:19	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			11/14/16 12:19	1
Isopropylbenzene	ND		1.0		ug/L			11/14/16 12:19	1
Methyl acetate	ND		10		ug/L			11/14/16 12:19	1
Methyl tert-butyl ether	ND		1.0		ug/L			11/14/16 12:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0		ug/L			11/14/16 12:19	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
1,2-Dichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
1,3-Dichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
1,4-Dichlorobenzene	ND		1.0		ug/L			11/14/16 12:19	1
Trichlorofluoromethane	ND		1.0		ug/L			11/14/16 12:19	1
Chlorodibromomethane	ND		1.0		ug/L			11/14/16 12:19	1
Methylcyclohexane	ND		1.0		ug/L			11/14/16 12:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		63 - 132		11/14/16 12:19	1
4-Bromofluorobenzene (Surr)	105		73 - 120		11/14/16 12:19	1
Toluene-d8 (Surr)	100		73 - 124		11/14/16 12:19	1
Dibromofluoromethane (Surr)	101		80 - 120		11/14/16 12:19	1

Lab Sample ID: LCS 240-255552/4

Matrix: Water

Analysis Batch: 255552

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	8.42	J *	ug/L		42	46 - 120
Benzene	10.0	10.1		ug/L		101	80 - 120
Dichlorobromomethane	10.0	10.3		ug/L		103	76 - 125
Bromoform	10.0	10.2		ug/L		102	52 - 157
Bromomethane	10.0	4.49		ug/L		45	24 - 160
2-Butanone (MEK)	20.0	15.2		ug/L		76	54 - 122
Carbon disulfide	10.0	10.3		ug/L		103	58 - 160
Carbon tetrachloride	10.0	15.1	*	ug/L		151	69 - 149
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
Chloroethane	10.0	4.47		ug/L		45	24 - 147
Chloroform	10.0	10.4		ug/L		104	80 - 120
Chloromethane	10.0	8.61		ug/L		86	50 - 135
1,1-Dichloroethane	10.0	9.73		ug/L		97	77 - 121
1,2-Dichloroethane	10.0	9.77		ug/L		98	76 - 130
1,1-Dichloroethene	10.0	10.5		ug/L		105	70 - 141
1,2-Dichloropropane	10.0	10.3		ug/L		103	79 - 121
cis-1,3-Dichloropropene	10.0	9.48		ug/L		95	75 - 120

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QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: LCS 240-255552/4

Matrix: Water

Analysis Batch: 255552

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	10.0	9.35		ug/L		94	65 - 120
Ethylbenzene	10.0	10.2		ug/L		102	80 - 120
2-Hexanone	20.0	18.0		ug/L		90	56 - 124
Methylene Chloride	10.0	10.7		ug/L		107	68 - 136
4-Methyl-2-pentanone (MIBK)	20.0	17.3		ug/L		87	60 - 131
Styrene	10.0	10.5		ug/L		105	80 - 120
1,1,2,2-Tetrachloroethane	10.0	8.38		ug/L		84	61 - 130
Tetrachloroethene	10.0	11.5		ug/L		115	80 - 123
Toluene	10.0	10.7		ug/L		107	80 - 121
Trichloroethene	10.0	10.8		ug/L		108	80 - 122
Vinyl chloride	10.0	8.54		ug/L		85	60 - 129
Xylenes, Total	20.0	19.5		ug/L		98	80 - 120
1,1,1-Trichloroethane	10.0	12.6		ug/L		126	79 - 133
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	80 - 120
Cyclohexane	10.0	10.6		ug/L		106	66 - 135
1,2-Dibromo-3-Chloropropane	10.0	9.08		ug/L		91	46 - 140
Ethylene Dibromide	10.0	10.8		ug/L		108	80 - 126
Dichlorodifluoromethane	10.0	10.4		ug/L		104	32 - 140
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	80 - 120
trans-1,2-Dichloroethene	10.0	10.9		ug/L		109	80 - 123
Isopropylbenzene	10.0	10.4		ug/L		104	80 - 120
Methyl acetate	50.0	43.7		ug/L		87	65 - 124
Methyl tert-butyl ether	10.0	10.2		ug/L		102	75 - 126
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	13.4		ug/L		134	65 - 151
1,2,4-Trichlorobenzene	10.0	9.46		ug/L		95	53 - 137
1,2-Dichlorobenzene	10.0	9.58		ug/L		96	80 - 120
1,3-Dichlorobenzene	10.0	9.48		ug/L		95	80 - 120
1,4-Dichlorobenzene	10.0	9.60		ug/L		96	80 - 120
Trichlorofluoromethane	10.0	16.4	*	ug/L		164	56 - 161
Chlorodibromomethane	10.0	11.1		ug/L		111	68 - 131
Methylcyclohexane	10.0	10.6		ug/L		106	71 - 122
m-Xylene & p-Xylene	10.0	9.61		ug/L		96	80 - 120
o-Xylene	10.0	9.91		ug/L		99	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		63 - 132
4-Bromofluorobenzene (Surr)	106		73 - 120
Toluene-d8 (Surr)	110		73 - 124
Dibromofluoromethane (Surr)	105		80 - 120

Lab Sample ID: 240-71709-1 MS

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*	40.0	31.4		ug/L		78	28 - 120
Benzene	ND		20.0	20.5		ug/L		102	67 - 126

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QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: 240-71709-1 MS

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	ND		20.0	21.3		ug/L		106	64 - 127
Bromoform	ND		20.0	21.6		ug/L		108	40 - 149
Bromomethane	ND		20.0	11.9		ug/L		59	10 - 169
2-Butanone (MEK)	ND		40.0	33.7		ug/L		84	38 - 123
Carbon disulfide	ND		20.0	18.9		ug/L		95	43 - 172
Carbon tetrachloride	ND	*	20.0	25.6		ug/L		128	51 - 154
Chlorobenzene	ND		20.0	20.1		ug/L		101	58 - 128
Chloroethane	ND		20.0	11.7		ug/L		58	10 - 162
Chloroform	ND		20.0	21.5		ug/L		108	67 - 133
Chloromethane	ND		20.0	17.5		ug/L		88	30 - 143
1,1-Dichloroethane	ND		20.0	19.9		ug/L		99	57 - 135
1,2-Dichloroethane	ND		20.0	20.7		ug/L		103	62 - 137
1,1-Dichloroethene	ND		20.0	19.7		ug/L		99	50 - 156
1,2-Dichloropropane	ND		20.0	20.6		ug/L		103	66 - 130
cis-1,3-Dichloropropene	ND		20.0	18.1		ug/L		91	58 - 120
trans-1,3-Dichloropropene	ND		20.0	16.5		ug/L		83	48 - 120
Ethylbenzene	ND		20.0	19.4		ug/L		97	66 - 123
2-Hexanone	ND		40.0	36.6		ug/L		92	41 - 135
Methylene Chloride	2.4		20.0	24.6		ug/L		111	48 - 138
4-Methyl-2-pentanone (MIBK)	ND		40.0	40.4		ug/L		101	43 - 143
Styrene	ND		20.0	21.9		ug/L		109	62 - 131
1,1,2,2-Tetrachloroethane	ND		20.0	16.4		ug/L		82	48 - 134
Tetrachloroethene	42		20.0	57.5		ug/L		78	54 - 138
Toluene	ND		20.0	19.5		ug/L		98	63 - 130
Trichloroethene	7.7		20.0	28.0		ug/L		102	58 - 139
Vinyl chloride	ND		20.0	15.9		ug/L		79	38 - 147
Xylenes, Total	ND		40.0	40.5		ug/L		101	60 - 126
1,1,1-Trichloroethane	ND		20.0	23.8		ug/L		119	55 - 150
1,1,2-Trichloroethane	ND		20.0	20.6		ug/L		103	65 - 130
Cyclohexane	ND		20.0	16.9		ug/L		85	36 - 144
1,2-Dibromo-3-Chloropropane	ND		20.0	20.7		ug/L		103	37 - 139
Ethylene Dibromide	ND		20.0	21.0		ug/L		105	64 - 137
Dichlorodifluoromethane	ND		20.0	16.6		ug/L		83	16 - 140
cis-1,2-Dichloroethene	14		20.0	35.1		ug/L		105	64 - 134
trans-1,2-Dichloroethene	ND		20.0	21.6		ug/L		108	70 - 137
Isopropylbenzene	ND		20.0	20.9		ug/L		104	57 - 132
Methyl acetate	ND		100	102		ug/L		102	46 - 135
Methyl tert-butyl ether	ND		20.0	22.1		ug/L		110	50 - 137
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	20.7		ug/L		103	41 - 149
1,2,4-Trichlorobenzene	ND		20.0	20.0		ug/L		100	35 - 140
1,2-Dichlorobenzene	ND		20.0	19.8		ug/L		99	62 - 123
1,3-Dichlorobenzene	ND		20.0	18.5		ug/L		93	59 - 122
1,4-Dichlorobenzene	ND		20.0	18.6		ug/L		93	60 - 122
Trichlorofluoromethane	ND	*	20.0	27.8		ug/L		139	26 - 175
Chlorodibromomethane	ND		20.0	21.4		ug/L		107	56 - 132
Methylcyclohexane	ND		20.0	16.6		ug/L		83	31 - 139
m-Xylene & p-Xylene	ND		20.0	19.7		ug/L		98	58 - 127

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: 240-71709-1 MS

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
o-Xylene	ND		20.0	20.8		ug/L		104	61 - 126
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	99		63 - 132						
4-Bromofluorobenzene (Surr)	116		73 - 120						
Toluene-d8 (Surr)	102		73 - 124						
Dibromofluoromethane (Surr)	106		80 - 120						

Lab Sample ID: 240-71709-1 MSD

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*	40.0	32.3		ug/L		81	28 - 120	3	35
Benzene	ND		20.0	21.1		ug/L		105	67 - 126	3	31
Dichlorobromomethane	ND		20.0	21.5		ug/L		108	64 - 127	1	35
Bromoform	ND		20.0	20.8		ug/L		104	40 - 149	4	35
Bromomethane	ND		20.0	13.5		ug/L		67	10 - 169	13	35
2-Butanone (MEK)	ND		40.0	31.5		ug/L		79	38 - 123	7	35
Carbon disulfide	ND		20.0	20.9		ug/L		104	43 - 172	10	35
Carbon tetrachloride	ND	*	20.0	29.4		ug/L		147	51 - 154	14	35
Chlorobenzene	ND		20.0	21.0		ug/L		105	58 - 128	4	35
Chloroethane	ND		20.0	12.6		ug/L		63	10 - 162	7	35
Chloroform	ND		20.0	21.8		ug/L		109	67 - 133	1	35
Chloromethane	ND		20.0	17.5		ug/L		88	30 - 143	0	35
1,1-Dichloroethane	ND		20.0	20.5		ug/L		103	57 - 135	3	35
1,2-Dichloroethane	ND		20.0	20.5		ug/L		103	62 - 137	1	35
1,1-Dichloroethene	ND		20.0	21.3		ug/L		107	50 - 156	8	35
1,2-Dichloropropane	ND		20.0	21.2		ug/L		106	66 - 130	3	35
cis-1,3-Dichloropropene	ND		20.0	18.1		ug/L		91	58 - 120	0	35
trans-1,3-Dichloropropene	ND		20.0	16.3		ug/L		81	48 - 120	2	35
Ethylbenzene	ND		20.0	20.9		ug/L		104	66 - 123	7	34
2-Hexanone	ND		40.0	33.9		ug/L		85	41 - 135	8	35
Methylene Chloride	2.4		20.0	25.3		ug/L		114	48 - 138	3	35
4-Methyl-2-pentanone (MIBK)	ND		40.0	38.6		ug/L		97	43 - 143	4	35
Styrene	ND		20.0	22.6		ug/L		113	62 - 131	3	35
1,1,2,2-Tetrachloroethane	ND		20.0	15.7		ug/L		79	48 - 134	4	35
Tetrachloroethene	42		20.0	57.7		ug/L		79	54 - 138	0	35
Toluene	ND		20.0	20.4		ug/L		102	63 - 130	4	33
Trichloroethene	7.7		20.0	29.3		ug/L		108	58 - 139	4	35
Vinyl chloride	ND		20.0	16.8		ug/L		84	38 - 147	6	35
Xylenes, Total	ND		40.0	42.4		ug/L		106	60 - 126	5	35
1,1,1-Trichloroethane	ND		20.0	25.9		ug/L		130	55 - 150	9	35
1,1,2-Trichloroethane	ND		20.0	20.1		ug/L		101	65 - 130	2	35
Cyclohexane	ND		20.0	20.8		ug/L		104	36 - 144	21	35
1,2-Dibromo-3-Chloropropane	ND		20.0	21.3		ug/L		106	37 - 139	3	35
Ethylene Dibromide	ND		20.0	20.6		ug/L		103	64 - 137	2	35
Dichlorodifluoromethane	ND		20.0	18.7		ug/L		94	16 - 140	12	35

TestAmerica Canton

QC Sample Results

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

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

Lab Sample ID: 240-71709-1 MSD

Matrix: Water

Analysis Batch: 255552

Client Sample ID: OW-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	14		20.0	35.2		ug/L		106	64 - 134	0	35
trans-1,2-Dichloroethene	ND		20.0	22.6		ug/L		113	70 - 137	5	25
Isopropylbenzene	ND		20.0	22.9		ug/L		114	57 - 132	9	35
Methyl acetate	ND		100	97.5		ug/L		97	46 - 135	5	34
Methyl tert-butyl ether	ND		20.0	21.7		ug/L		108	50 - 137	2	35
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	24.8		ug/L		124	41 - 149	18	35
1,2,4-Trichlorobenzene	ND		20.0	23.7		ug/L		119	35 - 140	17	35
1,2-Dichlorobenzene	ND		20.0	20.9		ug/L		104	62 - 123	5	35
1,3-Dichlorobenzene	ND		20.0	19.7		ug/L		98	59 - 122	6	35
1,4-Dichlorobenzene	ND		20.0	19.7		ug/L		99	60 - 122	6	35
Trichlorofluoromethane	ND	*	20.0	30.7		ug/L		154	26 - 175	10	35
Chlorodibromomethane	ND		20.0	21.2		ug/L		106	56 - 132	1	35
Methylcyclohexane	ND		20.0	20.3		ug/L		101	31 - 139	20	35
m-Xylene & p-Xylene	ND		20.0	20.8		ug/L		104	58 - 127	6	35
o-Xylene	ND		20.0	21.6		ug/L		108	61 - 126	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		63 - 132
4-Bromofluorobenzene (Surr)	115		73 - 120
Toluene-d8 (Surr)	101		73 - 124
Dibromofluoromethane (Surr)	105		80 - 120

QC Association Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

GC/MS VOA

Analysis Batch: 255306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71709-2	OW-2	Total/NA	Water	8260B	
240-71709-3	OW-5	Total/NA	Water	8260B	
240-71709-4	OW-5 DUP	Total/NA	Water	8260B	
240-71709-5	OW-10R	Total/NA	Water	8260B	
240-71709-6	OW-22	Total/NA	Water	8260B	
240-71709-7	OW-21	Total/NA	Water	8260B	
240-71709-8	TRIP BLANK	Total/NA	Water	8260B	
240-71709-9	FIELD BLANK	Total/NA	Water	8260B	
240-71709-10	OW-24	Total/NA	Water	8260B	
240-71709-11	PUMP RINSATE	Total/NA	Water	8260B	
MB 240-255306/8	Method Blank	Total/NA	Water	8260B	
LCS 240-255306/5	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 255552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71709-1	OW-6	Total/NA	Water	8260B	
240-71709-12	OW-19	Total/NA	Water	8260B	
240-71709-13	OW-18	Total/NA	Water	8260B	
240-71709-14	OW-13R	Total/NA	Water	8260B	
MB 240-255552/6	Method Blank	Total/NA	Water	8260B	
LCS 240-255552/4	Lab Control Sample	Total/NA	Water	8260B	
240-71709-1 MS	OW-6	Total/NA	Water	8260B	
240-71709-1 MSD	OW-6	Total/NA	Water	8260B	

Lab Chronicle

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-6

Date Collected: 11/01/16 09:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	255552	11/14/16 12:41	LEE	TAL CAN

Client Sample ID: OW-2

Date Collected: 11/01/16 10:45

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	255306	11/11/16 16:23	HMB	TAL CAN

Client Sample ID: OW-5

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.25	255306	11/11/16 16:46	HMB	TAL CAN

Client Sample ID: OW-5 DUP

Date Collected: 11/01/16 11:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.25	255306	11/11/16 17:09	HMB	TAL CAN

Client Sample ID: OW-10R

Date Collected: 11/01/16 13:20

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 17:32	HMB	TAL CAN

Client Sample ID: OW-22

Date Collected: 11/01/16 15:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 17:56	HMB	TAL CAN

Lab Chronicle

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-21

Date Collected: 11/01/16 16:15

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 18:19	HMB	TAL CAN

Client Sample ID: TRIP BLANK

Date Collected: 11/02/16 08:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 18:42	HMB	TAL CAN

Client Sample ID: FIELD BLANK

Date Collected: 11/02/16 09:35

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 19:05	HMB	TAL CAN

Client Sample ID: OW-24

Date Collected: 11/02/16 09:50

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 21:23	HMB	TAL CAN

Client Sample ID: PUMP RINSATE

Date Collected: 11/02/16 10:10

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255306	11/11/16 21:46	HMB	TAL CAN

Client Sample ID: OW-19

Date Collected: 11/02/16 11:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255552	11/14/16 13:03	LEE	TAL CAN

Lab Chronicle

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Client Sample ID: OW-18

Date Collected: 11/02/16 13:30

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255552	11/14/16 13:26	LEE	TAL CAN

Client Sample ID: OW-13R

Date Collected: 11/02/16 15:00

Date Received: 11/04/16 09:10

Lab Sample ID: 240-71709-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	255552	11/14/16 13:48	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-17
Kansas	NELAP	7	E-10336	01-31-17
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16 *
Minnesota	NELAP	5	039-999-348	12-31-16 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17
Nevada	State Program	9	OH-000482008A	07-31-17
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-13-00319	11-26-16 *
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

* Certification renewal pending - certification considered valid.

TestAmerica Canton

Method Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Cardinal Resources
Project/Site: C & D GW Sampling - 2016

TestAmerica Job ID: 240-71709-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71709-1	OW-6	Water	11/01/16 09:00	11/04/16 09:10
240-71709-2	OW-2	Water	11/01/16 10:45	11/04/16 09:10
240-71709-3	OW-5	Water	11/01/16 11:35	11/04/16 09:10
240-71709-4	OW-5 DUP	Water	11/01/16 11:35	11/04/16 09:10
240-71709-5	OW-10R	Water	11/01/16 13:20	11/04/16 09:10
240-71709-6	OW-22	Water	11/01/16 15:10	11/04/16 09:10
240-71709-7	OW-21	Water	11/01/16 16:15	11/04/16 09:10
240-71709-8	TRIP BLANK	Water	11/02/16 08:30	11/04/16 09:10
240-71709-9	FIELD BLANK	Water	11/02/16 09:35	11/04/16 09:10
240-71709-10	OW-24	Water	11/02/16 09:50	11/04/16 09:10
240-71709-11	PUMP RINSATE	Water	11/02/16 10:10	11/04/16 09:10
240-71709-12	OW-19	Water	11/02/16 11:30	11/04/16 09:10
240-71709-13	OW-18	Water	11/02/16 13:30	11/04/16 09:10
240-71709-14	OW-13R	Water	11/02/16 15:00	11/04/16 09:10

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
vm100is_stk_00028	02/08/17	07/08/16	MEOH, Lot 99494	50 mL	vm30241_00004	2 mL	1,4-Dichlorobenzene-d4	100 ug/mL
							Chlorobenzene-d5	100 ug/mL
							Fluorobenzene	100 ug/mL
.vm30241_00004	04/30/20	restek, Lot A0110589			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm100is_stk_00029	04/05/17	10/05/16	MEOH, Lot 147462	50 mL	vm30241_00006	2 mL	1,4-Dichlorobenzene-d4	100 ug/mL
							Chlorobenzene-d5	100 ug/mL
							Fluorobenzene	100 ug/mL
.vm30241_00006	02/28/21	restek, Lot A0117358			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm100ss_stk_00023	01/18/17	07/18/16	MEOH, Lot 127999	100 mL	VM567650_00024	4 mL	1,2-Dichloroethane-d4 (Surr)	100 ug/mL
							4-Bromofluorobenzene (Surr)	100 ug/mL
							Dibromofluoromethane (Surr)	100 ug/mL
							Toluene-d8 (Surr)	100 ug/mL
.VM567650_00024	07/31/20	Restek, Lot A0112455			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VM50IS_00055	10/03/16	04/05/16	MEOH, Lot 118655	100 mL	vm30241_00004	2 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00004	04/30/20	restek, Lot A0110589			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
VM50IS_00058	03/26/17	09/26/16	MEOH, Lot 127999	100 mL	vm30241_00004	2 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00004	04/30/20	restek, Lot A0110589			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50ss_00254	09/07/16	08/31/16	MEOH, Lot na	2 mL	vm50ss_stk_00070	2 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00070	12/17/16	06/17/16	MEOH, Lot 0000118655	200 mL	VM567650_00023	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00023	06/30/19	Restek, Lot A0104073			(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00069	10/18/16	04/19/16	MEOH, Lot 0000118655	200 mL	VM567650_00023	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00023	06/30/19		Restek, Lot A0104073		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
vm50ss_stk_00071	03/20/17	09/20/16	MEOH, Lot 0000136118	200 mL	VM567650_00024	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00024	07/31/20		Restek, Lot A0112455		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VMAROLISTDW_00153	06/27/16	06/20/16	MEOH, Lot na	3 mL	VMACROLSTD_00037	3 mL	Acrolein	250 ug/mL
.VMACROLSTD_00037	06/30/16	06/02/16	MEOH, Lot 0000127999	20 mL	VM568720_00012	250 uL	Acrolein	250 ug/mL
..VM568720_00012	06/30/16		restek, Lot A0117486		(Purchased Reagent)		Acrolein	20000 ug/mL
vmarolistdw_00163	09/07/16	08/31/16	MEOH, Lot na	3 mL	VMACROLSTD_00040	3 mL	Acrolein	250 ug/mL
.VMACROLSTD_00040	09/30/16	08/31/16	MEOH, Lot 0000147462	20 mL	VM568720_00015	250 uL	Acrolein	250 ug/mL
..VM568720_00015	10/31/16		restek, Lot A0119846		(Purchased Reagent)		Acrolein	20000 ug/mL
VMFASGW_00161	06/28/16	06/21/16	MEOH, Lot NA	2 mL	VMFASG_00045	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00045	06/30/16	05/31/16	MEOH, Lot 0000118655	50 mL	vm569722S_00001	1 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00001	08/31/18		Restek, Lot A0113063		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00171	09/05/16	08/29/16	MEOH, Lot NA	2 mL	VMFASG_00048	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00048	09/25/16	08/25/16	MEOH, Lot 0000127999	50 mL	vm569722S_00001	1 mL	Bromomethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00001	08/31/18		Restek, Lot A0113063		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00182	11/13/16	11/06/16	MEOH, Lot NA	4 mL	VMFASG_00050	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00050	11/15/16	10/15/16	MEOH, Lot 0000147462	50 mL	vm569722S_00002	1 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00002	05/31/18		Restek, Lot A0111273		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMFASGW_00183	11/21/16	11/14/16	MEOH, Lot NA	4 mL	VMFASG_00051	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00051	12/14/16	11/14/16	MEOH, Lot 0000147462	50 mL	vm569722S_00002	1 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00002	05/31/18		Restek, Lot A0111273		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VMFASPW_00160	06/28/16	06/21/16	MEOH, Lot n/a	2 mL	VMRFASP_00030	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMRFASP_00030	06/30/16	05/31/16	MEOH, Lot +173000000127999JM	100 mL	VM569720S_00001	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluor oethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
					trans-1,3-Dichloropropene	50 ug/mL		
					Trichloroethene	50 ug/mL		
					Xylenes, Total	100 ug/mL		
					VM569721S_00001	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
		4-Methyl-2-pentanone (MIBK)	100 ug/mL					
		Acetone	100 ug/mL					
..VM569720S_00001	01/31/17	Restek, Lot A0108163			(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
..VM569721S_00001	01/31/18		Restek, Lot A0108157		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
VMFASPW_00170	09/06/16	08/30/16	MEOH, Lot n/a	2 mL	VMRFASP_00033	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMRFASP_00033	11/30/16	08/13/16	MEOH, Lot 0000127999	100 mL	VM569720S_00001	2 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
				VM569721S_00001	0.8 mL	2-Butanone (MEK)	100 ug/mL	
						2-Hexanone	100 ug/mL	
						4-Methyl-2-pentanone (MIBK)	100 ug/mL	
						Acetone	100 ug/mL	
..VM569720S_00001	01/31/17	Restek, Lot A0108163			(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
..VM569721S_00001	01/31/18		Restek, Lot A0108157		(Purchased Reagent)		Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VMFASPW_00179	11/17/16	11/10/16	MEOH, Lot n/a	4 mL	VMRFASP_00034	4 mL	Xylenes, Total	5000 ug/mL
							2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00034	11/30/16	10/07/16	MEOH, Lot 0000147462	100 mL	VM569720S_00001	2 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VM569721S_00001	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
..VM569720S_00001	01/31/17	Restek, Lot A0108163			(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
..VM569721S_00001	01/31/18		Restek, Lot A0108157		(Purchased Reagent)		Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
							2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
VMRGAS_00158	06/27/16	06/20/16	MEOH, Lot 0000127999	10 mL	vm569722_00006	0.2 mL	Acetone	12500 ug/mL
							Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
							Bromomethane	2500 ug/mL
.vm569722_00006	10/31/18		Restek, Lot A0115012		(Purchased Reagent)		Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
							Bromomethane	2500 ug/mL
vmrgas_00167	09/06/16	08/30/16	MEOH, Lot 0000127999	10 mL	vm569722_00006	0.2 mL	Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
							Bromomethane	2500 ug/mL
.vm569722_00006	10/31/18		Restek, Lot A0115012		(Purchased Reagent)		Bromomethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRGAS_00177	11/17/16	11/10/16	MEOH, Lot 0000147462	10 mL	vm569722_00005	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00005	04/30/18		Restek, Lot A0110070		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
VMRPRIMW_00191	06/28/16	06/21/16	MEOH, Lot NA	1 mL	VMRPRIM_00017	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMRPRIM_00017	06/30/16	05/31/16	MEOH, Lot +173000000127999JM	50 mL	VM569720_00001	1 mL	2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					VM569721_00001	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00001	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00004	0.5 mL	Vinyl acetate	50 ug/mL
..VM569720_00001	01/31/17		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
..VM569721_00001	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00001	01/31/18		restek, Lot A0108172		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00004	06/30/16		Restek, Lot A0115764		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
vmrprimw_00200	09/02/16	08/26/16	MEOH, Lot NA	1 mL	VMRPRIM_00018	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
.VMRPRIM_00018	09/30/16	07/01/16	MEOH, Lot 0000127999	50 mL	VM569720_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							2-Methyl-2-propanol	500 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorobromomethane	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
					VM569721_00001	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00001	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00005	0.5 mL	Vinyl acetate	50 ug/mL
..VM569720_00001	01/31/17		Restek, Lot A0108166		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM569721_00001	04/30/18	Restek, Lot A0110400			(Purchased Reagent)		trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
..VM569723_00001	01/31/18	restek, Lot A0108172			(Purchased Reagent)		Acetone	12500 ug/mL
..VM569724_00005	09/30/16	Restek, Lot A0118255			(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
							Vinyl acetate	5000 ug/mL
VMRPRIMW_00212	11/16/16	11/09/16	MEOH, Lot NA	1 mL	VMRPRIM_00020	1 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
							2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
.VMRPRIM_00020	01/31/17	11/01/16	MEOH, Lot 0000147462	50 mL	VM569720_00001	1 mL	1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							Benzene	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dichlorobromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Ethylene Dibromide	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	250 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							o-Xylene	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
					VM569721_00001	0.4 mL	2-Butanone (MEK)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-71709-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM569720_00001	01/31/17		Restek, Lot A0108166		(Purchased Reagent)		2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
..VM569721_00001	04/30/18		Restek, Lot A0110400		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL

Reagent

vm30241_00004

vm 30241_00004 Rec: 7/9/15



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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 30241 **Lot No.:** A0110589
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2020 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Fluorobenzene CAS # 462-06-6 (Lot 1380033) Purity 99%	2,503.8 µg/mL	+/- 14.5573 µg/mL Gravimetric +/- 28.2339 µg/mL Unstressed +/- 32.4891 µg/mL Stressed
2	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-22736) Purity 99%	2,504.6 µg/mL	+/- 14.5620 µg/mL Gravimetric +/- 28.2430 µg/mL Unstressed +/- 32.4995 µg/mL Stressed
3	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	2,504.6 µg/mL	+/- 14.5620 µg/mL Gravimetric +/- 28.2430 µg/mL Unstressed +/- 32.4995 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

vm30241_00006



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Catalog No. : 30241 Lot No.: A0117358
Description : 8260A Internal Standard Mix
8260A Internal Standard Mix 2,500 µg/mL, P&T Methanol, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : February 28, 2021 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Fluorobenzene CAS # 462-06-6 (Lot BCBK8171V) Purity 99%	2,501.8 µg/mL	+/- 14.5457 µg/mL Gravimetric +/- 140.2734 µg/mL Unstressed +/- 143.5557 µg/mL Stressed
2	Chlorobenzene-d5 CAS # 3114-55-4 (Lot PR-23926) Purity 99%	2,500.1 µg/mL	+/- 14.5358 µg/mL Gravimetric +/- 140.1781 µg/mL Unstressed +/- 143.4581 µg/mL Stressed
3	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-18488) Purity 99%	2,500.7 µg/mL	+/- 14.5393 µg/mL Gravimetric +/- 140.2118 µg/mL Unstressed +/- 143.4925 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00023

VM567650-00023

Rca: 11/7/14



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Catalog No.: 567650 Lot No.: A0104073
Description: 8260 Surrogate Standard
8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul
Container Size: 5 mL Pkg Amt: > 5 mL
Expiration Date: June 30, 2019 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane CAS # 1868-53-7 (Lot 022012) Purity 99%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 28.2046 µg/mL +/- 32.4554 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 CAS # 17060-07-0 (Lot 12K-027) Purity 99%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 28.2046 µg/mL +/- 32.4554 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 CAS # 2037-26-5 (Lot 13I-050) Purity 99%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 28.2046 µg/mL +/- 32.4554 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) CAS # 460-00-4 (Lot 01127COV) Purity 99%	2,501.2 µg/mL	+/- 14.5422 µg/mL +/- 28.2046 µg/mL +/- 32.4554 µg/mL	Gravimetric Unstressed Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM567650_00024



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VM567650-00024

Rec: 9/16/15

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 Lot No.: A0112455
Description : 8260 Surrogate Standard
8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul
Container Size : 5 mL Pkg Amt: > 5 mL
Expiration Date : July 31, 2020 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)				
1	Dibromofluoromethane	2,509.6 µg/mL	+/-	14.5910	µg/mL	Gravimetric	
	CAS # 1868-53-7 (Lot 022012)		+/-	28.2993	µg/mL	Unstressed	
	Purity 99%		+/-	32.5644	µg/mL	Stressed	
2	1,2-Dichloroethane-d4	2,507.5 µg/mL	+/-	14.5788	µg/mL	Gravimetric	
	CAS # 17060-07-0 (Lot 14C-191)		+/-	28.2757	µg/mL	Unstressed	
	Purity 99%		+/-	32.5371	µg/mL	Stressed	
3	Toluene-d8	2,509.0 µg/mL	+/-	14.5875	µg/mL	Gravimetric	
	CAS # 2037-26-5 (Lot PR-26282)		+/-	28.2926	µg/mL	Unstressed	
	Purity 99%		+/-	32.5566	µg/mL	Stressed	
4	1-Bromo-4-fluorobenzene (BFB)	2,506.0 µg/mL	+/-	14.5701	µg/mL	Gravimetric	
	CAS # 460-00-4 (Lot 20401KOV)		+/-	28.2587	µg/mL	Unstressed	
	Purity 99%		+/-	32.5176	µg/mL	Stressed	

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

VM568720_00012

(4)

REC: 4/13/16

VM568720_00012



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Catalog No. : 568720 Lot No.: A0117486

Description : 8260 List 1/Std #5 Acrolein High

8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : June 30, 2016 Storage: 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.I. K=2)
1	Acrolein	19,938.0 µg/mL	+/- 116.7414 µg/mL Gravimetric
	CAS # 107-02-8 (Lot 160105JLM)		+/- 639.2750 µg/mL Unstressed
	Purity 99%		+/- 743.0872 µg/mL Stressed

Solvent: Water

CAS # 7732-18-5

Purity 99%

Reagent

VM568720_00015

V M568720-000LS

Rec: 8/16/16



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568720 Lot No.: A0119846
Description : 8260 List 1/Std #5 Acrolein High
8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : October 31, 2016 Storage: 0°C or colder
Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acrolein CAS # 107-02-8 Purity 99%	19.873.0 µg/mL (Lot 160518JLM)	+/- 116.3608 µg/mL Gravimetric +/- 637.1909 µg/mL Unstressed +/- 740.6647 µg/mL Stressed

Solvent: Water
CAS # 7732-18-5
Purity 99%

Reagent

VM569720_00001

VM569720-00001

Rec: 9/16/15



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Catalog No.: 569720 Lot No.: A0108166

Description: 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: January 31, 2017 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Diethyl ether (ethyl ether) CAS # 60-29-7 (Lot SHBF3466V) Purity 99%	2,521.3 µg/mL	+/- 14.6588 µg/mL	Gravimetric	+/- 134.1754 µg/mL	Unstressed
			+/- 134.3233 µg/mL	Stressed		
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1 (Lot 00001135) Purity 99%	2,522.5 µg/mL	+/- 14.6660 µg/mL	Gravimetric	+/- 134.2419 µg/mL	Unstressed
			+/- 134.3899 µg/mL	Stressed		
3	1,1-Dichloroethane CAS # 75-34-3 (Lot Q179-33) Purity 98%	2,499.5 µg/mL	+/- 14.5323 µg/mL	Gravimetric	+/- 133.0173 µg/mL	Unstressed
			+/- 133.1640 µg/mL	Stressed		
4	tert-Butanol (TBA) CAS # 75-65-0 (Lot SHBC6893V) Purity 99%	25,002.4 µg/mL	+/- 145.3584 µg/mL	Gravimetric	+/- 1,330.5704 µg/mL	Unstressed
			+/- 1,332.0378 µg/mL	Stressed		
5	Iodomethane (methyl iodide) CAS # 74-88-4 (Lot SHBC7288V) Purity 99%	2,510.0 µg/mL	+/- 14.5934 µg/mL	Gravimetric	+/- 133.5767 µg/mL	Unstressed
			+/- 133.7240 µg/mL	Stressed		
6	Methyl acetate CAS # 79-20-9 (Lot SHBD7134V) Purity 98%	12,505.4 µg/mL	+/- 72.7037 µg/mL	Gravimetric	+/- 665.5101 µg/mL	Unstressed
			+/- 666.2440 µg/mL	Stressed		
7	Allyl chloride (3-chloropropene) CAS # 107-05-1 (Lot MKBG5777V) Purity 99%	2,500.0 µg/mL	+/- 19.2743 µg/mL	Gravimetric	+/- 133.6453 µg/mL	Unstressed
			+/- 133.7914 µg/mL	Stressed		

8	Methylene chloride (dichloromethane) CAS # 75-09-2 Purity 99%	(Lot SHBD4974V)	2,511.3 µg/mL	+/- 14.6006 +/- 133.6432 +/- 133.7906	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Carbon disulfide CAS # 75-15-0 Purity 98%	(Lot C30Y997)	2,511.7 µg/mL	+/- 14.6035 +/- 133.6693 +/- 133.8167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Acrylonitrile CAS # 107-13-1 Purity 99%	(Lot 10172706)	25,017.1 µg/mL	+/- 145.4441 +/- 1,331.3554 +/- 1,332.8236	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	cis-1,2-Dichloroethene CAS # 156-59-2 Purity 99%	(Lot MKBG8424V)	2,503.9 µg/mL	+/- 14.5577 +/- 133.2507 +/- 133.3977	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	n-Hexane (C6) CAS # 110-54-3 Purity 99%	(Lot SHBF0293V)	2,511.9 µg/mL	+/- 14.6043 +/- 133.6764 +/- 133.8239	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	1,1-dichloroethene CAS # 75-35-4 Purity 99%	(Lot SHBD6170V)	2,521.3 µg/mL	+/- 14.6588 +/- 134.1754 +/- 134.3233	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2,2-Dichloropropane CAS # 594-20-7 Purity 98%	(Lot BCBH9246V)	2,500.0 µg/mL	+/- 14.5351 +/- 133.0434 +/- 133.1901	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	trans-1,2-Dichloroethene CAS # 156-60-5 Purity 99%	(Lot MKBH9850V)	2,505.0 µg/mL	+/- 14.5643 +/- 133.3106 +/- 133.4576	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 Purity 99%	(Lot SHBF2852V)	62,553.8 µg/mL	+/- 363.6739 +/- 3,328.9705 +/- 3,332.6417	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 Purity 99%	(Lot SHBF1193V)	2,504.6 µg/mL	+/- 14.5621 +/- 133.2906 +/- 133.4376	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Bromochloromethane CAS # 74-97-5 Purity 99%	(Lot 00004559)	2,505.1 µg/mL	+/- 14.5650 +/- 133.3172 +/- 133.4642	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Tetrahydrofuran CAS # 109-99-9 Purity 97%	(Lot SHBF2660V)	5,000.7 µg/mL	+/- 29.0746 +/- 266.1270 +/- 266.4204	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1,1,1-trichloroethane CAS # 71-55-6 Purity 99%	(Lot B14Z1114)	2,508.1 µg/mL	+/- 14.5825 +/- 133.4769 +/- 133.6241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot SHBD7873V)	2,504.0 µg/mL	+/- 14.5585 +/- 133.2574 +/- 133.4043	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	1,1-Dichloropropene CAS # 563-58-6 Purity 98%	(Lot PR09161302)	2,502.4 µg/mL	+/- 14.5493 +/- 133.1738 +/- 133.3207	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	carbon tetrachloride CAS # 56-23-5 Purity 99%	(Lot SHBC1410V)	2,505.3 µg/mL	+/- 14.5657 +/- 133.3239 +/- 133.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SHBF2321V)	2,501.4	µg/mL	+/- +/- +/-	14.5432 133.1177 133.2645	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane CAS # 107-06-2 Purity 99%	(Lot SHBC6595V)	2,501.6	µg/mL	+/- +/- +/-	14.5447 133.1310 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene CAS # 71-43-2 Purity 99%	(Lot SHBD4617V)	2,509.1	µg/mL	+/- +/- +/-	14.5883 133.5301 133.6774	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene CAS # 79-01-6 Purity 99%	(Lot SHBF0943V)	2,504.8	µg/mL	+/- +/- +/-	14.5628 133.2973 133.4443	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot 50996APV)	2,502.5	µg/mL	+/- +/- +/-	14.5498 133.1775 133.3244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane CAS # 78-87-5 Purity 99%	(Lot 01113D0V)	2,502.4	µg/mL	+/- +/- +/-	14.5490 133.1709 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	bromodichloromethane CAS # 75-27-4 Purity 98%	(Lot MKBL1617V)	2,507.9	µg/mL	+/- +/- +/-	14.5814 133.4672 133.6144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBF2002V)	50,001.4	µg/mL	+/- +/- +/-	290.6971 2,660.9612 2,663.8957	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3 Purity 99%	(Lot 10169264)	2,508.1	µg/mL	+/- +/- +/-	14.5825 133.4769 133.6241	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5 Purity 99%	(Lot 20936)	2,507.0	µg/mL	+/- +/- +/-	14.5759 133.4170 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3 Purity 99%	(Lot SHBF2730V)	2,502.4	µg/mL	+/- +/- +/-	14.5490 133.1709 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot 69796APV)	2,500.9	µg/mL	+/- +/- +/-	14.5403 133.0911 133.2378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6 Purity 99%	(Lot C363110)	2,502.1	µg/mL	+/- +/- +/-	14.5476 133.1576 133.3044	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5 Purity 99%	(Lot FGB01)	2,507.5	µg/mL	+/- +/- +/-	14.5788 133.4436 133.5908	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9 Purity 99%	(Lot BCBG2162V)	2,505.3	µg/mL	+/- +/- +/-	14.5657 133.3239 133.4709	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4 Purity 99%	(Lot SHBD2073V)	2,506.5	µg/mL	+/- +/- +/-	14.5730 133.3904 133.5375	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	dibromochloromethane CAS # 124-48-1 Purity 98%	(Lot MKBP0459V)	2,503.2 µg/mL	+/-	14.5536 133.2129 133.3598	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	(Lot BCBH3877V)	2,504.3 µg/mL	+/-	14.5599 133.2707 133.4176	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	Chlorobenzene CAS # 108-90-7 Purity 99%	(Lot SHBD3200V)	2,510.8 µg/mL	+/-	14.5977 133.6166 133.7639	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,1,2,2-Tetrachloroethane CAS # 79-34-5 Purity 99%	(Lot CFA4D)	2,502.9 µg/mL	+/-	14.5519 133.1975 133.3444	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	Ethylbenzene CAS # 100-41-4 Purity 99%	(Lot SHBC9001V)	2,509.6 µg/mL	+/-	14.5912 133.5567 133.7040	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	m-Xylene CAS # 108-38-3 Purity 99%	(Lot SHBF1720V)	1,252.6 µg/mL	+/-	7.2829 66.6619 66.7355	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	o-Xylene CAS # 95-47-6 Purity 98%	(Lot SHBC8668V)	2,503.7 µg/mL	+/-	14.5565 133.2390 133.3859	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	p-Xylene CAS # 106-42-3 Purity 99%	(Lot SHBF3427V)	1,253.3 µg/mL	+/-	7.2865 66.6952 66.7688	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	Styrene CAS # 100-42-5 Purity 99%	(Lot 10182421)	2,503.5 µg/mL	+/-	14.5556 133.2307 133.3777	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8 Purity 99%	(Lot 10169400)	2,502.5 µg/mL	+/-	14.5498 133.1775 133.3244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	bromoform CAS # 75-25-2 Purity 99%	(Lot SHBC3410V)	2,507.8 µg/mL	+/-	14.5803 133.4569 133.6041	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,1,1,2-Tetrachloroethane CAS # 630-20-6 Purity 99%	(Lot MKBS3769V)	2,510.3 µg/mL	+/-	14.5948 133.5900 133.7373	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	chloroform CAS # 67-66-3 Purity 99%	(Lot SHBB7498V)	2,501.3 µg/mL	+/-	14.5425 133.1110 133.2578	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	(Lot 1428739V)	2,502.5 µg/mL	+/-	14.5498 133.1775 133.3244	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 96%	(Lot MKBP5371V)	2,499.5 µg/mL	+/-	14.5322 133.0168 133.1635	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	n-Propylbenzene CAS # 103-65-1 Purity 99%	(Lot MKBQ8049V)	2,500.3 µg/mL	+/-	14.5367 133.0578 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Bromobenzene CAS # 108-86-1 Purity 99%	(Lot MKBD4032V)	2,501.1 µg/mL	+/- +/- +/-	14.5418 133.1044 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6 Purity 98%	(Lot MKBJ1732V)	2,501.6 µg/mL	+/- +/- +/-	14.5444 133.1282 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8 Purity 99%	(Lot MKBH8892V)	2,500.3 µg/mL	+/- +/- +/-	14.5367 133.0578 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4 Purity 99%	(Lot MKBB7205V)	2,506.4 µg/mL	+/- +/- +/-	14.5723 133.3837 133.5308	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6 Purity 99%	(Lot S52237V)	2,500.1 µg/mL	+/- +/- +/-	14.5359 133.0511 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8 Purity 99%	(Lot BCBJ3305V)	2,503.1 µg/mL	+/- +/- +/-	14.5534 133.2108 133.3577	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8 Purity 99%	(Lot MKBK3151V)	2,504.0 µg/mL	+/- +/- +/-	14.5585 133.2574 133.4043	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	p-Isopropyltoluene (p-Cymene) CAS # 99-87-6 Purity 99%	(Lot MKBK4439V)	2,501.1 µg/mL	+/- +/- +/-	14.5418 133.1044 133.2511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1 Purity 99%	(Lot BCBC1891V)	2,506.1 µg/mL	+/- +/- +/-	14.5708 133.3704 133.5175	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBL3891V)	2,507.0 µg/mL	+/- +/- +/-	14.5759 133.4170 133.5641	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8 Purity 99%	(Lot 09418JJV)	2,502.6 µg/mL	+/- +/- +/-	14.5505 133.1842 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot 68996CMV)	2,501.6 µg/mL	+/- +/- +/-	14.5447 133.1310 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 99%	(Lot FBL01)	2,505.9 µg/mL	+/- +/- +/-	14.5694 133.3571 133.5042	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot 26896BM)	2,501.5 µg/mL	+/- +/- +/-	14.5439 133.1243 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot K22W009)	2,501.6 µg/mL	+/- +/- +/-	14.5444 133.1282 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKBH4351V)	2,502.6 µg/mL	+/- +/- +/-	14.5505 133.1842 133.3311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene	2,503.4 µg/mL	+/- 14.5548	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot 12912PFV)	+/- 133.2241	µg/mL	Unstressed
	Purity 99%		+/- 133.3710	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant pressure 30 psi

Temp. Program:

40°C (hold 6 min.) to 240°C
@ 5°C/min. (hold 10 min.)

Inj. Temp:

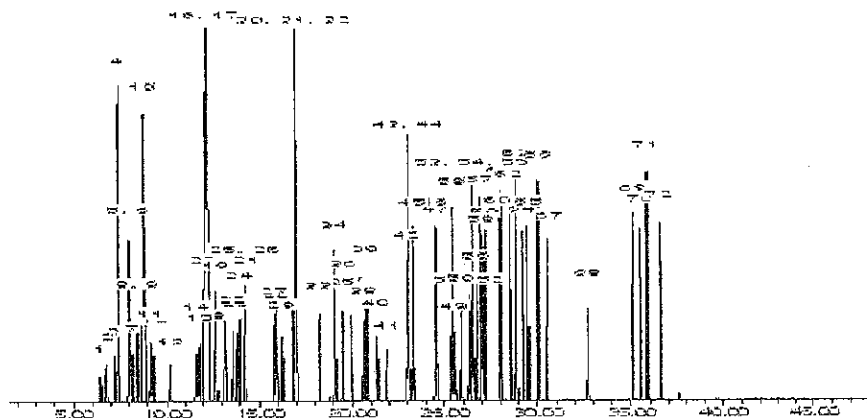
200°C

Det. Temp:

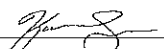
250°C

Det. Type:

MSD

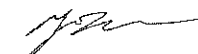


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Kendra Swope - Mix Technician

Date Mixed: 07-Jan-2015

Balance: 1125113331


Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

VM569720S_00001

VM569720s - 00001 Rec: 3/30/15



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569720.sec **Lot No.:** A0108163

Description: 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Diethyl ether (ethyl ether) CAS # 60-29-7.SEC (Lot F23X068) Purity 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL Gravimetric +/- 133.1044 µg/mL Unstressed +/- 133.2511 µg/mL Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) CAS # 76-13-1.SEC (Lot 18342) Purity 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL Gravimetric +/- 133.1044 µg/mL Unstressed +/- 133.2511 µg/mL Stressed
3	1,1-Dichloroethene CAS # 75-35-4.SEC (Lot 903000) Purity 99%	2,502.8 µg/mL	+/- 14.5512 µg/mL Gravimetric +/- 133.1908 µg/mL Unstressed +/- 133.3377 µg/mL Stressed
4	tert-Butanol (TBA) CAS # 75-65-0.SEC (Lot XYXDO) Purity 98%	25,000.5 µg/mL	+/- 145.3477 µg/mL Gravimetric +/- 1,330.4725 µg/mL Unstressed +/- 1,331.9397 µg/mL Stressed
5	Iodomethane (methyl iodide) CAS # 74-88-4.SEC (Lot A13Y016) Purity 97%	2,500.5 µg/mL	+/- 14.5383 µg/mL Gravimetric +/- 133.0732 µg/mL Unstressed +/- 133.2199 µg/mL Stressed
6	Methyl acetate CAS # 79-20-9.SEC (Lot YDGVVD) Purity 99%	12,500.6 µg/mL	+/- 72.6759 µg/mL Gravimetric +/- 665.2553 µg/mL Unstressed +/- 665.9889 µg/mL Stressed
7	Allyl chloride (3-chloropropene) CAS # 107-05-1.SEC (Lot 5MNOA-DQ) Purity 99%	2,501.3 µg/mL	+/- 14.5425 µg/mL Gravimetric +/- 133.1110 µg/mL Unstressed +/- 133.2578 µg/mL Stressed

8	Methylene chloride (dichloromethane) CAS # 75-09-2 Purity 99%	(Lot JGI102)	2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
					+/-	133.1177	µg/mL	Unstressed
					+/-	133.2645	µg/mL	Stressed
9	Carbon disulfide CAS # 75-15-0 Purity 98%	(Lot MKBL1376V)	2,501.2	µg/mL	+/-	14.5422	µg/mL	Gravimetric
					+/-	133.1086	µg/mL	Unstressed
					+/-	133.2554	µg/mL	Stressed
10	Acrylonitrile CAS # 107-13-1 Purity 99%	(Lot CCFKL)	25,002.1	µg/mL	+/-	145.3569	µg/mL	Gravimetric
					+/-	1,330.5571	µg/mL	Unstressed
					+/-	1,332.0244	µg/mL	Stressed
11	cis-1,2-Dichloroethene CAS # 156-59-2 Purity 99%	(Lot HGC01-BLKT)	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
					+/-	133.0578	µg/mL	Unstressed
					+/-	133.2045	µg/mL	Stressed
12	n-Hexane (C6) CAS # 110-54-3 Purity 98%	(Lot K24W001)	2,500.1	µg/mL	+/-	14.5358	µg/mL	Gravimetric
					+/-	133.0499	µg/mL	Unstressed
					+/-	133.1967	µg/mL	Stressed
13	1,1-Dichloroethane CAS # 75-34-3 Purity 99%	(Lot 2663100)	2,503.0	µg/mL	+/-	14.5527	µg/mL	Gravimetric
					+/-	133.2041	µg/mL	Unstressed
					+/-	133.3510	µg/mL	Stressed
14	2,2-Dichloropropane CAS # 594-20-7 Purity 99%	(Lot GI01)	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
					+/-	133.0844	µg/mL	Unstressed
					+/-	133.2312	µg/mL	Stressed
15	trans-1,2-Dichloroethene CAS # 156-60-5 Purity 97%	(Lot TS5UB)	2,500.2	µg/mL	+/-	14.5362	µg/mL	Gravimetric
					+/-	133.0538	µg/mL	Unstressed
					+/-	133.2005	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 Purity 99%	(Lot PH2XK)	62,501.3	µg/mL	+/-	363.3687	µg/mL	Gravimetric
					+/-	3,326.1766	µg/mL	Unstressed
					+/-	3,329.8447	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 Purity 99%	(Lot ZAQTA-MS)	2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
					+/-	133.0711	µg/mL	Unstressed
					+/-	133.2178	µg/mL	Stressed
18	Bromochloromethane CAS # 74-97-5 Purity 99%	(Lot 345600)	2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
					+/-	133.0777	µg/mL	Unstressed
					+/-	133.2245	µg/mL	Stressed
19	Tetrahydrofuran CAS # 109-99-9 Purity 99%	(Lot XWFLA)	5,002.3	µg/mL	+/-	29.0835	µg/mL	Gravimetric
					+/-	266.2087	µg/mL	Unstressed
					+/-	266.5023	µg/mL	Stressed
20	1,1,1-Trichloroethane CAS # 71-55-6 Purity 99%	(Lot 1103200)	2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
					+/-	133.1443	µg/mL	Unstressed
					+/-	133.2911	µg/mL	Stressed
21	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot YADRA)	2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
					+/-	133.1243	µg/mL	Unstressed
					+/-	133.2711	µg/mL	Stressed
22	1,1-Dichloropropene CAS # 563-58-6 Purity 97%	(Lot 2028500)	2,501.1	µg/mL	+/-	14.5419	µg/mL	Gravimetric
					+/-	133.1054	µg/mL	Unstressed
					+/-	133.2522	µg/mL	Stressed
23	Carbon tetrachloride CAS # 56-23-5 Purity 98%	(Lot 11466)	2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
					+/-	133.1477	µg/mL	Unstressed
					+/-	133.2946	µg/mL	Stressed

24	n-Heptane (C7) CAS # 142-82-5.SEC Purity 99%	(Lot OGM01)	2,500.4 µg/mL	+/- 14.5374 +/- 133.0644 +/- 133.2112	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1,2-Dichloroethane CAS # 107-06-2.SEC Purity 99%	(Lot FO6PK)	2,501.9 µg/mL	+/- 14.5461 +/- 133.1443 +/- 133.2911	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Benzene CAS # 71-43-2.SEC Purity 99%	(Lot B28Y008)	2,500.9 µg/mL	+/- 14.5403 +/- 133.0911 +/- 133.2378	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Trichloroethene CAS # 79-01-6.SEC Purity 98%	(Lot H04X050)	2,500.6 µg/mL	+/- 14.5387 +/- 133.0760 +/- 133.2228	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Methylcyclohexane CAS # 108-87-2.SEC Purity 99%	(Lot 24MSD-CD)	2,500.5 µg/mL	+/- 14.5381 +/- 133.0711 +/- 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1,2-Dichloropropane CAS # 78-87-5.SEC Purity 99%	(Lot OGG01)	2,500.0 µg/mL	+/- 14.5352 +/- 133.0445 +/- 133.1912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Bromodichloromethane CAS # 75-27-4.SEC Purity 99%	(Lot 10171168)	2,501.5 µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,4-Dioxane CAS # 123-91-1.SEC Purity 99%	(Lot CHA4A)	50,000.8 µg/mL	+/- 290.6935 +/- 2,660.9280 +/- 2,663.8624	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Dibromomethane CAS # 74-95-3.SEC Purity 99%	(Lot FGI01-OICH)	2,500.6 µg/mL	+/- 14.5388 +/- 133.0777 +/- 133.2245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	cis-1,3-Dichloropropene CAS # 10061-01-5.SEC Purity 99%	(Lot 7ZLXJ-TJ)	2,501.0 µg/mL	+/- 14.5410 +/- 133.0977 +/- 133.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	Toluene CAS # 108-88-3.SEC Purity 99%	(Lot YND2B-BD)	2,500.1 µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Ethyl methacrylate CAS # 97-63-2.SEC Purity 99%	(Lot MLWYK-LS)	2,500.8 µg/mL	+/- 14.5396 +/- 133.0844 +/- 133.2312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	trans-1,3-Dichloropropene CAS # 10061-02-6.SEC Purity 98%	(Lot 2ECIC-NM)	2,501.6 µg/mL	+/- 14.5444 +/- 133.1282 +/- 133.2750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,1,2-Trichloroethane CAS # 79-00-5.SEC Purity 99%	(Lot 732700)	2,501.0 µg/mL	+/- 14.5410 +/- 133.0977 +/- 133.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	1,3-Dichloropropane CAS # 142-28-9.SEC Purity 99%	(Lot AGN01-EFPC)	2,500.8 µg/mL	+/- 14.5396 +/- 133.0844 +/- 133.2312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Tetrachloroethene CAS # 127-18-4.SEC Purity 99%	(Lot F09W014)	2,500.0 µg/mL	+/- 14.5352 +/- 133.0445 +/- 133.1912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	Dibromochloromethane CAS # 124-48-1.SEC Purity 97%	(Lot I13W021)	2,501.8	µg/mL	+/-	14.5454	µg/mL	Gravimetric
					+/-	133.1377	µg/mL	Unstressed
					+/-	133.2845	µg/mL	Stressed
41	1,2-Dibromoethane (EDB) CAS # 106-93-4.SEC Purity 98%	(Lot 1368400)	2,502.1	µg/mL	+/-	14.5472	µg/mL	Gravimetric
					+/-	133.1542	µg/mL	Unstressed
					+/-	133.3011	µg/mL	Stressed
42	Chlorobenzene CAS # 108-90-7.SEC Purity 99%	(Lot 1161936)	2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
					+/-	133.1310	µg/mL	Unstressed
					+/-	133.2778	µg/mL	Stressed
43	1,1,1,2-Tetrachloroethane CAS # 630-20-6.SEC Purity 99%	(Lot GC01-QSHR)	2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
					+/-	133.0844	µg/mL	Unstressed
					+/-	133.2312	µg/mL	Stressed
44	Ethylbenzene CAS # 100-41-4.SEC Purity 99%	(Lot PI4SE-GR)	2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
					+/-	133.0578	µg/mL	Unstressed
					+/-	133.2045	µg/mL	Stressed
45	m-Xylene CAS # 108-38-3.SEC Purity 99%	(Lot OUKMG-GB)	1,250.4	µg/mL	+/-	7.2698	µg/mL	Gravimetric
					+/-	66.5422	µg/mL	Unstressed
					+/-	66.6156	µg/mL	Stressed
46	o-Xylene CAS # 95-47-6.SEC Purity 99%	(Lot FGL01-KTPK)	2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
					+/-	133.1110	µg/mL	Unstressed
					+/-	133.2578	µg/mL	Stressed
47	p-Xylene CAS # 106-42-3.SEC Purity 99%	(Lot GM01)	1,251.6	µg/mL	+/-	7.2771	µg/mL	Gravimetric
					+/-	66.6087	µg/mL	Unstressed
					+/-	66.6822	µg/mL	Stressed
48	Styrene CAS # 100-42-5.SEC Purity 99%	(Lot OFIOL-IA)	2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
					+/-	133.0911	µg/mL	Unstressed
					+/-	133.2378	µg/mL	Stressed
49	Isopropylbenzene (cumene) CAS # 98-82-8.SEC Purity 99%	(Lot 2PHXG-IH)	2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
					+/-	133.1110	µg/mL	Unstressed
					+/-	133.2578	µg/mL	Stressed
50	Bromoform CAS # 75-25-2.SEC Purity 99%	(Lot 1039300)	2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
					+/-	133.1243	µg/mL	Unstressed
					+/-	133.2711	µg/mL	Stressed
51	1,1,1,2-Tetrachloroethane CAS # 79-34-5.SEC Purity 99%	(Lot CFA4D-AQ)	2,502.9	µg/mL	+/-	14.5519	µg/mL	Gravimetric
					+/-	133.1975	µg/mL	Unstressed
					+/-	133.3444	µg/mL	Stressed
52	Chloroform CAS # 67-66-3.SEC Purity 99%	(Lot 1297547)	2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
					+/-	133.1310	µg/mL	Unstressed
					+/-	133.2778	µg/mL	Stressed
53	1,2,3-Trichloropropane CAS # 96-18-4.SEC Purity 98%	(Lot OGI01)	2,501.9	µg/mL	+/-	14.5465	µg/mL	Gravimetric
					+/-	133.1477	µg/mL	Unstressed
					+/-	133.2946	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene CAS # 110-57-6.SEC Purity 97%	(Lot 100700-2)	2,502.7	µg/mL	+/-	14.5510	µg/mL	Gravimetric
					+/-	133.1893	µg/mL	Unstressed
					+/-	133.3362	µg/mL	Stressed
55	n-Propylbenzene CAS # 103-65-1.SEC Purity 99%	(Lot T2HFC-JT)	2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
					+/-	133.0445	µg/mL	Unstressed
					+/-	133.1912	µg/mL	Stressed

56	Bromobenzene CAS # 108-86-1.SEC Purity 99%	(Lot 2FUHG-EM)	2,501.6 µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	1,2,4-Trimethylbenzene CAS # 95-63-6.SEC Purity 99%	(Lot SC7LO-QA)	2,502.4 µg/mL	+/- 14.5490 +/- 133.1709 +/- 133.3177	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Chlorotoluene CAS # 95-49-8.SEC Purity 99%	(Lot SW8QG-AO)	2,500.5 µg/mL	+/- 14.5381 +/- 133.0711 +/- 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4-Chlorotoluene CAS # 106-43-4.SEC Purity 99%	(Lot P4XHI-AO)	2,500.3 µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	tert-Butylbenzene CAS # 98-06-6.SEC Purity 99%	(Lot OGN01)	2,501.6 µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	1,3,5-Trimethylbenzene CAS # 108-67-8.SEC Purity 99%	(Lot FGH02-CMLN)	2,500.3 µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	sec-Butylbenzene CAS # 135-98-8.SEC Purity 99%	(Lot OGN01)	2,500.1 µg/mL	+/- 14.5359 +/- 133.0511 +/- 133.1979	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	4-Isopropyltoluene (p-cymene) CAS # 99-87-6.SEC Purity 99%	(Lot 1721700)	2,501.6 µg/mL	+/- 14.5447 +/- 133.1310 +/- 133.2778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD-KA)	2,501.5 µg/mL	+/- 14.5439 +/- 133.1243 +/- 133.2711	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot YWKDC-MK)	2,500.3 µg/mL	+/- 14.5367 +/- 133.0578 +/- 133.2045	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	n-Butylbenzene CAS # 104-51-8.SEC Purity 99%	(Lot OGN01)	2,500.6 µg/mL	+/- 14.5388 +/- 133.0777 +/- 133.2245	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OT)	2,500.0 µg/mL	+/- 14.5352 +/- 133.0445 +/- 133.1912	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	1,2-Dibromo-3-chloropropane CAS # 96-12-8.SEC Purity 97%	(Lot LC00408V)	2,500.5 µg/mL	+/- 14.5383 +/- 133.0732 +/- 133.2199	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	1,2,4-Trichlorobenzene CAS # 120-82-1.SEC Purity 99%	(Lot OGO01)	2,501.0 µg/mL	+/- 14.5410 +/- 133.0977 +/- 133.2445	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Hexachlorobutadiene CAS # 87-68-3.SEC Purity 97%	(Lot 2009400)	2,501.0 µg/mL	+/- 14.5412 +/- 133.0990 +/- 133.2458	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Naphthalene CAS # 91-20-3.SEC Purity 99%	(Lot 4KW3H-OO)	2,500.5 µg/mL	+/- 14.5381 +/- 133.0711 +/- 133.2178	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	1,2,3-Trichlorobenzene	2,502.4 µg/mL	+/- 14.5490	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)	+/- 133.1709	µg/mL	Unstressed
	Purity 99%		+/- 133.3177	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
 60m x 0.25mm x 1.4µm
 Rtx-502.2 (cat.#10916)

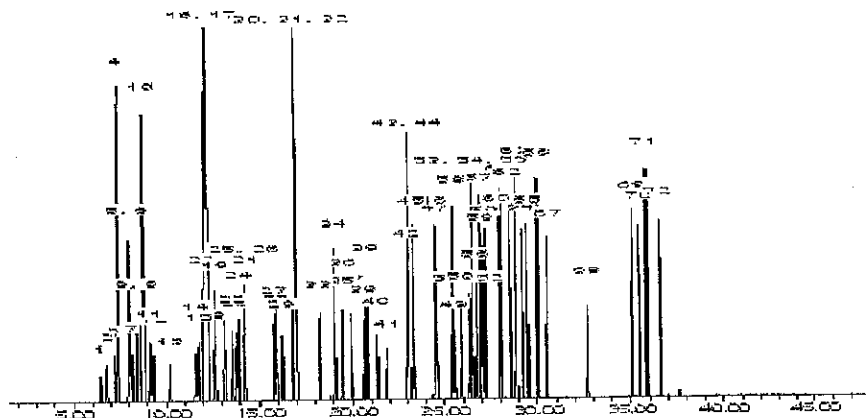
Carrier Gas:
 helium-constant pressure 30 psi

Temp. Program:
 40°C (hold 6 min.) to 240°C
 @ 6°C/min. (hold 10 min.)

Inj. Temp:
 200°C

Det. Temp:
 250°C

Det. Type:
 MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Mage

Date Mixed: 07-Jan-2015 **Balance:** 1127510105

Tyler Brown

Tyler Brown - QA Analyst

Date Passed: 14-Jan-2015

Manufactured under Restek's ISO 9001:2008
 Registered Quality System
 Certificate #FM 80397

Reagent

VM569721_00001

VM 569721-0000 Rec: 9/16/15



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721 Lot No.: A0110400
Description : 8260 List 1/ Std #2 Ketones (2015)
8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : April 30, 2018 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1 (Lot 07196AK) Purity 99%	12,506.8 µg/mL	+/- 73.2301 µg/mL Gravimetric +/- 665.6407 µg/mL Unstressed +/- 666.3747 µg/mL Stressed
2	2-Butanone (MEK) CAS # 78-93-3 (Lot BCBH7802V) Purity 99%	12,504.8 µg/mL	+/- 73.2184 µg/mL Gravimetric +/- 665.5343 µg/mL Unstressed +/- 666.2681 µg/mL Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1 (Lot SHBF5332V) Purity 99%	12,509.2 µg/mL	+/- 73.2441 µg/mL Gravimetric +/- 665.7684 µg/mL Unstressed +/- 666.5025 µg/mL Stressed
4	2-Hexanone CAS # 591-78-6 (Lot MKBN7380V) Purity 99%	12,501.6 µg/mL	+/- 73.1996 µg/mL Gravimetric +/- 665.3640 µg/mL Unstressed +/- 666.0976 µg/mL Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

VM569721S_00001



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Rec: 3/30/15
VM5697215-00001

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.SEC **Lot No.:** A0108157

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Acetone CAS # 67-64-1.SEC (Lot 0902033) Purity 99%	12,504.0 µg/mL	+/- 73.2137 µg/mL Gravimetric +/- 665.4917 µg/mL Unstressed +/- 666.2255 µg/mL Stressed
2	2-Butanone (MEK) CAS # 78-93-3.SEC (Lot VEGGI) Purity 99%	12,506.0 µg/mL	+/- 73.2254 µg/mL Gravimetric +/- 665.5981 µg/mL Unstressed +/- 666.3320 µg/mL Stressed
3	4-Methyl-2-pentanone (MIBK) CAS # 108-10-1.SEC (Lot E29T040) Purity 99%	12,537.3 µg/mL	+/- 73.4088 µg/mL Gravimetric +/- 667.2658 µg/mL Unstressed +/- 668.0015 µg/mL Stressed
4	2-Hexanone CAS # 591-78-6.SEC (Lot ZSVCD-FF) Purity 99%	12,508.7 µg/mL	+/- 73.2410 µg/mL Gravimetric +/- 665.7401 µg/mL Unstressed +/- 666.4741 µg/mL Stressed
Solvent:	P&T Methanol/Water (90:10) CAS # 67-56-1/7732-18-5 Purity 99%		

Reagent

vm569722_00005



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This Reference Material is intended for Laboratory Use Only as a standard for
 the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569722 Lot No.: A0110070

Description: 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: April 30, 2018 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Dichlorodifluoromethane (CFC-12)	2,499.9 µg/mL	+/-	17.9502	µg/mL	Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/-	30.0934	µg/mL	Unstressed
	Purity 99%		+/-	34.1055	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,500.1 µg/mL	+/-	17.2963	µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBC8470V)		+/-	29.7101	µg/mL	Unstressed
	Purity 99%		+/-	33.7686	µg/mL	Stressed
3	Vinyl chloride	2,500.2 µg/mL	+/-	16.5642	µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 17542)		+/-	29.2906	µg/mL	Unstressed
	Purity 99%		+/-	33.4004	µg/mL	Stressed
4	1,3-Butadiene	2,500.0 µg/mL	+/-	17.0072	µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBF3387V)		+/-	29.5416	µg/mL	Unstressed
	Purity 99%		+/-	33.6200	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,499.8 µg/mL	+/-	18.9451	µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/-	30.6969	µg/mL	Unstressed
	Purity 99%		+/-	34.6391	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,500.3 µg/mL	+/-	17.6395	µg/mL	Gravimetric
	CAS # 75-00-3 (Lot SHBD1717V)		+/-	29.9122	µg/mL	Unstressed
	Purity 99%		+/-	33.9470	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.2 µg/mL	+/-	16.7318	µg/mL	Gravimetric
	CAS # 75-43-4 (Lot Q9B-58)		+/-	29.3854	µg/mL	Unstressed
	Purity 99%		+/-	33.4835	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)	2,500.3 µg/mL	+/- 16.5866	µg/mL	Gravimetric
	CAS # 75-69-4 (Lot SHBD5121V)		+/- 29.3037	µg/mL	Unstressed
	Purity 99%		+/- 33.4120	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 5 min.) to 100°C
@ 5°C/min.

Inj. Temp:

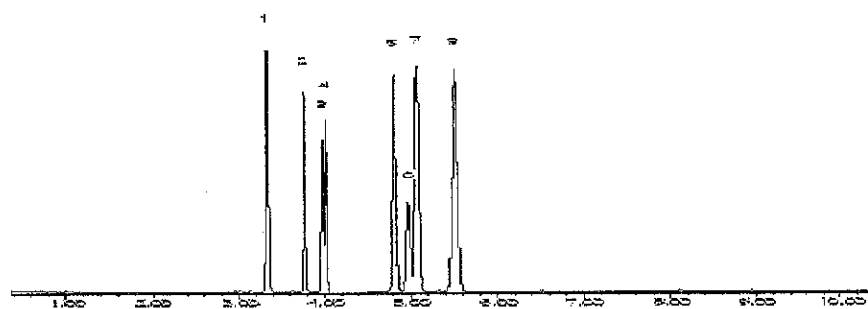
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

[Signature]
F. Joseph Gallon - Mix Technician

Date Mixed: 02-Apr-2015 Balance: B251644995

[Signature]
Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

vm569722_00006



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Rec: 2/16/16

VM569722-00006



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569722 Lot No.: A0115012
Description: 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul
Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: October 31, 2018 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8 (Lot Q167-08) Purity 99%	2,502.3 µg/mL	+/- 17.1236 µg/mL Gravimetric +/- 140.5935 µg/mL Unstressed +/- 143.8698 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3 (Lot SHBF7067V) Purity 99%	2,506.2 µg/mL	+/- 15.8909 µg/mL Gravimetric +/- 140.6631 µg/mL Unstressed +/- 143.9478 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4 (Lot 25LPST) Purity 99%	2,507.2 µg/mL	+/- 16.0743 µg/mL Gravimetric +/- 140.7405 µg/mL Unstressed +/- 144.0261 µg/mL Stressed
4	1,3-Butadiene CAS # 106-99-0 (Lot SHBF3387V) Purity 99%	2,517.0 µg/mL	+/- 17.1894 µg/mL Gravimetric +/- 141.4157 µg/mL Unstressed +/- 144.7114 µg/mL Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9 (Lot 101604) Purity 99%	2,511.3 µg/mL	+/- 17.3826 µg/mL Gravimetric +/- 141.1222 µg/mL Unstressed +/- 144.4097 µg/mL Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3 (Lot SHBD1717V) Purity 99%	2,497.4 µg/mL	+/- 16.0992 µg/mL Gravimetric +/- 140.2015 µg/mL Unstressed +/- 143.4741 µg/mL Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4 (Lot Q9B-58) Purity 99%	2,516.3 µg/mL	+/- 19.2032 µg/mL Gravimetric +/- 141.6354 µg/mL Unstressed +/- 144.9242 µg/mL Stressed

8	Trichlorofluoromethane (CFC-11)	2,512.2 µg/mL	+/- 18.6489	µg/mL	Gravimetric
CAS #	75-69-4 (Lot SHBF6387V)		+/- 141.3341	µg/mL	Unstressed
Purity	99%		+/- 144.6191	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

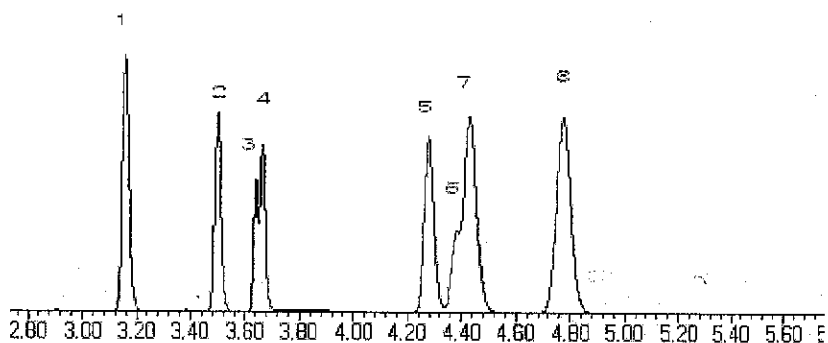
Carrier Gas:
helium-constant flow 2.0 mL/min.

Temp. Program:
40°C (hold 6 min.) to 100°C
@ 5°C/min.

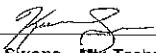
Inj. Temp:
200°C

Det. Temp:
250°C

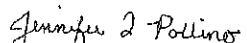
Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Kendra Swope - Mix Technician

Date Mixed: 29-Oct-2015 Balance: 1125113331


Jennifer L. Pollino - QC Analyst

Date Passed: 02-Nov-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

vm569722s_00001



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Catalog No.: 569722.SEC Lot No.: A0113063

Description: 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL Pkg Amt: > 1 mL
Expiration Date: August 31, 2018 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8.SEC (Lot 21773) Purity 99%	2,500.3 µg/mL	+/- 18.8969 µg/mL Gravimetric +/- 30.6711 µg/mL Unstressed +/- 34.6178 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,502.2 µg/mL	+/- 22.3652 µg/mL Gravimetric +/- 32.9346 µg/mL Unstressed +/- 36.6435 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,507.8 µg/mL	+/- 20.2660 µg/mL Gravimetric +/- 31.5880 µg/mL Unstressed +/- 35.4543 µg/mL Stressed
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 18349) Purity 99%	2,524.8 µg/mL	+/- 19.2677 µg/mL Gravimetric +/- 31.0859 µg/mL Unstressed +/- 35.0581 µg/mL Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,510.7 µg/mL	+/- 24.3913 µg/mL Gravimetric +/- 34.4006 µg/mL Unstressed +/- 37.9896 µg/mL Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,499.3 µg/mL	+/- 20.7673 µg/mL Gravimetric +/- 31.8496 µg/mL Unstressed +/- 35.6630 µg/mL Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4.SEC (Lot SHBC0858V) Purity 99%	2,511.4 µg/mL	+/- 18.9807 µg/mL Gravimetric +/- 30.8071 µg/mL Unstressed +/- 34.7713 µg/mL Stressed

8

Trichlorofluoromethane (CFC-11)

CAS # 75-69-4.SEC

Purity 99%

(Lot Q12B-59)

2,525.9 µg/mL

+/- 18.1086

µg/mL

Gravimetric

+/- 30.3895

µg/mL

Unstressed

+/- 34.4453

µg/mL

Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

50m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

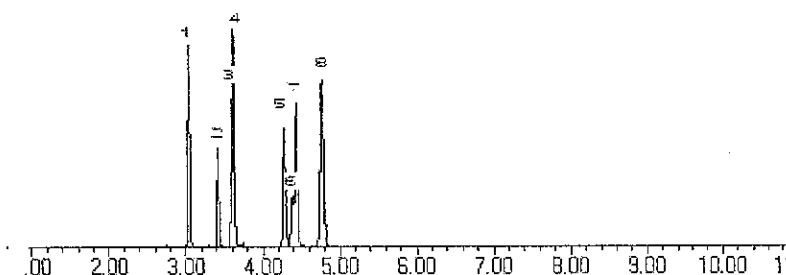
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 05-Aug-2015

Balance: 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 13-Aug-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

vm569722s_00002

Rec: 9/16/15
VM 569 7225-00002



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Catalog No. : 569722.SEC Lot No.: A0111273
Description : 8260 List 1 / Std #3 Gases (2015)
8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : May 31, 2018 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8.SEC (Lot 21773) Purity 99%	2,497.6 µg/mL	+/- 24.0984 µg/mL Gravimetric +/- 34.1039 µg/mL Unstressed +/- 37.6853 µg/mL Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,503.8 µg/mL	+/- 21.5368 µg/mL Gravimetric +/- 32.3897 µg/mL Unstressed +/- 36.1592 µg/mL Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,492.0 µg/mL	+/- 23.1023 µg/mL Gravimetric +/- 33.3685 µg/mL Unstressed +/- 37.0056 µg/mL Stressed
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 18349) Purity 99%	2,488.6 µg/mL	+/- 19.2643 µg/mL Gravimetric +/- 30.8102 µg/mL Unstressed +/- 34.7063 µg/mL Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,491.9 µg/mL	+/- 20.7776 µg/mL Gravimetric +/- 31.8022 µg/mL Unstressed +/- 35.5993 µg/mL Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 00004202) Purity 99%	2,516.0 µg/mL	+/- 19.4764 µg/mL Gravimetric +/- 31.1495 µg/mL Unstressed +/- 35.0885 µg/mL Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4.SEC (Lot SHBC0858V) Purity 99%	2,503.3 µg/mL	+/- 18.8823 µg/mL Gravimetric +/- 30.6846 µg/mL Unstressed +/- 34.6386 µg/mL Stressed

8

Trichlorofluoromethane (CFC-11)
CAS # 75-69-4.SEC
Purity 99%

30000-2555 2519.4 µg/mL
(Lot Q158-102)

+/-	19.7925	µg/mL	Gravimetric
+/-	31.3733	µg/mL	Unstressed
+/-	35.2972	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:

60m x 0.25mm x 1.4µm
Rtx-S02.2 (cat.#10916)

Carrier Gas:

helium-constant flow 2.0 mL/min.

Temp. Program:

40°C (hold 6 min.) to 100°C
@ 6°C/min.

Inj. Temp:

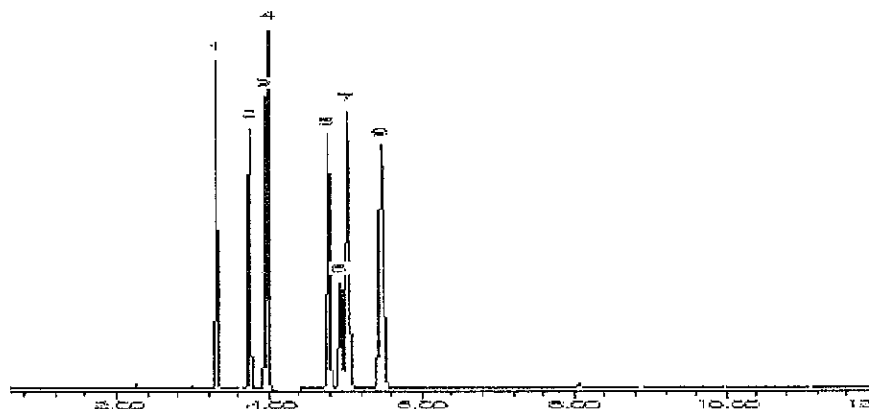
200°C

Det. Temp:

250°C

Det. Type:

MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish

Brandon Reish - Mix Technician

Date Mixed: 21-May-2015 Balance: 1127510105

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 10-Jun-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

Reagent

VM569723_00001



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

Rev: 3/30/15
VM 569723 - 00001



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 Lot No.: A0108172
Description : 8260 List 1 / Std #4 2-CEVE (2015)
8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : January 31, 2018 Storage: 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Chloroethyl vinyl ether CAS # 110-75-8 Purity 99% (Lot MKBK2735V)	2,502.0 µg/mL	+/- 14.6831 µg/mL Gravimetric +/- 53.0984 µg/mL Unstressed +/- 53.3337 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

VM569724_00004

VM 569724-00004

Dec: 1/14/16



CERTIFIED REFERENCE MATERIAL

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Catalog No. : 569724 **Lot No.:** A0115764

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2016 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Vinyl acetate	5,009.0 µg/mL	+/- 29.3956 µg/mL Gravimetric
	CAS # 108-05-4 (Lot STBD7333V)		+/- 302.2416 µg/mL Unstressed
	Purity 99%		+/- 302.9590 µg/mL Stressed

Solvent: P&T Methanol

CAS # 67-56-1

Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

VM569724_00005

VM 569724_00005 Rec: 6/7/16

(10)



110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569724 Lot No.: A0118255

Description: 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: September 30, 2016 Storage: 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Vinyl acetate CAS # 108-05-4 Purity 99%	5,003.0 µg/mL (Lot STBD7333V)	+/- 29.3604 µg/mL Gravimetric +/- 301.8795 µg/mL Unstressed +/- 302.5961 µg/mL Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Method 8260B

Volatile Organic Compounds (GC/MS)
by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Matrix: Water Level: Low
 GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
OW-6	240-71709-1	102	99	100	102
OW-2	240-71709-2	88	90	83	87
OW-5	240-71709-3	91	95	87	89
OW-5 DUP	240-71709-4	92	92	86	89
OW-10R	240-71709-5	89	94	84	87
OW-22	240-71709-6	90	93	84	88
OW-21	240-71709-7	91	95	86	88
TRIP BLANK	240-71709-8	91	95	86	91
FIELD BLANK	240-71709-9	92	92	85	88
OW-24	240-71709-10	91	94	85	89
PUMP RINSATE	240-71709-11	88	89	84	86
OW-19	240-71709-12	102	100	98	106
OW-18	240-71709-13	102	100	100	110
OW-13R	240-71709-14	103	100	101	100
	MB 240-255306/8	88	94	83	88
	MB 240-255552/6	101	99	100	105
	LCS 240-255306/5	89	90	88	90
	LCS 240-255552/4	105	96	110	106
OW-6 MS	240-71709-1 MS	106	99	102	116
OW-6 MSD	240-71709-1 MSD	105	95	101	115

	<u>QC LIMITS</u>
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	63-132
TOL = Toluene-d8 (Surr)	73-124
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXM9302.D
 Lab ID: LCS 240-255306/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	40.0	45.2	113	46-120	
Benzene	20.0	19.1	96	80-120	
Dichlorobromomethane	20.0	18.8	94	76-125	
Bromoform	20.0	21.3	107	52-157	
Bromomethane	20.0	18.3	91	24-160	
2-Butanone (MEK)	40.0	46.3	116	54-122	
Carbon disulfide	20.0	19.5	98	58-160	
Carbon tetrachloride	20.0	18.4	92	69-149	
Chlorobenzene	20.0	17.6	88	80-120	
Chloroethane	20.0	19.4	97	24-147	
Chloroform	20.0	19.3	97	80-120	
Chloromethane	20.0	16.3	82	50-135	
1,1-Dichloroethane	20.0	19.5	97	77-121	
1,2-Dichloroethane	20.0	19.5	97	76-130	
1,1-Dichloroethene	20.0	20.0	100	70-141	
1,2-Dichloropropane	20.0	19.2	96	79-121	
cis-1,3-Dichloropropene	20.0	18.7	94	75-120	
trans-1,3-Dichloropropene	20.0	18.7	93	65-120	
Ethylbenzene	20.0	18.2	91	80-120	
2-Hexanone	40.0	48.3	121	56-124	
Methylene Chloride	20.0	18.5	93	68-136	
4-Methyl-2-pentanone (MIBK)	40.0	45.9	115	60-131	
Styrene	20.0	18.4	92	80-120	
1,1,2,2-Tetrachloroethane	20.0	22.6	113	61-130	
Tetrachloroethene	20.0	18.1	90	80-123	
Toluene	20.0	18.7	93	80-121	
Trichloroethene	20.0	18.7	93	80-122	
Vinyl chloride	20.0	17.6	88	60-129	
Xylenes, Total	40.0	35.5	89	80-120	
1,1,1-Trichloroethane	20.0	18.3	92	79-133	
1,1,2-Trichloroethane	20.0	20.3	101	80-120	
Cyclohexane	20.0	18.6	93	66-135	
1,2-Dibromo-3-Chloropropane	20.0	21.6	108	46-140	
Ethylene Dibromide	20.0	21.2	106	80-126	
Dichlorodifluoromethane	20.0	12.7	64	32-140	
cis-1,2-Dichloroethene	20.0	19.5	98	80-120	
trans-1,2-Dichloroethene	20.0	19.4	97	80-123	
Isopropylbenzene	20.0	17.9	90	80-120	
Methyl acetate	100	122	122	65-124	
Methyl tert-butyl ether	20.0	20.3	102	75-126	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.4	92	65-151	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
SDG No.: _____
Matrix: Water Level: Low Lab File ID: UXM9302.D
Lab ID: LCS 240-255306/5 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	20.0	17.4	87	53-137	
1,2-Dichlorobenzene	20.0	17.9	89	80-120	
1,3-Dichlorobenzene	20.0	17.0	85	80-120	
1,4-Dichlorobenzene	20.0	17.1	86	80-120	
Trichlorofluoromethane	20.0	16.4	82	56-161	
Chlorodibromomethane	20.0	19.7	98	68-131	
Methylcyclohexane	20.0	16.9	84	71-122	
m-Xylene & p-Xylene	20.0	17.8	89	80-120	
o-Xylene	20.0	17.7	88	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXC9705.D
 Lab ID: LCS 240-255552/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acetone	20.0	8.42 J	42	46-120	*
Benzene	10.0	10.1	101	80-120	
Dichlorobromomethane	10.0	10.3	103	76-125	
Bromoform	10.0	10.2	102	52-157	
Bromomethane	10.0	4.49	45	24-160	
2-Butanone (MEK)	20.0	15.2	76	54-122	
Carbon disulfide	10.0	10.3	103	58-160	
Carbon tetrachloride	10.0	15.1	151	69-149	*
Chlorobenzene	10.0	10.2	102	80-120	
Chloroethane	10.0	4.47	45	24-147	
Chloroform	10.0	10.4	104	80-120	
Chloromethane	10.0	8.61	86	50-135	
1,1-Dichloroethane	10.0	9.73	97	77-121	
1,2-Dichloroethane	10.0	9.77	98	76-130	
1,1-Dichloroethene	10.0	10.5	105	70-141	
1,2-Dichloropropane	10.0	10.3	103	79-121	
cis-1,3-Dichloropropene	10.0	9.48	95	75-120	
trans-1,3-Dichloropropene	10.0	9.35	94	65-120	
Ethylbenzene	10.0	10.2	102	80-120	
2-Hexanone	20.0	18.0	90	56-124	
Methylene Chloride	10.0	10.7	107	68-136	
4-Methyl-2-pentanone (MIBK)	20.0	17.3	87	60-131	
Styrene	10.0	10.5	105	80-120	
1,1,2,2-Tetrachloroethane	10.0	8.38	84	61-130	
Tetrachloroethene	10.0	11.5	115	80-123	
Toluene	10.0	10.7	107	80-121	
Trichloroethene	10.0	10.8	108	80-122	
Vinyl chloride	10.0	8.54	85	60-129	
Xylenes, Total	20.0	19.5	98	80-120	
1,1,1-Trichloroethane	10.0	12.6	126	79-133	
1,1,2-Trichloroethane	10.0	10.4	104	80-120	
Cyclohexane	10.0	10.6	106	66-135	
1,2-Dibromo-3-Chloropropane	10.0	9.08	91	46-140	
Ethylene Dibromide	10.0	10.8	108	80-126	
Dichlorodifluoromethane	10.0	10.4	104	32-140	
cis-1,2-Dichloroethene	10.0	10.5	105	80-120	
trans-1,2-Dichloroethene	10.0	10.9	109	80-123	
Isopropylbenzene	10.0	10.4	104	80-120	
Methyl acetate	50.0	43.7	87	65-124	
Methyl tert-butyl ether	10.0	10.2	102	75-126	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	13.4	134	65-151	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXC9705.D
 Lab ID: LCS 240-255552/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	10.0	9.46	95	53-137	
1,2-Dichlorobenzene	10.0	9.58	96	80-120	
1,3-Dichlorobenzene	10.0	9.48	95	80-120	
1,4-Dichlorobenzene	10.0	9.60	96	80-120	
Trichlorofluoromethane	10.0	16.4	164	56-161	*
Chlorodibromomethane	10.0	11.1	111	68-131	
Methylcyclohexane	10.0	10.6	106	71-122	
m-Xylene & p-Xylene	10.0	9.61	96	80-120	
o-Xylene	10.0	9.91	99	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXC9727.D
 Lab ID: 240-71709-1 MS Client ID: OW-6 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acetone	40.0	ND	31.4	78	28-120	
Benzene	20.0	ND	20.5	102	67-126	
Dichlorobromomethane	20.0	ND	21.3	106	64-127	
Bromoform	20.0	ND	21.6	108	40-149	
Bromomethane	20.0	ND	11.9	59	10-169	
2-Butanone (MEK)	40.0	ND	33.7	84	38-123	
Carbon disulfide	20.0	ND	18.9	95	43-172	
Carbon tetrachloride	20.0	ND	25.6	128	51-154	
Chlorobenzene	20.0	ND	20.1	101	58-128	
Chloroethane	20.0	ND	11.7	58	10-162	
Chloroform	20.0	ND	21.5	108	67-133	
Chloromethane	20.0	ND	17.5	88	30-143	
1,1-Dichloroethane	20.0	ND	19.9	99	57-135	
1,2-Dichloroethane	20.0	ND	20.7	103	62-137	
1,1-Dichloroethene	20.0	ND	19.7	99	50-156	
1,2-Dichloropropane	20.0	ND	20.6	103	66-130	
cis-1,3-Dichloropropene	20.0	ND	18.1	91	58-120	
trans-1,3-Dichloropropene	20.0	ND	16.5	83	48-120	
Ethylbenzene	20.0	ND	19.4	97	66-123	
2-Hexanone	40.0	ND	36.6	92	41-135	
Methylene Chloride	20.0	2.4	24.6	111	48-138	
4-Methyl-2-pentanone (MIBK)	40.0	ND	40.4	101	43-143	
Styrene	20.0	ND	21.9	109	62-131	
1,1,2,2-Tetrachloroethane	20.0	ND	16.4	82	48-134	
Tetrachloroethene	20.0	42	57.5	78	54-138	
Toluene	20.0	ND	19.5	98	63-130	
Trichloroethene	20.0	7.7	28.0	102	58-139	
Vinyl chloride	20.0	ND	15.9	79	38-147	
Xylenes, Total	40.0	ND	40.5	101	60-126	
1,1,1-Trichloroethane	20.0	ND	23.8	119	55-150	
1,1,2-Trichloroethane	20.0	ND	20.6	103	65-130	
Cyclohexane	20.0	ND	16.9	85	36-144	
1,2-Dibromo-3-Chloropropane	20.0	ND	20.7	103	37-139	
Ethylene Dibromide	20.0	ND	21.0	105	64-137	
Dichlorodifluoromethane	20.0	ND	16.6	83	16-140	
cis-1,2-Dichloroethene	20.0	14	35.1	105	64-134	
trans-1,2-Dichloroethene	20.0	ND	21.6	108	70-137	
Isopropylbenzene	20.0	ND	20.9	104	57-132	
Methyl acetate	100	ND	102	102	46-135	
Methyl tert-butyl ether	20.0	ND	22.1	110	50-137	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	ND	20.7	103	41-149	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXC9727.D
 Lab ID: 240-71709-1 MS Client ID: OW-6 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,2,4-Trichlorobenzene	20.0	ND	20.0	100	35-140	
1,2-Dichlorobenzene	20.0	ND	19.8	99	62-123	
1,3-Dichlorobenzene	20.0	ND	18.5	93	59-122	
1,4-Dichlorobenzene	20.0	ND	18.6	93	60-122	
Trichlorofluoromethane	20.0	ND	27.8	139	26-175	
Chlorodibromomethane	20.0	ND	21.4	107	56-132	
Methylcyclohexane	20.0	ND	16.6	83	31-139	
m-Xylene & p-Xylene	20.0	ND	19.7	98	58-127	
o-Xylene	20.0	ND	20.8	104	61-126	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-71709-1

SDG No.: _____

Matrix: Water

Level: Low

Lab File ID: UXC9728.D

Lab ID: 240-71709-1 MSD

Client ID: OW-6 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Acetone	40.0	32.3	81	3	35	28-120	
Benzene	20.0	21.1	105	3	31	67-126	
Dichlorobromomethane	20.0	21.5	108	1	35	64-127	
Bromoform	20.0	20.8	104	4	35	40-149	
Bromomethane	20.0	13.5	67	13	35	10-169	
2-Butanone (MEK)	40.0	31.5	79	7	35	38-123	
Carbon disulfide	20.0	20.9	104	10	35	43-172	
Carbon tetrachloride	20.0	29.4	147	14	35	51-154	
Chlorobenzene	20.0	21.0	105	4	35	58-128	
Chloroethane	20.0	12.6	63	7	35	10-162	
Chloroform	20.0	21.8	109	1	35	67-133	
Chloromethane	20.0	17.5	88	0	35	30-143	
1,1-Dichloroethane	20.0	20.5	103	3	35	57-135	
1,2-Dichloroethane	20.0	20.5	103	1	35	62-137	
1,1-Dichloroethene	20.0	21.3	107	8	35	50-156	
1,2-Dichloropropane	20.0	21.2	106	3	35	66-130	
cis-1,3-Dichloropropene	20.0	18.1	91	0	35	58-120	
trans-1,3-Dichloropropene	20.0	16.3	81	2	35	48-120	
Ethylbenzene	20.0	20.9	104	7	34	66-123	
2-Hexanone	40.0	33.9	85	8	35	41-135	
Methylene Chloride	20.0	25.3	114	3	35	48-138	
4-Methyl-2-pentanone (MIBK)	40.0	38.6	97	4	35	43-143	
Styrene	20.0	22.6	113	3	35	62-131	
1,1,2,2-Tetrachloroethane	20.0	15.7	79	4	35	48-134	
Tetrachloroethene	20.0	57.7	79	0	35	54-138	
Toluene	20.0	20.4	102	4	33	63-130	
Trichloroethene	20.0	29.3	108	4	35	58-139	
Vinyl chloride	20.0	16.8	84	6	35	38-147	
Xylenes, Total	40.0	42.4	106	5	35	60-126	
1,1,1-Trichloroethane	20.0	25.9	130	9	35	55-150	
1,1,2-Trichloroethane	20.0	20.1	101	2	35	65-130	
Cyclohexane	20.0	20.8	104	21	35	36-144	
1,2-Dibromo-3-Chloropropane	20.0	21.3	106	3	35	37-139	
Ethylene Dibromide	20.0	20.6	103	2	35	64-137	
Dichlorodifluoromethane	20.0	18.7	94	12	35	16-140	
cis-1,2-Dichloroethene	20.0	35.2	106	0	35	64-134	
trans-1,2-Dichloroethene	20.0	22.6	113	5	25	70-137	
Isopropylbenzene	20.0	22.9	114	9	35	57-132	
Methyl acetate	100	97.5	97	5	34	46-135	
Methyl tert-butyl ether	20.0	21.7	108	2	35	50-137	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	24.8	124	18	35	41-149	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXC9728.D
 Lab ID: 240-71709-1 MSD Client ID: OW-6 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,2,4-Trichlorobenzene	20.0	23.7	119	17	35	35-140	
1,2-Dichlorobenzene	20.0	20.9	104	5	35	62-123	
1,3-Dichlorobenzene	20.0	19.7	98	6	35	59-122	
1,4-Dichlorobenzene	20.0	19.7	99	6	35	60-122	
Trichlorofluoromethane	20.0	30.7	154	10	35	26-175	
Chlorodibromomethane	20.0	21.2	106	1	35	56-132	
Methylcyclohexane	20.0	20.3	101	20	35	31-139	
m-Xylene & p-Xylene	20.0	20.8	104	6	35	58-127	
o-Xylene	20.0	21.6	108	4	35	61-126	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Lab File ID: UXM9305.D Lab Sample ID: MB 240-255306/8
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: A3UX16 Date Analyzed: 11/11/2016 12:34
 GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-255306/5	UXM9302.D	11/11/2016 11:24
OW-2	240-71709-2	UXM9314.D	11/11/2016 16:23
OW-5	240-71709-3	UXM9315.D	11/11/2016 16:46
OW-5 DUP	240-71709-4	UXM9316.D	11/11/2016 17:09
OW-10R	240-71709-5	UXM9317.D	11/11/2016 17:32
OW-22	240-71709-6	UXM9318.D	11/11/2016 17:56
OW-21	240-71709-7	UXM9319.D	11/11/2016 18:19
TRIP BLANK	240-71709-8	UXM9320.D	11/11/2016 18:42
FIELD BLANK	240-71709-9	UXM9321.D	11/11/2016 19:05
OW-24	240-71709-10	UXM9327.D	11/11/2016 21:23
PUMP RINSATE	240-71709-11	UXM9328.D	11/11/2016 21:46

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
SDG No.: _____
Lab File ID: UXC9707.D Lab Sample ID: MB 240-255552/6
Matrix: Water Heated Purge: (Y/N) N
Instrument ID: A3UX15 Date Analyzed: 11/14/2016 12:19
GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-255552/4	UXC9705.D	11/14/2016 11:34
OW-6	240-71709-1	UXC9708.D	11/14/2016 12:41
OW-19	240-71709-12	UXC9709.D	11/14/2016 13:03
OW-18	240-71709-13	UXC9710.D	11/14/2016 13:26
OW-13R	240-71709-14	UXC9711.D	11/14/2016 13:48
OW-6 MS	240-71709-1 MS	UXC9727.D	11/14/2016 19:46
OW-6 MSD	240-71709-1 MSD	UXC9728.D	11/14/2016 20:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Lab File ID: BFB619.D BFB Injection Date: 06/23/2016
 Instrument ID: A3UX15 BFB Injection Time: 11:35
 Analysis Batch No.: 235700

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	16.7
75	30.0 - 60.0 % of mass 95	46.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.2
173	Less than 2.0 % of mass 174	0.4 (0.4) 1
174	50.0 - 120.00 % of mass 95	90.4
175	5.0 - 9.0 % of mass 174	6.2 (6.8) 1
176	95.0 - 101.0 % of mass 174	87.8 (97.1) 1
177	5.0 - 9.0 % of mass 176	5.4 (6.1) 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
	STD8260 240-235700/2	UXC9008.D	06/23/2016	12:01
	STD8260 240-235700/3	UXC9009.D	06/23/2016	12:23
	STD8260 240-235700/4	UXC9010.D	06/23/2016	12:46
	STD8260 240-235700/5	UXC9011.D	06/23/2016	13:08
	STD8260 240-235700/6	UXC9012.D	06/23/2016	13:31
	STD8260 240-235700/7	UXC9013.D	06/23/2016	13:53
	ICV 240-235700/14	UXC9014.D	06/23/2016	14:16
	ICV 240-235700/15	UXC9021.D	06/23/2016	16:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-71709-1
SDG No.: _____
Lab File ID: BFB61114A.D BFB Injection Date: 11/14/2016
Instrument ID: A3UX15 BFB Injection Time: 09:41
Analysis Batch No.: 255552

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	15.7
75	30.0 - 60.0 % of mass 95	46.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.4 (0.5) 1
174	50.0 - 120.00 % of mass 95	93.4
175	5.0 - 9.0 % of mass 174	6.2 (6.6) 1
176	95.0 - 101.0 % of mass 174	92.4 (98.9) 1
177	5.0 - 9.0 % of mass 176	5.9 (6.4) 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
	CCVIS 240-255552/2	UXC9701.D	11/14/2016	10:04
	CCV 240-255552/3	UXC9703.D	11/14/2016	10:49
	LCS 240-255552/4	UXC9705.D	11/14/2016	11:34
	MB 240-255552/6	UXC9707.D	11/14/2016	12:19
OW-6	240-71709-1	UXC9708.D	11/14/2016	12:41
OW-19	240-71709-12	UXC9709.D	11/14/2016	13:03
OW-18	240-71709-13	UXC9710.D	11/14/2016	13:26
OW-13R	240-71709-14	UXC9711.D	11/14/2016	13:48
OW-6 MS	240-71709-1 MS	UXC9727.D	11/14/2016	19:46
OW-6 MSD	240-71709-1 MSD	UXC9728.D	11/14/2016	20:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Lab File ID: BFB4965.D BFB Injection Date: 09/02/2016
 Instrument ID: A3UX16 BFB Injection Time: 17:51
 Analysis Batch No.: 245430

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	45.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.8
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	72.6
175	5.0 - 9.0 % of mass 174	5.3 (7.3) 1
176	95.0 - 101.0 % of mass 174	71.8 (99.0) 1
177	5.0 - 9.0 % of mass 176	4.8 (6.6) 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
	STD8260 240-245430/6	UXM7645.D	09/02/2016	18:19
	STD8260 240-245430/7	UXM7646.D	09/02/2016	18:42
	STD8260 240-245430/8	UXM7647.D	09/02/2016	19:05
	ICIS 240-245430/9	UXM7648.D	09/02/2016	19:28
	STD8260 240-245430/10	UXM7649.D	09/02/2016	19:51
	STD8260 240-245430/11	UXM7650.D	09/02/2016	20:14
	ICV 240-245430/20	UXM7659.D	09/02/2016	23:42

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-71709-1
SDG No.: _____
Lab File ID: BFB5052.D BFB Injection Date: 11/11/2016
Instrument ID: A3UX16 BFB Injection Time: 10:25
Analysis Batch No.: 255306

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.3
75	30.0 - 60.0 % of mass 95	45.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.3
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	69.7
175	5.0 - 9.0 % of mass 174	5.2 (7.5) 1
176	95.0 - 101.0 % of mass 174	67.5 (96.8) 1
177	5.0 - 9.0 % of mass 176	5.2 (7.7) 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 240-255306/4	UXM9301.D	11/11/2016	11:01
	LCS 240-255306/5	UXM9302.D	11/11/2016	11:24
	CCV 240-255306/6	UXM9303.D	11/11/2016	11:48
	MB 240-255306/8	UXM9305.D	11/11/2016	12:34
OW-2	240-71709-2	UXM9314.D	11/11/2016	16:23
OW-5	240-71709-3	UXM9315.D	11/11/2016	16:46
OW-5 DUP	240-71709-4	UXM9316.D	11/11/2016	17:09
OW-10R	240-71709-5	UXM9317.D	11/11/2016	17:32
OW-22	240-71709-6	UXM9318.D	11/11/2016	17:56
OW-21	240-71709-7	UXM9319.D	11/11/2016	18:19
TRIP BLANK	240-71709-8	UXM9320.D	11/11/2016	18:42
FIELD BLANK	240-71709-9	UXM9321.D	11/11/2016	19:05
OW-24	240-71709-10	UXM9327.D	11/11/2016	21:23
PUMP RINSATE	240-71709-11	UXM9328.D	11/11/2016	21:46

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Sample No.: STD8260 240-235700/4 Date Analyzed: 06/23/2016 12:46
 Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXC9010.D Heated Purge: (Y/N) N
 Calibration ID: 34930

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1646184	5.13	1222360	7.81	530154	10.04
UPPER LIMIT		3292368	5.63	2444720	8.31	1060308	10.54
LOWER LIMIT		823092	4.63	611180	7.31	265077	9.54
LAB SAMPLE ID		CLIENT SAMPLE ID					
ICV 240-235700/14		1661685	5.13	1268289	7.81	530949	10.04
ICV 240-235700/15		1649875	5.13	1270373	7.81	493234	10.04
CCVIS 240-255552/2		1440866	5.03	1126162	7.68	644886	9.91

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Sample No.: CCVIS 240-255552/2 Date Analyzed: 11/14/2016 10:04
 Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXC9701.D Heated Purge: (Y/N) N
 Calibration ID: 36079

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1440866	5.03	1126162	7.68	644886	9.91
UPPER LIMIT		2881732	5.53	2252324	8.18	1289772	10.41
LOWER LIMIT		720433	4.53	563081	7.18	322443	9.41
LAB SAMPLE ID		CLIENT SAMPLE ID					
CCV 240-255552/3		1392019	5.03	1091409	7.68	561961	9.91
LCS 240-255552/4		1453579	5.03	1048423	7.68	551934	9.91
MB 240-255552/6		1475505	5.03	1137961	7.68	643086	9.93
240-71709-1	OW-6	1412139	5.03	1096638	7.68	569201	9.91
240-71709-12	OW-19	1407128	5.03	1128510	7.68	680171	9.93
240-71709-13	OW-18	1415228	5.03	1103107	7.68	627099	9.93
240-71709-14	OW-13R	1393785	5.03	1073961	7.68	540081	9.91
240-71709-1 MS	OW-6 MS	1439662	5.03	1132122	7.68	711997	9.93
240-71709-1 MSD	OW-6 MSD	1457876	5.03	1156497	7.68	720974	9.91

FB = Fluorobenzene
 FB = Fluorobenzene
 CBNZd5 = Chlorobenzene-d5
 CBNZd5 = Chlorobenzene-d5
 Area Limit = 50%-200% of internal standard area
 DCBd4 = 1,4-Dichlorobenzene-d4
 RT Limit = ± 0.5 minutes of internal standard RT
 DCBd4 = 1,4-Dichlorobenzene-d4

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Sample No.: ICIS 240-245430/9 Date Analyzed: 09/02/2016 19:28
 Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXM7648.D Heated Purge: (Y/N) N
 Calibration ID: 35911

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	1017298	5.17	725873	7.87	378084	10.10	
UPPER LIMIT	2034596	5.67	1451746	8.37	756168	10.60	
LOWER LIMIT	508649	4.67	362937	7.37	189042	9.60	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-245430/20		1038034	5.17	740042	7.85	381864	10.10
CCVIS 240-255306/4		807971	5.17	555719	7.87	301490	10.10

FB = Fluorobenzene

CBNZd5 = Chlorobenzene-d5

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = $\pm$ 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Sample No.: CCVIS 240-255306/4 Date Analyzed: 11/11/2016 11:01
 Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXM9301.D Heated Purge: (Y/N) N
 Calibration ID: 35917

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		807971	5.17	555719	7.87	301490	10.10
UPPER LIMIT		1615942	5.67	1111438	8.37	602980	10.60
LOWER LIMIT		403986	4.67	277860	7.37	150745	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-255306/5		806219	5.17	553032	7.85	293788	10.10
CCV 240-255306/6		780660	5.17	531973	7.85	277748	10.10
MB 240-255306/8		797887	5.17	542672	7.85	272674	10.10
240-71709-2	OW-2	772184	5.17	527846	7.85	270437	10.10
240-71709-3	OW-5	760272	5.17	515960	7.85	264119	10.10
240-71709-4	OW-5 DUP	752031	5.17	516383	7.85	263915	10.10
240-71709-5	OW-10R	770176	5.17	528603	7.85	272185	10.10
240-71709-6	OW-22	764198	5.17	529864	7.85	269976	10.10
240-71709-7	OW-21	746999	5.17	511122	7.85	259202	10.10
240-71709-8	TRIP BLANK	740455	5.17	503966	7.85	263010	10.10
240-71709-9	FIELD BLANK	753917	5.17	521455	7.85	261538	10.10
240-71709-10	OW-24	749455	5.17	509839	7.85	261342	10.10
240-71709-11	PUMP RINSATE	780364	5.17	529206	7.85	269241	10.10

FB = Fluorobenzene
 CBNZd5 = Chlorobenzene-d5
 DCBd4 = 1,4-Dichlorobenzene-d4
 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 I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-6</u>	Lab Sample ID: <u>240-71709-1</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXC9708.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 09:00</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/14/2016 12:41</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>2</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255552</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND	*	20	
71-43-2	Benzene	ND		2.0	
75-27-4	Dichlorobromomethane	ND		2.0	
75-25-2	Bromoform	ND		2.0	
74-83-9	Bromomethane	ND		2.0	
78-93-3	2-Butanone (MEK)	ND		20	
75-15-0	Carbon disulfide	ND		2.0	
56-23-5	Carbon tetrachloride	ND	*	2.0	
108-90-7	Chlorobenzene	ND		2.0	
75-00-3	Chloroethane	ND		2.0	
67-66-3	Chloroform	ND		2.0	
74-87-3	Chloromethane	ND		2.0	
75-34-3	1,1-Dichloroethane	ND		2.0	
107-06-2	1,2-Dichloroethane	ND		2.0	
75-35-4	1,1-Dichloroethene	ND		2.0	
78-87-5	1,2-Dichloropropane	ND		2.0	
10061-01-5	cis-1,3-Dichloropropene	ND		2.0	
10061-02-6	trans-1,3-Dichloropropene	ND		2.0	
100-41-4	Ethylbenzene	ND		2.0	
591-78-6	2-Hexanone	ND		20	
75-09-2	Methylene Chloride	2.4		2.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	
100-42-5	Styrene	ND		2.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.0	
127-18-4	Tetrachloroethene	42		2.0	
108-88-3	Toluene	ND		2.0	
79-01-6	Trichloroethene	7.7		2.0	
75-01-4	Vinyl chloride	ND		2.0	
1330-20-7	Xylenes, Total	ND		4.0	
71-55-6	1,1,1-Trichloroethane	ND		2.0	
79-00-5	1,1,2-Trichloroethane	ND		2.0	
110-82-7	Cyclohexane	ND		2.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.0	
106-93-4	Ethylene Dibromide	ND		2.0	
75-71-8	Dichlorodifluoromethane	ND		2.0	
156-59-2	cis-1,2-Dichloroethene	14		2.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-6 Lab Sample ID: 240-71709-1
 Matrix: Water Lab File ID: UXC9708.D
 Analysis Method: 8260B Date Collected: 11/01/2016 09:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 12:41
 Soil Aliquot Vol: _____ Dilution Factor: 2
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		2.0	
98-82-8	Isopropylbenzene	ND		2.0	
79-20-9	Methyl acetate	ND		20	
1634-04-4	Methyl tert-butyl ether	ND		2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	
120-82-1	1,2,4-Trichlorobenzene	ND		2.0	
95-50-1	1,2-Dichlorobenzene	ND		2.0	
541-73-1	1,3-Dichlorobenzene	ND		2.0	
106-46-7	1,4-Dichlorobenzene	ND		2.0	
75-69-4	Trichlorofluoromethane	ND	*	2.0	
124-48-1	Chlorodibromomethane	ND		2.0	
108-87-2	Methylcyclohexane	ND		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-132
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	102		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9708.D
 Lims ID: 240-71709-B-1
 Client ID: OW-6
 Sample Type: Client
 Inject. Date: 14-Nov-2016 12:41:30 ALS Bottle#: 8 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 2.0000
 Sample Info: 240-0059951-032
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 13:03:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1412139	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	86	1096638	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.913	9.913	0.000	93	569201	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	300084	8.17	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.766	4.766	0.000	0	351970	7.91	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	93	1351467	7.98	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	96	473144	8.17	
9 Dichlorodifluoromethane	85		1.458				ND	
10 Chloromethane	50		1.600				ND	
11 Vinyl chloride	62		1.695				ND	
13 Bromomethane	94		1.968				ND	
14 Chloroethane	64		2.063				ND	
16 Trichlorofluoromethane	101		2.229				ND	
19 1,1-Dichloroethene	96		2.644				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.679				ND	
22 Acetone	43		2.703				ND	
24 Carbon disulfide	76		2.833				ND	
27 Methyl acetate	43		2.964				ND	
28 Methylene Chloride	84	3.047	3.047	0.000	90	81034	1.21	
31 Methyl tert-butyl ether	73		3.260				ND	
30 trans-1,2-Dichloroethene	96		3.260				ND	
34 1,1-Dichloroethane	63		3.616				ND	
39 cis-1,2-Dichloroethene	96	4.090	4.090	0.000	79	340365	7.02	
41 2-Butanone (MEK)	43		4.102				ND	
47 Chloroform	83		4.339				ND	
48 1,1,1-Trichloroethane	97		4.494				ND	
49 Cyclohexane	56		4.529				ND	
50 Carbon tetrachloride	117		4.624				ND	
53 Benzene	78		4.802				ND	
54 1,2-Dichloroethane	62		4.826				ND	
58 Trichloroethene	130	5.336	5.336	0.000	95	175662	3.84	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.478				ND	
61 1,2-Dichloropropane	63		5.537				ND	
65 Dichlorobromomethane	83		5.762				ND	
68 cis-1,3-Dichloropropene	75		6.142				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.272				ND	
70 Toluene	91		6.438				ND	
71 trans-1,3-Dichloropropene	75		6.640				ND	
73 1,1,2-Trichloroethane	97		6.806				ND	
74 Tetrachloroethene	164	6.913	6.925	-0.012	98	803724	20.9	
76 2-Hexanone	43		7.019				ND	
79 Chlorodibromomethane	129		7.162				ND	
80 Ethylene Dibromide	107		7.280				ND	
82 Chlorobenzene	112		7.719				ND	
84 Ethylbenzene	106		7.802				ND	
85 m-Xylene & p-Xylene	91		7.909				ND	
86 o-Xylene	106		8.288				ND	
87 Styrene	104		8.312				ND	
88 Bromoform	173		8.502				ND	
89 Isopropylbenzene	105		8.632				ND	
93 1,1,2,2-Tetrachloroethane	83		8.941				ND	
106 1,3-Dichlorobenzene	146		9.854				ND	
108 1,4-Dichlorobenzene	146		9.937				ND	
112 1,2-Dichlorobenzene	146		10.316				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.099				ND	
115 1,2,4-Trichlorobenzene	180		11.905				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9708.D

Injection Date: 14-Nov-2016 12:41:30

Instrument ID: A3UX15

Operator ID:

Lims ID: 240-71709-B-1

Lab Sample ID: 240-71709-1

Worklist Smp#: 32

Client ID: OW-6

Purge Vol: 5.000 mL

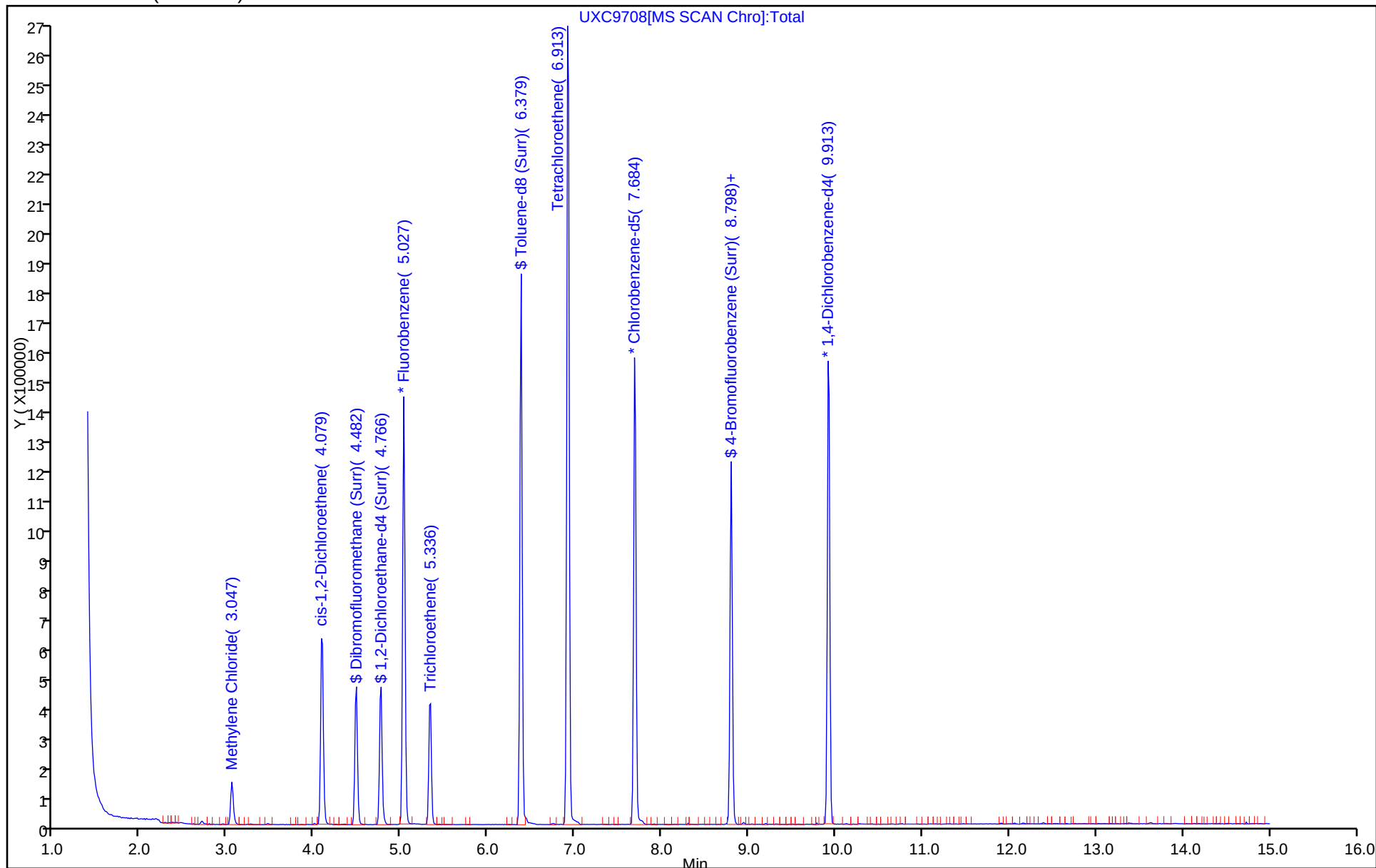
Dil. Factor: 2.0000

ALS Bottle#: 8

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9708.D
 Lims ID: 240-71709-B-1
 Client ID: OW-6
 Sample Type: Client
 Inject. Date: 14-Nov-2016 12:41:30 ALS Bottle#: 8 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 2.0000
 Sample Info: 240-0059951-032
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 13:03:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.17	102.01
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	7.91	98.71
\$ 6 Toluene-d8 (Surr)	8.01	7.98	99.68
\$ 7 4-Bromofluorobenzene (Surr)	8.01	8.17	102.04

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9708.D

Injection Date: 14-Nov-2016 12:41:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-1

Lab Sample ID: 240-71709-1

Client ID: OW-6

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 32

Purge Vol: 5.000 mL

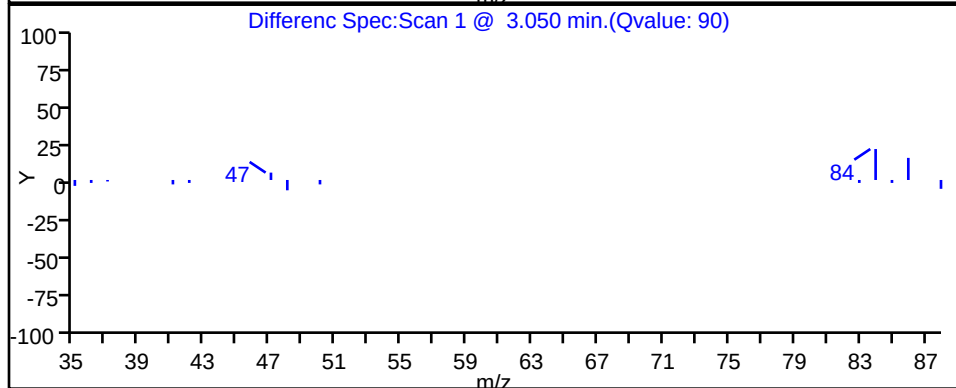
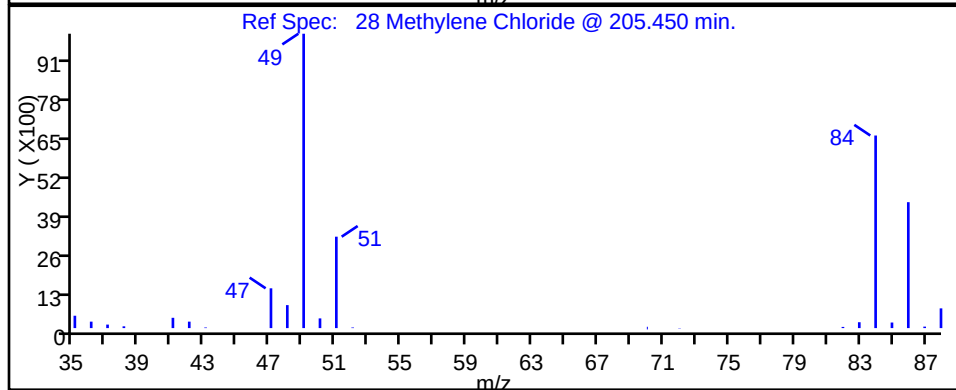
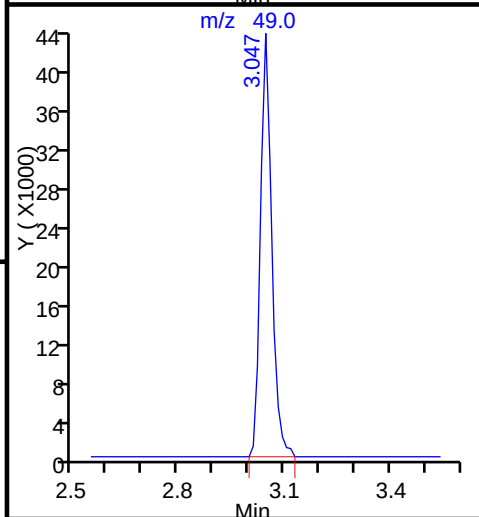
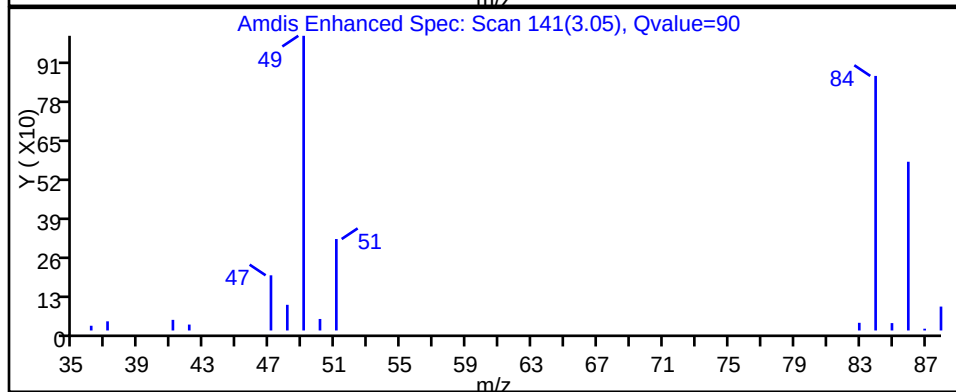
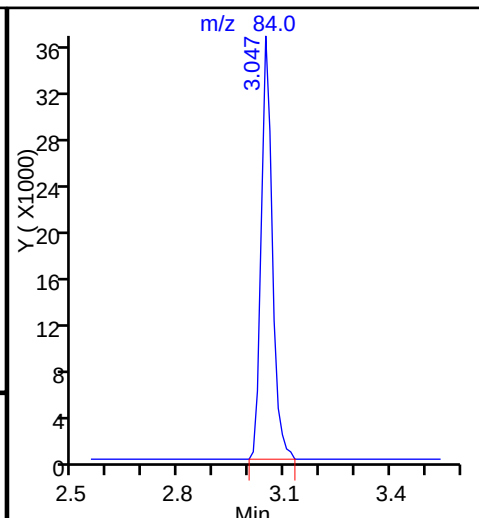
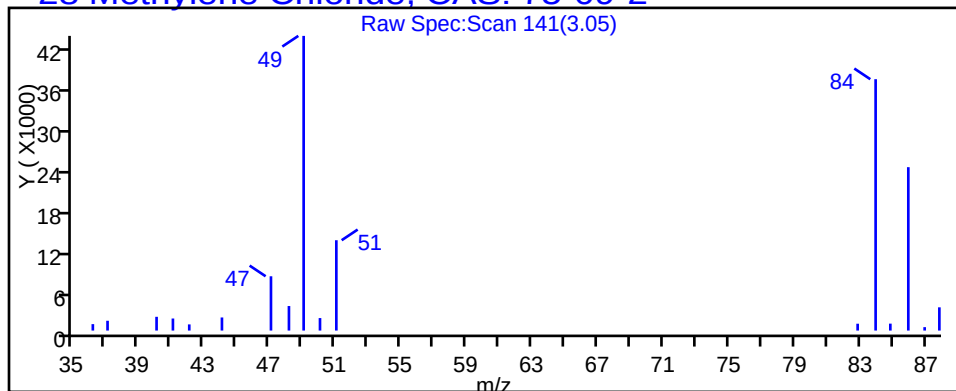
Dil. Factor: 2.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

28 Methylene Chloride, CAS: 75-09-2

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9708.D

Injection Date: 14-Nov-2016 12:41:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-1

Lab Sample ID: 240-71709-1

Client ID: OW-6

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 32

Purge Vol: 5.000 mL

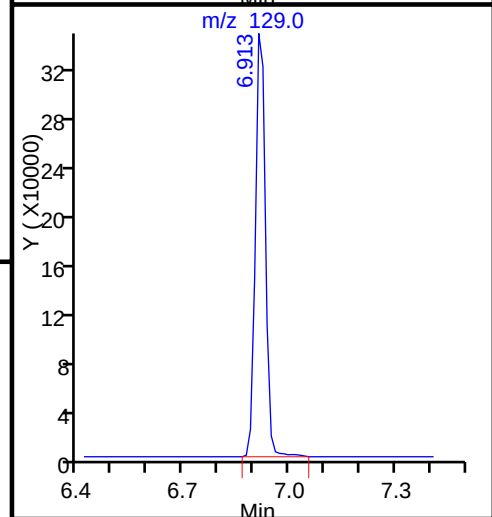
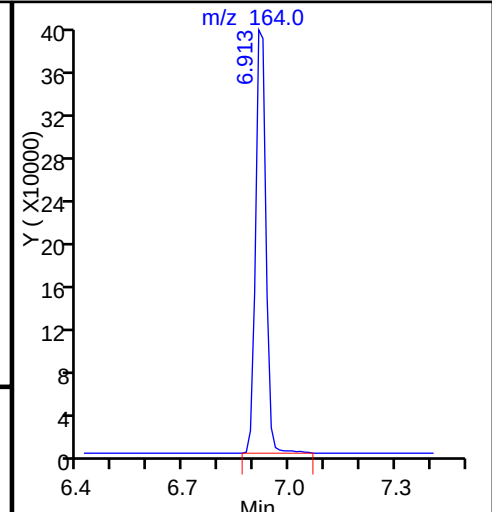
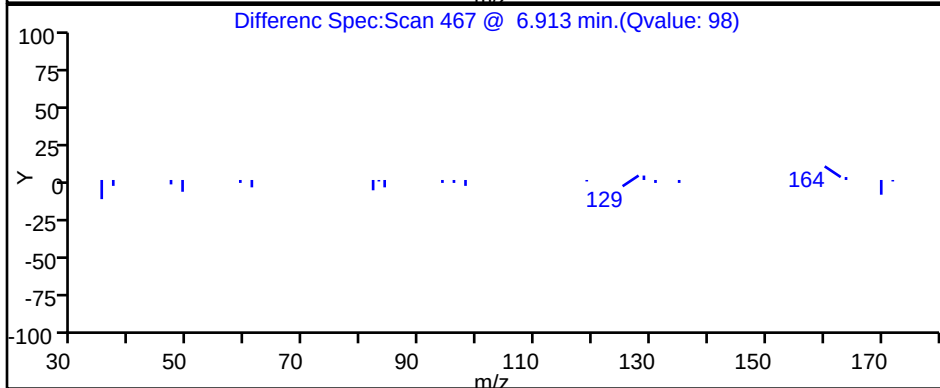
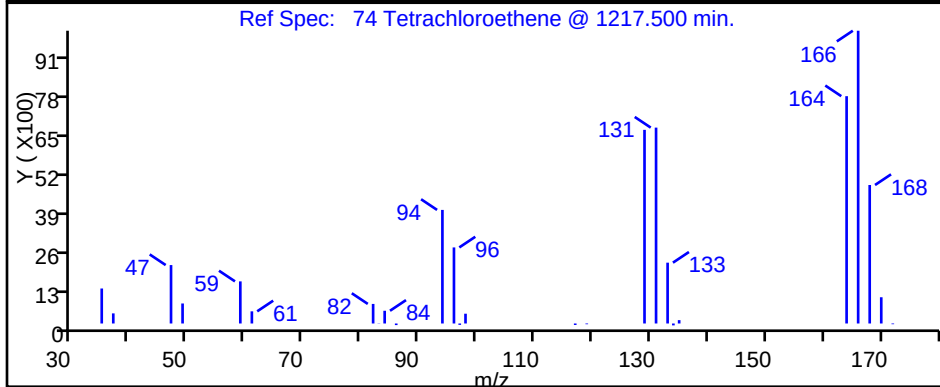
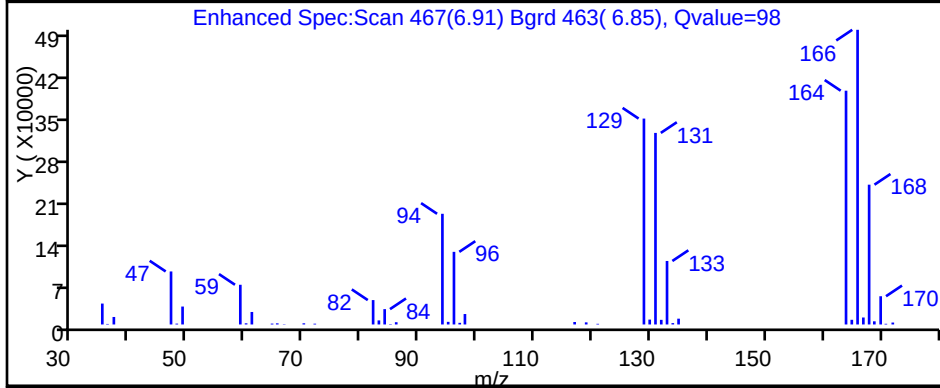
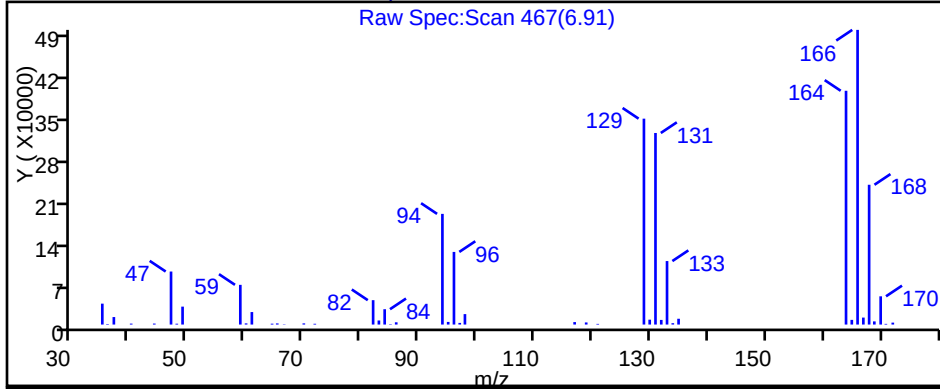
Dil. Factor: 2.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

74 Tetrachloroethene, CAS: 127-18-4

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9708.D

Injection Date: 14-Nov-2016 12:41:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-1

Lab Sample ID: 240-71709-1

Client ID: OW-6

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 32

Purge Vol: 5.000 mL

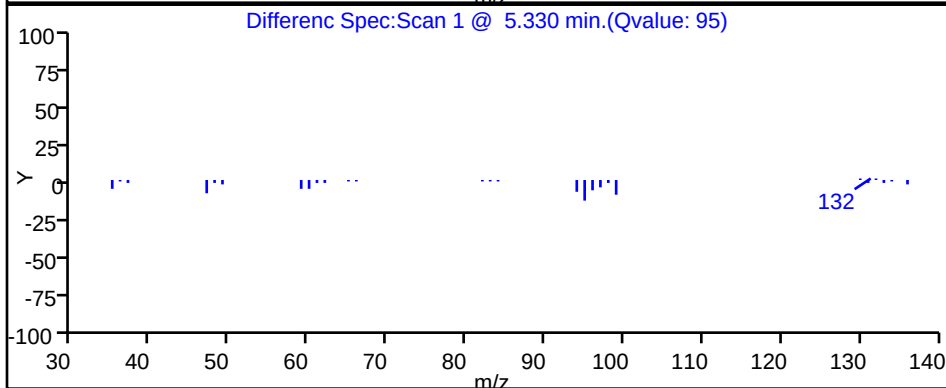
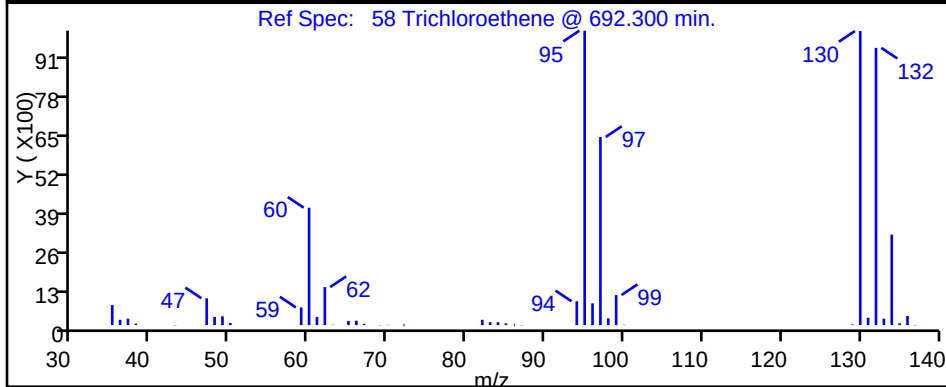
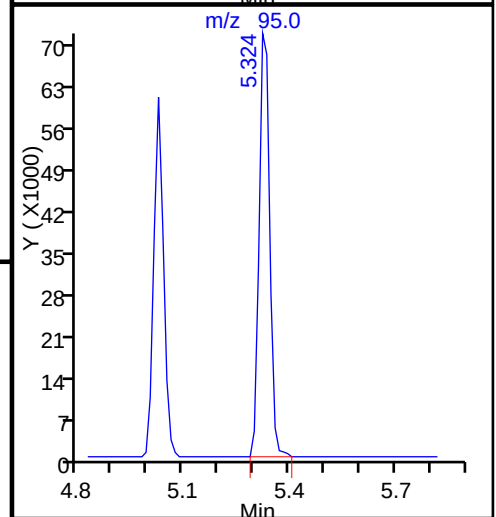
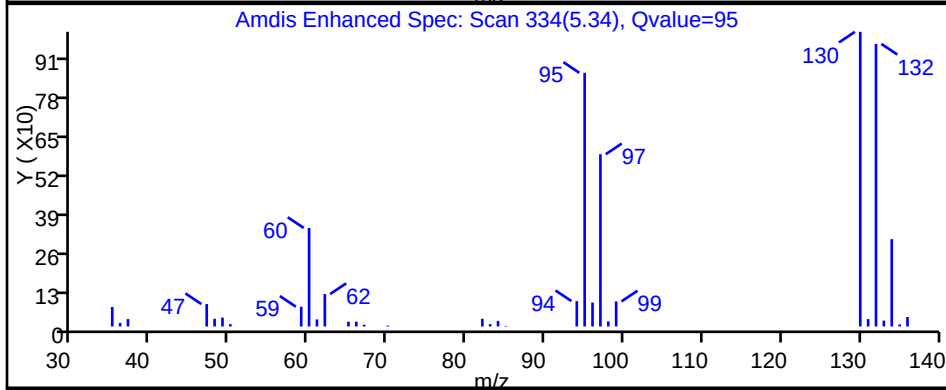
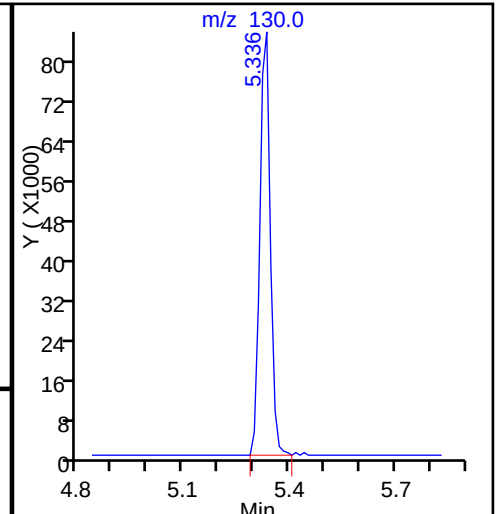
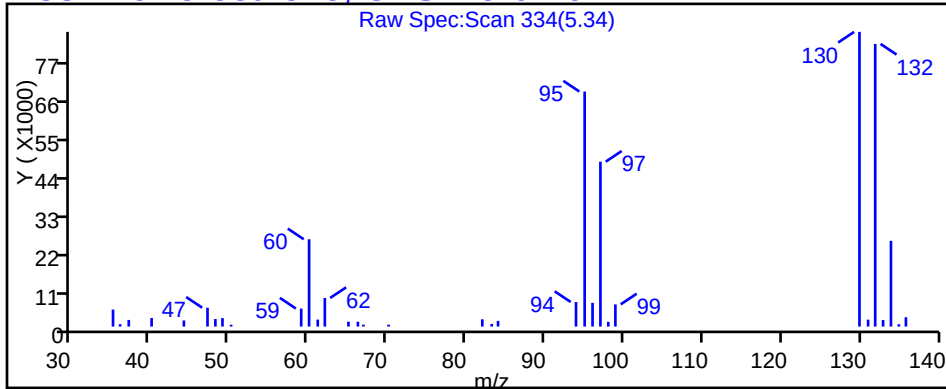
Dil. Factor: 2.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9708.D

Injection Date: 14-Nov-2016 12:41:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-1

Lab Sample ID: 240-71709-1

Client ID: OW-6

Operator ID:

ALS Bottle#:

8

Worklist Smp#:

32

Purge Vol: 5.000 mL

Dil. Factor:

2.0000

Method: 8260_15

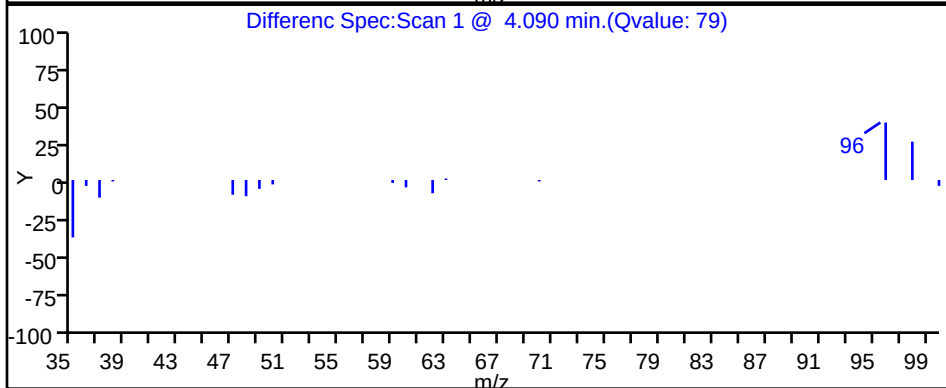
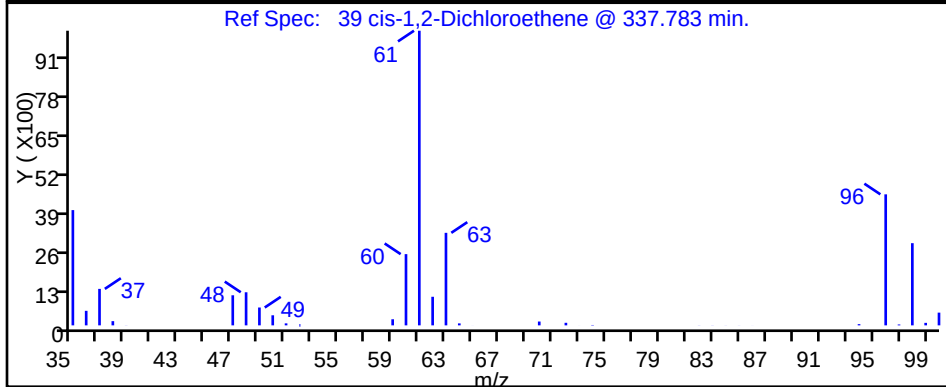
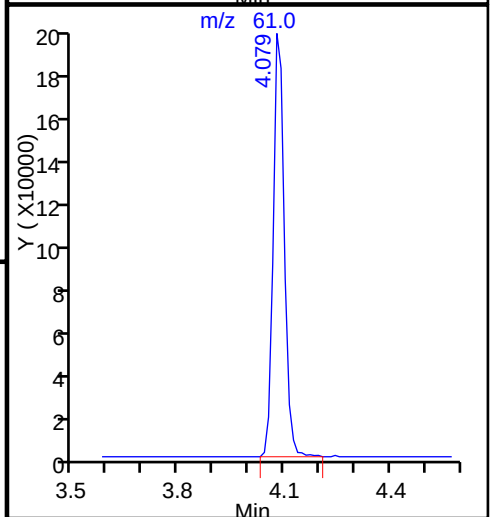
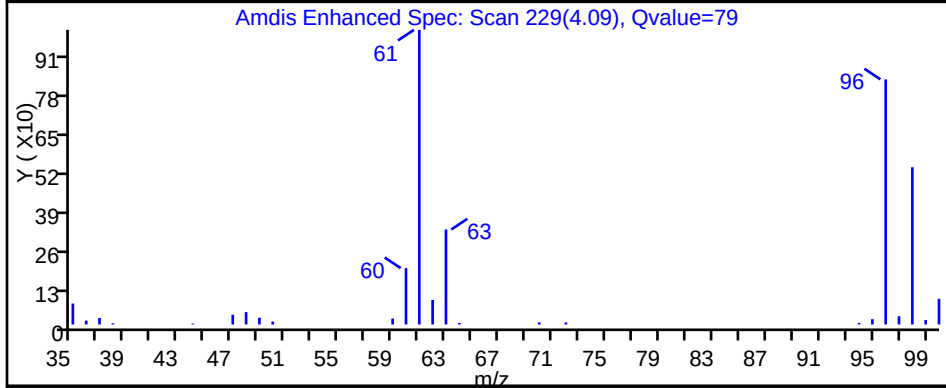
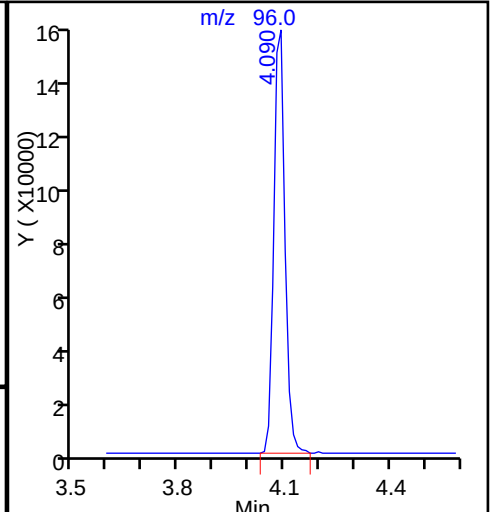
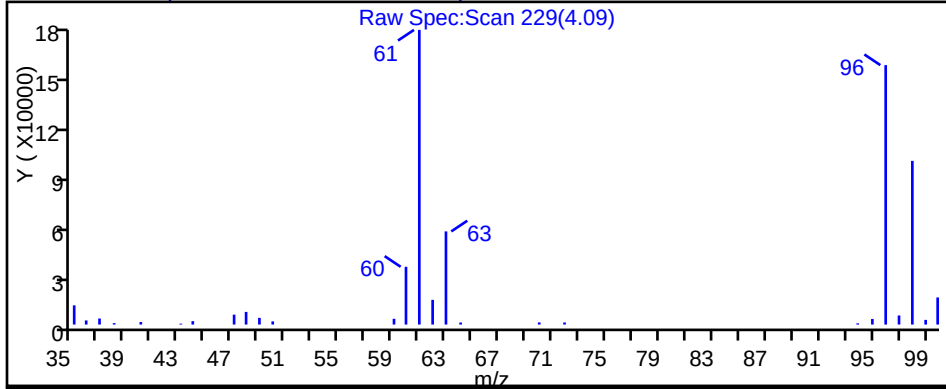
Limit Group:

MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector

MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-2</u>	Lab Sample ID: <u>240-71709-2</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9314.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 10:45</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 16:23</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>2.5</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		25	
71-43-2	Benzene	ND		2.5	
75-27-4	Dichlorobromomethane	ND		2.5	
75-25-2	Bromoform	ND		2.5	
74-83-9	Bromomethane	ND		2.5	
78-93-3	2-Butanone (MEK)	ND		25	
75-15-0	Carbon disulfide	ND		2.5	
56-23-5	Carbon tetrachloride	ND		2.5	
108-90-7	Chlorobenzene	ND		2.5	
75-00-3	Chloroethane	ND		2.5	
67-66-3	Chloroform	ND		2.5	
74-87-3	Chloromethane	ND		2.5	
75-34-3	1,1-Dichloroethane	ND		2.5	
107-06-2	1,2-Dichloroethane	ND		2.5	
75-35-4	1,1-Dichloroethene	ND		2.5	
78-87-5	1,2-Dichloropropane	ND		2.5	
10061-01-5	cis-1,3-Dichloropropene	ND		2.5	
10061-02-6	trans-1,3-Dichloropropene	ND		2.5	
100-41-4	Ethylbenzene	ND		2.5	
591-78-6	2-Hexanone	ND		25	
75-09-2	Methylene Chloride	ND		2.5	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	
100-42-5	Styrene	ND		2.5	
79-34-5	1,1,2,2-Tetrachloroethane	ND		2.5	
127-18-4	Tetrachloroethene	68		2.5	
108-88-3	Toluene	ND		2.5	
79-01-6	Trichloroethene	9.9		2.5	
75-01-4	Vinyl chloride	ND		2.5	
1330-20-7	Xylenes, Total	ND		5.0	
71-55-6	1,1,1-Trichloroethane	ND		2.5	
79-00-5	1,1,2-Trichloroethane	ND		2.5	
110-82-7	Cyclohexane	ND		2.5	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	
106-93-4	Ethylene Dibromide	ND		2.5	
75-71-8	Dichlorodifluoromethane	ND		2.5	
156-59-2	cis-1,2-Dichloroethene	63		2.5	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-2 Lab Sample ID: 240-71709-2
 Matrix: Water Lab File ID: UXM9314.D
 Analysis Method: 8260B Date Collected: 11/01/2016 10:45
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 16:23
 Soil Aliquot Vol: _____ Dilution Factor: 2.5
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		2.5	
98-82-8	Isopropylbenzene	ND		2.5	
79-20-9	Methyl acetate	ND		25	
1634-04-4	Methyl tert-butyl ether	ND		2.5	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.5	
120-82-1	1,2,4-Trichlorobenzene	ND		2.5	
95-50-1	1,2-Dichlorobenzene	ND		2.5	
541-73-1	1,3-Dichlorobenzene	ND		2.5	
106-46-7	1,4-Dichlorobenzene	ND		2.5	
75-69-4	Trichlorofluoromethane	ND		2.5	
124-48-1	Chlorodibromomethane	ND		2.5	
108-87-2	Methylcyclohexane	ND		2.5	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	87		73-120
2037-26-5	Toluene-d8 (Surr)	83		73-124
1868-53-7	Dibromofluoromethane (Surr)	88		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9314.D
 Lims ID: 240-71709-B-2
 Client ID: OW-2
 Sample Type: Client
 Inject. Date: 11-Nov-2016 16:23:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 2.5000
 Sample Info: 240-0059904-018
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 20:25:37 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:31:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	772184	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	527846	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	270437	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	155087	17.6	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	169196	17.9	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	642056	16.7	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	245450	17.3	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62		1.628				ND	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	79	300570	25.1	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78		4.937				ND	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130	5.494	5.494	0.000	98	41951	3.96	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164	7.107	7.107	0.000	99	198080	27.2	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9314.D

Injection Date: 11-Nov-2016 16:23:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-B-2

Lab Sample ID: 240-71709-2

Worklist Smp#: 18

Client ID: OW-2

Purge Vol: 5.000 mL

Dil. Factor: 2.5000

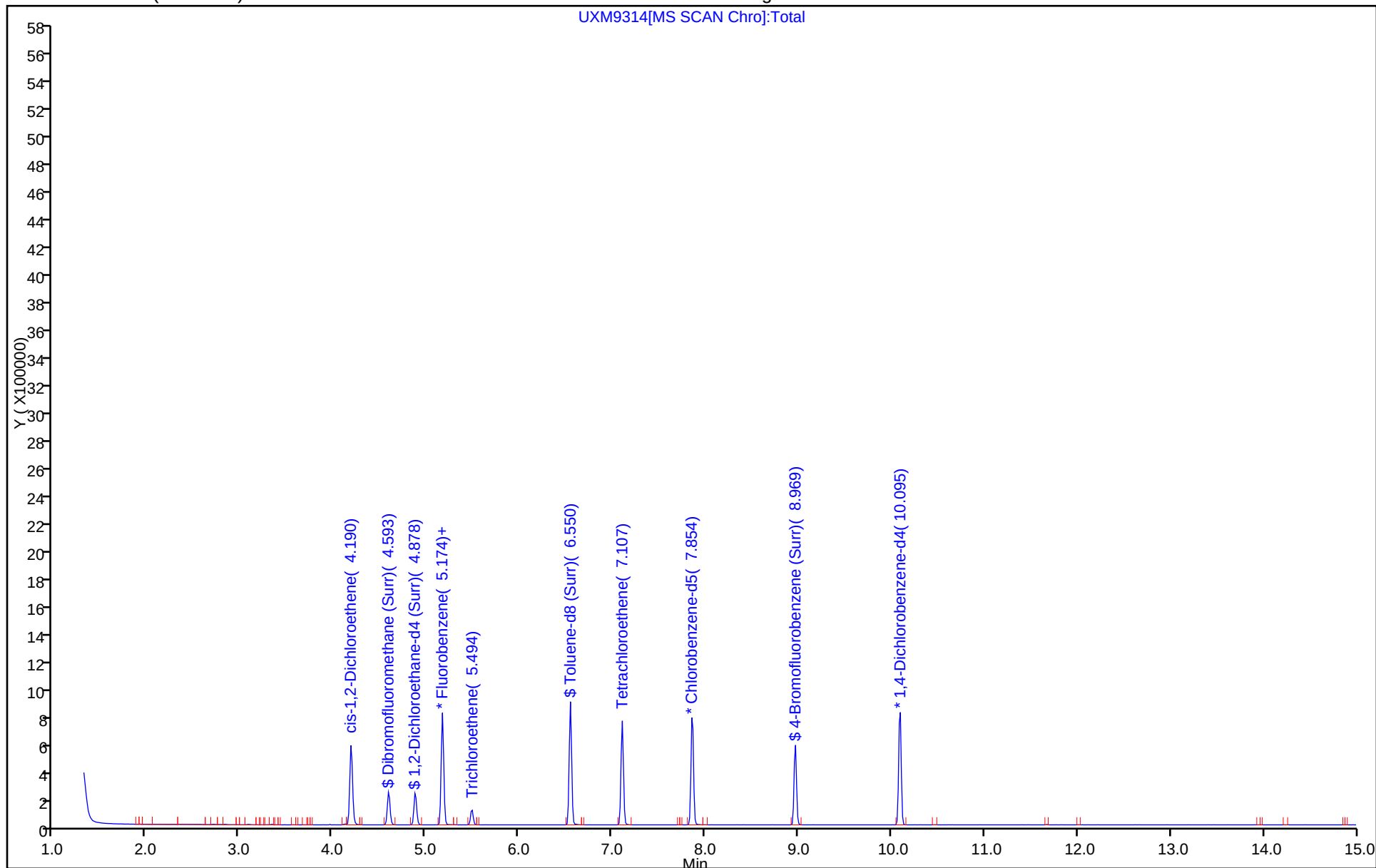
ALS Bottle#: 15

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9314.D
 Lims ID: 240-71709-B-2
 Client ID: OW-2
 Sample Type: Client
 Inject. Date: 11-Nov-2016 16:23:30 ALS Bottle#: 15 Worklist Smp#: 18
 Purge Vol: 5.000 mL Dil. Factor: 2.5000
 Sample Info: 240-0059904-018
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 20:25:37 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:31:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	17.6	87.75
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.9	89.59
\$ 6 Toluene-d8 (Surr)	20.0	16.7	83.42
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.3	86.61

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9314.D

Injection Date: 11-Nov-2016 16:23:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-2

Lab Sample ID: 240-71709-2

Client ID: OW-2

Operator ID: 001765

ALS Bottle#: 15

Worklist Smp#: 18

Purge Vol: 5.000 mL

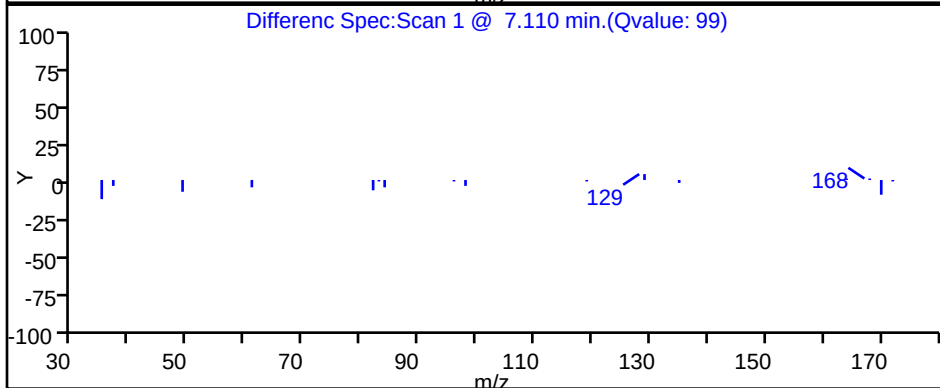
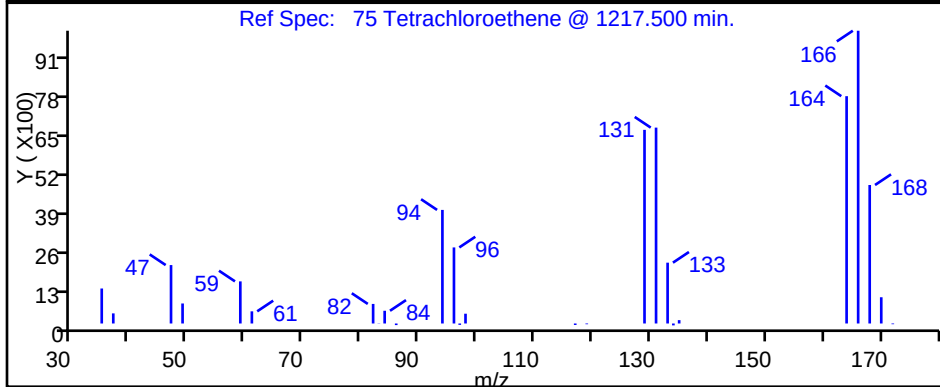
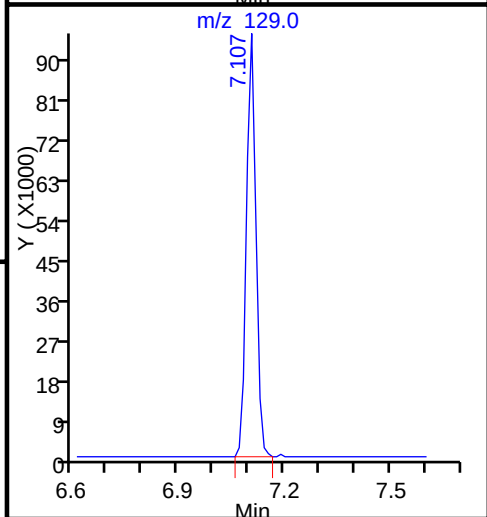
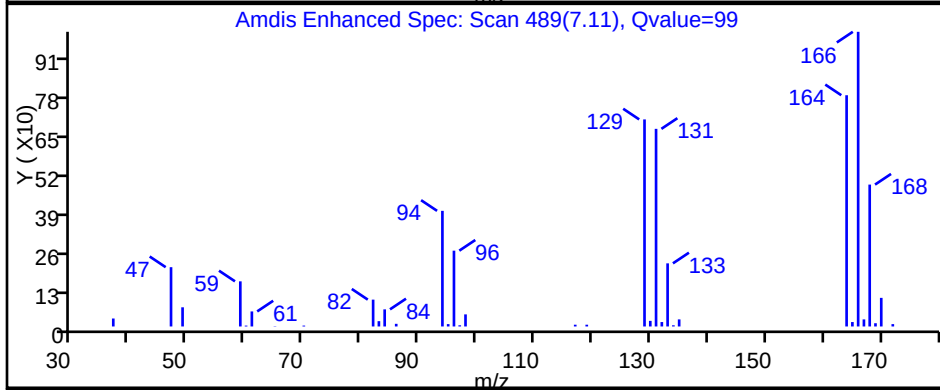
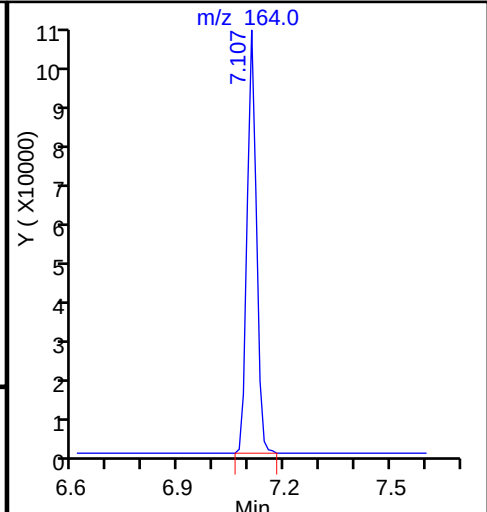
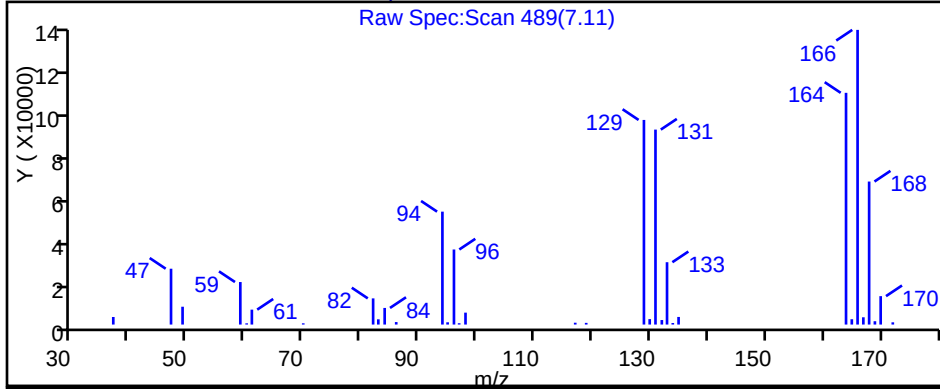
Dil. Factor: 2.5000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 Tetrachloroethene, CAS: 127-18-4

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9314.D

Injection Date: 11-Nov-2016 16:23:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-2

Lab Sample ID: 240-71709-2

Client ID: OW-2

Operator ID: 001765

ALS Bottle#: 15

Worklist Smp#: 18

Purge Vol: 5.000 mL

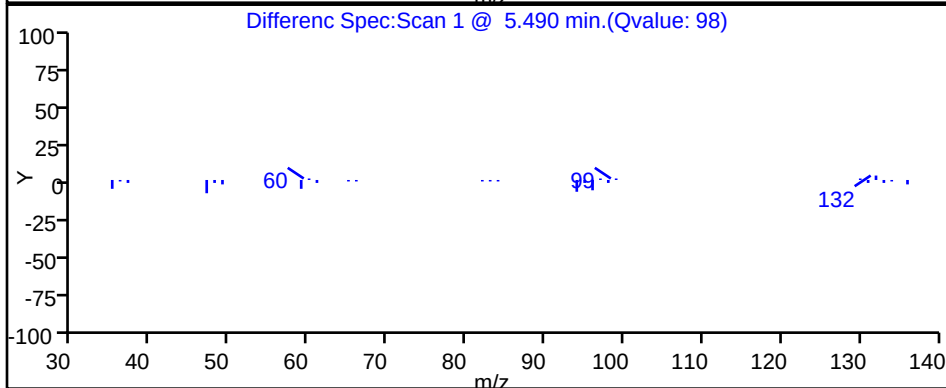
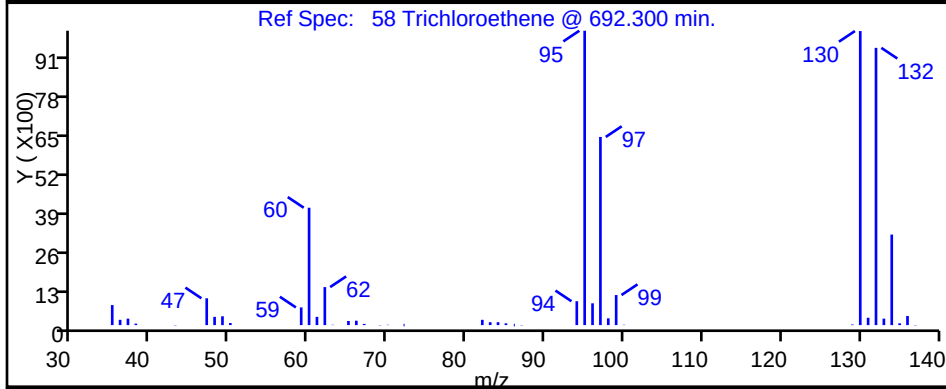
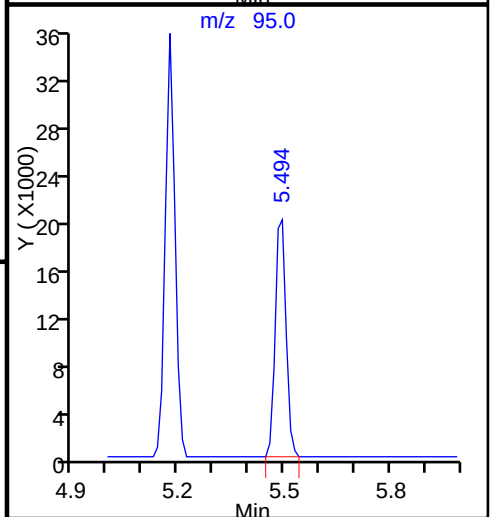
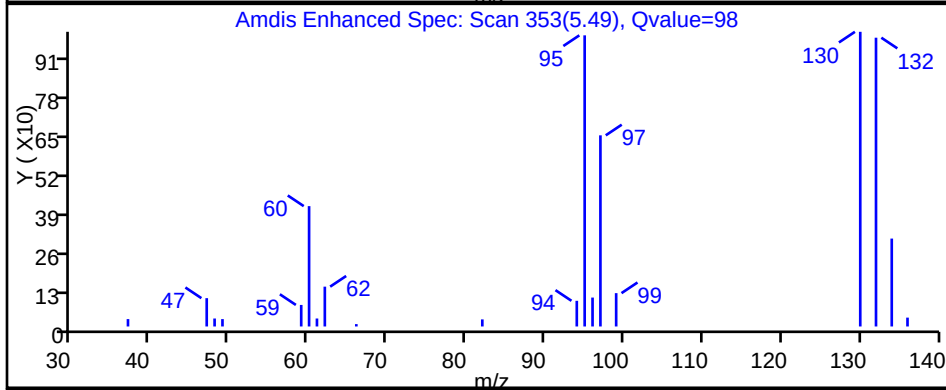
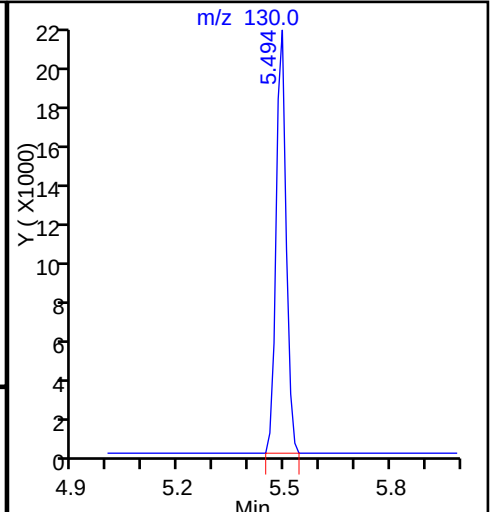
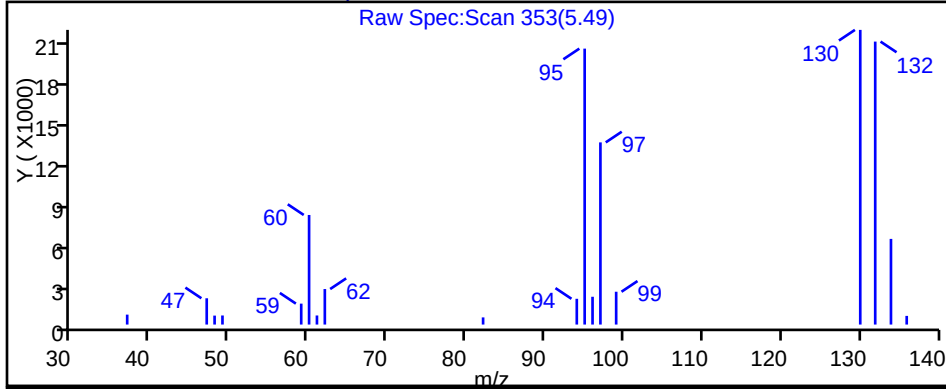
Dil. Factor: 2.5000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9314.D

Injection Date: 11-Nov-2016 16:23:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-2

Lab Sample ID: 240-71709-2

Client ID: OW-2

Operator ID: 001765

ALS Bottle#: 15

Worklist Smp#: 18

Purge Vol: 5.000 mL

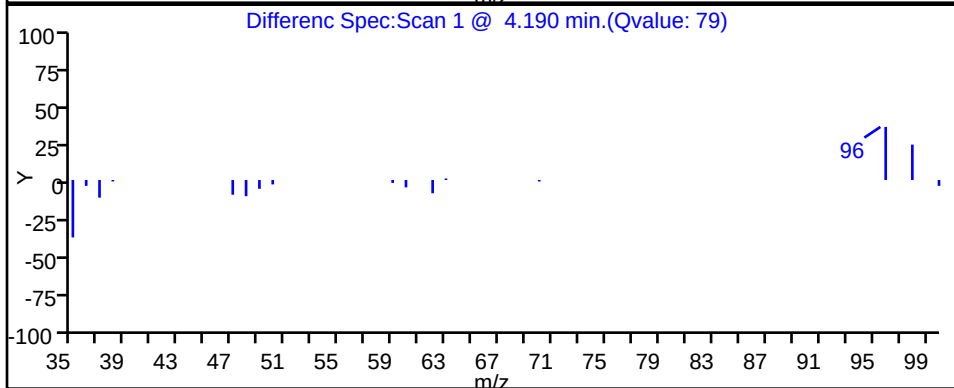
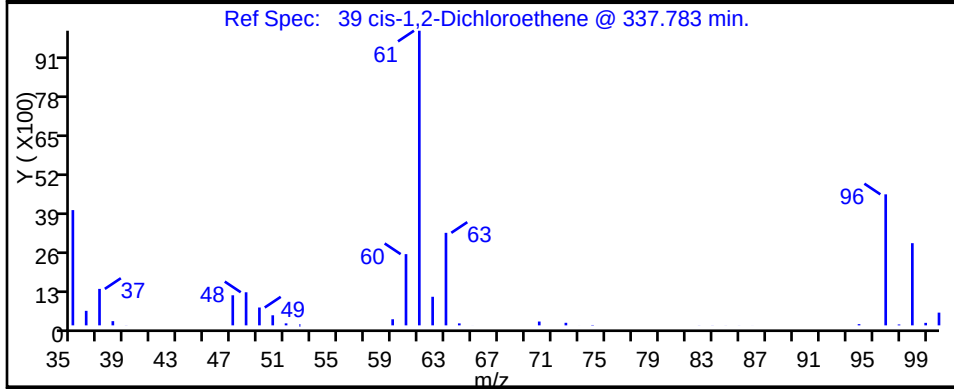
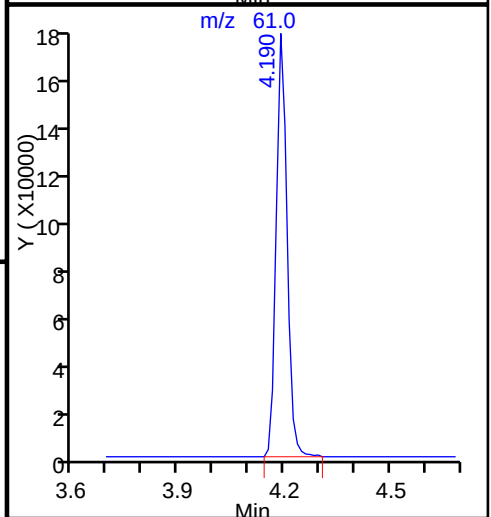
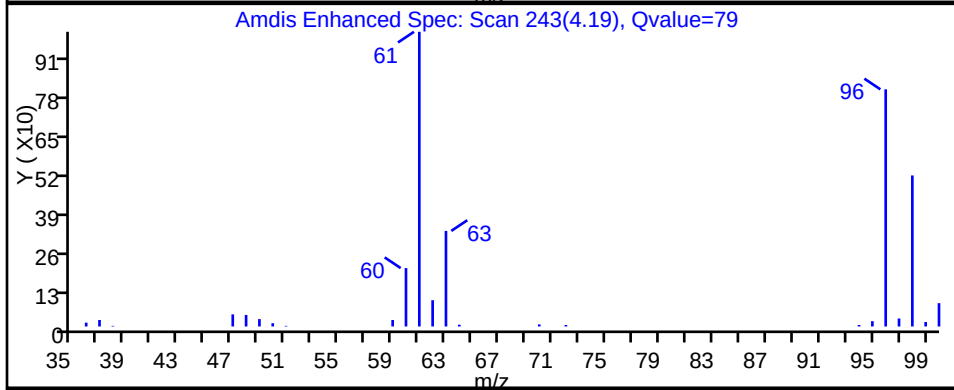
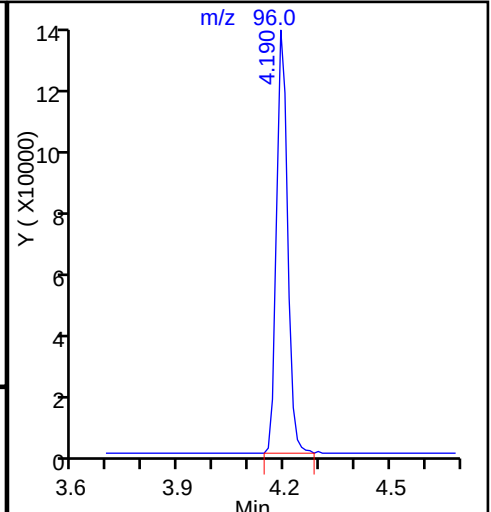
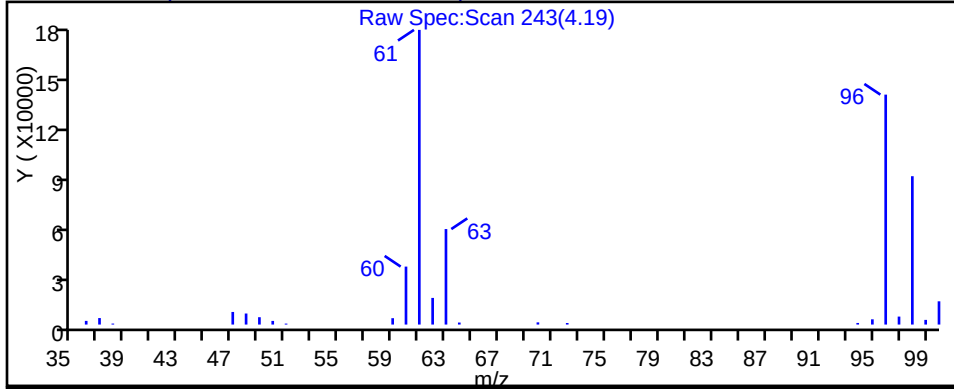
Dil. Factor: 2.5000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-5</u>	Lab Sample ID: <u>240-71709-3</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9315.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 11:35</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 16:46</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1.25</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		13	
71-43-2	Benzene	ND		1.3	
75-27-4	Dichlorobromomethane	ND		1.3	
75-25-2	Bromoform	ND		1.3	
74-83-9	Bromomethane	ND		1.3	
78-93-3	2-Butanone (MEK)	ND		13	
75-15-0	Carbon disulfide	ND		1.3	
56-23-5	Carbon tetrachloride	ND		1.3	
108-90-7	Chlorobenzene	ND		1.3	
75-00-3	Chloroethane	ND		1.3	
67-66-3	Chloroform	ND		1.3	
74-87-3	Chloromethane	ND		1.3	
75-34-3	1,1-Dichloroethane	ND		1.3	
107-06-2	1,2-Dichloroethane	ND		1.3	
75-35-4	1,1-Dichloroethene	ND		1.3	
78-87-5	1,2-Dichloropropane	ND		1.3	
10061-01-5	cis-1,3-Dichloropropene	ND		1.3	
10061-02-6	trans-1,3-Dichloropropene	ND		1.3	
100-41-4	Ethylbenzene	ND		1.3	
591-78-6	2-Hexanone	ND		13	
75-09-2	Methylene Chloride	ND		1.3	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		13	
100-42-5	Styrene	ND		1.3	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.3	
127-18-4	Tetrachloroethene	22		1.3	
108-88-3	Toluene	ND		1.3	
79-01-6	Trichloroethene	5.1		1.3	
75-01-4	Vinyl chloride	ND		1.3	
1330-20-7	Xylenes, Total	ND		2.5	
71-55-6	1,1,1-Trichloroethane	ND		1.3	
79-00-5	1,1,2-Trichloroethane	ND		1.3	
110-82-7	Cyclohexane	ND		1.3	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.5	
106-93-4	Ethylene Dibromide	ND		1.3	
75-71-8	Dichlorodifluoromethane	ND		1.3	
156-59-2	cis-1,2-Dichloroethene	34		1.3	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-5 Lab Sample ID: 240-71709-3
 Matrix: Water Lab File ID: UXM9315.D
 Analysis Method: 8260B Date Collected: 11/01/2016 11:35
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 16:46
 Soil Aliquot Vol: _____ Dilution Factor: 1.25
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.3	
98-82-8	Isopropylbenzene	ND		1.3	
79-20-9	Methyl acetate	ND		13	
1634-04-4	Methyl tert-butyl ether	ND		1.3	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.3	
120-82-1	1,2,4-Trichlorobenzene	ND		1.3	
95-50-1	1,2-Dichlorobenzene	ND		1.3	
541-73-1	1,3-Dichlorobenzene	ND		1.3	
106-46-7	1,4-Dichlorobenzene	ND		1.3	
75-69-4	Trichlorofluoromethane	ND		1.3	
124-48-1	Chlorodibromomethane	ND		1.3	
108-87-2	Methylcyclohexane	ND		1.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-132
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
2037-26-5	Toluene-d8 (Surr)	87		73-124
1868-53-7	Dibromofluoromethane (Surr)	91		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9315.D
 Lims ID: 240-71709-B-3
 Client ID: OW-5
 Sample Type: Client
 Inject. Date: 11-Nov-2016 16:46:30 ALS Bottle#: 16 Worklist Smp#: 19
 Purge Vol: 5.000 mL Dil. Factor: 1.2500
 Sample Info: 240-0059904-019
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:44:46 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:32:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	760272	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	515960	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	95	264119	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	157896	18.1	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	98	176443	19.0	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	651347	17.3	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	245655	17.7	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62		1.628				ND	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	89	1525	0.1383	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	79	317478	27.0	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78		4.937				ND	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130	5.494	5.494	0.000	98	42719	4.09	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164	7.107	7.107	0.000	98	125918	17.7	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9315.D

Injection Date: 11-Nov-2016 16:46:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-B-3

Lab Sample ID: 240-71709-3

Worklist Smp#: 19

Client ID: OW-5

Purge Vol: 5.000 mL

Dil. Factor: 1.2500

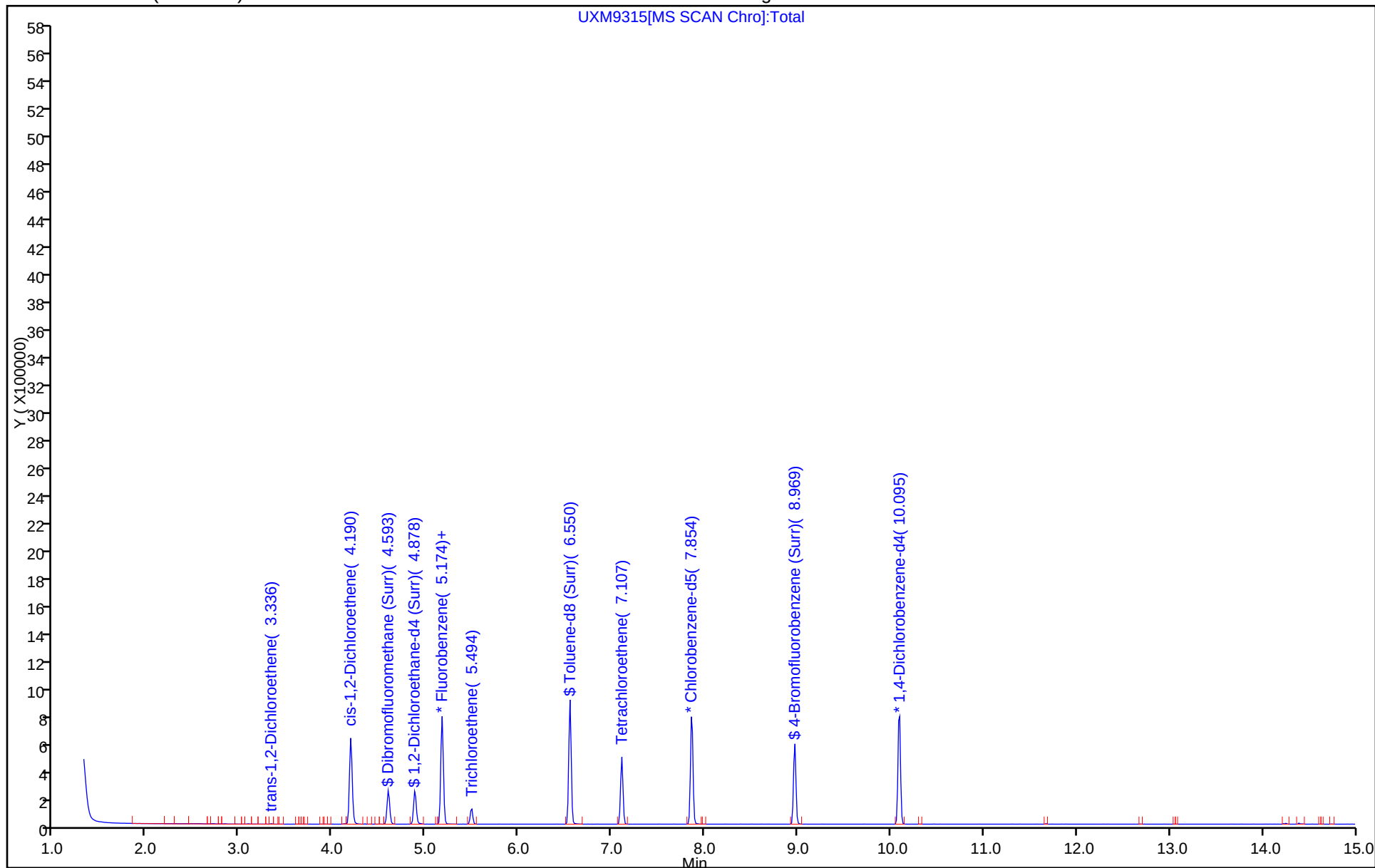
ALS Bottle#: 16

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9315.D
Lims ID: 240-71709-B-3
Client ID: OW-5
Sample Type: Client
Inject. Date: 11-Nov-2016 16:46:30 ALS Bottle#: 16 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.2500
Sample Info: 240-0059904-019
Operator ID: 001765 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Nov-2016 09:44:46 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:32:50

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	18.1	90.74
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.0	94.89
\$ 6 Toluene-d8 (Surr)	20.0	17.3	86.58
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.7	88.68

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9315.D

Injection Date: 11-Nov-2016 16:46:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-3

Lab Sample ID: 240-71709-3

Client ID: OW-5

Operator ID: 001765

ALS Bottle#: 16

Worklist Smp#: 19

Purge Vol: 5.000 mL

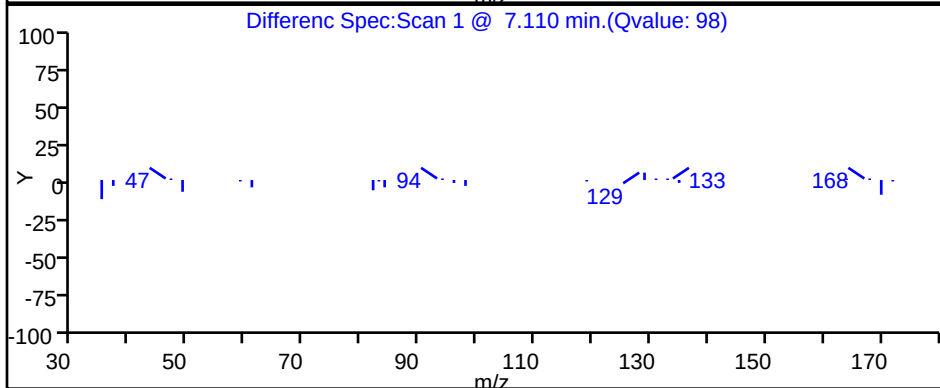
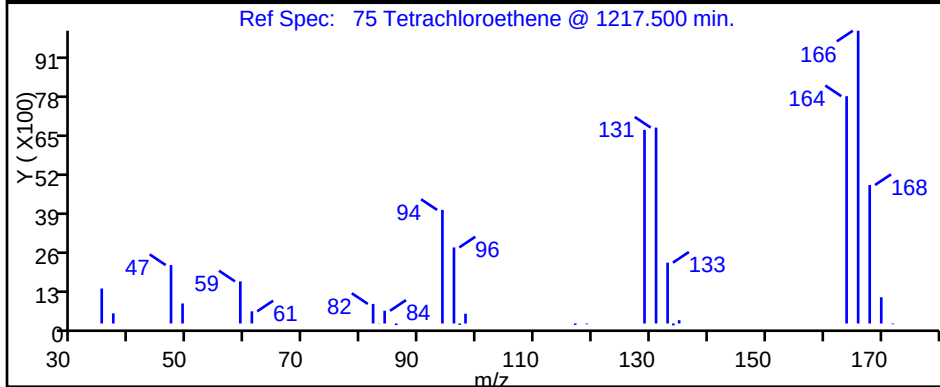
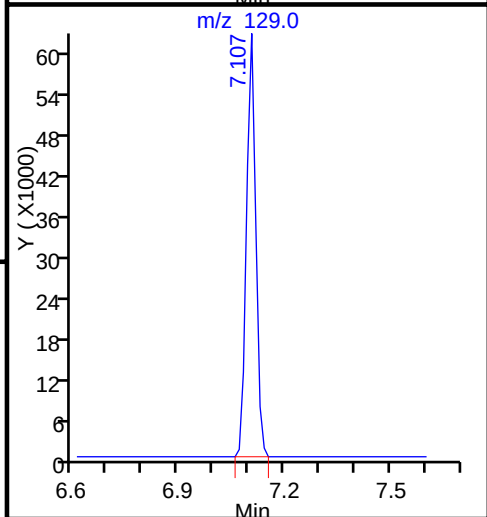
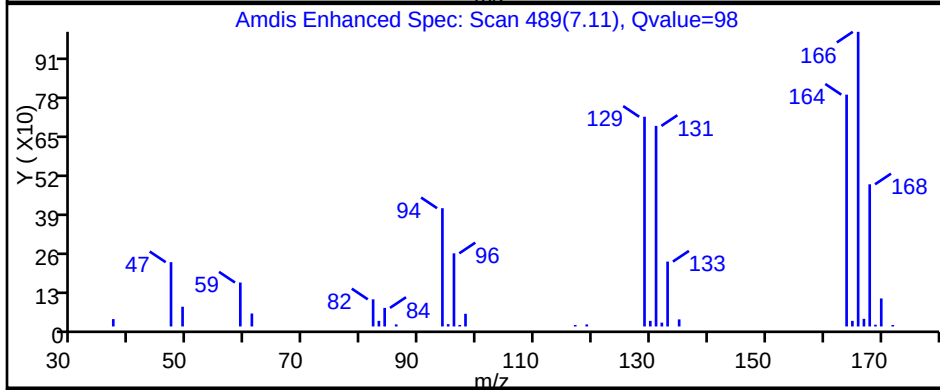
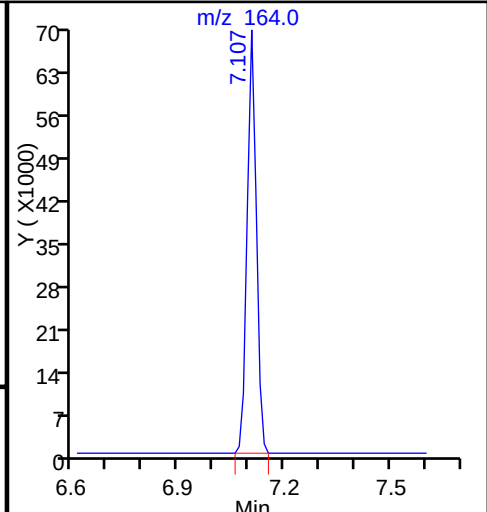
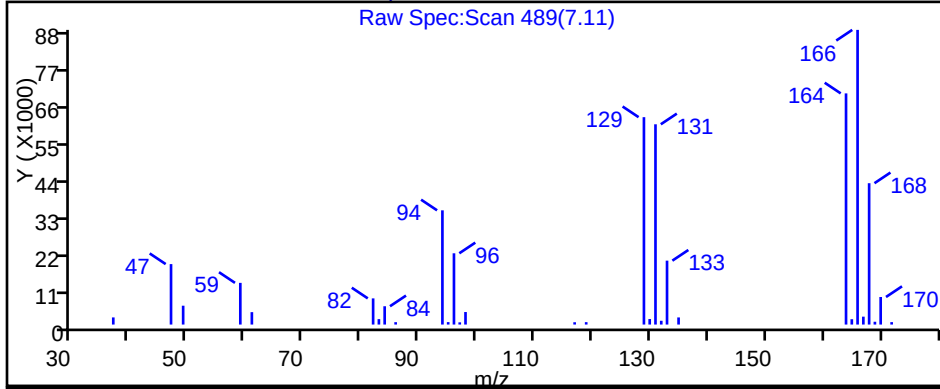
Dil. Factor: 1.2500

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 Tetrachloroethene, CAS: 127-18-4

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9315.D

Injection Date: 11-Nov-2016 16:46:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-3

Lab Sample ID: 240-71709-3

Client ID: OW-5

Operator ID: 001765

ALS Bottle#: 16

Worklist Smp#: 19

Purge Vol: 5.000 mL

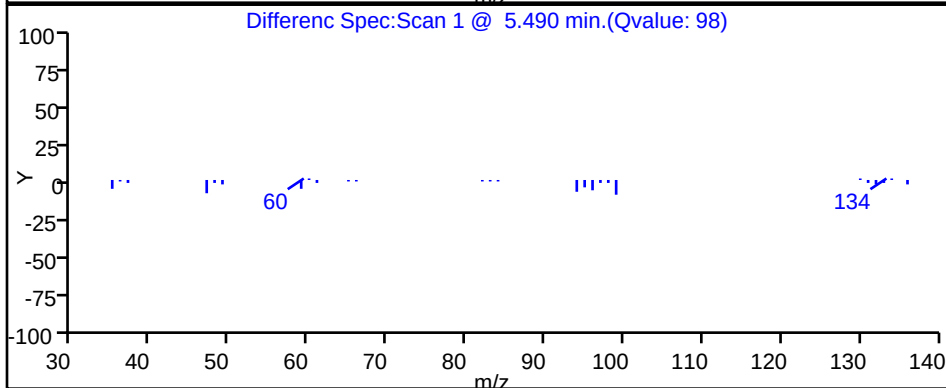
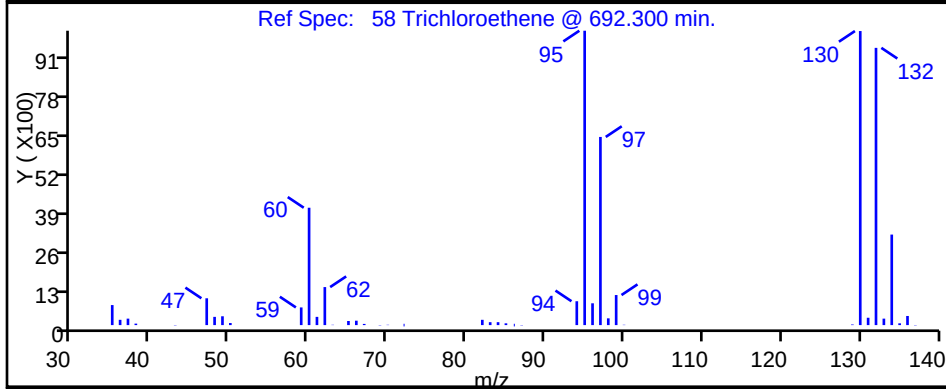
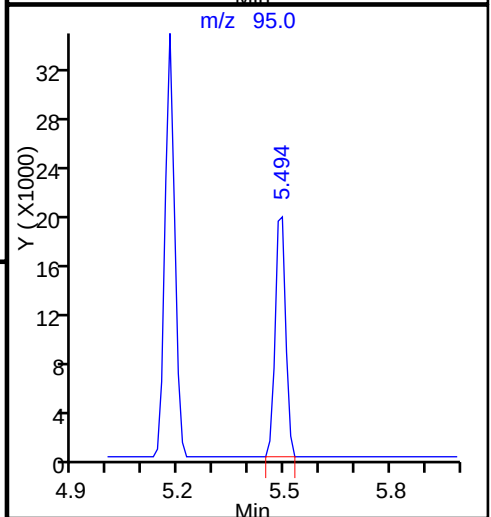
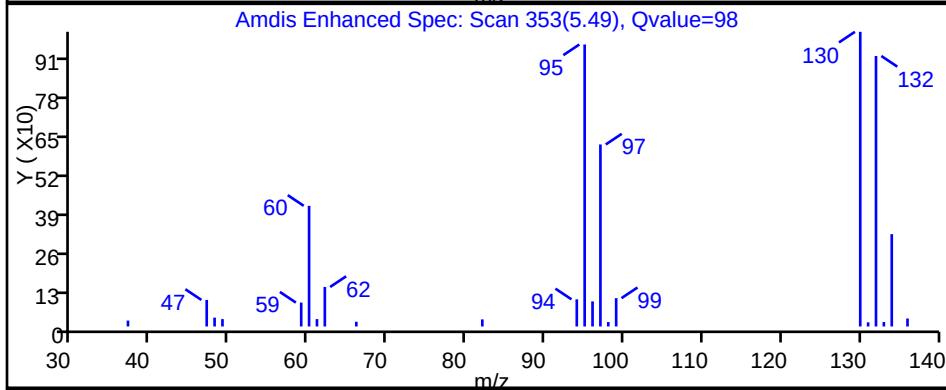
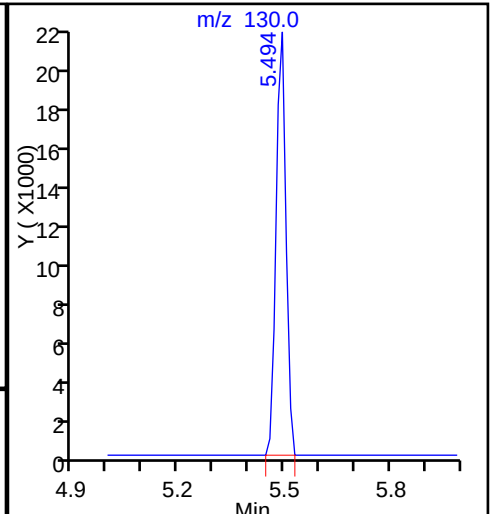
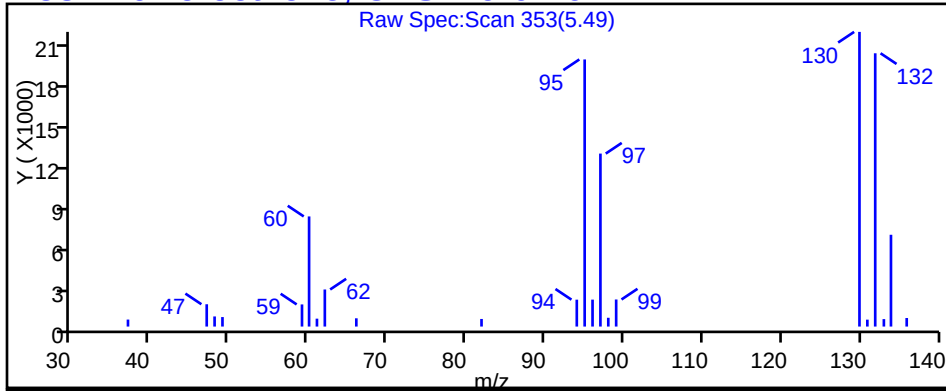
Dil. Factor: 1.2500

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9315.D

Injection Date: 11-Nov-2016 16:46:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-3

Lab Sample ID: 240-71709-3

Client ID: OW-5

Operator ID: 001765

ALS Bottle#: 16

Worklist Smp#: 19

Purge Vol: 5.000 mL

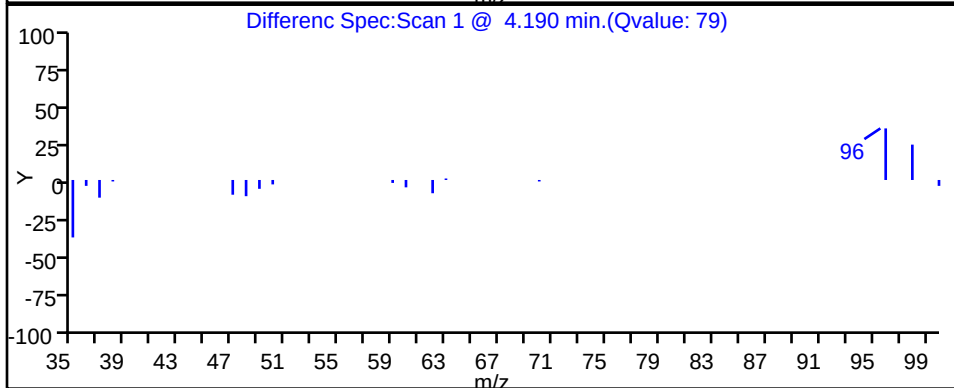
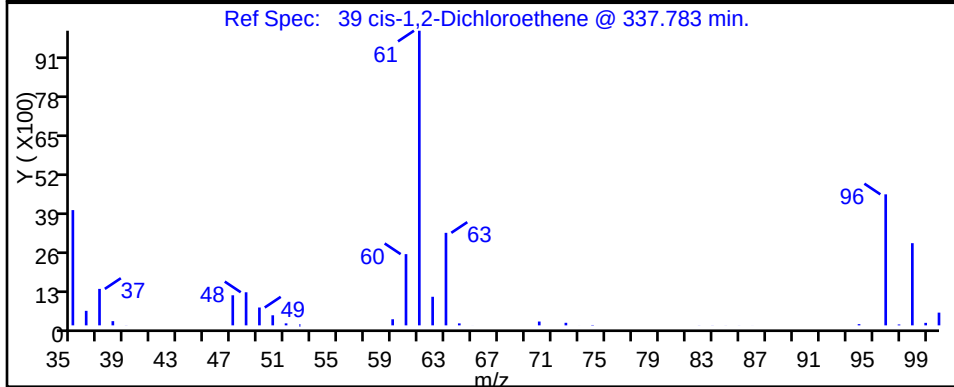
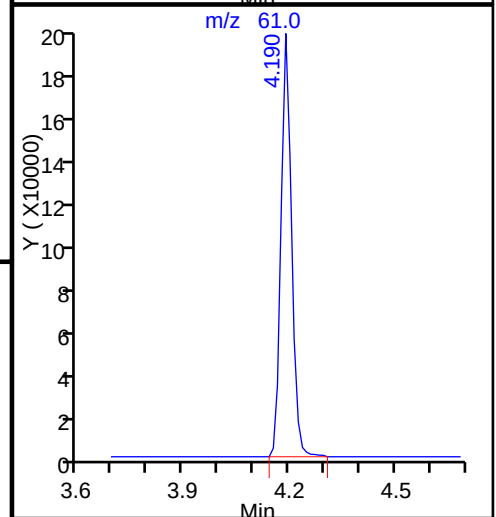
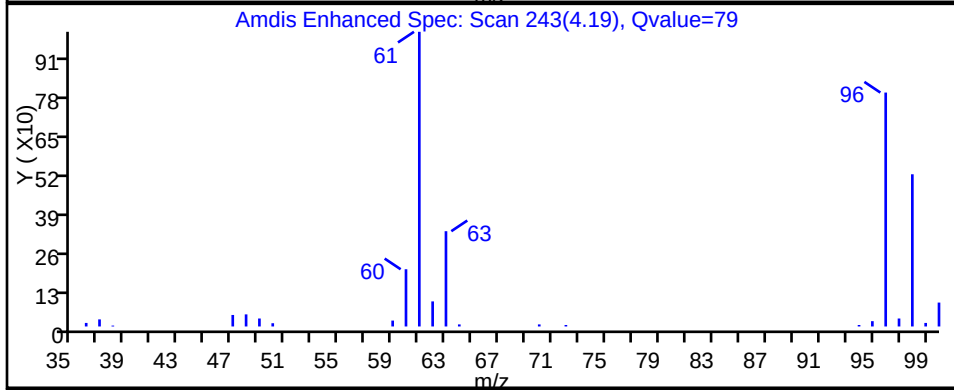
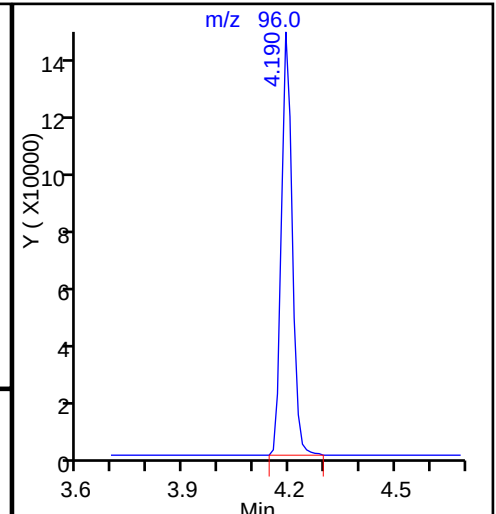
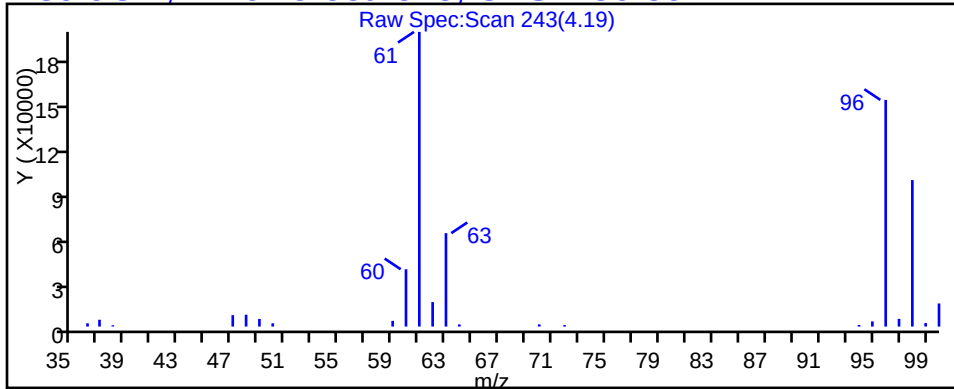
Dil. Factor: 1.2500

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-5 DUP</u>	Lab Sample ID: <u>240-71709-4</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9316.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 11:35</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 17:09</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1.25</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		13	
71-43-2	Benzene	ND		1.3	
75-27-4	Dichlorobromomethane	ND		1.3	
75-25-2	Bromoform	ND		1.3	
74-83-9	Bromomethane	ND		1.3	
78-93-3	2-Butanone (MEK)	ND		13	
75-15-0	Carbon disulfide	ND		1.3	
56-23-5	Carbon tetrachloride	ND		1.3	
108-90-7	Chlorobenzene	ND		1.3	
75-00-3	Chloroethane	ND		1.3	
67-66-3	Chloroform	ND		1.3	
74-87-3	Chloromethane	ND		1.3	
75-34-3	1,1-Dichloroethane	ND		1.3	
107-06-2	1,2-Dichloroethane	ND		1.3	
75-35-4	1,1-Dichloroethene	ND		1.3	
78-87-5	1,2-Dichloropropane	ND		1.3	
10061-01-5	cis-1,3-Dichloropropene	ND		1.3	
10061-02-6	trans-1,3-Dichloropropene	ND		1.3	
100-41-4	Ethylbenzene	ND		1.3	
591-78-6	2-Hexanone	ND		13	
75-09-2	Methylene Chloride	ND		1.3	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		13	
100-42-5	Styrene	ND		1.3	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.3	
127-18-4	Tetrachloroethene	21		1.3	
108-88-3	Toluene	ND		1.3	
79-01-6	Trichloroethene	5.0		1.3	
75-01-4	Vinyl chloride	ND		1.3	
1330-20-7	Xylenes, Total	ND		2.5	
71-55-6	1,1,1-Trichloroethane	ND		1.3	
79-00-5	1,1,2-Trichloroethane	ND		1.3	
110-82-7	Cyclohexane	ND		1.3	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.5	
106-93-4	Ethylene Dibromide	ND		1.3	
75-71-8	Dichlorodifluoromethane	ND		1.3	
156-59-2	cis-1,2-Dichloroethene	33		1.3	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-5 DUP Lab Sample ID: 240-71709-4
 Matrix: Water Lab File ID: UXM9316.D
 Analysis Method: 8260B Date Collected: 11/01/2016 11:35
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 17:09
 Soil Aliquot Vol: _____ Dilution Factor: 1.25
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.3	
98-82-8	Isopropylbenzene	ND		1.3	
79-20-9	Methyl acetate	ND		13	
1634-04-4	Methyl tert-butyl ether	ND		1.3	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.3	
120-82-1	1,2,4-Trichlorobenzene	ND		1.3	
95-50-1	1,2-Dichlorobenzene	ND		1.3	
541-73-1	1,3-Dichlorobenzene	ND		1.3	
106-46-7	1,4-Dichlorobenzene	ND		1.3	
75-69-4	Trichlorofluoromethane	ND		1.3	
124-48-1	Chlorodibromomethane	ND		1.3	
108-87-2	Methylcyclohexane	ND		1.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
2037-26-5	Toluene-d8 (Surr)	86		73-124
1868-53-7	Dibromofluoromethane (Surr)	92		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9316.D
 Lims ID: 240-71709-B-4
 Client ID: OW-5 DUP
 Sample Type: Client
 Inject. Date: 11-Nov-2016 17:09:30 ALS Bottle#: 17 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.2500
 Sample Info: 240-0059904-020
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 20:25:37 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:33:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	752031	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	516383	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	263915	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	157507	18.3	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	169595	18.4	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	649607	17.3	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	86	245981	17.7	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62		1.628				ND	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	81	1773	0.1626	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	79	308322	26.5	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78		4.937				ND	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130	5.494	5.494	0.000	98	41059	3.98	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164	7.107	7.107	0.000	98	120924	17.0	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9316.D

Injection Date: 11-Nov-2016 17:09:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-B-4

Lab Sample ID: 240-71709-4

Worklist Smp#: 20

Client ID: OW-5 DUP

Purge Vol: 5.000 mL

Dil. Factor: 1.2500

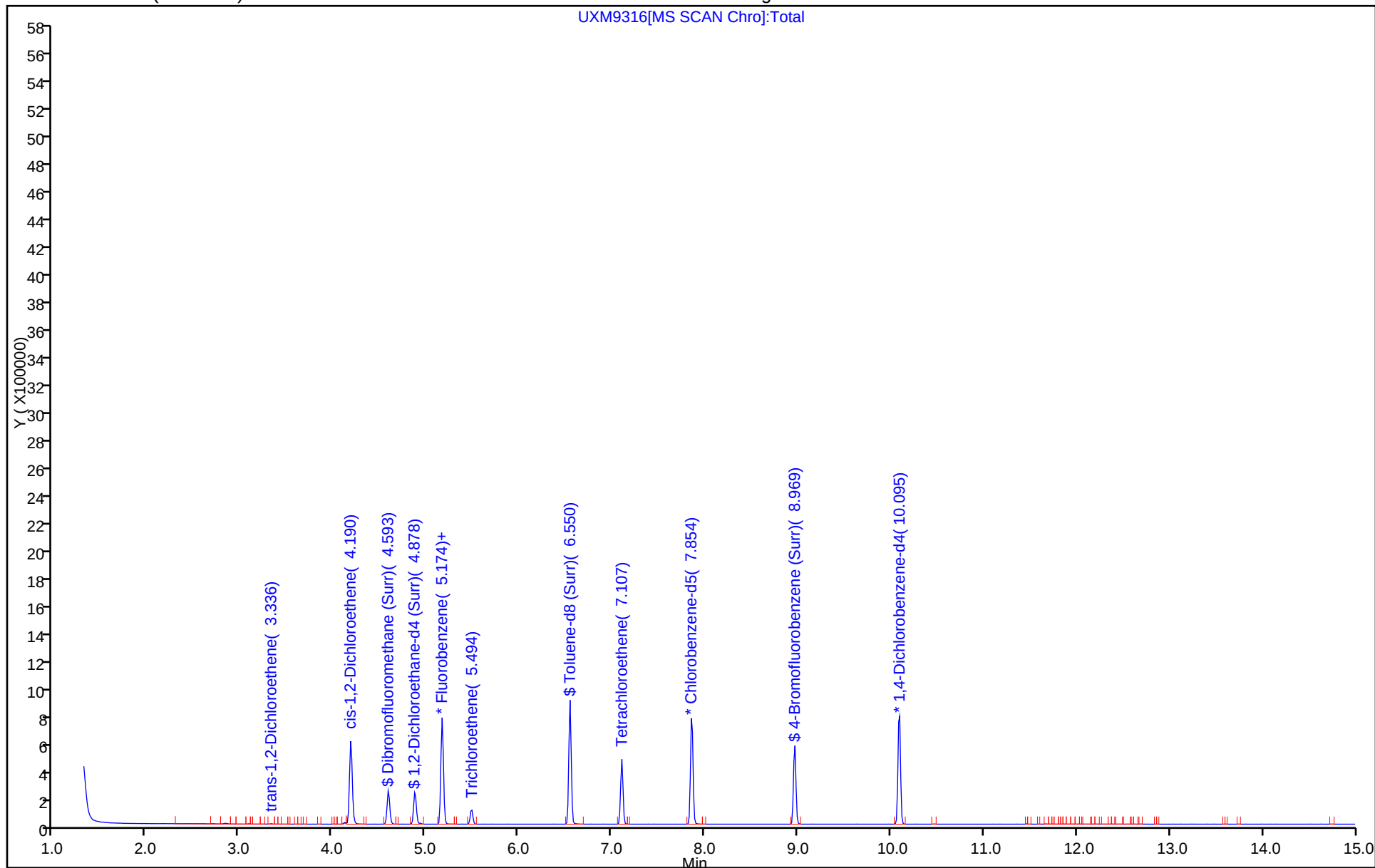
ALS Bottle#: 17

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9316.D
Lims ID: 240-71709-B-4
Client ID: OW-5 DUP
Sample Type: Client
Inject. Date: 11-Nov-2016 17:09:30 ALS Bottle#: 17 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.2500
Sample Info: 240-0059904-020
Operator ID: 001765 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Nov-2016 20:25:37 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:33:14

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.51
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.4	92.21
\$ 6 Toluene-d8 (Surr)	20.0	17.3	86.28
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.7	88.72

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9316.D

Injection Date: 11-Nov-2016 17:09:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-4

Lab Sample ID: 240-71709-4

Client ID: OW-5 DUP

Operator ID: 001765

ALS Bottle#: 17

Worklist Smp#: 20

Purge Vol: 5.000 mL

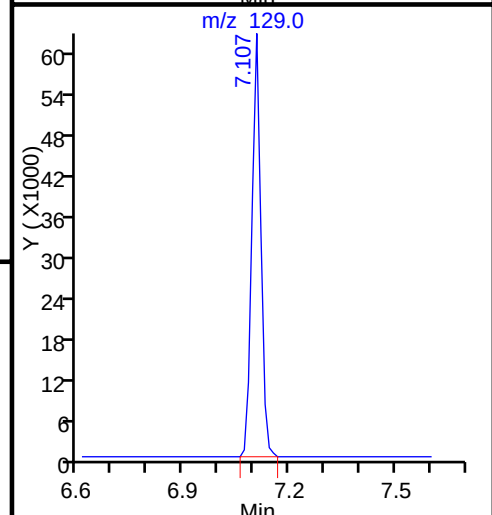
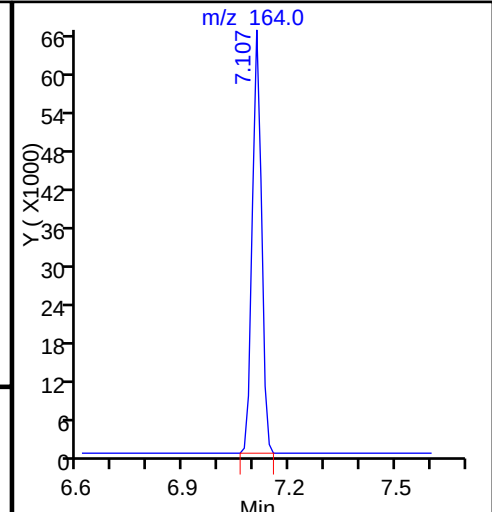
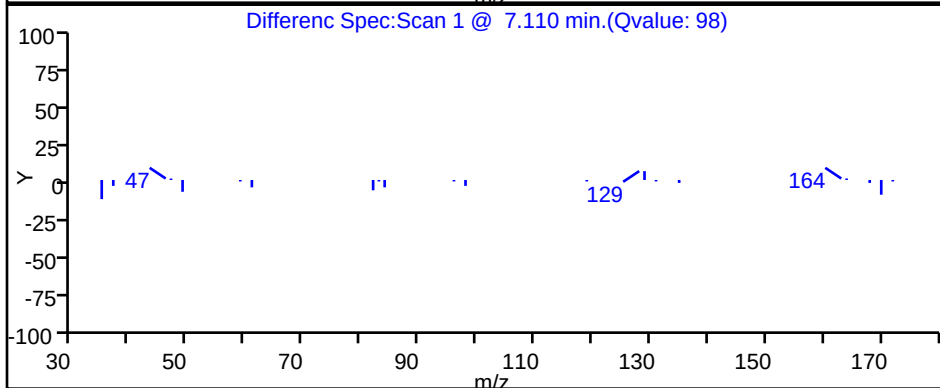
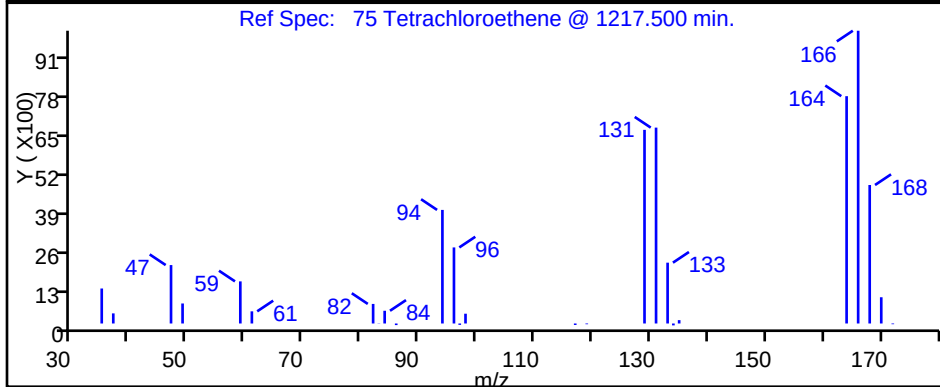
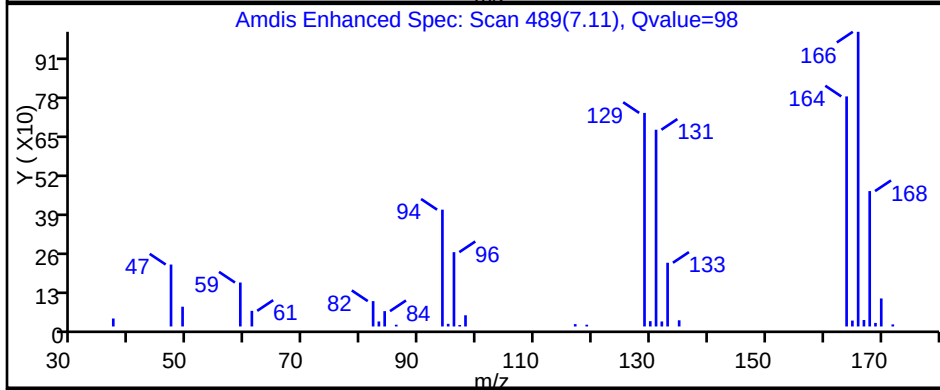
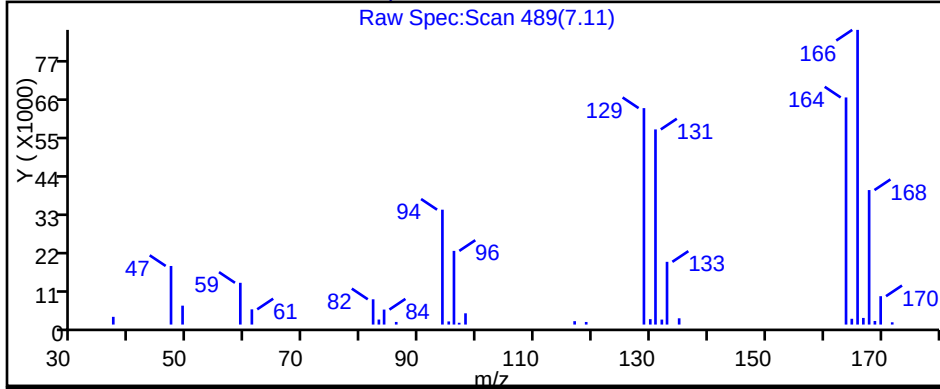
Dil. Factor: 1.2500

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

75 Tetrachloroethene, CAS: 127-18-4

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9316.D

Injection Date: 11-Nov-2016 17:09:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-4

Lab Sample ID: 240-71709-4

Client ID: OW-5 DUP

Operator ID: 001765

ALS Bottle#: 17

Worklist Smp#: 20

Purge Vol: 5.000 mL

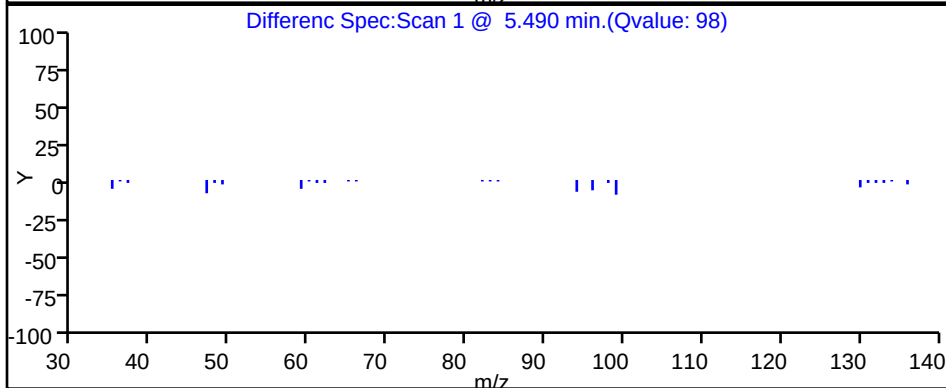
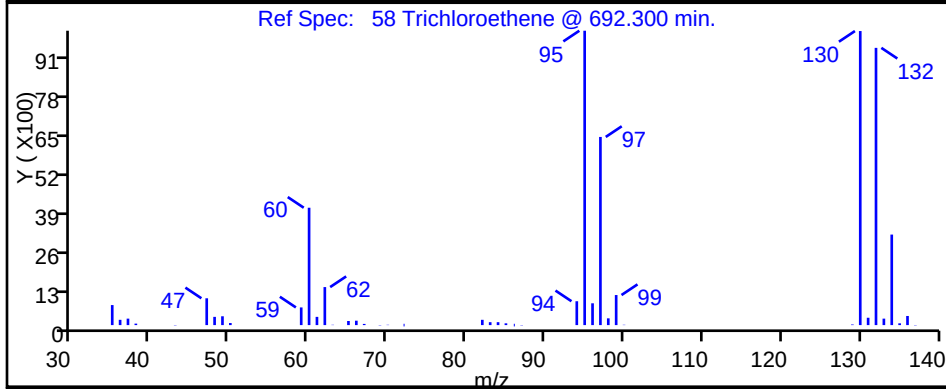
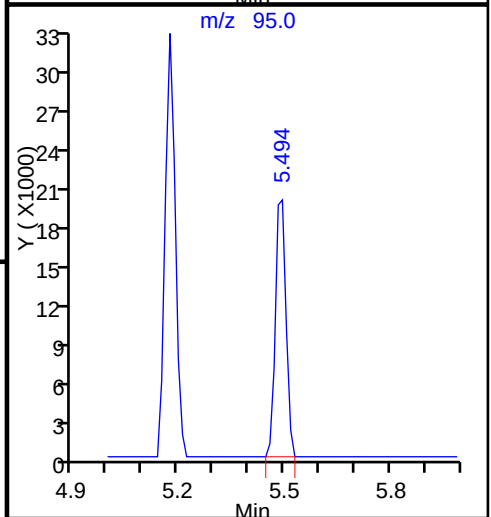
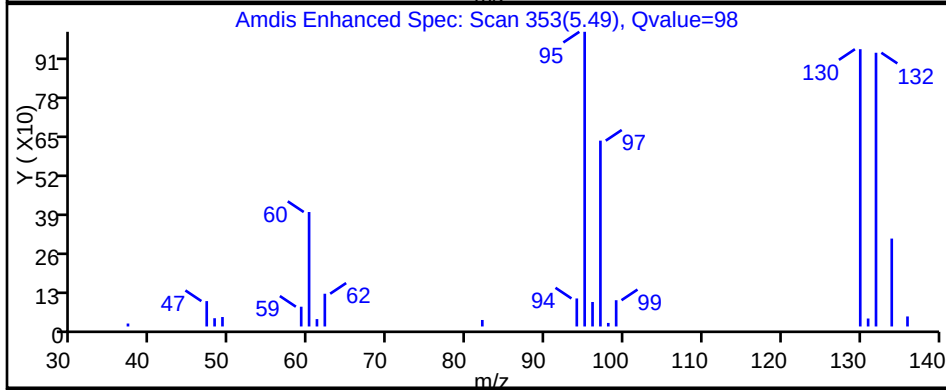
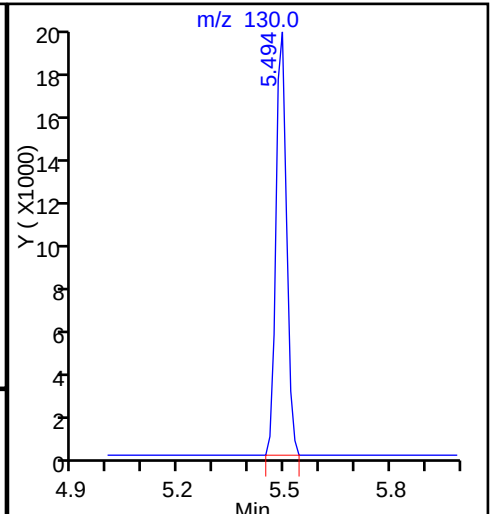
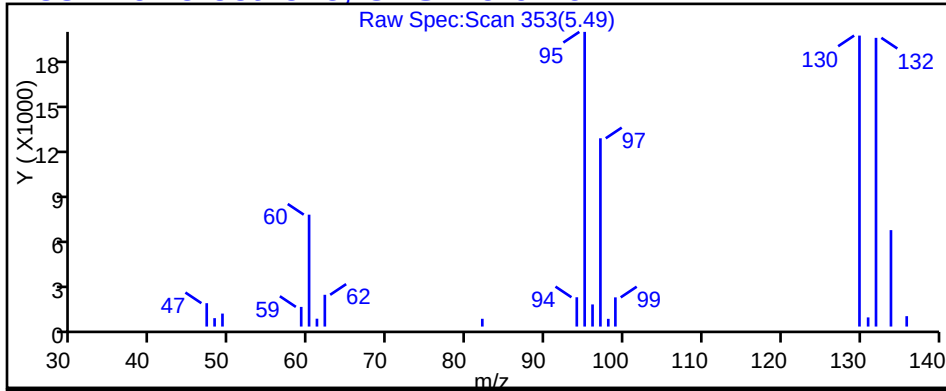
Dil. Factor: 1.2500

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9316.D

Injection Date: 11-Nov-2016 17:09:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-4

Lab Sample ID: 240-71709-4

Client ID: OW-5 DUP

Operator ID: 001765

ALS Bottle#: 17

Worklist Smp#: 20

Purge Vol: 5.000 mL

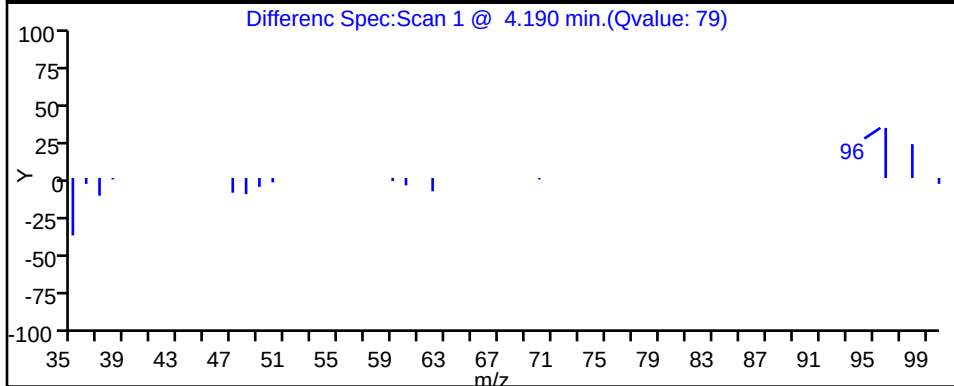
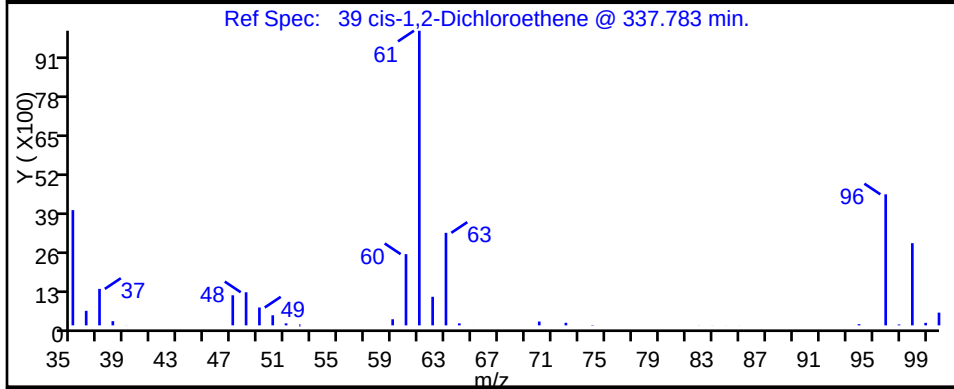
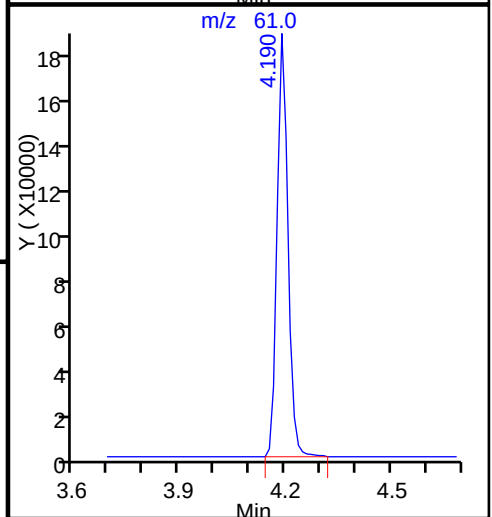
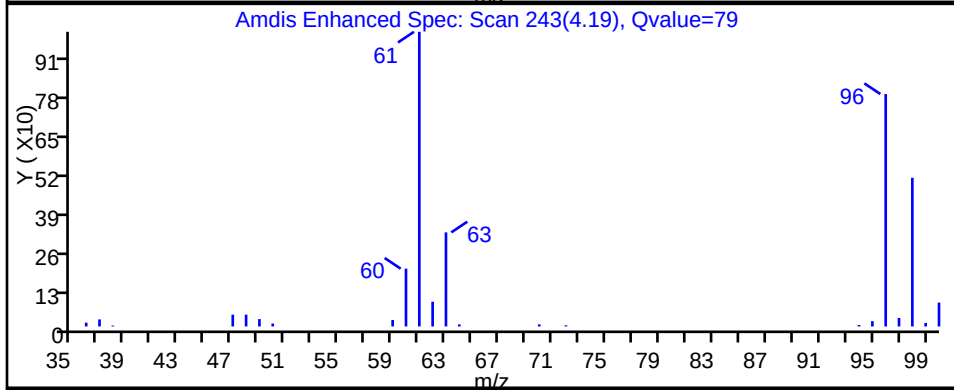
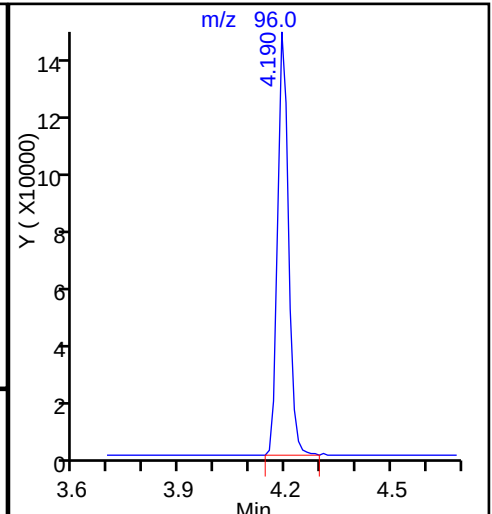
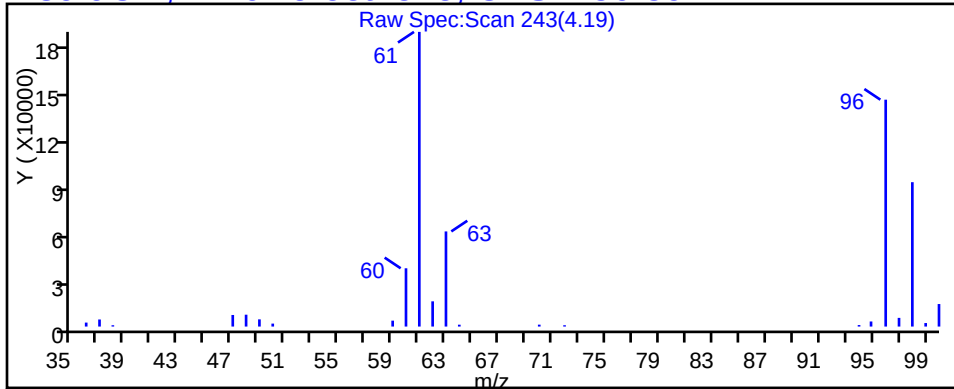
Dil. Factor: 1.2500

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-10R</u>	Lab Sample ID: <u>240-71709-5</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9317.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 13:20</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 17:32</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	2.4		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	3.4		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-10R Lab Sample ID: 240-71709-5
 Matrix: Water Lab File ID: UXM9317.D
 Analysis Method: 8260B Date Collected: 11/01/2016 13:20
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 17:32
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-132
460-00-4	4-Bromofluorobenzene (Surr)	87		73-120
2037-26-5	Toluene-d8 (Surr)	84		73-124
1868-53-7	Dibromofluoromethane (Surr)	89		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9317.D
 Lims ID: 240-71709-B-5
 Client ID: OW-10R
 Sample Type: Client
 Inject. Date: 11-Nov-2016 17:32:30 ALS Bottle#: 18 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-021
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:34:36 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:34:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	770176	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	87	528603	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	272185	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	156683	17.8	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	98	177700	18.9	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	646641	16.8	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	248125	17.5	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62	1.617	1.628	-0.011	95	9451	0.6907	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64	2.008	1.996	0.012	97	27719	3.42	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43	2.708	2.707	0.001	98	7098	0.4535	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	74	4426	0.3713	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78	4.937	4.937	0.000	95	108538	2.40	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130		5.494				ND	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112	7.890	7.890	0.000	94	25551	0.8820	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146	10.475	10.487	-0.012	93	3310	0.1674	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9317.D

Injection Date: 11-Nov-2016 17:32:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-B-5

Lab Sample ID: 240-71709-5

Worklist Smp#: 21

Client ID: OW-10R

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

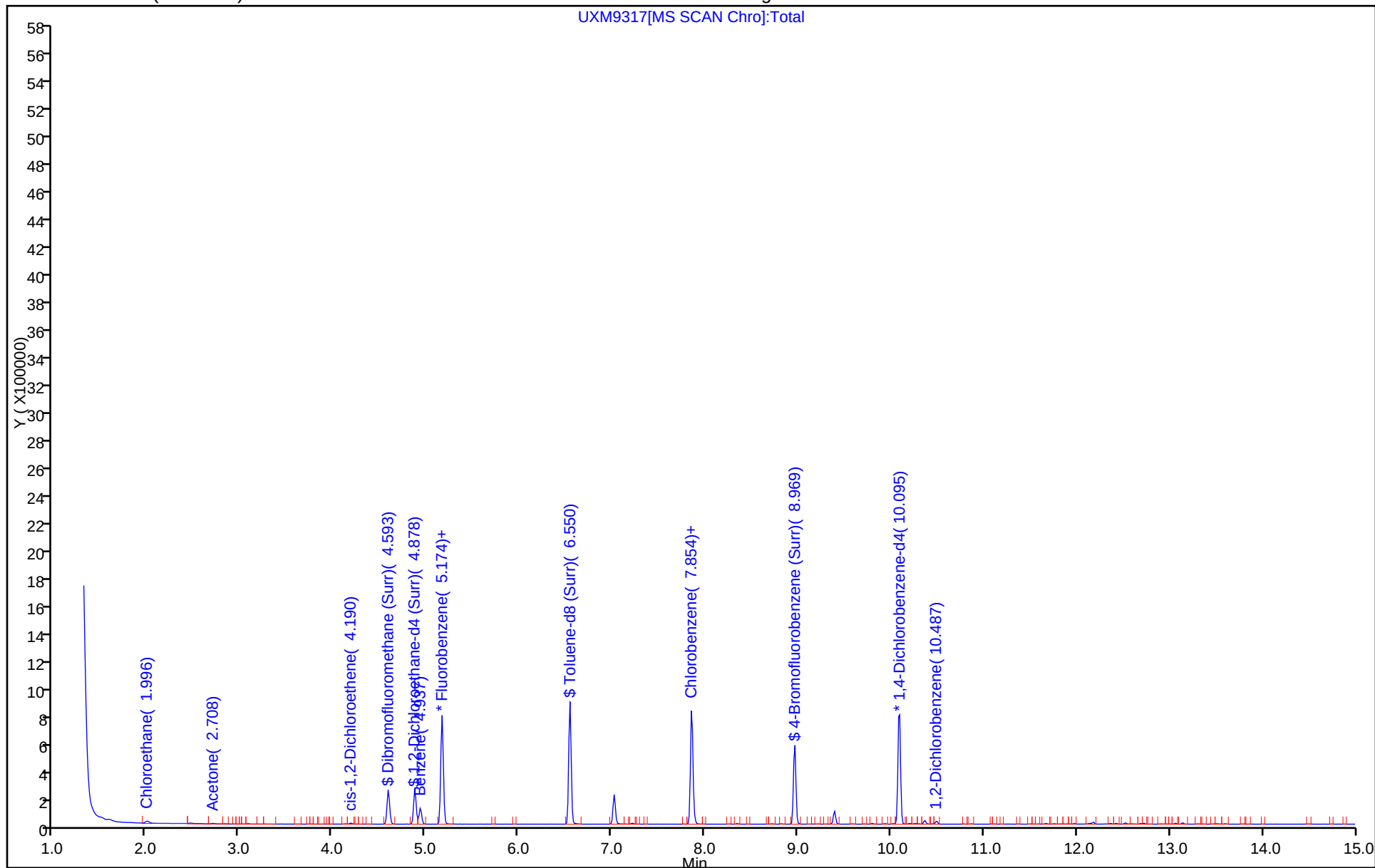
ALS Bottle#: 18

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9317.D
 Lims ID: 240-71709-B-5
 Client ID: OW-10R
 Sample Type: Client
 Inject. Date: 11-Nov-2016 17:32:30 ALS Bottle#: 18 Worklist Smp#: 21
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-021
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:34:36 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:34:36

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	17.8	88.89
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.9	94.34
\$ 6 Toluene-d8 (Surr)	20.0	16.8	83.90
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.5	87.43

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9317.D

Injection Date: 11-Nov-2016 17:32:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-5

Lab Sample ID: 240-71709-5

Client ID: OW-10R

Operator ID: 001765

ALS Bottle#: 18

Worklist Smp#: 21

Purge Vol: 5.000 mL

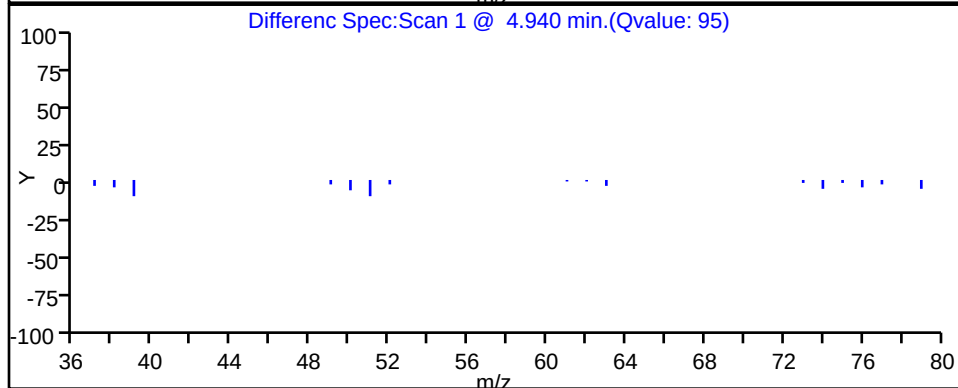
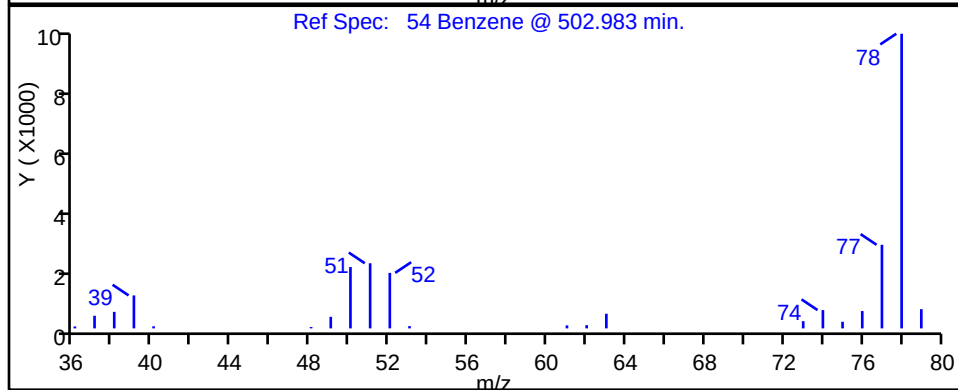
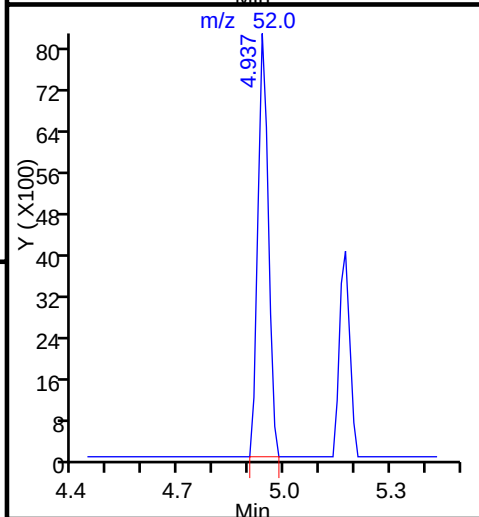
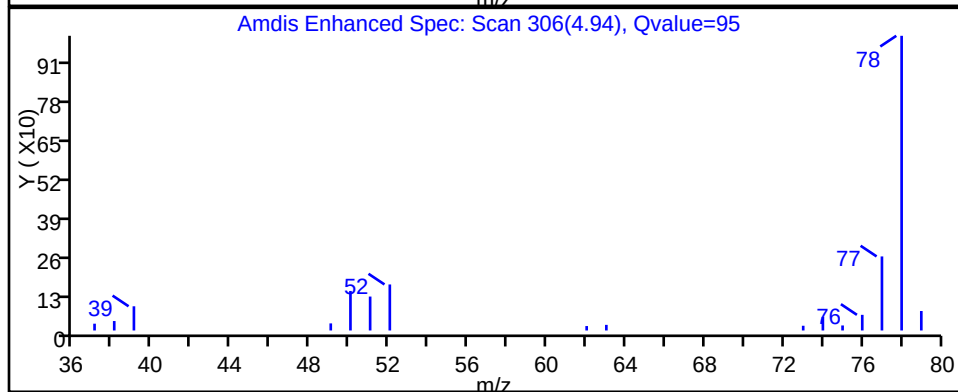
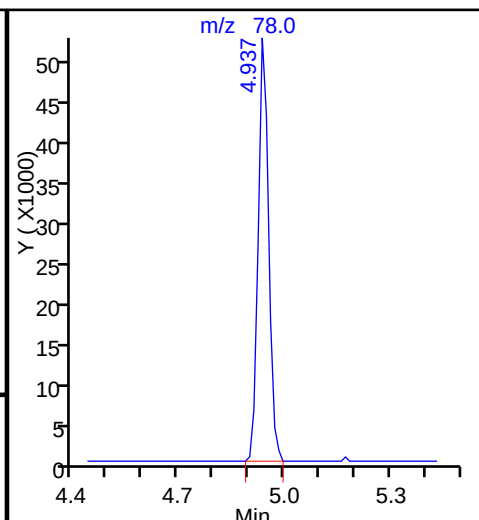
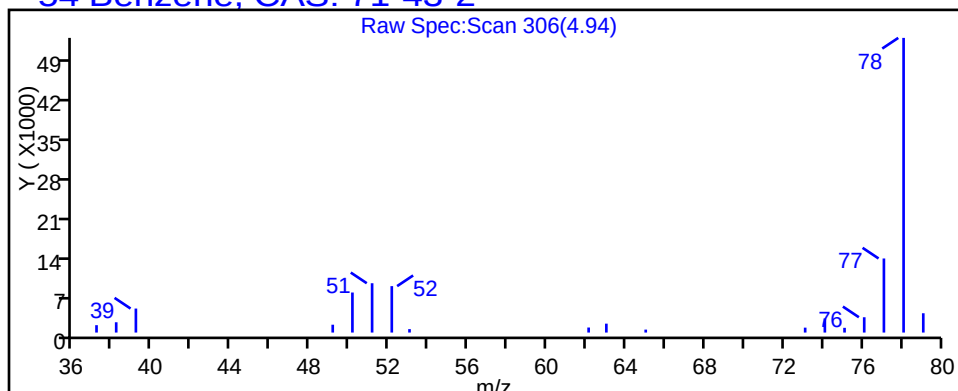
Dil. Factor: 1.0000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

54 Benzene, CAS: 71-43-2

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9317.D

Injection Date: 11-Nov-2016 17:32:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-5

Lab Sample ID: 240-71709-5

Client ID: OW-10R

Operator ID: 001765

ALS Bottle#: 18

Worklist Smp#: 21

Purge Vol: 5.000 mL

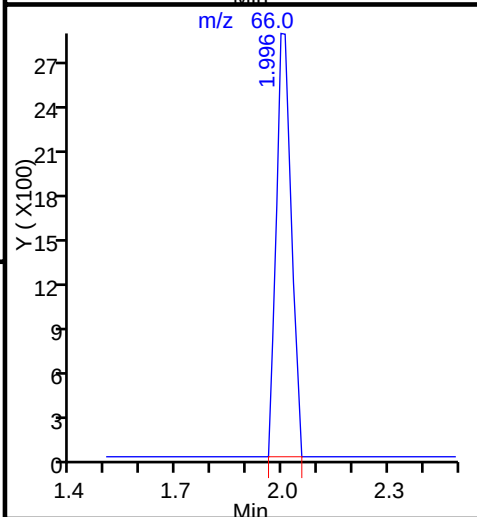
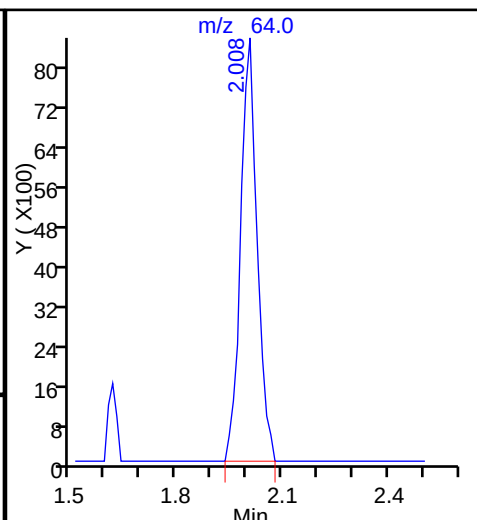
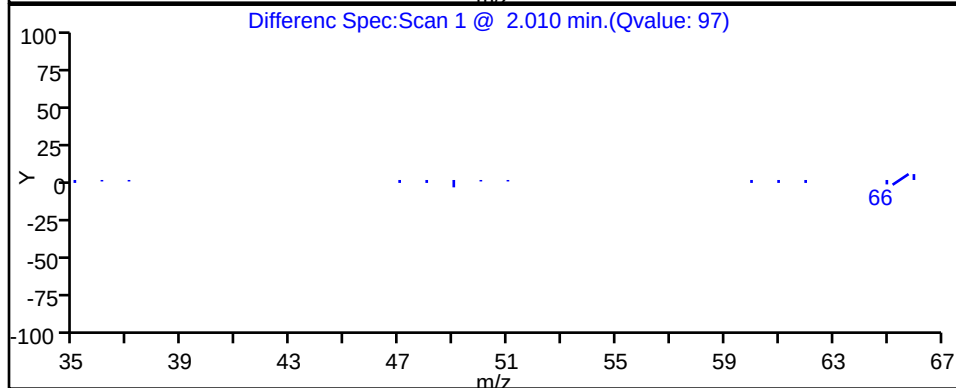
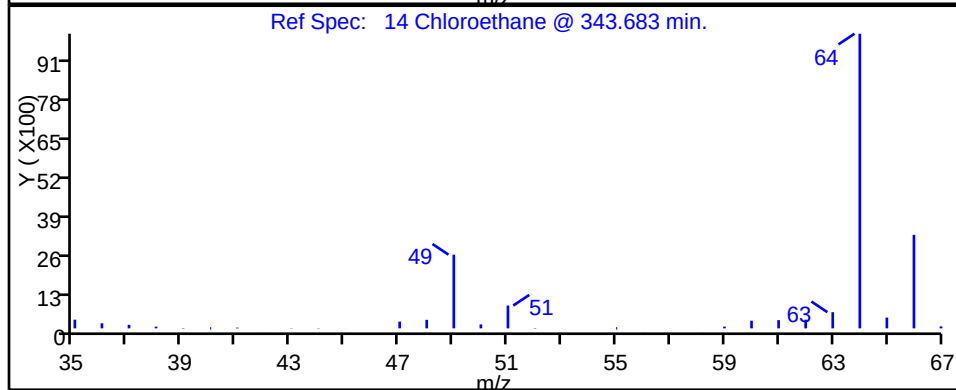
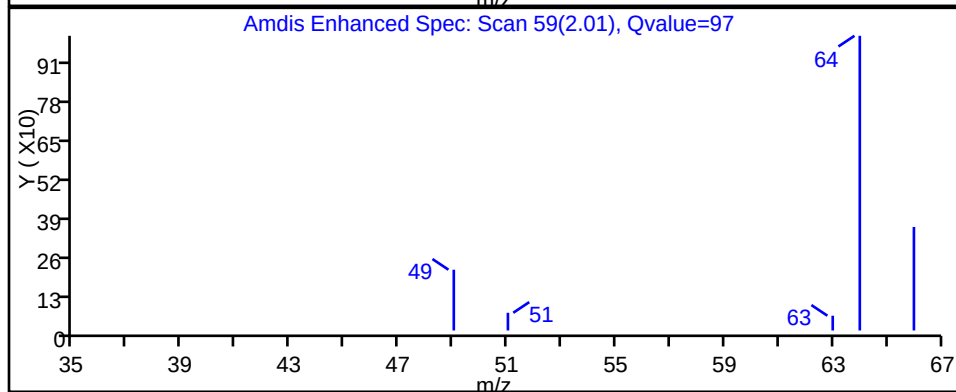
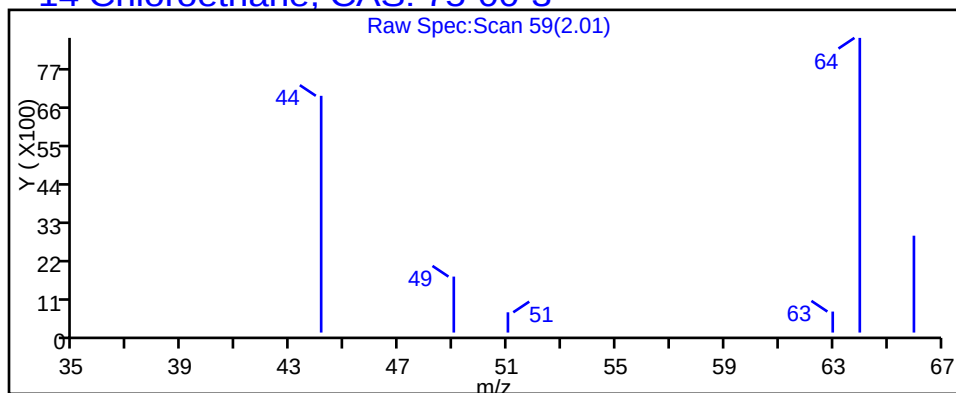
Dil. Factor: 1.0000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

14 Chloroethane, CAS: 75-00-3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-22</u>	Lab Sample ID: <u>240-71709-6</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9318.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 15:10</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 17:56</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	1.8		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	2.8		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-22 Lab Sample ID: 240-71709-6
 Matrix: Water Lab File ID: UXM9318.D
 Analysis Method: 8260B Date Collected: 11/01/2016 15:10
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 17:56
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-132
460-00-4	4-Bromofluorobenzene (Surr)	88		73-120
2037-26-5	Toluene-d8 (Surr)	84		73-124
1868-53-7	Dibromofluoromethane (Surr)	90		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9318.D
 Lims ID: 240-71709-B-6
 Client ID: OW-22
 Sample Type: Client
 Inject. Date: 11-Nov-2016 17:56:30 ALS Bottle#: 19 Worklist Smp#: 22
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-022
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:42:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	764198	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	529864	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	269976	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	157217	18.0	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	98	173303	18.5	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	645271	16.7	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	86	250696	17.6	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62	1.628	1.628	0.000	93	5596	0.4122	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64	2.008	1.996	0.012	92	2363	0.2934	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	76	4383	0.3706	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78	4.937	4.937	0.000	94	79218	1.77	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130		5.494				ND	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91	6.609	6.609	0.000	92	5482	0.1210	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112	7.890	7.890	0.000	95	80804	2.78	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	96	6764	0.3535	
86 o-Xylene	106	8.471	8.471	0.000	88	3074	0.1570	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	90	10325	0.4689	
112 1,2-Dichlorobenzene	146	10.475	10.487	-0.012	94	6268	0.3195	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106				0		0.5105	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9318.D

Injection Date: 11-Nov-2016 17:56:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-B-6

Lab Sample ID: 240-71709-6

Worklist Smp#: 22

Client ID: OW-22

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

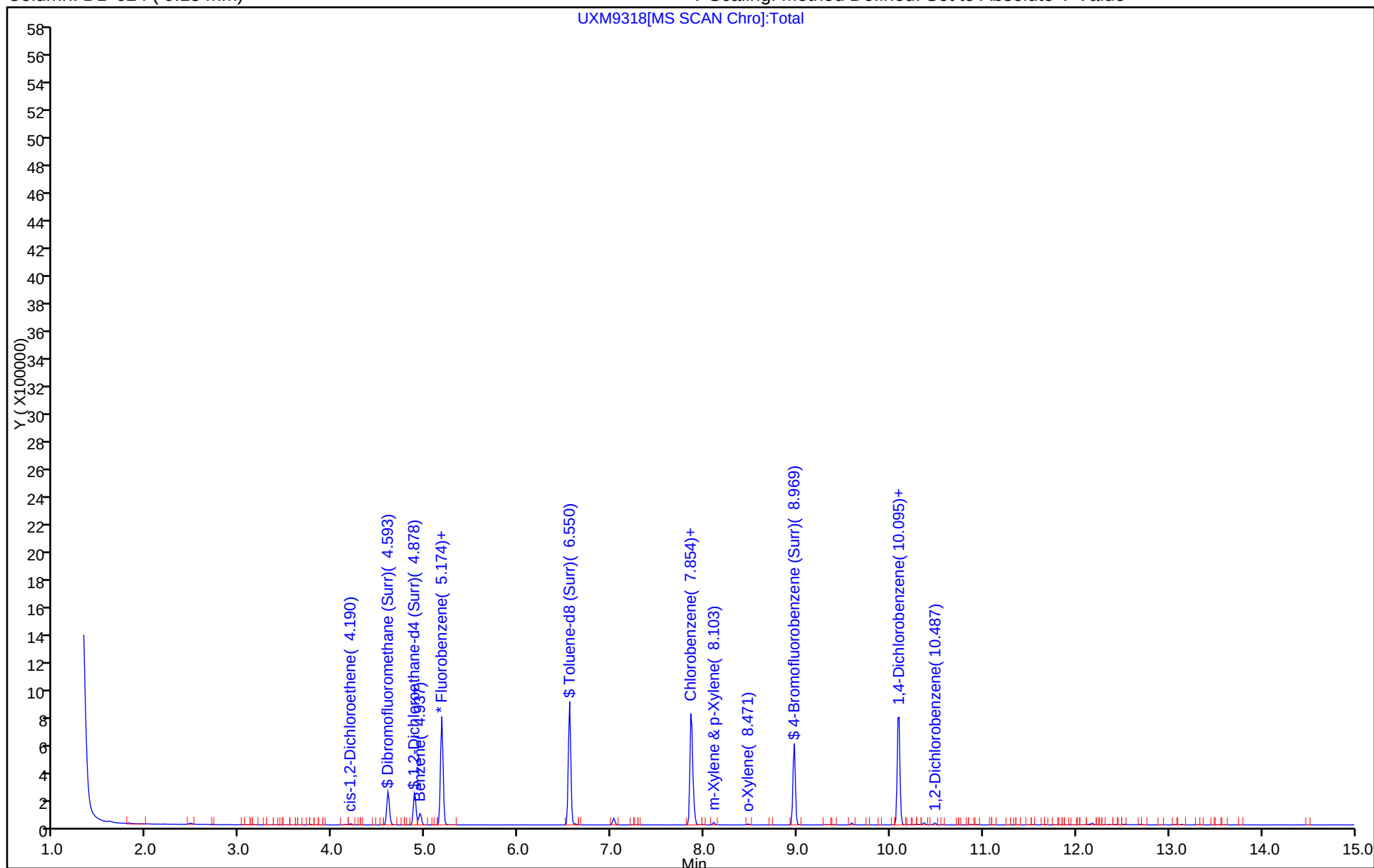
ALS Bottle#: 19

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9318.D
Lims ID: 240-71709-B-6
Client ID: OW-22
Sample Type: Client
Inject. Date: 11-Nov-2016 17:56:30 ALS Bottle#: 19 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0059904-022
Operator ID: 001765 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:42:06

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	18.0	89.89
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.5	92.72
\$ 6 Toluene-d8 (Surr)	20.0	16.7	83.52
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.6	88.12

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9318.D

Injection Date: 11-Nov-2016 17:56:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-6

Lab Sample ID: 240-71709-6

Client ID: OW-22

Operator ID: 001765

ALS Bottle#: 19

Worklist Smp#: 22

Purge Vol: 5.000 mL

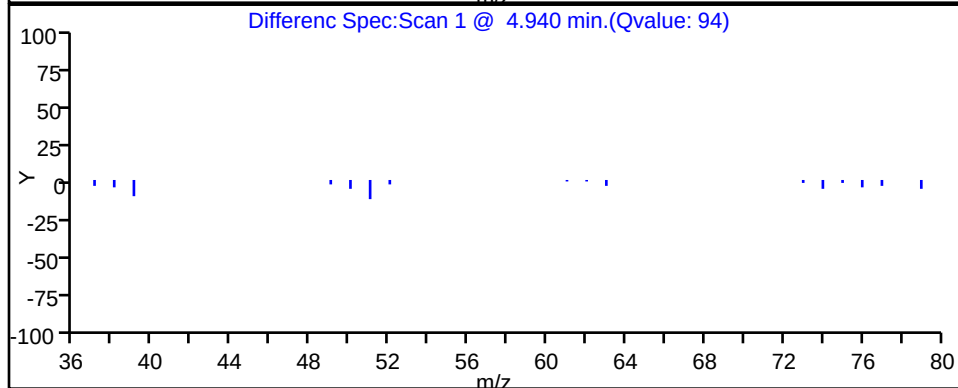
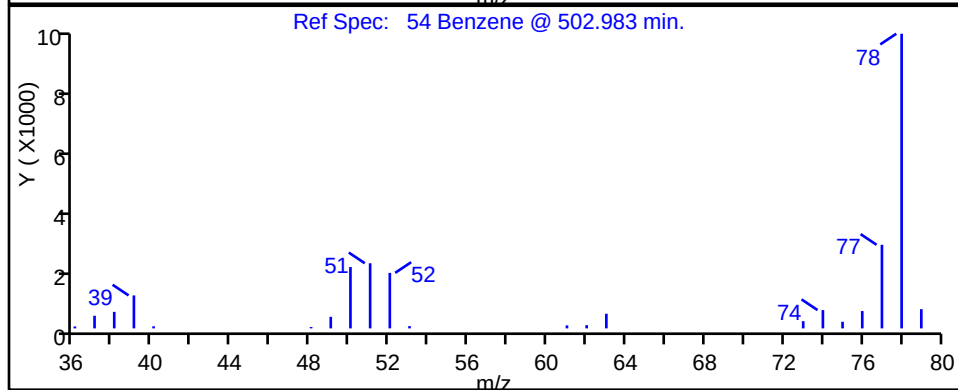
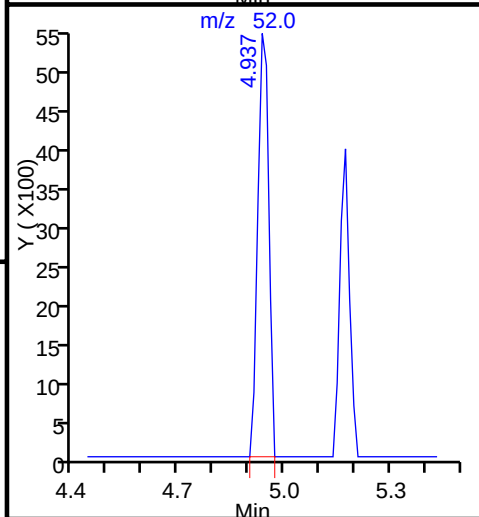
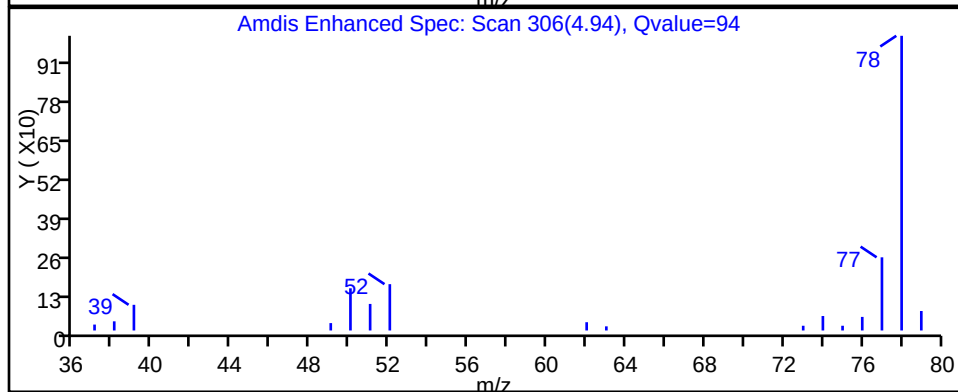
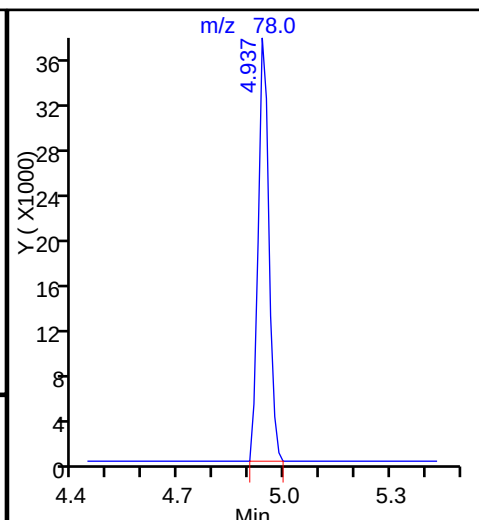
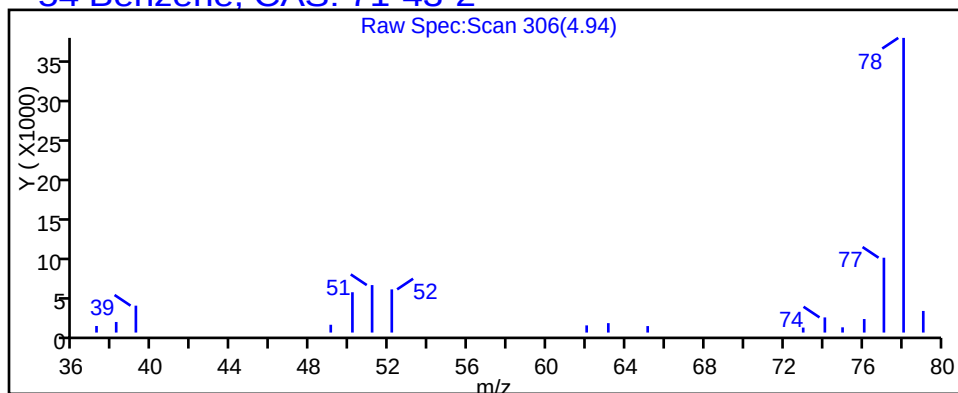
Dil. Factor: 1.0000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

54 Benzene, CAS: 71-43-2

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9318.D

Injection Date: 11-Nov-2016 17:56:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-6

Lab Sample ID: 240-71709-6

Client ID: OW-22

Operator ID: 001765

ALS Bottle#: 19

Worklist Smp#: 22

Purge Vol: 5.000 mL

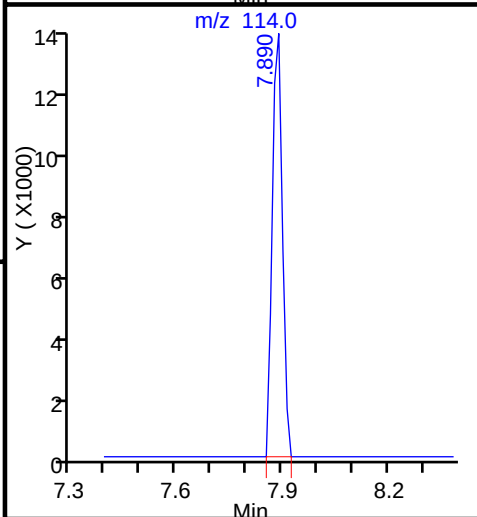
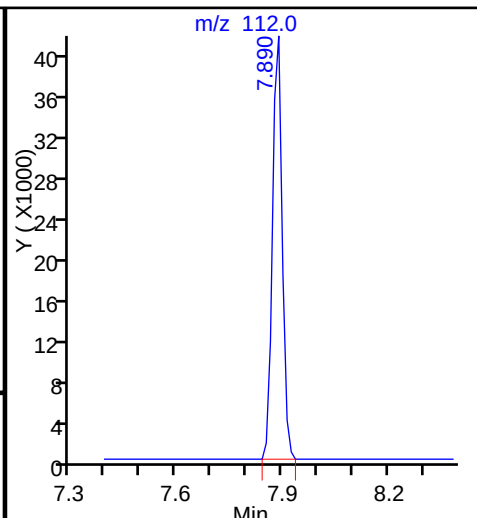
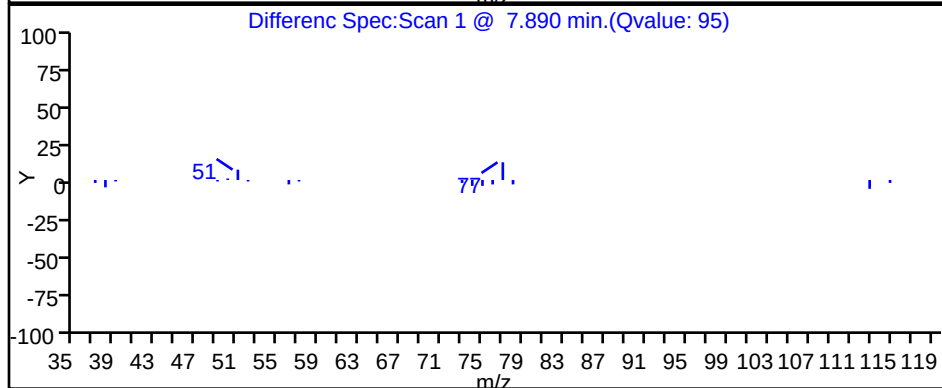
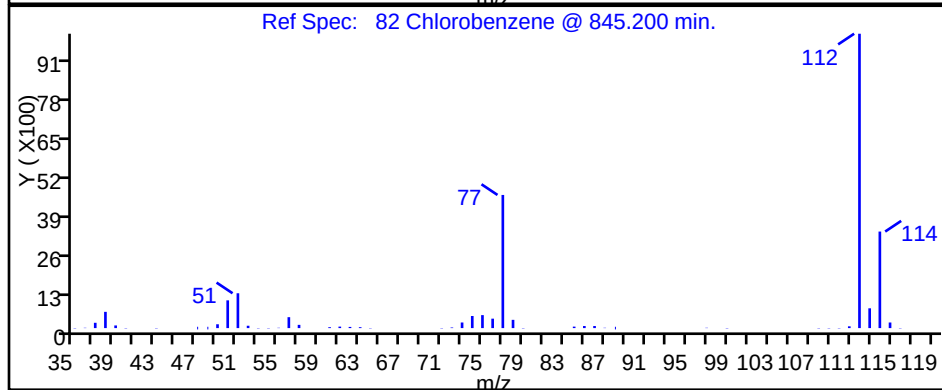
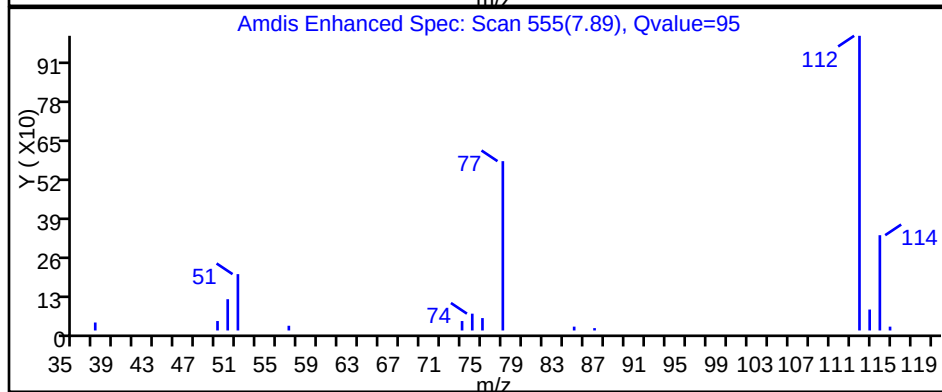
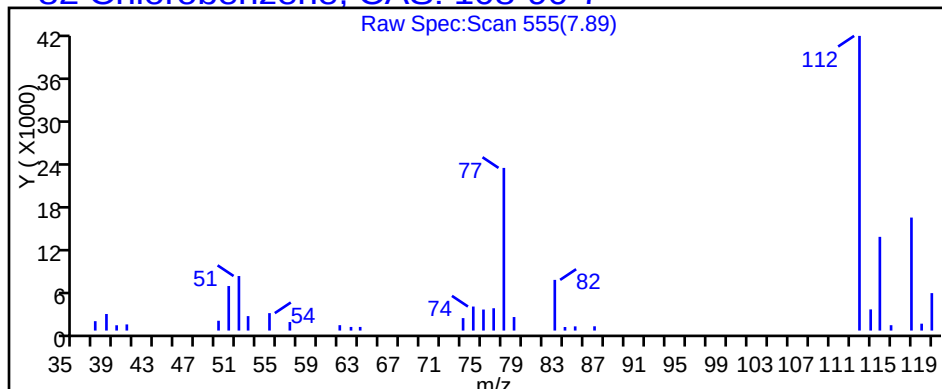
Dil. Factor: 1.0000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

82 Chlorobenzene, CAS: 108-90-7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-21</u>	Lab Sample ID: <u>240-71709-7</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9319.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 16:15</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 18:19</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	1.0		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-21 Lab Sample ID: 240-71709-7
 Matrix: Water Lab File ID: UXM9319.D
 Analysis Method: 8260B Date Collected: 11/01/2016 16:15
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 18:19
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-132
460-00-4	4-Bromofluorobenzene (Surr)	88		73-120
2037-26-5	Toluene-d8 (Surr)	86		73-124
1868-53-7	Dibromofluoromethane (Surr)	91		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9319.D
 Lims ID: 240-71709-B-7
 Client ID: OW-21
 Sample Type: Client
 Inject. Date: 11-Nov-2016 18:19:30 ALS Bottle#: 20 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-023
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:42:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	746999	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	511122	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	259202	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	155963	18.2	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	173091	18.9	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	643189	17.3	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	240848	17.6	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62	1.616	1.628	-0.012	91	3324	0.2505	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	71	2396	0.2072	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78	4.937	4.937	0.000	95	44336	1.01	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130		5.494				ND	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9319.D

Injection Date: 11-Nov-2016 18:19:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-B-7

Lab Sample ID: 240-71709-7

Worklist Smp#: 23

Client ID: OW-21

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

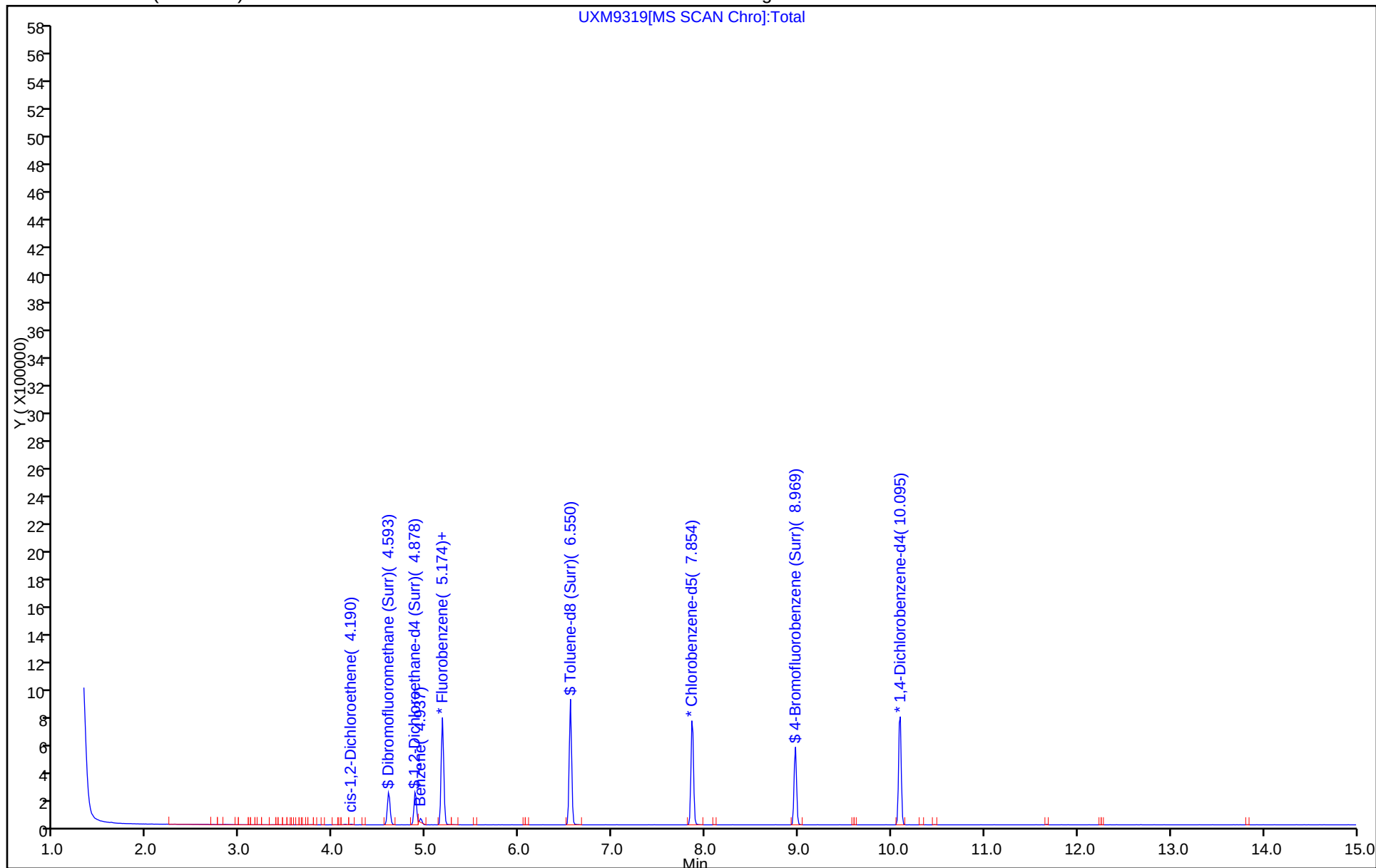
ALS Bottle#: 20

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9319.D
 Lims ID: 240-71709-B-7
 Client ID: OW-21
 Sample Type: Client
 Inject. Date: 11-Nov-2016 18:19:30 ALS Bottle#: 20 Worklist Smp#: 23
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-023
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:42:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	18.2	91.23
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.9	94.74
\$ 6 Toluene-d8 (Surr)	20.0	17.3	86.31
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.6	87.77

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9319.D

Injection Date: 11-Nov-2016 18:19:30

Instrument ID: A3UX16

Lims ID: 240-71709-B-7

Lab Sample ID: 240-71709-7

Client ID: OW-21

Operator ID: 001765

ALS Bottle#: 20

Worklist Smp#: 23

Purge Vol: 5.000 mL

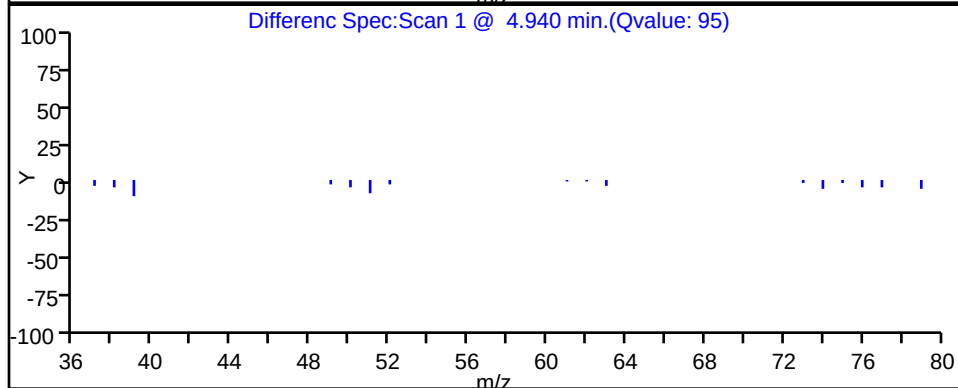
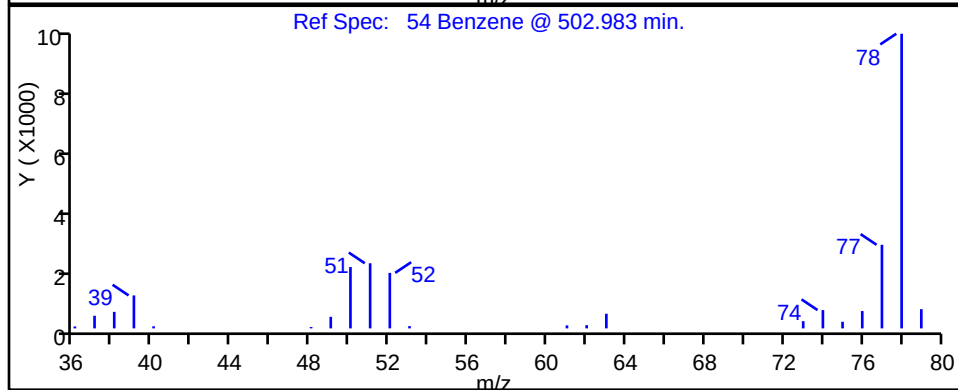
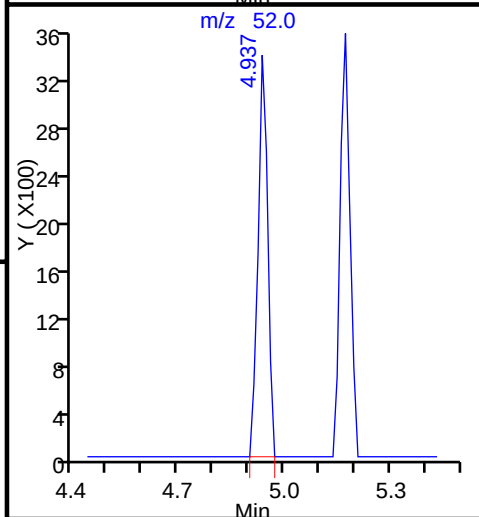
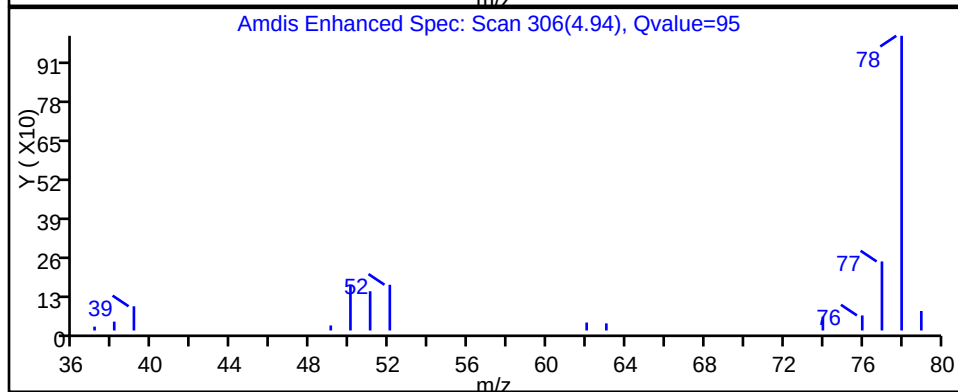
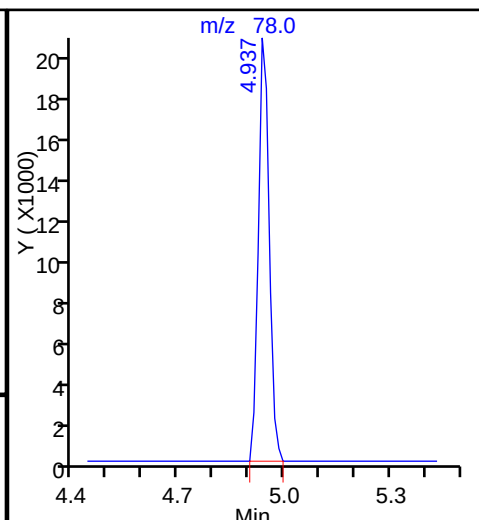
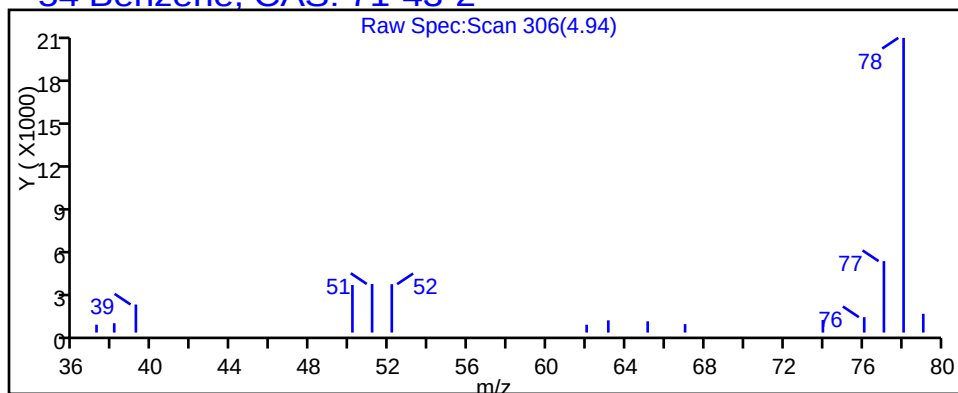
Dil. Factor: 1.0000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

54 Benzene, CAS: 71-43-2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>TRIP BLANK</u>	Lab Sample ID: <u>240-71709-8</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9320.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/02/2016 08:30</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 18:42</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: TRIP BLANK Lab Sample ID: 240-71709-8
 Matrix: Water Lab File ID: UXM9320.D
 Analysis Method: 8260B Date Collected: 11/02/2016 08:30
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 18:42
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-132
460-00-4	4-Bromofluorobenzene (Surr)	91		73-120
2037-26-5	Toluene-d8 (Surr)	86		73-124
1868-53-7	Dibromofluoromethane (Surr)	91		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9320.D
 Lims ID: 240-71709-B-8
 Client ID: TRIP BLANK
 Sample Type: Client
 Inject. Date: 11-Nov-2016 18:42:30 ALS Bottle#: 21 Worklist Smp#: 24
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-024
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:42:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	740455	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	503966	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	263010	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	155037	18.3	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	172219	19.0	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	632608	17.2	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	86	246474	18.2	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62		1.628				ND	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43	2.708	2.707	0.001	97	12660	4.18	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96		4.190				ND	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78		4.937				ND	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130		5.494				ND	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9320.D

Injection Date: 11-Nov-2016 18:42:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-B-8

Lab Sample ID: 240-71709-8

Worklist Smp#: 24

Client ID: TRIP BLANK

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

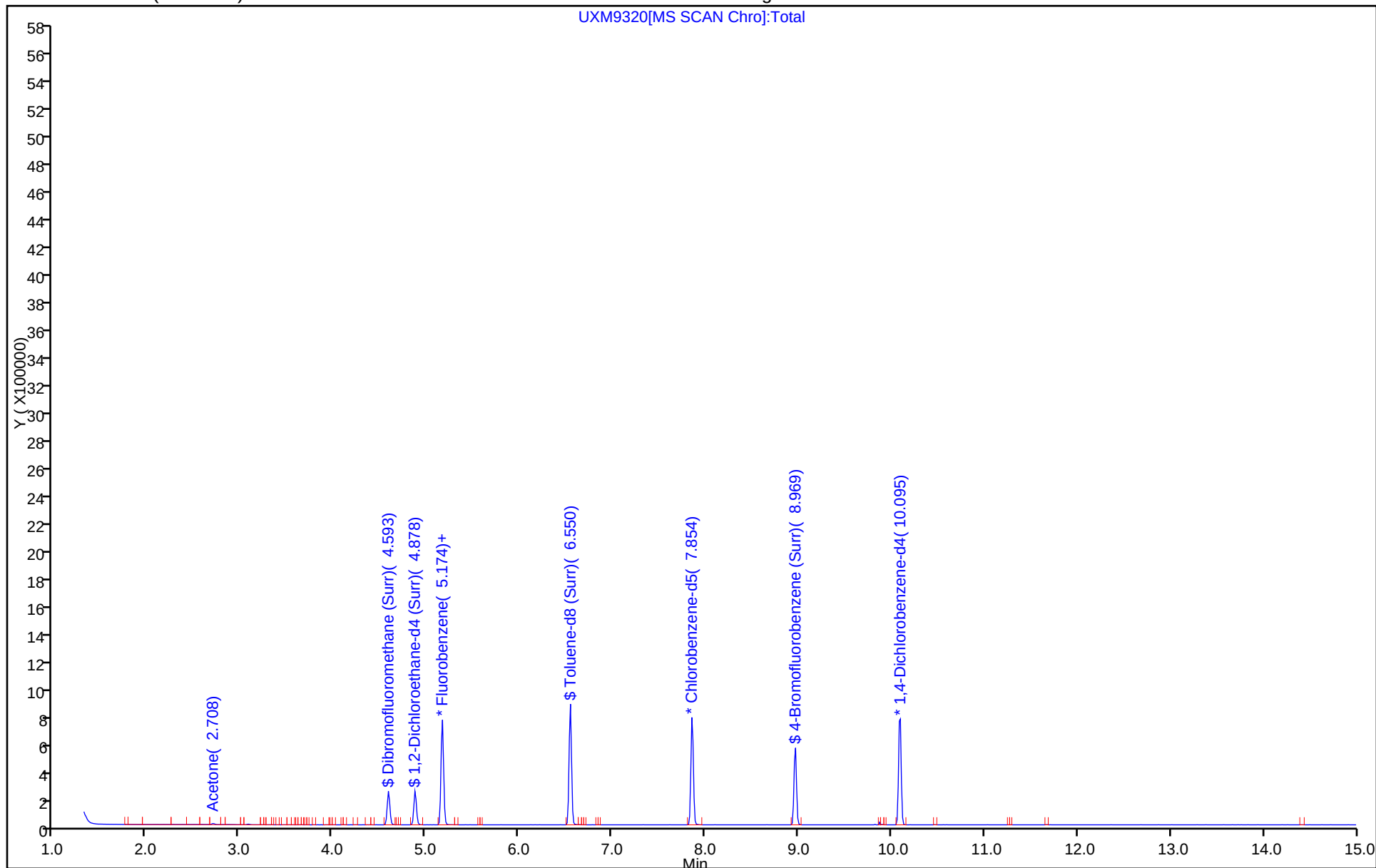
ALS Bottle#: 21

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9320.D
Lims ID: 240-71709-B-8
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 11-Nov-2016 18:42:30 ALS Bottle#: 21 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0059904-024
Operator ID: 001765 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:42:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.49
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	19.0	95.10
\$ 6 Toluene-d8 (Surr)	20.0	17.2	86.09
\$ 7 4-Bromofluorobenzene (Surr)	20.0	18.2	91.09

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>FIELD BLANK</u>	Lab Sample ID: <u>240-71709-9</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9321.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/02/2016 09:35</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 19:05</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: FIELD BLANK Lab Sample ID: 240-71709-9
 Matrix: Water Lab File ID: UXM9321.D
 Analysis Method: 8260B Date Collected: 11/02/2016 09:35
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 19:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		63-132
460-00-4	4-Bromofluorobenzene (Surr)	88		73-120
2037-26-5	Toluene-d8 (Surr)	85		73-124
1868-53-7	Dibromofluoromethane (Surr)	92		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9321.D
 Lims ID: 240-71709-C-9
 Client ID: FIELD BLANK
 Sample Type: Client
 Inject. Date: 11-Nov-2016 19:05:30 ALS Bottle#: 22 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-025
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:43:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	753917	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	521455	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	261538	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	157980	18.3	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	168871	18.3	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	643128	16.9	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	247179	17.7	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62		1.628				ND	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96		4.190				ND	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78		4.937				ND	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130		5.494				ND	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9321.D

Injection Date: 11-Nov-2016 19:05:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-C-9

Lab Sample ID: 240-71709-9

Worklist Smp#: 25

Client ID: FIELD BLANK

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

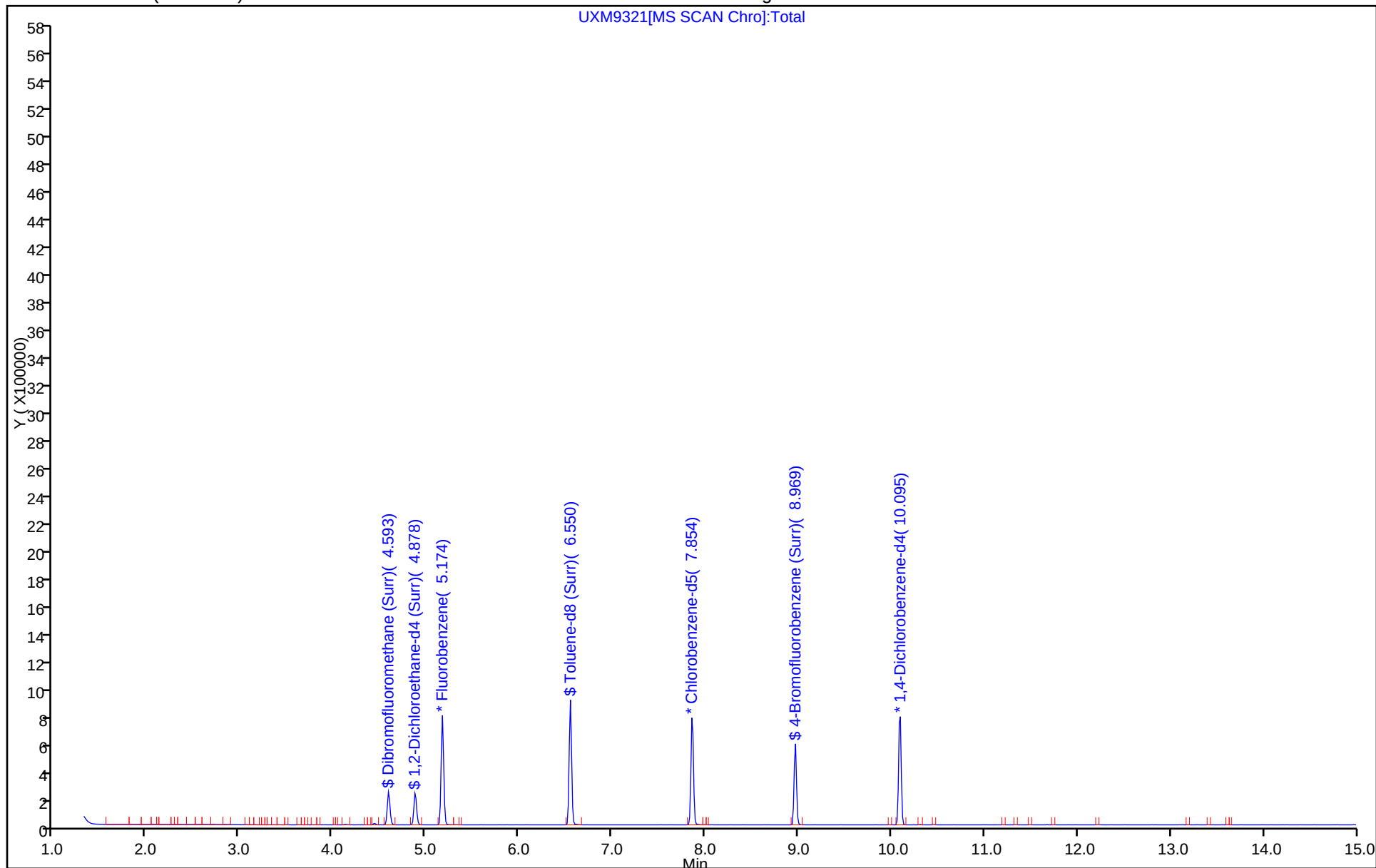
ALS Bottle#: 22

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9321.D
 Lims ID: 240-71709-C-9
 Client ID: FIELD BLANK
 Sample Type: Client
 Inject. Date: 11-Nov-2016 19:05:30 ALS Bottle#: 22 Worklist Smp#: 25
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-025
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:42:06 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:43:10

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	18.3	91.56
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.3	91.58
\$ 6 Toluene-d8 (Surr)	20.0	16.9	84.59
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.7	88.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-24</u>	Lab Sample ID: <u>240-71709-10</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9327.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/02/2016 09:50</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 21:23</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-24 Lab Sample ID: 240-71709-10
 Matrix: Water Lab File ID: UXM9327.D
 Analysis Method: 8260B Date Collected: 11/02/2016 09:50
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 21:23
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-132
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
2037-26-5	Toluene-d8 (Surr)	85		73-124
1868-53-7	Dibromofluoromethane (Surr)	91		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9327.D
 Lims ID: 240-71709-C-10
 Client ID: OW-24
 Sample Type: Client
 Inject. Date: 11-Nov-2016 21:23:30 ALS Bottle#: 28 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-031
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:44:46 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:46:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	749455	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	509839	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	261342	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	155516	18.1	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	171653	18.7	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	634072	17.1	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	242413	17.7	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62		1.628				ND	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96		4.190				ND	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78		4.937				ND	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130		5.494				ND	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9327.D

Injection Date: 11-Nov-2016 21:23:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-C-10

Lab Sample ID: 240-71709-10

Worklist Smp#: 31

Client ID: OW-24

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

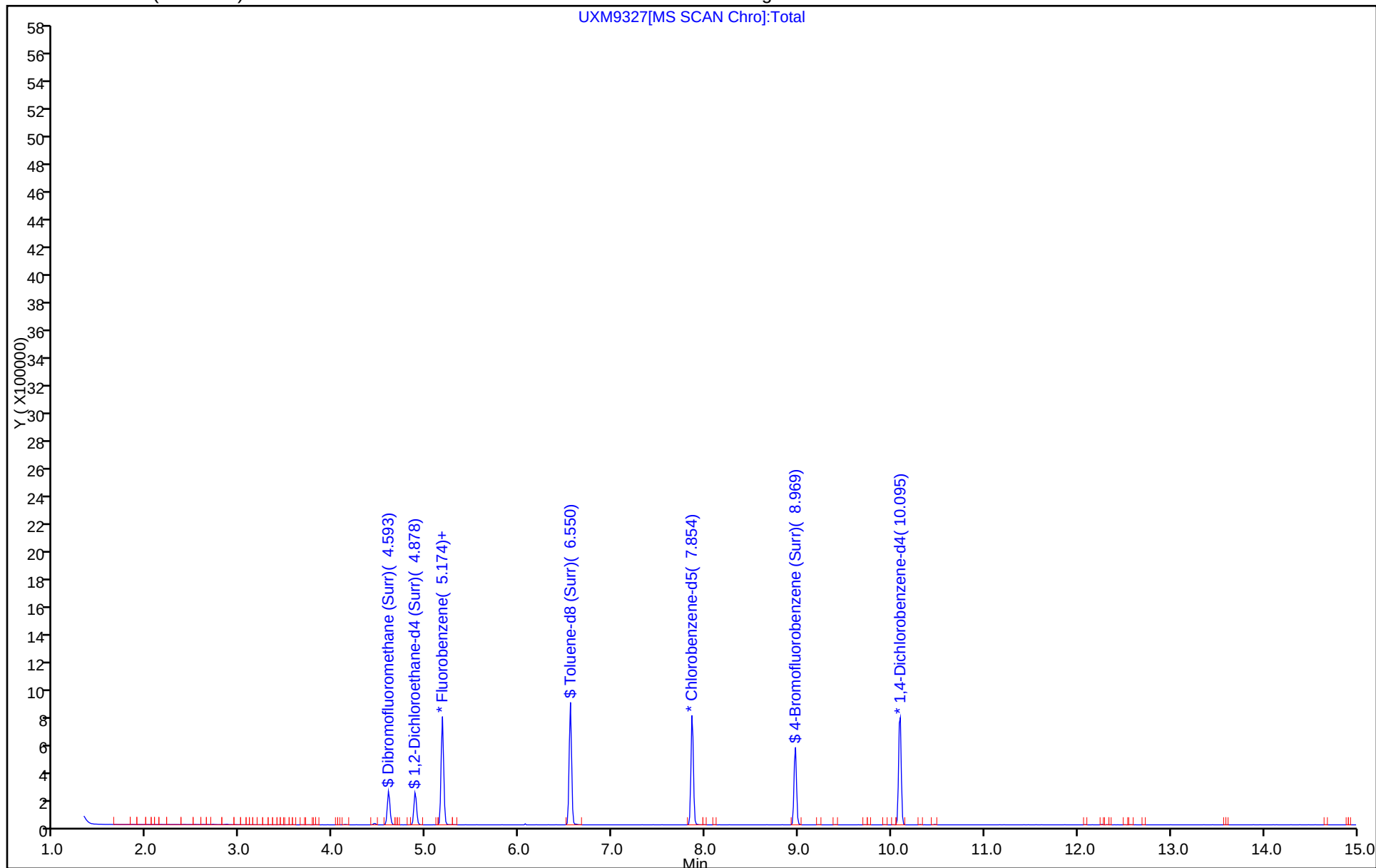
ALS Bottle#: 28

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9327.D
 Lims ID: 240-71709-C-10
 Client ID: OW-24
 Sample Type: Client
 Inject. Date: 11-Nov-2016 21:23:30 ALS Bottle#: 28 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-031
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:44:46 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:46:32

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	18.1	90.67
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.7	93.65
\$ 6 Toluene-d8 (Surr)	20.0	17.1	85.30
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.7	88.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>PUMP RINSATE</u>	Lab Sample ID: <u>240-71709-11</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9328.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/02/2016 10:10</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 21:46</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: PUMP RINSATE Lab Sample ID: 240-71709-11
 Matrix: Water Lab File ID: UXM9328.D
 Analysis Method: 8260B Date Collected: 11/02/2016 10:10
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 21:46
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		63-132
460-00-4	4-Bromofluorobenzene (Surr)	86		73-120
2037-26-5	Toluene-d8 (Surr)	84		73-124
1868-53-7	Dibromofluoromethane (Surr)	88		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9328.D
 Lims ID: 240-71709-C-11
 Client ID: PUMP RINSATE
 Sample Type: Client
 Inject. Date: 11-Nov-2016 21:46:30 ALS Bottle#: 29 Worklist Smp#: 32
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-032
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 14-Nov-2016 09:44:46 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:46:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	780364	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	529206	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	269241	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	157362	17.6	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	170713	17.9	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	648045	16.8	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	86	245674	17.3	
9 Dichlorodifluoromethane	85		1.403				ND	
10 Chloromethane	50		1.510				ND	
11 Vinyl chloride	62		1.628				ND	
13 Bromomethane	94		1.901				ND	
14 Chloroethane	64		1.996				ND	
16 Trichlorofluoromethane	101		2.209				ND	
19 1,1-Dichloroethene	96		2.672				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707				ND	
21 Acetone	43		2.707				ND	
24 Carbon disulfide	76		2.862				ND	
27 Methyl acetate	43		3.004				ND	
28 Methylene Chloride	84		3.087				ND	
32 trans-1,2-Dichloroethene	96		3.336				ND	
31 Methyl tert-butyl ether	73		3.348				ND	
34 1,1-Dichloroethane	63		3.692				ND	
39 cis-1,2-Dichloroethene	96		4.190				ND	
40 2-Butanone (MEK)	43		4.202				ND	
47 Chloroform	83		4.463				ND	
48 1,1,1-Trichloroethane	97		4.629				ND	
49 Cyclohexane	56		4.688				ND	
51 Carbon tetrachloride	117		4.771				ND	
54 Benzene	78		4.937				ND	
53 1,2-Dichloroethane	62		4.949				ND	
58 Trichloroethene	130		5.494				ND	
61 1,2-Dichloropropane	63		5.672				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.672				ND	
65 Dichlorobromomethane	83		5.909				ND	
68 cis-1,3-Dichloropropene	75		6.301				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443				ND	
70 Toluene	91		6.609				ND	
71 trans-1,3-Dichloropropene	75		6.787				ND	
73 1,1,2-Trichloroethane	97		6.953				ND	
75 Tetrachloroethene	164		7.107				ND	
76 2-Hexanone	43		7.190				ND	
78 Chlorodibromomethane	129		7.320				ND	
80 Ethylene Dibromide	107		7.427				ND	
82 Chlorobenzene	112		7.890				ND	
84 Ethylbenzene	106		7.996				ND	
85 m-Xylene & p-Xylene	106		8.103				ND	
86 o-Xylene	106		8.471				ND	
87 Styrene	104		8.483				ND	
88 Bromoform	173		8.649				ND	
89 Isopropylbenzene	105		8.826				ND	
92 1,1,2,2-Tetrachloroethane	83		9.099				ND	
106 1,3-Dichlorobenzene	146		10.024				ND	
108 1,4-Dichlorobenzene	146		10.119				ND	
112 1,2-Dichlorobenzene	146		10.487				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	
115 1,2,4-Trichlorobenzene	180		12.088				ND	
S 133 Xylenes, Total	106		16.350				ND	

Reagents:

vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9328.D

Injection Date: 11-Nov-2016 21:46:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: 240-71709-C-11

Lab Sample ID: 240-71709-11

Worklist Smp#: 32

Client ID: PUMP RINSATE

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

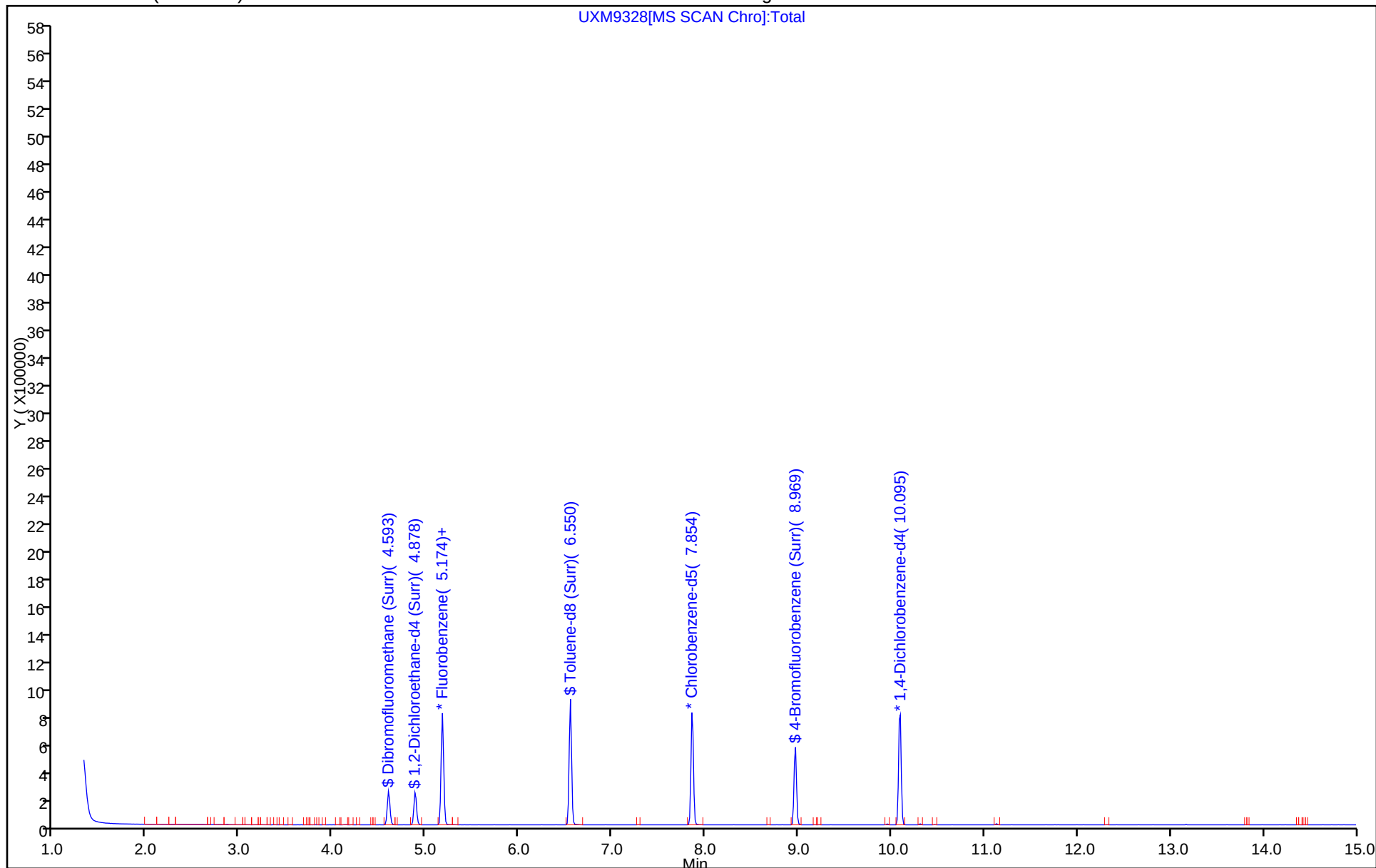
ALS Bottle#: 29

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9328.D
Lims ID: 240-71709-C-11
Client ID: PUMP RINSATE
Sample Type: Client
Inject. Date: 11-Nov-2016 21:46:30 ALS Bottle#: 29 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0059904-032
Operator ID: 001765 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 14-Nov-2016 09:44:46 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: bosworthh

Date: 14-Nov-2016 09:46:55

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	17.6	88.11
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	17.9	89.45
\$ 6 Toluene-d8 (Surr)	20.0	16.8	83.99
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.3	86.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-19</u>	Lab Sample ID: <u>240-71709-12</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXC9709.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/02/2016 11:30</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/14/2016 13:03</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255552</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND	*	10	
71-43-2	Benzene	ND		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND	*	1.0	
108-90-7	Chlorobenzene	5.3		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	1.0		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-19 Lab Sample ID: 240-71709-12
 Matrix: Water Lab File ID: UXC9709.D
 Analysis Method: 8260B Date Collected: 11/02/2016 11:30
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 13:03
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND	*	1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-132
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
2037-26-5	Toluene-d8 (Surr)	98		73-124
1868-53-7	Dibromofluoromethane (Surr)	102		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9709.D
 Lims ID: 240-71709-B-12
 Client ID: OW-19
 Sample Type: Client
 Inject. Date: 14-Nov-2016 13:03:30 ALS Bottle#: 9 Worklist Smp#: 33
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-033
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 15-Nov-2016 08:48:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1407128	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	90	1128510	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.925	9.913	0.012	93	680171	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	299121	8.17	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.767	4.766	0.001	0	354861	8.00	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	93	1363150	7.83	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	96	505654	8.49	
9 Dichlorodifluoromethane	85		1.458				ND	
10 Chloromethane	50		1.600				ND	
11 Vinyl chloride	62	1.683	1.695	-0.012	96	32030	0.5403	
13 Bromomethane	94		1.968				ND	
14 Chloroethane	64	2.039	2.063	-0.024	30	5502	0.1745	
16 Trichlorofluoromethane	101		2.229				ND	
19 1,1-Dichloroethene	96		2.644				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.679				ND	
22 Acetone	43		2.703				ND	
24 Carbon disulfide	76		2.833				ND	
27 Methyl acetate	43		2.964				ND	
28 Methylene Chloride	84		3.047				ND	
31 Methyl tert-butyl ether	73		3.260				ND	
30 trans-1,2-Dichloroethene	96		3.260				ND	
34 1,1-Dichloroethane	63		3.616				ND	
39 cis-1,2-Dichloroethene	96	4.079	4.090	-0.011	81	48811	1.01	
41 2-Butanone (MEK)	43		4.102				ND	
47 Chloroform	83		4.339				ND	
48 1,1,1-Trichloroethane	97		4.494				ND	
49 Cyclohexane	56		4.529				ND	
50 Carbon tetrachloride	117		4.624				ND	
53 Benzene	78	4.802	4.802	0.000	92	113702	0.6228	
54 1,2-Dichloroethane	62		4.826				ND	
58 Trichloroethene	130		5.336				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.478				ND	
61 1,2-Dichloropropane	63		5.537				ND	
65 Dichlorobromomethane	83		5.762				ND	
68 cis-1,3-Dichloropropene	75		6.142				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.272				ND	
70 Toluene	91		6.438				ND	
71 trans-1,3-Dichloropropene	75		6.640				ND	
73 1,1,2-Trichloroethane	97		6.806				ND	
74 Tetrachloroethene	164	6.925	6.925	0.000	90	6278	0.1589	
76 2-Hexanone	43		7.019				ND	
79 Chlorodibromomethane	129		7.162				ND	
80 Ethylene Dibromide	107		7.280				ND	
82 Chlorobenzene	112	7.719	7.719	0.000	98	696072	5.30	
84 Ethylbenzene	106		7.802				ND	
85 m-Xylene & p-Xylene	91		7.909				ND	
86 o-Xylene	106		8.288				ND	
87 Styrene	104		8.312				ND	
88 Bromoform	173		8.502				ND	
89 Isopropylbenzene	105		8.632				ND	
93 1,1,2,2-Tetrachloroethane	83		8.941				ND	
106 1,3-Dichlorobenzene	146		9.854				ND	
108 1,4-Dichlorobenzene	146	9.937	9.937	0.000	96	80245	0.6685	
112 1,2-Dichlorobenzene	146		10.316				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.099				ND	
115 1,2,4-Trichlorobenzene	180		11.905				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9709.D

Injection Date: 14-Nov-2016 13:03:30

Instrument ID: A3UX15

Operator ID:

Lims ID: 240-71709-B-12

Lab Sample ID: 240-71709-12

Worklist Smp#: 33

Client ID: OW-19

Purge Vol: 5.000 mL

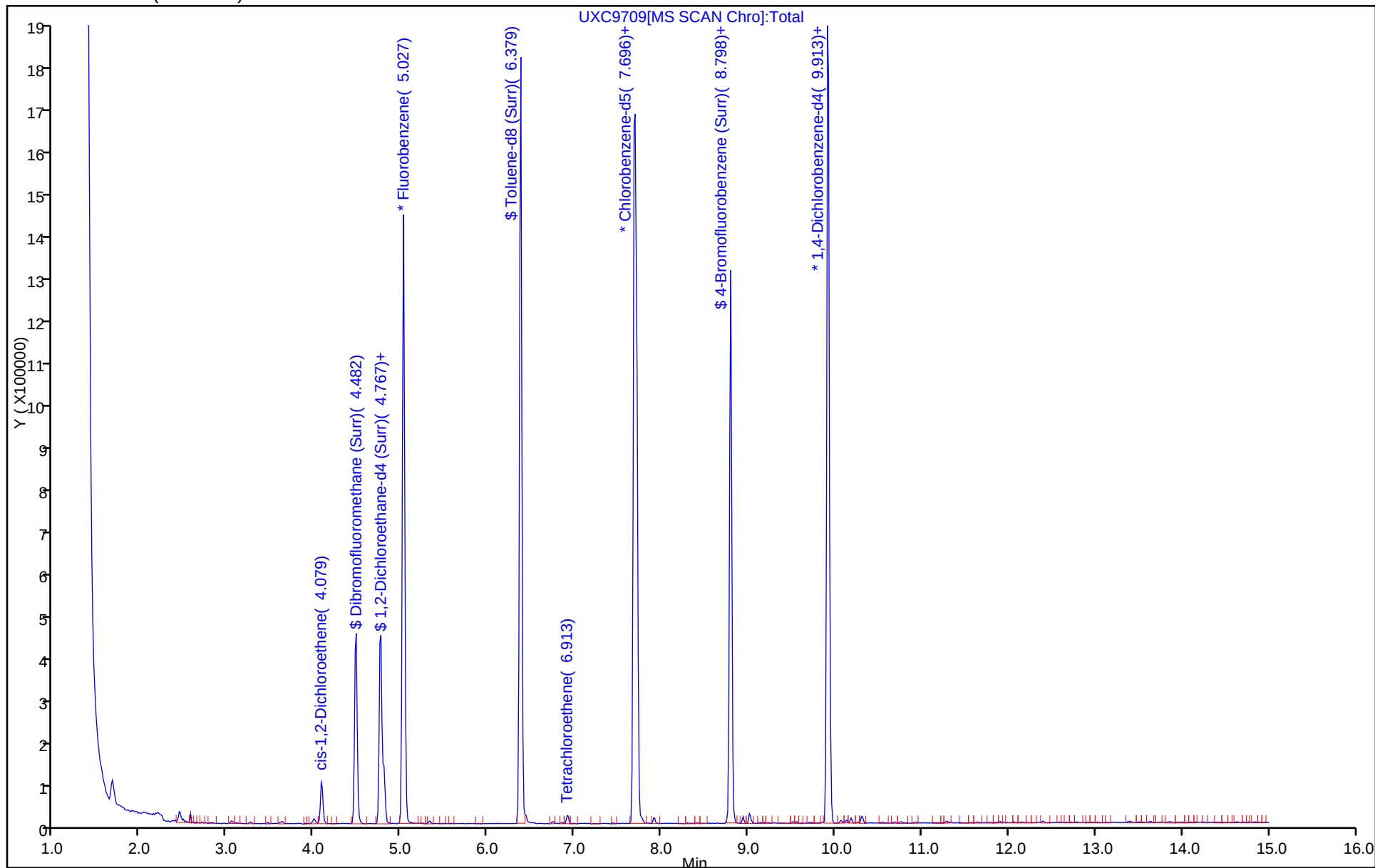
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9709.D
 Lims ID: 240-71709-B-12
 Client ID: OW-19
 Sample Type: Client
 Inject. Date: 14-Nov-2016 13:03:30 ALS Bottle#: 9 Worklist Smp#: 33
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-033
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 15-Nov-2016 08:48:43

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.17	102.05
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	8.00	99.88
\$ 6 Toluene-d8 (Surr)	8.01	7.83	97.71
\$ 7 4-Bromofluorobenzene (Surr)	8.01	8.49	105.97

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9709.D

Injection Date: 14-Nov-2016 13:03:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-12

Lab Sample ID: 240-71709-12

Client ID: OW-19

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 33

Purge Vol: 5.000 mL

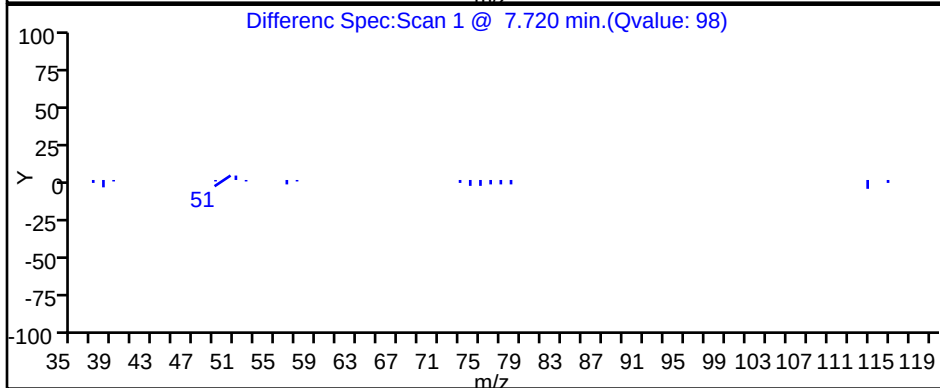
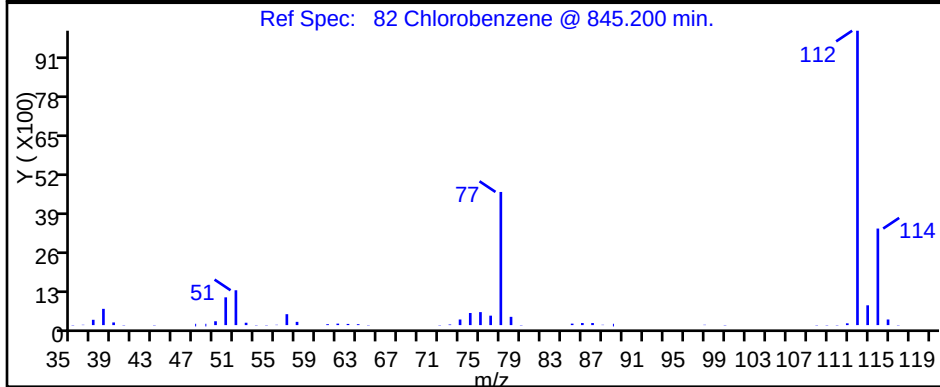
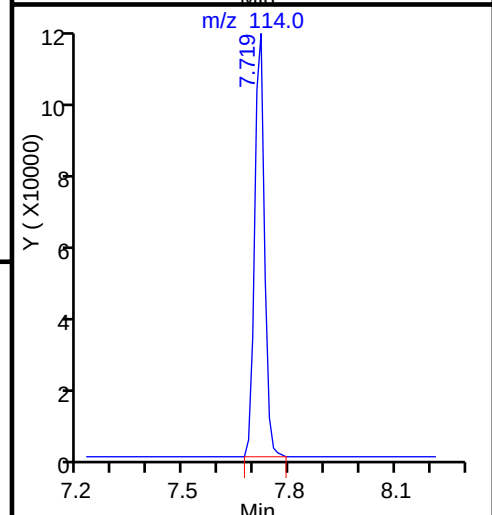
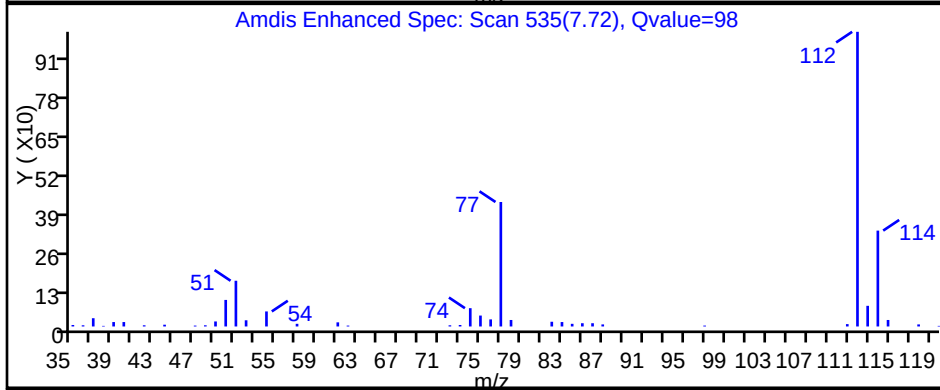
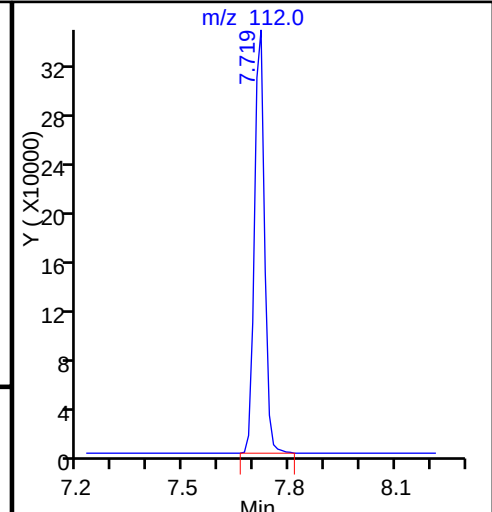
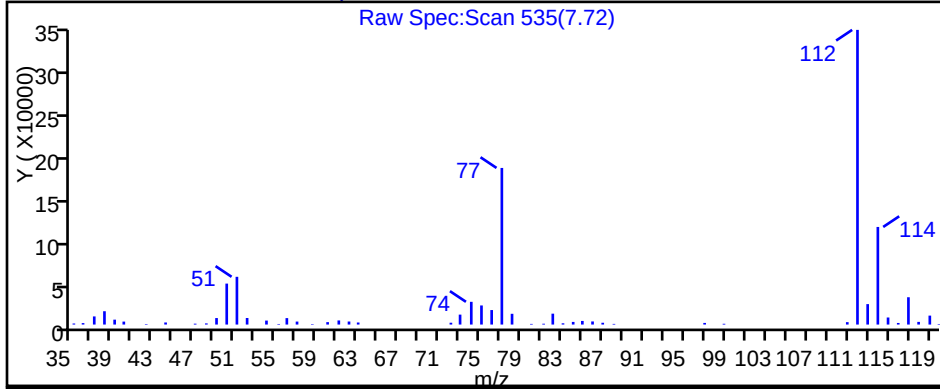
Dil. Factor: 1.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

82 Chlorobenzene, CAS: 108-90-7

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9709.D

Injection Date: 14-Nov-2016 13:03:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-12

Lab Sample ID: 240-71709-12

Client ID: OW-19

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 33

Purge Vol: 5.000 mL

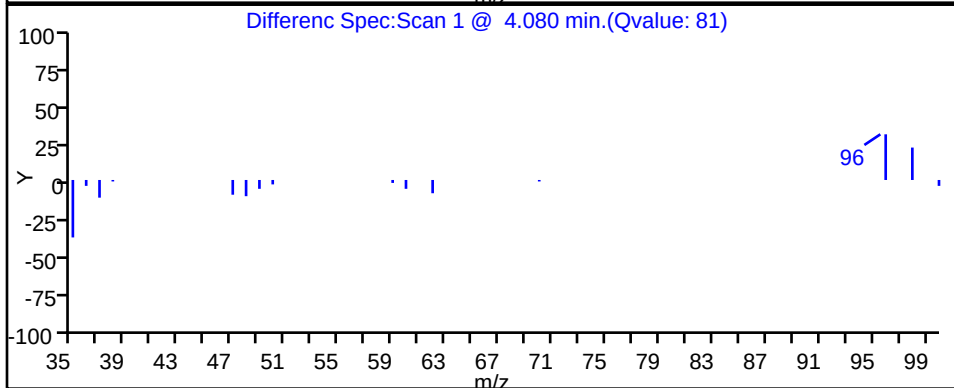
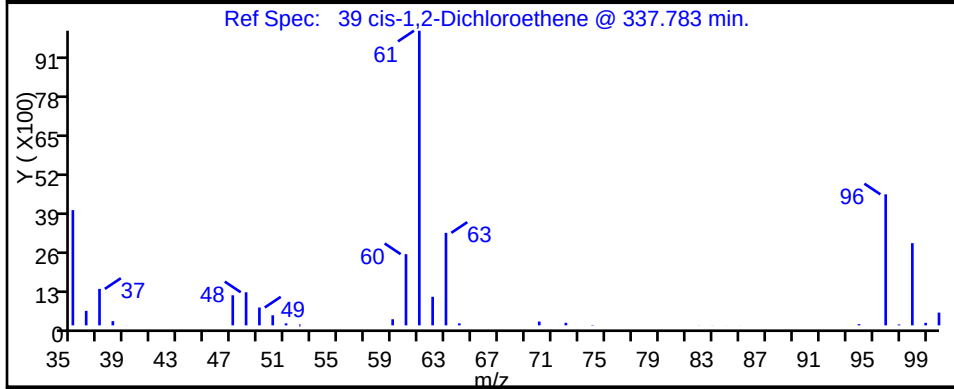
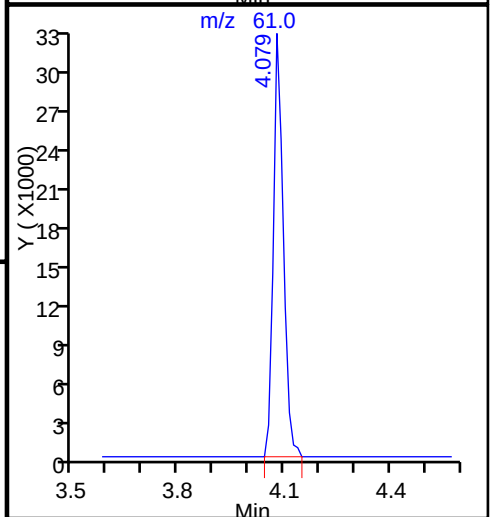
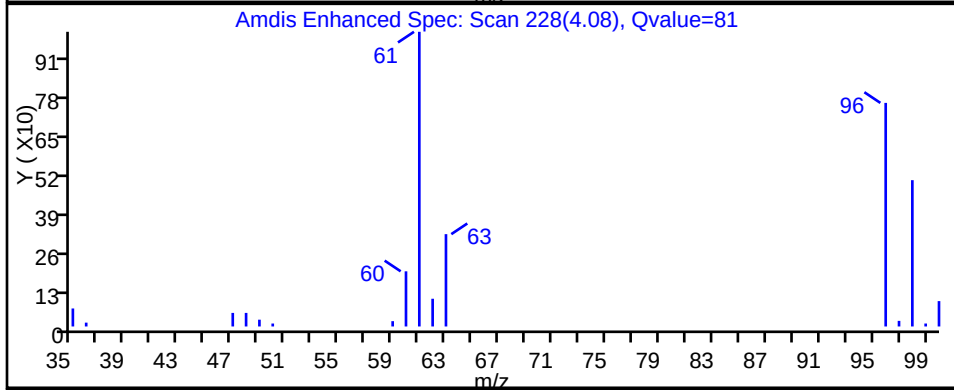
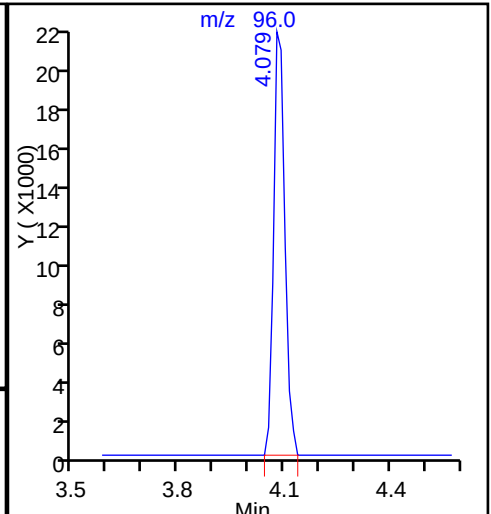
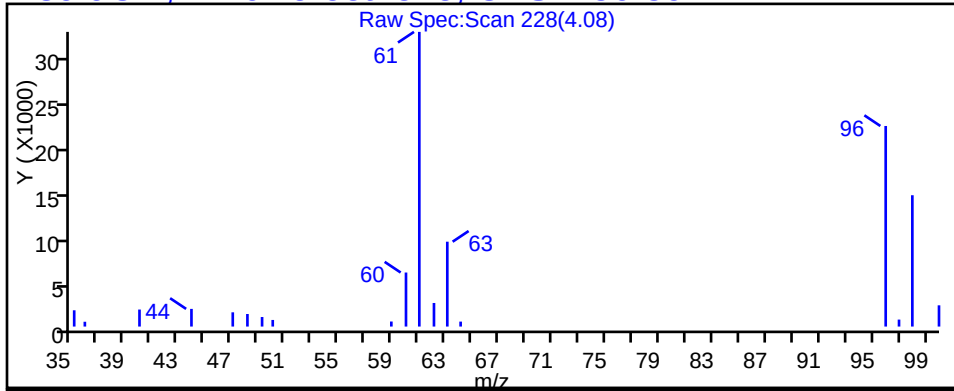
Dil. Factor: 1.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

39 cis-1,2-Dichloroethene, CAS: 156-59-2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-18</u>	Lab Sample ID: <u>240-71709-13</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXC9710.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/02/2016 13:30</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/14/2016 13:26</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255552</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND	*	10	
71-43-2	Benzene	5.0		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND	*	1.0	
108-90-7	Chlorobenzene	14		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-18 Lab Sample ID: 240-71709-13
 Matrix: Water Lab File ID: UXC9710.D
 Analysis Method: 8260B Date Collected: 11/02/2016 13:30
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 13:26
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND	*	1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-132
460-00-4	4-Bromofluorobenzene (Surr)	110		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	102		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9710.D
 Lims ID: 240-71709-B-13
 Client ID: OW-18
 Sample Type: Client
 Inject. Date: 14-Nov-2016 13:26:30 ALS Bottle#: 10 Worklist Smp#: 34
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-034
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 13:47:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1415228	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	86	1103107	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.925	9.913	0.012	93	627099	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	301759	8.20	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.767	4.766	0.000	0	357931	8.02	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	92	1363412	8.01	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	96	514890	8.84	
9 Dichlorodifluoromethane	85		1.458				ND	
10 Chloromethane	50		1.600				ND	
11 Vinyl chloride	62		1.695				ND	
13 Bromomethane	94		1.968				ND	
14 Chloroethane	64	2.051	2.063	-0.012	96	11800	0.3720	
16 Trichlorofluoromethane	101		2.229				ND	
19 1,1-Dichloroethene	96		2.644				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.679				ND	
22 Acetone	43		2.703				ND	
24 Carbon disulfide	76		2.833				ND	
27 Methyl acetate	43		2.964				ND	
28 Methylene Chloride	84		3.047				ND	
31 Methyl tert-butyl ether	73		3.260				ND	
30 trans-1,2-Dichloroethene	96		3.260				ND	
34 1,1-Dichloroethane	63	3.616	3.616	0.000	90	8001	0.1039	
39 cis-1,2-Dichloroethene	96	4.091	4.090	0.001	78	15269	0.3144	
41 2-Butanone (MEK)	43		4.102				ND	
47 Chloroform	83		4.339				ND	
48 1,1,1-Trichloroethane	97		4.494				ND	
49 Cyclohexane	56		4.529				ND	
50 Carbon tetrachloride	117		4.624				ND	
53 Benzene	78	4.802	4.802	0.000	95	922989	5.03	
54 1,2-Dichloroethane	62		4.826				ND	
58 Trichloroethene	130		5.336				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.478				ND	
61 1,2-Dichloropropane	63		5.537				ND	
65 Dichlorobromomethane	83		5.762				ND	
68 cis-1,3-Dichloropropene	75		6.142				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.272				ND	
70 Toluene	91	6.439	6.438	0.001	98	22064	0.1105	
71 trans-1,3-Dichloropropene	75		6.640				ND	
73 1,1,2-Trichloroethane	97		6.806				ND	
74 Tetrachloroethene	164		6.925				ND	
76 2-Hexanone	43		7.019				ND	
79 Chlorodibromomethane	129		7.162				ND	
80 Ethylene Dibromide	107		7.280				ND	
82 Chlorobenzene	112	7.719	7.719	0.000	97	1857053	14.5	
84 Ethylbenzene	106		7.802				ND	
85 m-Xylene & p-Xylene	91	7.909	7.909	0.000	92	27460	0.1631	
86 o-Xylene	106		8.288				ND	
87 Styrene	104		8.312				ND	
88 Bromoform	173		8.502				ND	
89 Isopropylbenzene	105		8.632				ND	
93 1,1,2,2-Tetrachloroethane	83		8.941				ND	
106 1,3-Dichlorobenzene	146		9.854				ND	
108 1,4-Dichlorobenzene	146	9.949	9.937	0.012	94	105221	0.9507	
112 1,2-Dichlorobenzene	146	10.316	10.316	0.000	97	22880	0.2313	
113 1,2-Dibromo-3-Chloropropan	157		11.099				ND	
115 1,2,4-Trichlorobenzene	180		11.905				ND	
S 129 Xylenes, Total	106				0		0.1631	

Reagents:

vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9710.D

Injection Date: 14-Nov-2016 13:26:30

Instrument ID: A3UX15

Operator ID:

Lims ID: 240-71709-B-13

Lab Sample ID: 240-71709-13

Worklist Smp#: 34

Client ID: OW-18

Purge Vol: 5.000 mL

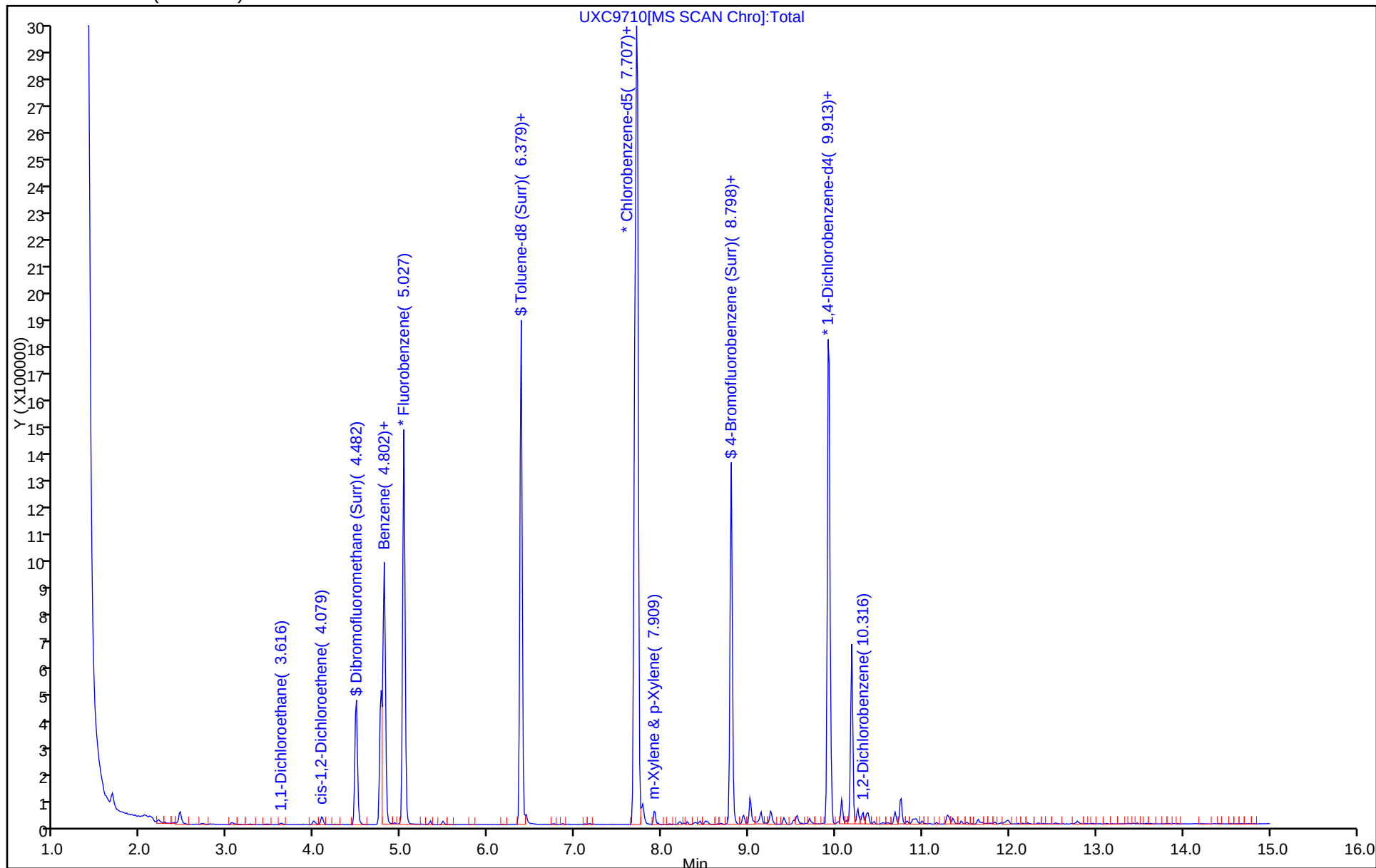
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9710.D
 Lims ID: 240-71709-B-13
 Client ID: OW-18
 Sample Type: Client
 Inject. Date: 14-Nov-2016 13:26:30 ALS Bottle#: 10 Worklist Smp#: 34
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-034
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 13:47:40

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.20	102.36
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	8.02	100.17
\$ 6 Toluene-d8 (Surr)	8.01	8.01	99.98
\$ 7 4-Bromofluorobenzene (Surr)	8.01	8.84	110.39

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9710.D

Injection Date: 14-Nov-2016 13:26:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-13

Lab Sample ID: 240-71709-13

Client ID: OW-18

Operator ID:

ALS Bottle#: 10

Worklist Smp#: 34

Purge Vol: 5.000 mL

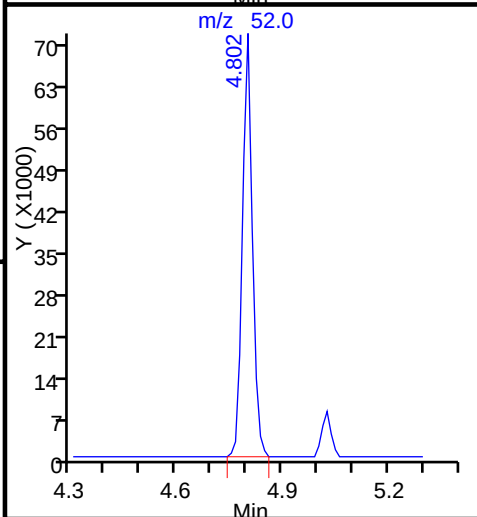
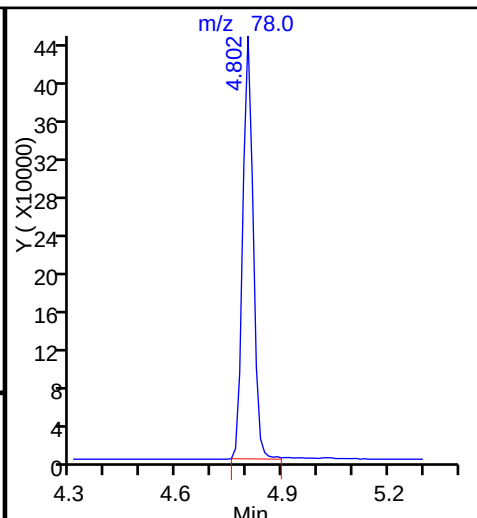
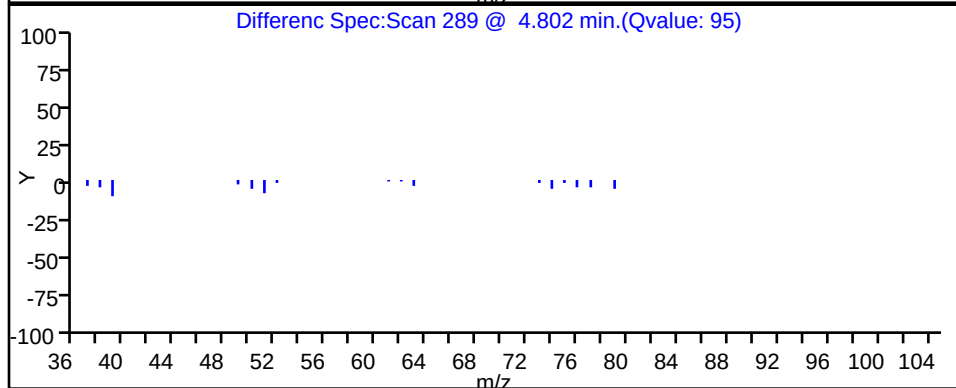
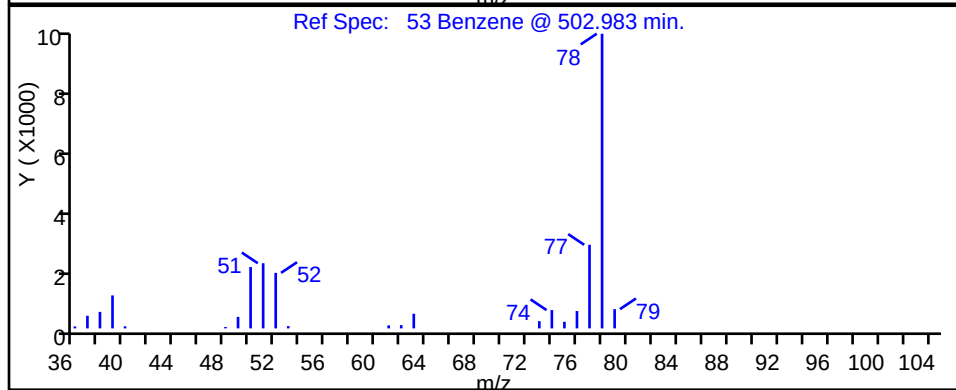
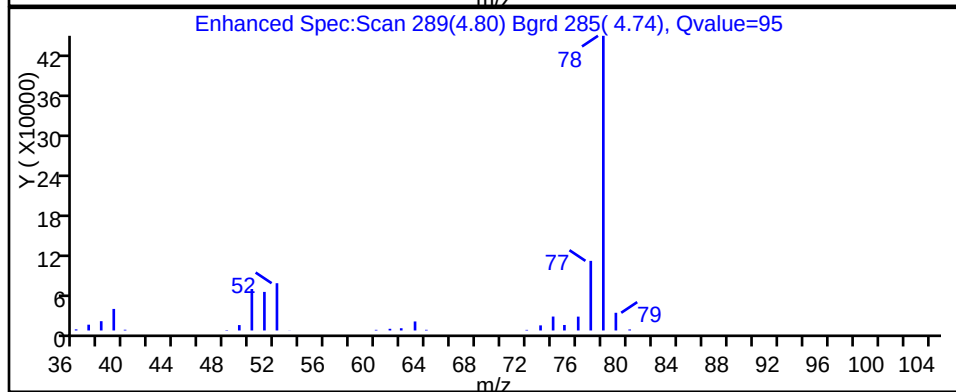
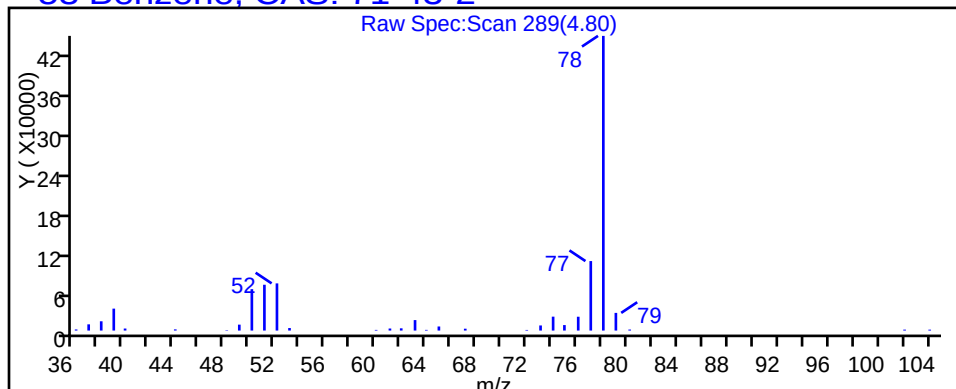
Dil. Factor: 1.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

53 Benzene, CAS: 71-43-2

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9710.D

Injection Date: 14-Nov-2016 13:26:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-13

Lab Sample ID: 240-71709-13

Client ID: OW-18

Operator ID:

ALS Bottle#: 10

Worklist Smp#: 34

Purge Vol: 5.000 mL

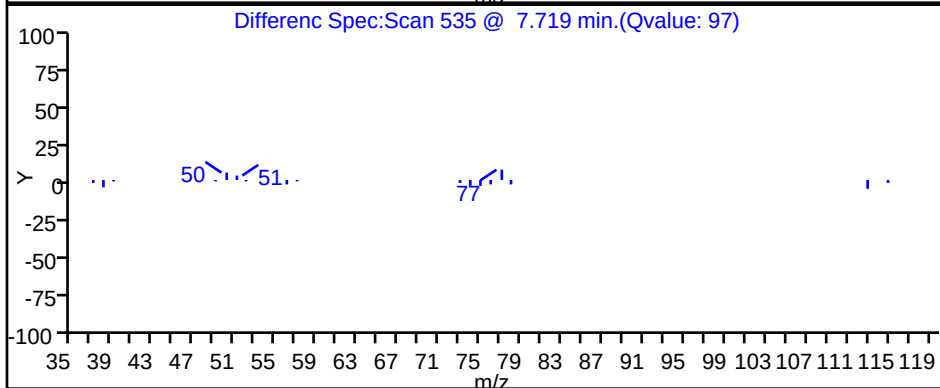
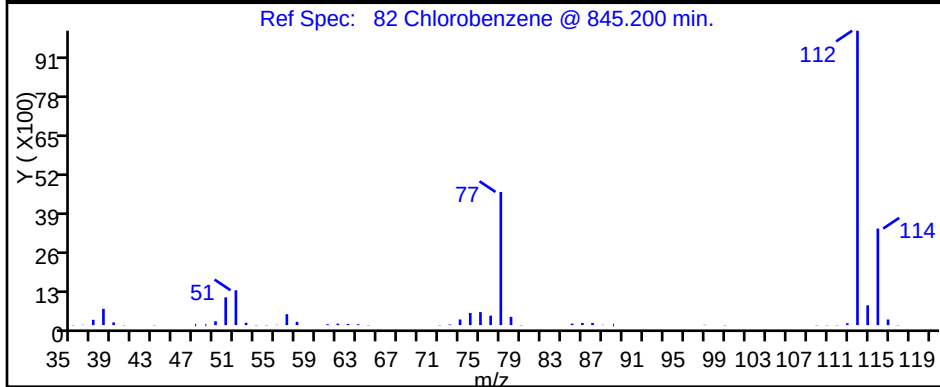
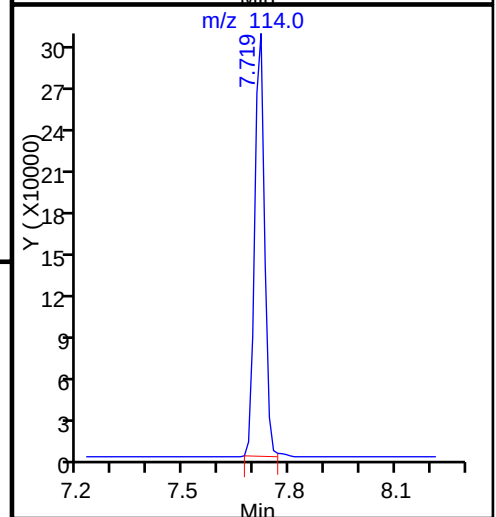
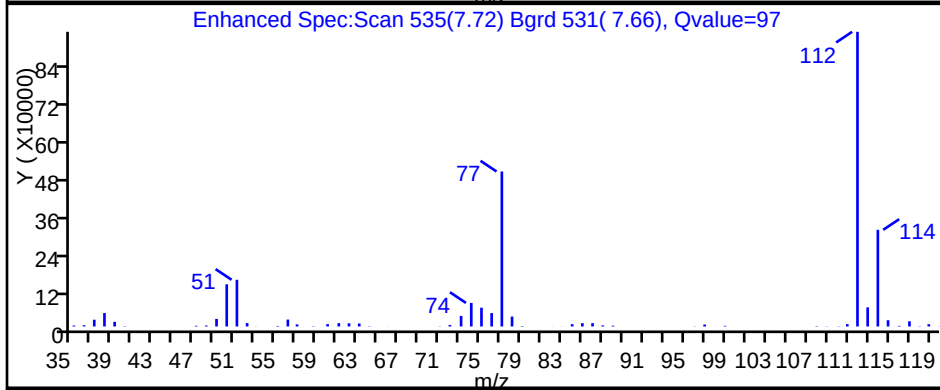
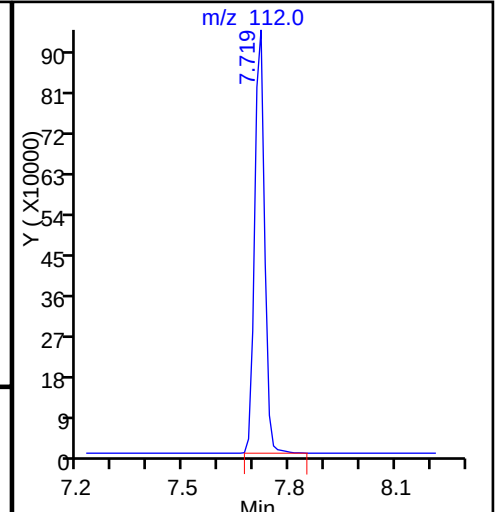
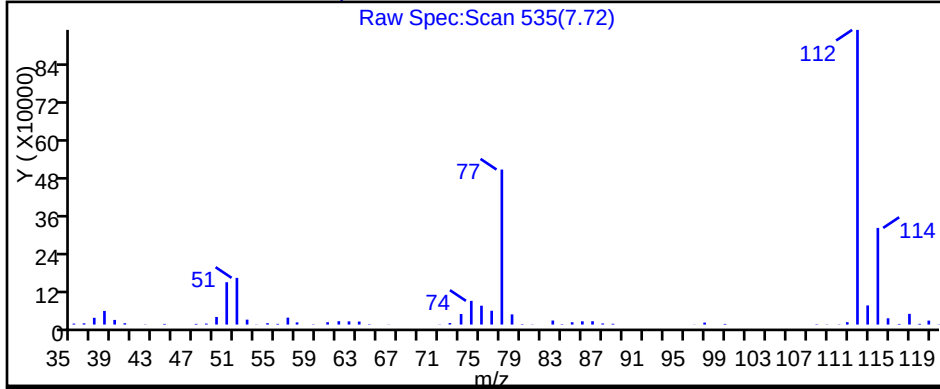
Dil. Factor: 1.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

82 Chlorobenzene, CAS: 108-90-7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-13R</u>	Lab Sample ID: <u>240-71709-14</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXC9711.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/02/2016 15:00</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/14/2016 13:48</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255552</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND	*	10	
71-43-2	Benzene	4.3		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND	*	1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-13R Lab Sample ID: 240-71709-14
 Matrix: Water Lab File ID: UXC9711.D
 Analysis Method: 8260B Date Collected: 11/02/2016 15:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 13:48
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND	*	1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		63-132
460-00-4	4-Bromofluorobenzene (Surr)	100		73-120
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9711.D
 Lims ID: 240-71709-B-14
 Client ID: OW-13R
 Sample Type: Client
 Inject. Date: 14-Nov-2016 13:48:30 ALS Bottle#: 11 Worklist Smp#: 35
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-035
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 15-Nov-2016 08:50:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1393785	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	84	1073961	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.913	9.913	0.000	95	540081	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	300202	8.28	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.766	4.766	0.000	0	353101	8.04	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	93	1339745	8.08	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	97	453962	8.01	
9 Dichlorodifluoromethane	85		1.458				ND	
10 Chloromethane	50		1.600				ND	
11 Vinyl chloride	62	1.683	1.695	-0.012	95	18106	0.3084	
13 Bromomethane	94		1.968				ND	
14 Chloroethane	64		2.063				ND	
16 Trichlorofluoromethane	101		2.229				ND	
19 1,1-Dichloroethene	96		2.644				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.679				ND	
22 Acetone	43		2.703				ND	
24 Carbon disulfide	76		2.833				ND	
27 Methyl acetate	43		2.964				ND	
28 Methylene Chloride	84		3.047				ND	
31 Methyl tert-butyl ether	73		3.260				ND	
30 trans-1,2-Dichloroethene	96		3.260				ND	
34 1,1-Dichloroethane	63		3.616				ND	
39 cis-1,2-Dichloroethene	96	4.090	4.090	0.000	76	13064	0.2732	
41 2-Butanone (MEK)	43		4.102				ND	
47 Chloroform	83		4.339				ND	
48 1,1,1-Trichloroethane	97		4.494				ND	
49 Cyclohexane	56		4.529				ND	
50 Carbon tetrachloride	117		4.624				ND	
53 Benzene	78	4.802	4.802	0.000	94	772208	4.27	
54 1,2-Dichloroethane	62		4.826				ND	
58 Trichloroethene	130	5.324	5.336	-0.012	90	5624	0.1245	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
60 Methylcyclohexane	83		5.478				ND	
61 1,2-Dichloropropane	63		5.537				ND	
65 Dichlorobromomethane	83		5.762				ND	
68 cis-1,3-Dichloropropene	75		6.142				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.272				ND	
70 Toluene	91		6.438				ND	
71 trans-1,3-Dichloropropene	75		6.640				ND	
73 1,1,2-Trichloroethane	97		6.806				ND	
74 Tetrachloroethene	164		6.925				ND	
76 2-Hexanone	43		7.019				ND	
79 Chlorodibromomethane	129		7.162				ND	
80 Ethylene Dibromide	107		7.280				ND	
82 Chlorobenzene	112	7.707	7.719	-0.012	95	15880	0.1270	
84 Ethylbenzene	106		7.802				ND	
85 m-Xylene & p-Xylene	91		7.909				ND	
86 o-Xylene	106		8.288				ND	
87 Styrene	104		8.312				ND	
88 Bromoform	173		8.502				ND	
89 Isopropylbenzene	105		8.632				ND	
93 1,1,2,2-Tetrachloroethane	83		8.941				ND	
106 1,3-Dichlorobenzene	146		9.854				ND	
108 1,4-Dichlorobenzene	146		9.937				ND	
112 1,2-Dichlorobenzene	146		10.316				ND	
113 1,2-Dibromo-3-Chloropropan	157		11.099				ND	
115 1,2,4-Trichlorobenzene	180		11.905				ND	
S 129 Xylenes, Total	106		16.530				ND	

Reagents:

vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9711.D

Injection Date: 14-Nov-2016 13:48:30

Instrument ID: A3UX15

Operator ID:

Lims ID: 240-71709-B-14

Lab Sample ID: 240-71709-14

Worklist Smp#: 35

Client ID: OW-13R

Purge Vol: 5.000 mL

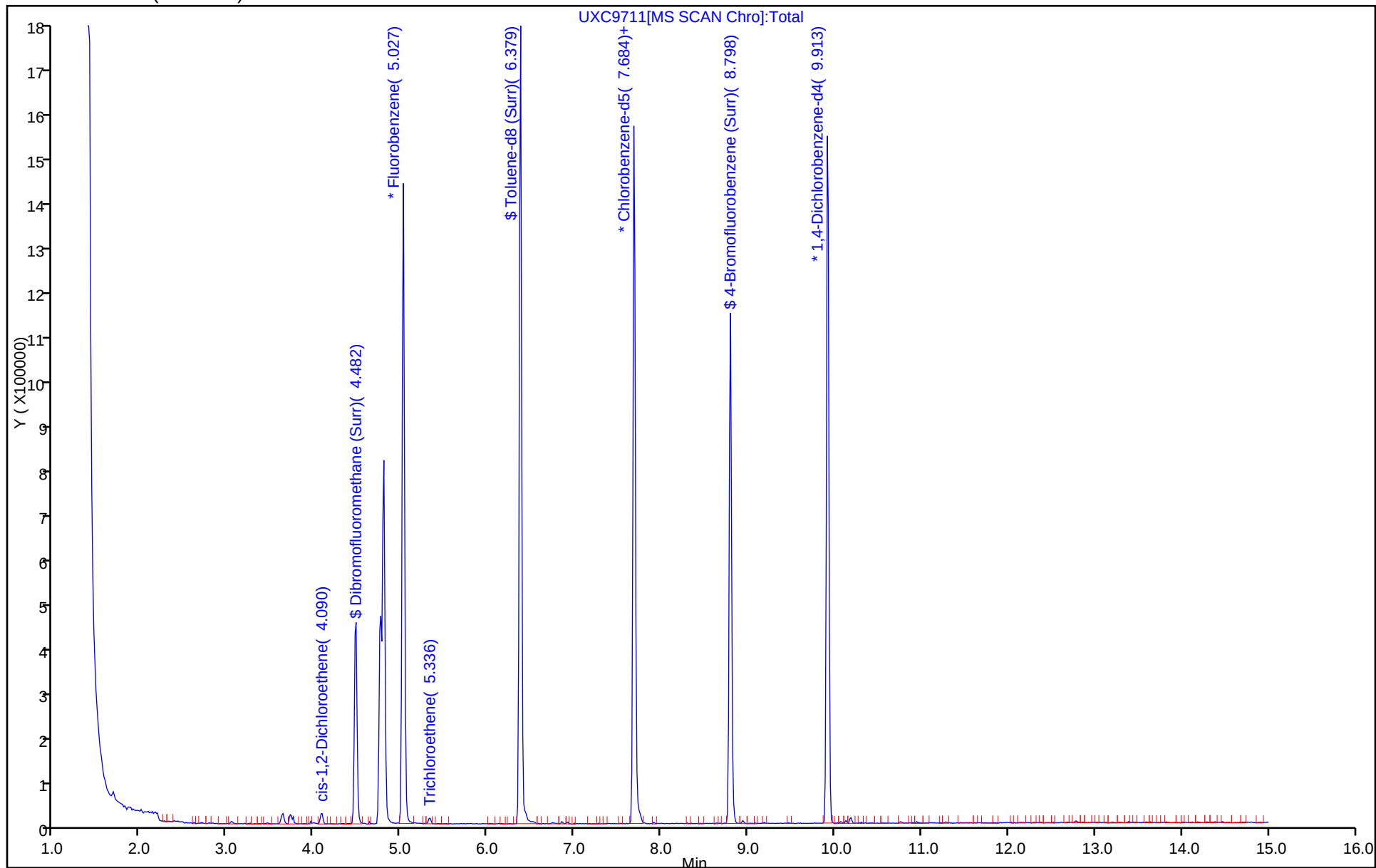
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9711.D
 Lims ID: 240-71709-B-14
 Client ID: OW-13R
 Sample Type: Client
 Inject. Date: 14-Nov-2016 13:48:30 ALS Bottle#: 11 Worklist Smp#: 35
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-035
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 15-Nov-2016 08:50:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.28	103.39
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	8.04	100.34
\$ 6 Toluene-d8 (Surr)	8.01	8.08	100.91
\$ 7 4-Bromofluorobenzene (Surr)	8.01	8.01	99.97

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9711.D

Injection Date: 14-Nov-2016 13:48:30

Instrument ID: A3UX15

Lims ID: 240-71709-B-14

Lab Sample ID: 240-71709-14

Client ID: OW-13R

Operator ID:

ALS Bottle#:

Worklist Smp#: 35

Purge Vol: 5.000 mL

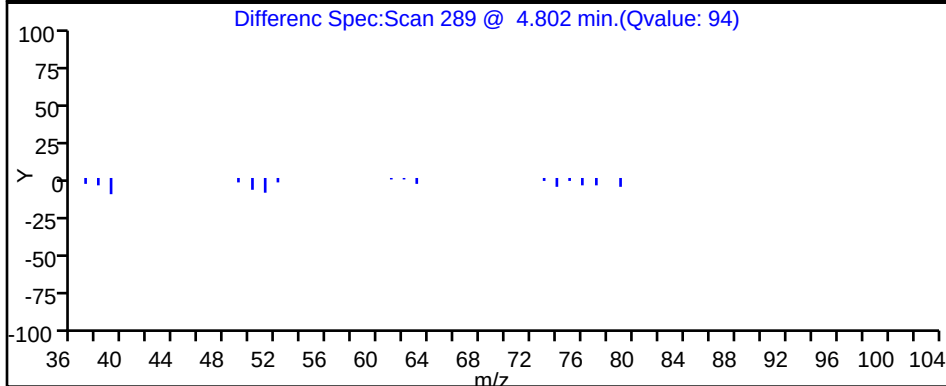
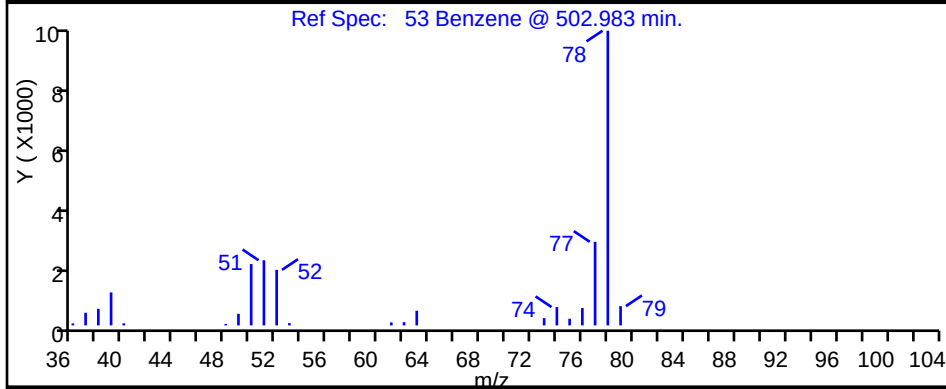
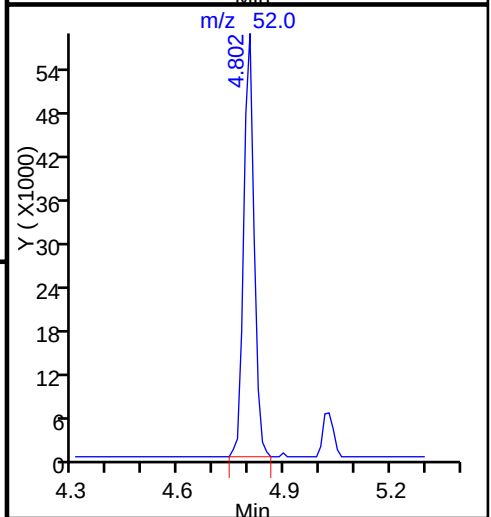
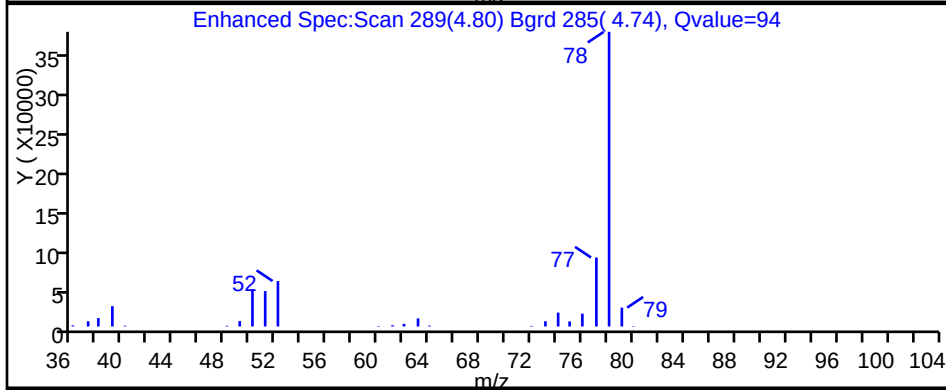
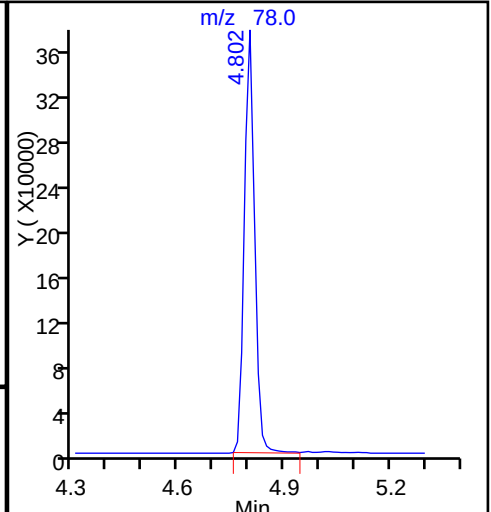
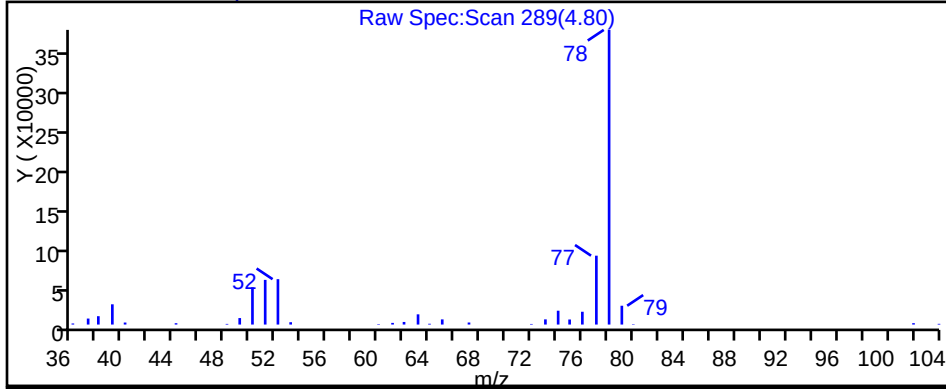
Dil. Factor: 1.0000

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

53 Benzene, CAS: 71-43-2

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-235700/7	UXC9013.D
Level 2	STD8260 240-235700/6	UXC9012.D
Level 3	STD8260 240-235700/5	UXC9011.D
Level 4	STD8260 240-235700/4	UXC9010.D
Level 5	STD8260 240-235700/3	UXC9009.D
Level 6	STD8260 240-235700/2	UXC9008.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								
Dichlorodifluoromethane	0.3321 0.3340	0.3168	0.3294	0.3233	0.3421	Ave		0.3296				2.7		15.0			
Chloromethane	0.5208 0.4361	0.4774	0.4696	0.4288	0.4654	Ave		0.4664			0.1000	7.1		15.0			
Vinyl chloride	0.4391 0.4197	0.4151	0.4242	0.3962	0.4333	Ave		0.4213				3.6		15.0			
Butadiene	0.4013 0.3963	0.3836	0.3985	0.3823	0.4088	Ave		0.3951				2.6		15.0			
Bromomethane	0.1340 0.1484	0.1393	0.1381	0.1229	0.1534	Ave		0.1393				7.7		15.0			
Chloroethane	0.2365 0.2202	0.2232	0.2271	0.2108	0.2270	Ave		0.2241				3.8		15.0			
Dichlorofluoromethane	0.5040 0.4904	0.5039	0.4975	0.4540	0.5047	Ave		0.4924				4.0		15.0			
Trichlorofluoromethane	0.2480 0.2661	0.2535	0.2474	0.2379	0.2614	Ave		0.2524				4.1		15.0			
Ethyl ether	0.2476 0.2339	0.2449	0.2241	0.2370	0.2362	Ave		0.2373				3.5		15.0			
Acrolein	0.0273 0.0276	0.0269	0.0279	0.0278	0.0281	Ave		0.0276				1.5		15.0			
1,1-Dichloroethene	0.2949 0.3034	0.2936	0.2845	0.2901	0.3022	Ave		0.2948				2.4		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2043 0.2209	0.2241	0.2068	0.1967	0.2302	Ave		0.2139				6.1		15.0			
Acetone	0.1395 0.0726	0.1118	0.0878	0.0765	0.0741	Lin1	0.1478	0.0706							1.0000		0.9900
Iodomethane	0.4298 0.4393	0.4742	0.4386	0.4552	0.4550	Ave		0.4487				3.6		15.0			
Carbon disulfide	0.8263 0.9010	0.8422	0.8083	0.8576	0.9046	Ave		0.8567				4.6		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

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								
3-Chloro-1-propene	0.1554 0.1784	0.1576	0.1559	0.1742	0.1827	Ave		0.1674				7.4		15.0			
Methyl acetate	0.1618 0.1580	0.1598	0.1514	0.1507	0.1555	Ave		0.1562				2.9		15.0			
Methylene Chloride	0.4936 0.3132	0.4248	0.3449	0.3381	0.3268	Lin1	0.1973	0.3119							1.0000		0.9900
2-Methyl-2-propanol	0.0096 0.0085	0.0101	0.0097	0.0091	0.0098	Ave		0.0095				5.9		15.0			
Methyl tert-butyl ether	0.5514 0.5919	0.5838	0.5562	0.5860	0.5987	Ave		0.5780				3.4		15.0			
Acrylonitrile	0.0865 0.0883	0.0907	0.0851	0.0849	0.0870	Ave		0.0871				2.5		15.0			
trans-1,2-Dichloroethene	0.3240 0.3105	0.3275	0.3102	0.3200	0.3216	Ave		0.3190				2.2		15.0			
Hexane	0.0821 0.0795	0.0794	0.0711	0.0762	0.0800	Ave		0.0781				5.0		15.0			
1,1-Dichloroethane	0.5384 0.5434	0.5585	0.5285	0.5452	0.5510	Ave		0.5441			0.1000	1.9		15.0			
Vinyl acetate	0.3327 0.4085	0.3342	0.3408	0.3597	0.3885	Ave		0.3607				8.7		15.0			
2,2-Dichloropropane	0.1567 0.1717	0.1672	0.1652	0.1881	0.1921	Ave		0.1735				8.0		15.0			
cis-1,2-Dichloroethene	0.3493 0.3361	0.3547	0.3327	0.3418	0.3441	Ave		0.3431				2.4		15.0			
2-Butanone (MEK)	0.1156 0.0989	0.1075	0.0977	0.0935	0.0974	Ave		0.1018				8.1		15.0			
Chlorobromomethane	0.1540 0.1507	0.1555	0.1493	0.1527	0.1537	Ave		0.1527				1.5		15.0			
Tetrahydrofuran	0.0572 0.0606	0.0583	0.0537	0.0538	0.0574	Ave		0.0568				4.7		15.0			
Chloroform	0.5050 0.5062	0.5301	0.4888	0.5048	0.5160	Ave		0.5085				2.7		15.0			
1,1,1-Trichloroethane	0.2852 0.3173	0.3011	0.2949	0.3230	0.3345	Ave		0.3093				6.0		15.0			
Cyclohexane	0.5215 0.5527	0.5316	0.5133	0.5316	0.5628	Ave		0.5356				3.5		15.0			
1,1-Dichloropropene	0.4167 0.4309	0.4314	0.4054	0.4204	0.4364	Ave		0.4235				2.7		15.0			
Carbon tetrachloride	0.2299 0.2784	0.2395	0.2362	0.2634	0.2833	Ave		0.2551				9.0		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

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								
Isobutyl alcohol	0.0044 0.0049	0.0050	0.0049	0.0045	0.0052	Ave		0.0048				6.2		15.0			
Benzene	1.2947 1.3224	1.3476	1.2332	1.2686	1.3184	Ave		1.2975				3.2		15.0			
1,2-Dichloroethane	0.3772 0.3692	0.3872	0.3588	0.3580	0.3701	Ave		0.3701				3.0		15.0			
n-Heptane	0.0707 0.0754	0.0678	0.0671	0.0694	0.0748	Ave		0.0709				5.0		15.0			
Trichloroethene	0.3257 0.3255	0.3303	0.3132	0.3205	0.3298	Ave		0.3242				2.0		15.0			
Methylcyclohexane	0.4725 0.5041	0.4829	0.4609	0.4756	0.5114	Ave		0.4846				4.0		15.0			
1,2-Dichloropropane	0.2716 0.3011	0.2967	0.2760	0.2859	0.2981	Ave		0.2882				4.3		15.0			
Dibromomethane	0.1477 0.1578	0.1546	0.1476	0.1507	0.1554	Ave		0.1523				2.8		15.0			
1,4-Dioxane	0.0018 0.0020	0.0021	0.0022	0.0020	0.0024	Ave		0.0021				10.4		15.0			
Dichlorobromomethane	0.2755 0.3482	0.2939	0.2900	0.3099	0.3353	Ave		0.3088				9.1		15.0			
2-Chloroethyl vinyl ether	0.1285 0.1675	0.1385	0.1373	0.1440	0.1608	Ave		0.1461				10.3		15.0			
cis-1,3-Dichloropropene	0.2821 0.4251	0.3138	0.3239	0.3522	0.4012	Lin1	-0.207	0.4144							0.9960		0.9900
4-Methyl-2-pentanone (MIBK)	0.1559 0.1939	0.1659	0.1670	0.1782	0.1883	Ave		0.1749				8.3		15.0			
Toluene	1.8454 1.8440	1.8252	1.6979	1.7996	1.8461	Ave		1.8097				3.2		15.0			
trans-1,3-Dichloropropene	0.2726 0.4490	0.3002	0.3104	0.3649	0.4144	Lin1	-0.265	0.4348							0.9930		0.9900
Ethyl methacrylate	0.3014 0.4225	0.3234	0.3291	0.3763	0.4067	Ave		0.3599				13.7		15.0			
1,1,2-Trichloroethane	0.3188 0.3147	0.3102	0.2977	0.3101	0.3157	Ave		0.3112				2.4		15.0			
Tetrachloroethene	0.3611 0.3541	0.3544	0.3269	0.3481	0.3554	Ave		0.3500				3.4		15.0			
1,3-Dichloropropane	0.5883 0.5924	0.5978	0.5552	0.5681	0.5922	Ave		0.5823				2.9		15.0			
2-Hexanone	0.1386 0.1847	0.1470	0.1601	0.1648	0.1828	Ave		0.1630				11.4		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

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								
Chlorodibromomethane	0.2261 0.3274	0.2475	0.2505	0.2847	0.3137	Ave		0.2750				14.6		15.0			
Ethylene Dibromide	0.2774 0.3104	0.2927	0.2790	0.2998	0.3114	Ave		0.2951				5.0		15.0			
Chlorobenzene	1.1961 1.1713	1.1891	1.1210	1.1448	1.1639	Ave		1.1644			0.3000	2.4		15.0			
1,1,1,2-Tetrachloroethane	0.2725 0.3478	0.2873	0.2883	0.3111	0.3365	Ave		0.3072				9.7		15.0			
Ethylbenzene	0.6049 0.6363	0.6212	0.5904	0.6147	0.6332	Ave		0.6168				2.8		15.0			
m-Xylene & p-Xylene	1.5175 1.5637	1.5565	1.4594	1.5035	1.5590	Ave		1.5266				2.7		15.0			
o-Xylene	0.6940 0.7507	0.7369	0.7052	0.7149	0.7489	Ave		0.7251				3.3		15.0			
Styrene	1.0918 1.3099	1.2017	1.1803	1.2357	1.2846	Ave		1.2173				6.4		15.0			
Bromoform	0.1065 0.1710	0.1173	0.1240	0.1392	0.1569	Lin1	-0.095	0.1654			0.1000				0.9940		0.9900
Isopropylbenzene	1.6591 1.8007	1.7054	1.6662	1.6882	1.7718	Ave		1.7152				3.4		15.0			
1,1,2,2-Tetrachloroethane	0.7544 0.7783	0.7987	0.7374	0.7885	0.8054	Ave		0.7771			0.3000	3.4		15.0			
Bromobenzene	0.9784 1.0520	1.0763	0.9992	1.0201	1.0915	Ave		1.0362				4.3		15.0			
1,2,3-Trichloropropane	0.2309 0.2475	0.2509	0.2407	0.2509	0.2552	Ave		0.2460				3.6		15.0			
trans-1,4-Dichloro-2-butene	0.2006 0.2385	0.2147	0.2001	0.2165	0.2397	Ave		0.2183				8.0		15.0			
N-Propylbenzene	0.9622 1.0807	1.0815	1.0048	1.0306	1.1185	Ave		1.0464				5.5		15.0			
2-Chlorotoluene	0.8538 0.9207	0.9561	0.8891	0.9079	0.9420	Ave		0.9116				4.1		15.0			
1,3,5-Trimethylbenzene	2.8746 3.0704	2.9843	2.8406	2.9341	3.0812	Ave		2.9642				3.4		15.0			
4-Chlorotoluene	3.0370 3.1778	3.3117	3.0525	3.1150	3.2501	Ave		3.1573				3.5		15.0			
tert-Butylbenzene	2.2647 2.5252	2.3995	2.3043	2.3833	2.5293	Ave		2.4010				4.6		15.0			
1,2,4-Trimethylbenzene	3.0029 3.0543	3.0523	2.8941	2.9667	3.0688	Ave		3.0065				2.2		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 235700
SDG No.: _____
Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

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								
sec-Butylbenzene	3.0231 3.4048	3.2243	3.0768	3.1838	3.3627	Ave		3.2126				4.7		15.0			
1,3-Dichlorobenzene	1.7546 1.7099	1.7746	1.6796	1.7043	1.7149	Ave		1.7230				2.0		15.0			
4-Isopropyltoluene	2.5011 2.9007	2.6300	2.6148	2.7211	2.8304	Ave		2.6997				5.5		15.0			
1,4-Dichlorobenzene	1.8619 1.7322	1.8194	1.7077	1.7335	1.7343	Ave		1.7648				3.5		15.0			
n-Butylbenzene	2.0048 2.3308	2.0827	2.0417	2.1624	2.2859	Ave		2.1514				6.2		15.0			
1,2-Dichlorobenzene	1.6369 1.5498	1.6372	1.5209	1.5641	1.5550	Ave		1.5773				3.1		15.0			
1,2-Dibromo-3-Chloropropane	0.0713 0.0968	0.0775	0.0764	0.0877	0.0937	Ave		0.0839				12.3		15.0			
1,2,4-Trichlorobenzene	0.8718 0.7845	0.8230	0.8095	0.8148	0.8000	Ave		0.8173				3.6		15.0			
Hexachlorobutadiene	0.4286 0.3302	0.4026	0.3714	0.3683	0.3604	Ave		0.3769				9.1		15.0			
Naphthalene	1.6356 1.6877	1.6077	1.7526	1.8425	1.8273	Ave		1.7256				5.7		15.0			
1,2,3-Trichlorobenzene	0.7978 0.6410	0.7359	0.7435	0.7184	0.7003	Ave		0.7228				7.2		15.0			
Dibromofluoromethane (Surr)	0.2526 0.2636	0.2509	0.2605	0.2635	0.2693	Ave		0.2601				2.7		15.0			
1,2-Dichloroethane-d4 (Surr)	0.3324 0.3123	0.3098	0.3131	0.3078	0.3160	Ave		0.3152				2.8		15.0			
Toluene-d8 (Surr)	1.5529 1.5694	1.4893	1.5049	1.5498	1.5942	Ave		1.5434				2.6		15.0			
4-Bromofluorobenzene (Surr)	0.5282 0.5273	0.5194	0.5346	0.5225	0.5355	Ave		0.5279				1.2		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-235700/7	UXC9013.D
Level 2	STD8260 240-235700/6	UXC9012.D
Level 3	STD8260 240-235700/5	UXC9011.D
Level 4	STD8260 240-235700/4	UXC9010.D
Level 5	STD8260 240-235700/3	UXC9009.D
Level 6	STD8260 240-235700/2	UXC9008.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	55024 2229623	105410	274441	532159	1144735	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	86283 2911060	158822	391248	705860	1557494	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	72739 2801712	138092	353417	652249	1449866	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	66485 2645386	127624	332014	629347	1368063	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	22196 990656	46331	115029	202278	513329	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	39185 1469906	74250	189192	346989	759516	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	83499 3273615	167634	414459	747338	1688900	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	41091 1776192	84337	206100	391615	874639	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	41022 1560987	81466	186739	390126	790259	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	22626 920230	44766	116080	228895	469577	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	48857 2025255	97683	237007	477574	1011305	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	33852 1474637	74571	172263	323860	770507	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Lin1	46220 968716	74384	146250	251825	495657	2.00 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	71203 2932296	157756	365381	749391	1522711	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	136890 6013828	280189	673419	1411770	3027069	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	25745 1190613	52428	129902	286781	611371	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	134041 5273734	265861	630724	1240351	2602080	5.00 200	10.0	25.0	50.0	100
Methylene Chloride	FB	Lin1	81766 2090362	141323	287307	556561	1093604	1.00 40.0	2.00	5.00	10.0	20.0
2-Methyl-2-propanol	FB	Ave	15845 569469	33607	80496	150416	327915	10.0 400	20.0	50.0	100	200
Methyl tert-butyl ether	FB	Ave	91351 3950828	194215	463381	964687	2003662	1.00 40.0	2.00	5.00	10.0	20.0
Acrylonitrile	FB	Ave	143273 5891955	301718	708836	1397440	2912650	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	53675 2072600	108973	258409	526754	1076175	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	13602 530917	26430	59250	125426	267808	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	89192 3626879	185806	440269	897451	1843848	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	55121 2726750	111189	283912	592187	1300066	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	25956 1146332	55617	137623	309609	643010	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	57867 2243506	118007	277142	562656	1151518	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	38303 1320225	71513	162840	307817	652105	2.00 80.0	4.00	10.0	20.0	40.0
Chlorobromomethane	FB	Ave	25519 1006164	51721	124357	251373	514415	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	18942 808963	38759	89497	176986	384344	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	83655 3379090	176362	407237	830945	1726855	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	47244 2118032	100159	245712	531766	1119264	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	86402 3689554	176846	427675	875148	1883262	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	69032 2876108	143524	337773	691987	1460478	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	38089 1858266	79673	196757	433593	947908	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	FB	Ave	18236 825609	41883	102363	187203	433197	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	214485 8827192	448345	1027408	2088384	4412001	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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-Dichloroethane	FB	Ave	62483 2464628	128819	298918	589299	1238438	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	11712 503321	22548	55905	114259	250214	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	53963 2173004	109905	260945	527532	1103783	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	78279 3365087	160647	384006	782928	1711466	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	44995 2009871	98717	229954	470627	997682	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	24464 1053602	51449	122976	248098	520157	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Ave	5989 264593	13752	37134	65211	162465	20.0 800	40.0	100	200	400
Dichlorobromomethane	FB	Ave	45637 2324051	97780	241601	510131	1121948	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	42581 2235854	92131	228738	474045	1076012	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Lin1	46728 2837611	104387	269857	579810	1342445	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	51663 2588586	110394	278264	586618	1260528	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	225168 9433663	460534	1083109	2199736	4682291	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Lin1	33265 2297071	75746	197993	446038	1051127	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	36781 2161616	81602	209911	459965	1031531	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	38897 1609867	78276	189917	378998	800710	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	44067 1811657	89429	208541	425523	901375	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	71787 3030428	150849	354169	694381	1501894	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	33826 1890048	74175	204217	402888	927380	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	27591 1675183	62455	159774	348057	795696	1.00 40.0	2.00	5.00	10.0	20.0
Ethylene Dibromide	CBNZ d5	Ave	33852 1588091	73856	177983	366462	789894	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	145951 5992439	300027	715092	1399342	2951936	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	33248 1779319	72483	183911	380328	853371	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	73812 3255299	156737	376622	751339	1606039	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	185158 8000005	392735	930985	1837857	3953954	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	84676 3840557	185926	449885	873874	1899316	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	133220 6701573	303226	752906	1510454	3258210	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Lin1	12996 874881	29607	79115	170115	397885	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	202439 9212113	430308	1062899	2063573	4493773	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	41297 1734933	86262	209034	418050	861073	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	53560 2345213	116245	283235	540828	1166894	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	12643 551771	27103	68244	133008	272823	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	10981 531665	23186	56722	114770	256277	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	52678 2409177	116805	284834	546391	1195811	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	46742 2052357	103264	252046	481328	1007144	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	157371 6844634	322320	805236	1555545	3294165	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	166259 7084085	357682	865284	1651421	3474725	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	123979 5629272	259157	653200	1263523	2704111	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	164392 6808804	329665	820390	1572810	3280943	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	165502 7590052	348238	872177	1687895	3595143	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	96057 3811820	191662	476108	903522	1833479	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	136924 6466298	284055	741221	1442579	3026066	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	101928 3861573	196508	484088	919003	1854141	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 235700

SDG No.: _____

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34930

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	109753 5195979	224939	578770	1146393	2443899	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	89610 3454878	176829	431124	829198	1662485	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	3901 215853	8373	21663	46486	100207	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	47724 1748725	88892	229477	431994	855266	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	23461 736086	43488	105293	195239	385336	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	89542 3762350	173642	496820	976833	1953626	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	43674 1428988	79480	210753	380869	748657	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	41850 1759601	83478	217037	433724	901146	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	55060 2084284	103057	260866	506674	1057637	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	189479 8028858	375796	960001	1894355	4043434	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	64450 2697403	131047	341028	638664	1358117	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9008.D
 Lims ID: STD8260 L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 23-Jun-2016 12:01:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0055685-002
 Misc. Info.: C60623A-IC,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist: chrom-8260_15*sub72
 Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 24-Jun-2016 09:16:27 Calib Date: 23-Jun-2016 16:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: evansle

Date: 23-Jun-2016 12:35:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.134	5.134	0.000	99	1668746	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.814	7.814	0.000	86	1278985	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.043	10.044	-0.001	93	557308	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.589	4.589	0.000	95	1759601	40.0	40.5	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	0	2084284	40.0	39.6	
\$ 6 Toluene-d8 (Surr)	98	6.498	6.498	0.000	92	8028858	40.0	40.7	
\$ 7 4-Bromofluorobenzene (Surr	95	8.917	8.917	0.000	92	2697403	40.0	40.0	
9 Dichlorodifluoromethane	85	1.517	1.517	0.000	99	2229623	40.0	40.5	
10 Chloromethane	50	1.636	1.648	-0.012	99	2911060	40.0	37.4	
11 Vinyl chloride	62	1.743	1.743	-0.001	98	2801712	40.0	39.9	
12 Butadiene	54	1.766	1.766	0.000	98	2645386	40.0	40.1	
13 Bromomethane	94	2.015	2.027	-0.012	89	990656	40.0	42.6	
14 Chloroethane	64	2.098	2.110	-0.012	99	1469906	40.0	39.3	
15 Dichlorofluoromethane	67	2.264	2.276	-0.012	97	3273615	40.0	39.8	
16 Trichlorofluoromethane	101	2.300	2.300	0.000	98	1776192	40.0	42.2	
17 Ethyl ether	59	2.525	2.525	0.000	89	1560987	40.0	39.4	
18 Acrolein	56	2.656	2.656	0.000	100	920230	200.0	199.9	
20 1,1,2-Trichloro-1,2,2-trif	151	2.739	2.739	0.000	89	1474637	40.0	41.3	
19 1,1-Dichloroethene	96	2.727	2.739	-0.012	98	2025255	40.0	41.2	
22 Acetone	43	2.786	2.786	0.000	100	968716	80.0	80.1	
23 Iodomethane	142	2.869	2.869	0.000	97	2932296	40.0	39.2	
24 Carbon disulfide	76	2.928	2.929	-0.001	99	6013828	40.0	42.1	
25 3-Chloro-1-propene	76	3.035	3.035	0.000	93	1190613	40.0	42.6	
27 Methyl acetate	43	3.047	3.047	0.000	98	5273734	200.0	202.3	
28 Methylene Chloride	84	3.142	3.142	0.000	92	2090362	40.0	39.5	
29 2-Methyl-2-propanol	59	3.225	3.225	0.000	87	569469	400.0	360.5	
31 Methyl tert-butyl ether	73	3.343	3.344	-0.001	95	3950828	40.0	41.0	
30 trans-1,2-Dichloroethene	96	3.355	3.355	0.000	67	2072600	40.0	38.9	
32 Acrylonitrile	53	3.355	3.355	0.000	99	5891955	400.0	405.5	
33 Hexane	86	3.557	3.557	0.000	91	530917	40.0	40.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.711	3.711	0.000	96	3626879	40.0	39.9	
36 Vinyl acetate	43	3.735	3.735	0.000	97	2726750	40.0	45.3	
39 cis-1,2-Dichloroethene	96	4.185	4.186	-0.001	82	2243506	40.0	39.2	
40 2,2-Dichloropropane	77	4.185	4.186	-0.001	61	1146332	40.0	39.6	
41 2-Butanone (MEK)	43	4.197	4.197	0.000	99	1320225	80.0	77.7	
45 Chlorobromomethane	128	4.387	4.399	-0.012	94	1006164	40.0	39.5	
46 Tetrahydrofuran	42	4.423	4.423	0.000	88	808963	80.0	85.3	
47 Chloroform	83	4.446	4.446	0.000	92	3379090	40.0	39.8	
48 1,1,1-Trichloroethane	97	4.600	4.601	-0.001	98	2118032	40.0	41.0	
49 Cyclohexane	56	4.636	4.636	0.000	89	3689554	40.0	41.3	
51 1,1-Dichloropropene	75	4.731	4.731	0.000	96	2876108	40.0	40.7	
50 Carbon tetrachloride	117	4.731	4.731	0.000	73	1858266	40.0	43.7	
52 Isobutyl alcohol	41	4.814	4.814	0.000	95	825609	1000.0	1022.6	
53 Benzene	78	4.909	4.909	0.000	94	8827192	40.0	40.8	
54 1,2-Dichloroethane	62	4.932	4.933	-0.001	97	2464628	40.0	39.9	
56 n-Heptane	100	5.087	5.087	0.000	92	503321	40.0	42.6	
58 Trichloroethene	130	5.442	5.443	-0.001	98	2173004	40.0	40.2	
60 Methylcyclohexane	83	5.597	5.597	0.000	88	3365087	40.0	41.6	
61 1,2-Dichloropropane	63	5.644	5.644	0.000	97	2009871	40.0	41.8	
63 Dibromomethane	93	5.751	5.751	0.000	93	1053602	40.0	41.5	
64 1,4-Dioxane	88	5.751	5.763	-0.012	39	264593	800.0	761.5	
65 Dichlorobromomethane	83	5.881	5.881	0.000	100	2324051	40.0	45.1	
67 2-Chloroethyl vinyl ether	63	6.118	6.118	0.000	91	2235854	80.0	91.7	
68 cis-1,3-Dichloropropene	75	6.261	6.261	0.000	96	2837611	40.0	41.5	
69 4-Methyl-2-pentanone (MIBK)	43	6.391	6.391	0.000	96	2588586	80.0	88.7	
70 Toluene	91	6.557	6.557	0.000	98	9433663	40.0	40.8	
71 trans-1,3-Dichloropropene	75	6.747	6.747	0.000	92	2297071	40.0	41.9	
72 Ethyl methacrylate	69	6.806	6.806	0.000	89	2161616	40.0	47.0	
73 1,1,2-Trichloroethane	97	6.925	6.925	0.000	90	1609867	40.0	40.4	
74 Tetrachloroethene	164	7.031	7.032	-0.001	97	1811657	40.0	40.5	
75 1,3-Dichloropropane	76	7.079	7.079	0.000	89	3030428	40.0	40.7	
76 2-Hexanone	43	7.138	7.138	0.000	96	1890048	80.0	90.7	
79 Chlorodibromomethane	129	7.280	7.281	-0.001	90	1675183	40.0	47.6	
80 Ethylene Dibromide	107	7.399	7.399	0.000	98	1588091	40.0	42.1	
82 Chlorobenzene	112	7.838	7.838	0.000	96	5992439	40.0	40.2	
83 1,1,1,2-Tetrachloroethane	131	7.909	7.909	0.000	94	1779319	40.0	45.3	
84 Ethylbenzene	106	7.921	7.921	0.000	98	3255299	40.0	41.3	
85 m-Xylene & p-Xylene	91	8.028	8.028	0.000	92	8000005	40.0	41.0	
86 o-Xylene	106	8.407	8.407	0.000	97	3840557	40.0	41.4	
87 Styrene	104	8.431	8.431	0.000	96	6701573	40.0	43.0	
88 Bromoform	173	8.620	8.621	-0.001	99	874881	40.0	41.9	
89 Isopropylbenzene	105	8.763	8.763	0.000	95	9212113	40.0	42.0	
93 1,1,2,2-Tetrachloroethane	83	9.059	9.059	0.000	94	1734933	40.0	40.1	
92 Bromobenzene	156	9.071	9.071	0.000	94	2345213	40.0	40.6	
94 1,2,3-Trichloropropane	110	9.119	9.107	0.011	82	551771	40.0	40.2	
95 trans-1,4-Dichloro-2-buten	53	9.119	9.119	-0.001	69	531665	40.0	43.7	
96 N-Propylbenzene	120	9.154	9.154	0.000	98	2409177	40.0	41.3	
97 2-Chlorotoluene	126	9.249	9.249	0.000	99	2052357	40.0	40.4	
98 1,3,5-Trimethylbenzene	105	9.320	9.320	0.000	93	6844634	40.0	41.4	
99 4-Chlorotoluene	91	9.356	9.356	0.000	97	7084085	40.0	40.3	
101 tert-Butylbenzene	119	9.640	9.640	0.000	92	5629272	40.0	42.1	
103 1,2,4-Trimethylbenzene	105	9.688	9.688	0.000	95	6808804	40.0	40.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.854	9.854	0.000	94	7590052	40.0	42.4	
106 1,3-Dichlorobenzene	146	9.984	9.984	0.000	99	3811820	40.0	39.7	
107 4-Isopropyltoluene	119	9.996	9.996	0.000	97	6466298	40.0	43.0	
108 1,4-Dichlorobenzene	146	10.067	10.067	0.000	96	3861573	40.0	39.3	
111 n-Butylbenzene	91	10.399	10.399	0.000	97	5195979	40.0	43.3	
112 1,2-Dichlorobenzene	146	10.447	10.447	0.000	99	3454878	40.0	39.3	
113 1,2-Dibromo-3-Chloropropan	157	11.229	11.229	0.000	88	215853	40.0	46.2	
115 1,2,4-Trichlorobenzene	180	12.036	12.036	0.000	93	1748725	40.0	38.4	
116 Hexachlorobutadiene	225	12.190	12.190	0.000	95	736086	40.0	35.0	
117 Naphthalene	128	12.285	12.285	0.000	97	3762350	40.0	39.1	
118 1,2,3-Trichlorobenzene	180	12.534	12.534	0.000	96	1428988	40.0	35.5	
S 127 1,2-Dichloroethene, Total	96				0			78.1	
S 128 1,3-Dichloropropene, Total	75				0			83.5	
S 129 Xylenes, Total	106				0		80.0	82.4	
S 130 Trihalomethanes, Total	1				0		160.0	174.5	

Reagents:

vm50ss_stk_00069	Amount Added: 32.00	Units: uL
VM50IS_00055	Amount Added: 1.00	Units: uL
VMRPRIMW_00191	Amount Added: 32.00	Units: uL
VMRGAS_00158	Amount Added: 32.00	Units: uL
VMAROLISTDW_00153	Amount Added: 32.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9008.D

Injection Date: 23-Jun-2016 12:01:30

Instrument ID: A3UX15

Lims ID: STD8260 L6

Client ID:

Operator ID:

Worklist Smp#: 2

Purge Vol: 5.000 mL

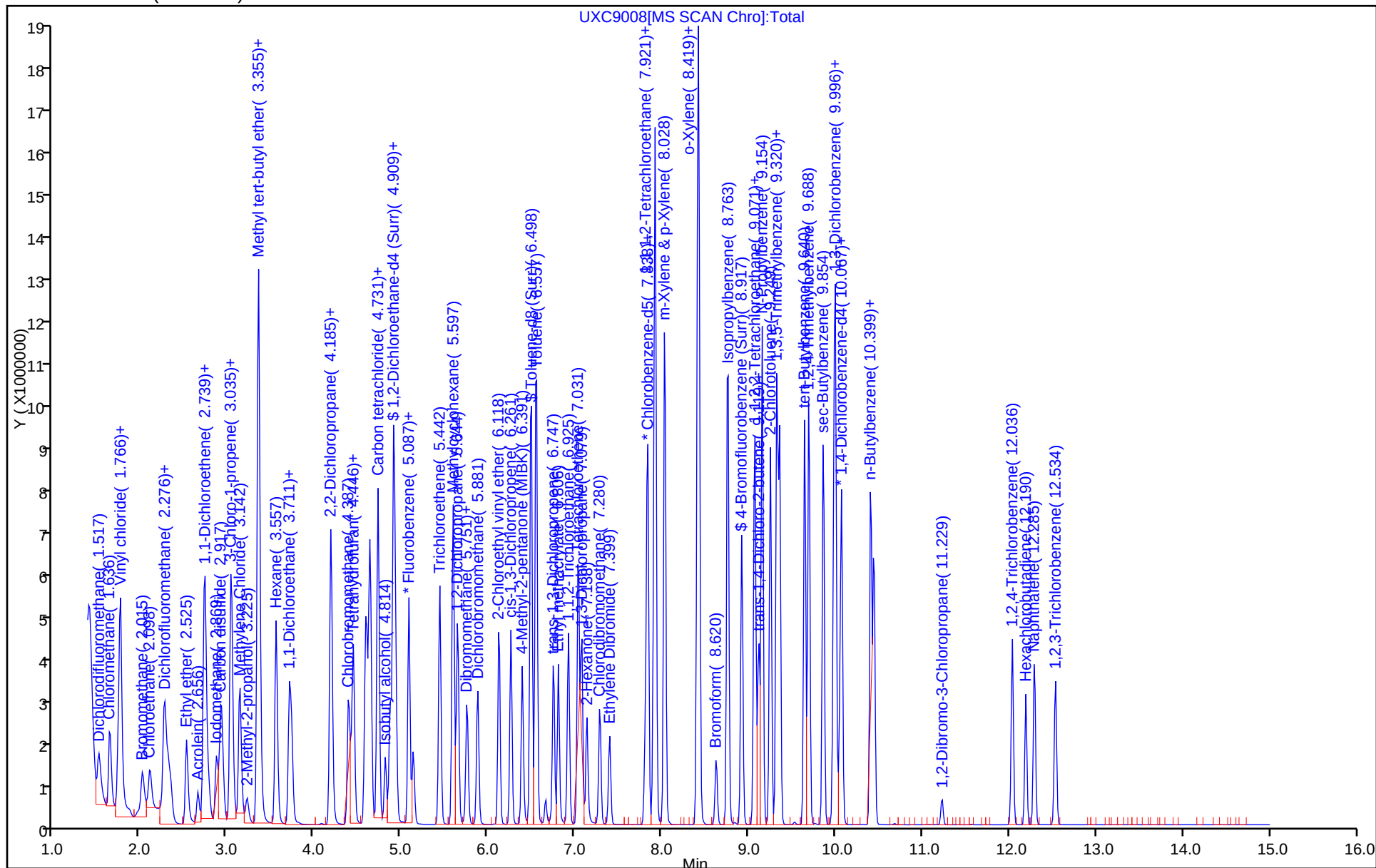
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9009.D
 Lims ID: STD8260 L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 23-Jun-2016 12:23:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0055685-003
 Misc. Info.: C60623A-IC,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist: chrom-8260_15*sub72
 Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 24-Jun-2016 09:16:30 Calib Date: 23-Jun-2016 16:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: evansle

Date: 23-Jun-2016 12:53:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.134	5.134	0.000	99	1673213	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.814	7.814	0.000	87	1268134	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.044	10.044	0.000	93	534559	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.589	4.589	0.000	95	901146	20.0	20.7	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	0	1057637	20.0	20.1	
\$ 6 Toluene-d8 (Surr)	98	6.498	6.498	0.000	93	4043434	20.0	20.7	
\$ 7 4-Bromofluorobenzene (Surr	95	8.917	8.917	0.000	92	1358117	20.0	20.3	
9 Dichlorodifluoromethane	85	1.517	1.517	0.000	99	1144735	20.0	20.8	
10 Chloromethane	50	1.636	1.648	-0.012	99	1557494	20.0	20.0	
11 Vinyl chloride	62	1.743	1.743	0.000	98	1449866	20.0	20.6	
12 Butadiene	54	1.766	1.766	0.000	97	1368063	20.0	20.7	
13 Bromomethane	94	2.015	2.027	-0.012	89	513329	20.0	22.0	
14 Chloroethane	64	2.098	2.110	-0.012	99	759516	20.0	20.3	
15 Dichlorofluoromethane	67	2.264	2.276	-0.012	97	1688900	20.0	20.5	
16 Trichlorofluoromethane	101	2.300	2.300	0.000	99	874639	20.0	20.7	
17 Ethyl ether	59	2.525	2.525	0.000	90	790259	20.0	19.9	
18 Acrolein	56	2.656	2.656	0.000	99	469577	100.0	101.7	
20 1,1,2-Trichloro-1,2,2-trif	151	2.739	2.739	0.000	90	770507	20.0	21.5	
19 1,1-Dichloroethene	96	2.727	2.739	-0.012	98	1011305	20.0	20.5	
22 Acetone	43	2.786	2.786	0.000	100	495657	40.0	39.9	
23 Iodomethane	142	2.869	2.869	0.000	97	1522711	20.0	20.3	
24 Carbon disulfide	76	2.928	2.929	-0.001	99	3027069	20.0	21.1	
25 3-Chloro-1-propene	76	3.035	3.035	0.000	92	611371	20.0	21.8	
27 Methyl acetate	43	3.047	3.047	0.000	97	2602080	100.0	99.6	
28 Methylene Chloride	84	3.142	3.142	0.000	92	1093604	20.0	20.3	
29 2-Methyl-2-propanol	59	3.225	3.225	0.000	86	327915	200.0	207.0	
31 Methyl tert-butyl ether	73	3.344	3.344	0.000	95	2003662	20.0	20.7	
30 trans-1,2-Dichloroethene	96	3.355	3.355	0.000	70	1076175	20.0	20.2	
32 Acrylonitrile	53	3.355	3.355	0.000	99	2912650	200.0	199.9	
33 Hexane	86	3.557	3.557	0.000	91	267808	20.0	20.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.711	3.711	0.000	96	1843848	20.0	20.3	
36 Vinyl acetate	43	3.735	3.735	0.000	97	1300066	20.0	21.5	
39 cis-1,2-Dichloroethene	96	4.185	4.186	-0.001	81	1151518	20.0	20.1	
40 2,2-Dichloropropane	77	4.185	4.186	-0.001	54	643010	20.0	22.1	
41 2-Butanone (MEK)	43	4.197	4.197	0.000	99	652105	40.0	38.3	
45 Chlorobromomethane	128	4.387	4.399	-0.012	94	514415	20.0	20.1	
46 Tetrahydrofuran	42	4.423	4.423	0.000	88	384344	40.0	40.4	
47 Chloroform	83	4.446	4.446	0.000	92	1726855	20.0	20.3	
48 1,1,1-Trichloroethane	97	4.601	4.601	0.000	98	1119264	20.0	21.6	
49 Cyclohexane	56	4.636	4.636	0.000	89	1883262	20.0	21.0	
51 1,1-Dichloropropene	75	4.731	4.731	0.000	97	1460478	20.0	20.6	
50 Carbon tetrachloride	117	4.731	4.731	0.000	73	947908	20.0	22.2	
52 Isobutyl alcohol	41	4.814	4.814	0.000	93	433197	500.0	535.1	
53 Benzene	78	4.909	4.909	0.000	95	4412001	20.0	20.3	
54 1,2-Dichloroethane	62	4.933	4.933	0.000	97	1238438	20.0	20.0	
56 n-Heptane	100	5.087	5.087	0.000	93	250214	20.0	21.1	
58 Trichloroethene	130	5.442	5.443	-0.001	98	1103783	20.0	20.3	
60 Methylcyclohexane	83	5.597	5.597	0.000	88	1711466	20.0	21.1	
61 1,2-Dichloropropane	63	5.644	5.644	0.000	97	997682	20.0	20.7	
63 Dibromomethane	93	5.751	5.751	0.000	94	520157	20.0	20.4	
64 1,4-Dioxane	88	5.751	5.763	-0.012	41	162465	400.0	466.3	
65 Dichlorobromomethane	83	5.881	5.881	0.000	100	1121948	20.0	21.7	
67 2-Chloroethyl vinyl ether	63	6.118	6.118	0.000	91	1076012	40.0	44.0	
68 cis-1,3-Dichloropropene	75	6.261	6.261	0.000	96	1342445	20.0	19.9	
69 4-Methyl-2-pentanone (MIBK)	43	6.391	6.391	0.000	96	1260528	40.0	43.1	
70 Toluene	91	6.557	6.557	0.000	98	4682291	20.0	20.4	
71 trans-1,3-Dichloropropene	75	6.747	6.747	0.000	92	1051127	20.0	19.7	
72 Ethyl methacrylate	69	6.806	6.806	0.000	89	1031531	20.0	22.6	
73 1,1,2-Trichloroethane	97	6.925	6.925	0.000	90	800710	20.0	20.3	
74 Tetrachloroethene	164	7.032	7.032	0.000	97	901375	20.0	20.3	
75 1,3-Dichloropropane	76	7.079	7.079	0.000	89	1501894	20.0	20.3	
76 2-Hexanone	43	7.138	7.138	0.000	96	927380	40.0	44.9	
79 Chlorodibromomethane	129	7.281	7.281	0.000	90	795696	20.0	22.8	
80 Ethylene Dibromide	107	7.399	7.399	0.000	99	789894	20.0	21.1	
82 Chlorobenzene	112	7.838	7.838	0.000	95	2951936	20.0	20.0	
83 1,1,1,2-Tetrachloroethane	131	7.909	7.909	0.000	94	853371	20.0	21.9	
84 Ethylbenzene	106	7.921	7.921	0.000	98	1606039	20.0	20.5	
85 m-Xylene & p-Xylene	91	8.028	8.028	0.000	92	3953954	20.0	20.4	
86 o-Xylene	106	8.407	8.407	0.000	96	1899316	20.0	20.7	
87 Styrene	104	8.431	8.431	0.000	95	3258210	20.0	21.1	
88 Bromoform	173	8.621	8.621	0.000	99	397885	20.0	19.5	
89 Isopropylbenzene	105	8.763	8.763	0.000	95	4493773	20.0	20.7	
93 1,1,2,2-Tetrachloroethane	83	9.059	9.059	0.000	94	861073	20.0	20.7	
92 Bromobenzene	156	9.071	9.071	0.000	93	1166894	20.0	21.1	
94 1,2,3-Trichloropropane	110	9.107	9.107	0.000	83	272823	20.0	20.7	
95 trans-1,4-Dichloro-2-buten	53	9.119	9.119	0.000	68	256277	20.0	22.0	
96 N-Propylbenzene	120	9.154	9.154	0.000	98	1195811	20.0	21.4	
97 2-Chlorotoluene	126	9.249	9.249	0.000	99	1007144	20.0	20.7	
98 1,3,5-Trimethylbenzene	105	9.320	9.320	0.000	93	3294165	20.0	20.8	
99 4-Chlorotoluene	91	9.356	9.356	0.000	97	3474725	20.0	20.6	
101 tert-Butylbenzene	119	9.640	9.640	0.000	92	2704111	20.0	21.1	
103 1,2,4-Trimethylbenzene	105	9.688	9.688	0.000	94	3280943	20.0	20.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.854	9.854	0.000	94	3595143	20.0	20.9	
106 1,3-Dichlorobenzene	146	9.984	9.984	0.000	99	1833479	20.0	19.9	
107 4-Isopropyltoluene	119	9.996	9.996	0.000	97	3026066	20.0	21.0	
108 1,4-Dichlorobenzene	146	10.067	10.067	0.000	95	1854141	20.0	19.7	
111 n-Butylbenzene	91	10.399	10.399	0.000	97	2443899	20.0	21.3	
112 1,2-Dichlorobenzene	146	10.447	10.447	0.000	99	1662485	20.0	19.7	
113 1,2-Dibromo-3-Chloropropan	157	11.229	11.229	0.000	87	100207	20.0	22.3	
115 1,2,4-Trichlorobenzene	180	12.036	12.036	0.000	94	855266	20.0	19.6	
116 Hexachlorobutadiene	225	12.190	12.190	0.000	94	385336	20.0	19.1	
117 Naphthalene	128	12.285	12.285	0.000	97	1953626	20.0	21.2	
118 1,2,3-Trichlorobenzene	180	12.534	12.534	0.000	96	748657	20.0	19.4	
S 127 1,2-Dichloroethene, Total	96				0			40.2	
S 128 1,3-Dichloropropene, Total	75				0			39.5	
S 129 Xylenes, Total	106				0		40.0	41.1	
S 130 Trihalomethanes, Total	1				0		80.0	84.4	

Reagents:

vm50ss_stk_00069	Amount Added: 16.00	Units: uL
VM50IS_00055	Amount Added: 1.00	Units: uL
VMRPRIMW_00191	Amount Added: 16.00	Units: uL
VMRGAS_00158	Amount Added: 16.00	Units: uL
VMAROLISTDW_00153	Amount Added: 16.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9009.D

Injection Date: 23-Jun-2016 12:23:30

Instrument ID: A3UX15

Lims ID: STD8260 L5

Client ID:

Operator ID:

Worklist Smp#: 3

Purge Vol: 5.000 mL

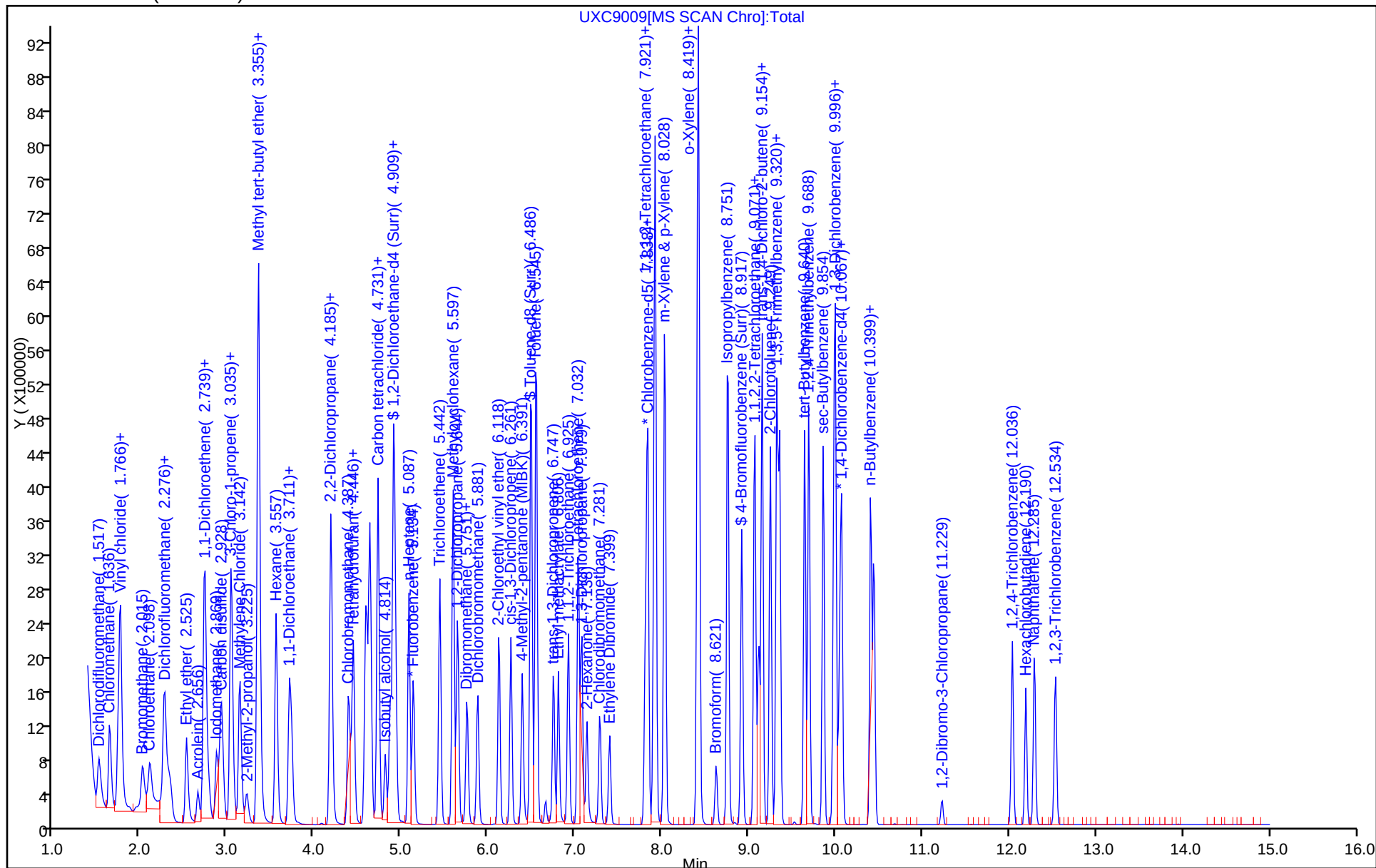
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9010.D
 Lims ID: STD8260 L4
 Client ID:
 Sample Type: ICIS Calib Level: 4
 Inject. Date: 23-Jun-2016 12:46:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0055685-004
 Misc. Info.: C60623A-IC,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist: chrom-8260_15*sub72
 Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 24-Jun-2016 09:16:32 Calib Date: 23-Jun-2016 16:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: evansle

Date: 23-Jun-2016 13:26:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.134	5.134	0.000	99	1646184	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.814	7.814	0.000	92	1222360	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.044	10.044	0.000	95	530154	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.589	4.589	0.000	95	433724	10.0	10.1	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	0	506674	10.0	9.76	
\$ 6 Toluene-d8 (Surr)	98	6.498	6.498	0.000	92	1894355	10.0	10.0	
\$ 7 4-Bromofluorobenzene (Surr	95	8.917	8.917	0.000	92	638664	10.0	9.90	
9 Dichlorodifluoromethane	85	1.517	1.517	0.000	99	532159	10.0	9.81	
10 Chloromethane	50	1.648	1.648	0.000	99	705860	10.0	9.19	
11 Vinyl chloride	62	1.743	1.743	0.000	98	652249	10.0	9.41	
12 Butadiene	54	1.766	1.766	0.000	97	629347	10.0	9.68	
13 Bromomethane	94	2.027	2.027	0.000	89	202278	10.0	8.82	
14 Chloroethane	64	2.110	2.110	0.000	99	346989	10.0	9.40	
15 Dichlorofluoromethane	67	2.276	2.276	0.000	97	747338	10.0	9.22	
16 Trichlorofluoromethane	101	2.300	2.300	0.000	98	391615	10.0	9.43	
17 Ethyl ether	59	2.525	2.525	0.000	90	390126	10.0	9.99	
18 Acrolein	56	2.656	2.656	0.000	100	228895	50.0	50.4	
20 1,1,2-Trichloro-1,2,2-trif	151	2.739	2.739	0.000	90	323860	10.0	9.20	
19 1,1-Dichloroethene	96	2.739	2.739	0.000	98	477574	10.0	9.84	
22 Acetone	43	2.786	2.786	0.000	100	251825	20.0	19.6	
23 Iodomethane	142	2.869	2.869	0.000	97	749391	10.0	10.1	
24 Carbon disulfide	76	2.929	2.929	0.000	99	1411770	10.0	10.0	
25 3-Chloro-1-propene	76	3.035	3.035	0.000	92	286781	10.0	10.4	
27 Methyl acetate	43	3.047	3.047	0.000	97	1240351	50.0	48.2	
28 Methylene Chloride	84	3.142	3.142	0.000	92	556561	10.0	10.2	
29 2-Methyl-2-propanol	59	3.225	3.225	0.000	86	150416	100.0	96.5	
31 Methyl tert-butyl ether	73	3.344	3.344	0.000	95	964687	10.0	10.1	
30 trans-1,2-Dichloroethene	96	3.355	3.355	0.000	72	526754	10.0	10.0	
32 Acrylonitrile	53	3.355	3.355	0.000	99	1397440	100.0	97.5	
33 Hexane	86	3.557	3.557	0.000	92	125426	10.0	9.76	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.711	3.711	0.000	96	897451	10.0	10.0	
36 Vinyl acetate	43	3.735	3.735	0.000	97	592187	10.0	9.97	
39 cis-1,2-Dichloroethene	96	4.186	4.186	0.000	80	562656	10.0	9.96	
40 2,2-Dichloropropane	77	4.186	4.186	0.000	80	309609	10.0	10.8	
41 2-Butanone (MEK)	43	4.197	4.197	0.000	100	307817	20.0	18.4	
45 Chlorobromomethane	128	4.399	4.399	0.000	93	251373	10.0	10.0	
46 Tetrahydrofuran	42	4.423	4.423	0.000	86	176986	20.0	18.9	
47 Chloroform	83	4.446	4.446	0.000	92	830945	10.0	9.93	
48 1,1,1-Trichloroethane	97	4.601	4.601	0.000	99	531766	10.0	10.4	
49 Cyclohexane	56	4.636	4.636	0.000	89	875148	10.0	9.93	
51 1,1-Dichloropropene	75	4.731	4.731	0.000	97	691987	10.0	9.93	
50 Carbon tetrachloride	117	4.731	4.731	0.000	71	433593	10.0	10.3	
52 Isobutyl alcohol	41	4.814	4.814	0.000	94	187203	250.0	235.1	
53 Benzene	78	4.909	4.909	0.000	95	2088384	10.0	9.78	
54 1,2-Dichloroethane	62	4.933	4.933	0.000	97	589299	10.0	9.67	
56 n-Heptane	100	5.087	5.087	0.000	92	114259	10.0	9.80	
58 Trichloroethene	130	5.443	5.443	0.000	97	527532	10.0	9.88	
60 Methylcyclohexane	83	5.597	5.597	0.000	88	782928	10.0	9.81	
61 1,2-Dichloropropane	63	5.644	5.644	0.000	97	470627	10.0	9.92	
63 Dibromomethane	93	5.751	5.751	0.000	93	248098	10.0	9.89	
64 1,4-Dioxane	88	5.763	5.763	0.000	37	65211	200.0	190.3	
65 Dichlorobromomethane	83	5.881	5.881	0.000	100	510131	10.0	10.0	
67 2-Chloroethyl vinyl ether	63	6.118	6.118	0.000	91	474045	20.0	19.7	
68 cis-1,3-Dichloropropene	75	6.261	6.261	0.000	96	579810	10.0	9.00	
69 4-Methyl-2-pentanone (MIBK)	43	6.391	6.391	0.000	96	586618	20.0	20.4	
70 Toluene	91	6.557	6.557	0.000	98	2199736	10.0	9.94	
71 trans-1,3-Dichloropropene	75	6.747	6.747	0.000	94	446038	10.0	9.00	
72 Ethyl methacrylate	69	6.806	6.806	0.000	89	459965	10.0	10.5	
73 1,1,2-Trichloroethane	97	6.925	6.925	0.000	90	378998	10.0	9.96	
74 Tetrachloroethene	164	7.032	7.032	0.000	97	425523	10.0	9.95	
75 1,3-Dichloropropane	76	7.079	7.079	0.000	89	694381	10.0	9.76	
76 2-Hexanone	43	7.138	7.138	0.000	95	402888	20.0	20.2	
79 Chlorodibromomethane	129	7.281	7.281	0.000	90	348057	10.0	10.4	
80 Ethylene Dibromide	107	7.399	7.399	0.000	98	366462	10.0	10.2	
82 Chlorobenzene	112	7.838	7.838	0.000	95	1399342	10.0	9.83	
83 1,1,1,2-Tetrachloroethane	131	7.909	7.909	0.000	93	380328	10.0	10.1	
84 Ethylbenzene	106	7.921	7.921	0.000	98	751339	10.0	9.97	
85 m-Xylene & p-Xylene	91	8.028	8.028	0.000	93	1837857	10.0	9.85	
86 o-Xylene	106	8.407	8.407	0.000	97	873874	10.0	9.86	
87 Styrene	104	8.431	8.431	0.000	95	1510454	10.0	10.2	
88 Bromoform	173	8.621	8.621	0.000	98	170115	10.0	8.99	
89 Isopropylbenzene	105	8.763	8.763	0.000	95	2063573	10.0	9.84	
93 1,1,2,2-Tetrachloroethane	83	9.059	9.059	0.000	94	418050	10.0	10.1	
92 Bromobenzene	156	9.071	9.071	0.000	93	540828	10.0	9.84	
94 1,2,3-Trichloropropane	110	9.107	9.107	0.000	86	133008	10.0	10.2	
95 trans-1,4-Dichloro-2-buten	53	9.119	9.119	0.000	72	114770	10.0	9.91	
96 N-Propylbenzene	120	9.154	9.154	0.000	98	546391	10.0	9.85	
97 2-Chlorotoluene	126	9.249	9.249	0.000	98	481328	10.0	9.96	
98 1,3,5-Trimethylbenzene	105	9.320	9.320	0.000	95	1555545	10.0	9.90	
99 4-Chlorotoluene	91	9.356	9.356	0.000	97	1651421	10.0	9.87	
101 tert-Butylbenzene	119	9.640	9.640	0.000	93	1263523	10.0	9.93	
103 1,2,4-Trimethylbenzene	105	9.688	9.688	0.000	94	1572810	10.0	9.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.854	9.854	0.000	94	1687895	10.0	9.91	
106 1,3-Dichlorobenzene	146	9.984	9.984	0.000	98	903522	10.0	9.89	
107 4-Isopropyltoluene	119	9.996	9.996	0.000	97	1442579	10.0	10.1	
108 1,4-Dichlorobenzene	146	10.067	10.067	0.000	96	919003	10.0	9.82	
111 n-Butylbenzene	91	10.399	10.399	0.000	97	1146393	10.0	10.1	
112 1,2-Dichlorobenzene	146	10.447	10.447	0.000	99	829198	10.0	9.92	
113 1,2-Dibromo-3-Chloropropan	157	11.229	11.229	0.000	84	46486	10.0	10.5	
115 1,2,4-Trichlorobenzene	180	12.036	12.036	0.000	94	431994	10.0	9.97	
116 Hexachlorobutadiene	225	12.190	12.190	0.000	94	195239	10.0	9.77	
117 Naphthalene	128	12.285	12.285	0.000	97	976833	10.0	10.7	
118 1,2,3-Trichlorobenzene	180	12.534	12.534	0.000	96	380869	10.0	9.94	
S 129 Xylenes, Total	106				0		20.0	19.7	
S 130 Trihalomethanes, Total	1				0		40.0	39.3	

Reagents:

vm50ss_stk_00069	Amount Added: 8.00	Units: uL
VM50IS_00055	Amount Added: 1.00	Units: uL
VMRPRIMW_00191	Amount Added: 8.00	Units: uL
VMRGAS_00158	Amount Added: 8.00	Units: uL
VMAROLISTDW_00153	Amount Added: 8.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9010.D

Injection Date: 23-Jun-2016 12:46:30

Instrument ID: A3UX15

Lims ID: STD8260 L4

Client ID:

Operator ID:

Worklist Smp#: 4

Purge Vol: 5.000 mL

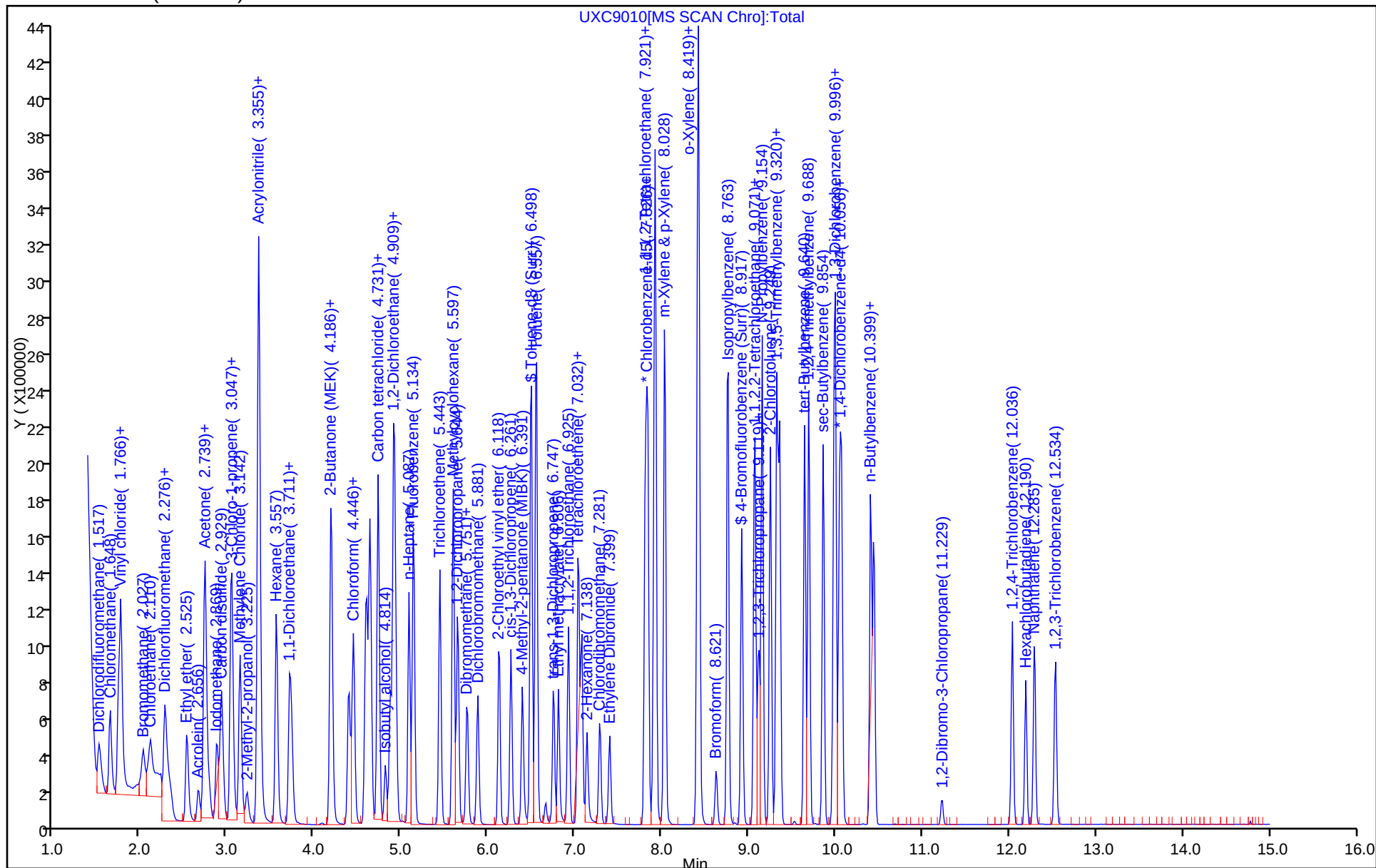
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9011.D
 Lims ID: STD8260 L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 23-Jun-2016 13:08:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0055685-005
 Misc. Info.: C60623A-IC,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist: chrom-8260_15*sub72
 Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 24-Jun-2016 09:16:38 Calib Date: 23-Jun-2016 16:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: evansle

Date: 23-Jun-2016 13:43:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.134	5.134	0.000	99	1666252	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.814	7.814	0.000	92	1275821	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.043	10.044	-0.001	95	566938	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.589	4.589	0.000	95	217037	5.00	5.01	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	0	260866	5.00	4.97	
\$ 6 Toluene-d8 (Surr)	98	6.498	6.498	0.000	93	960001	5.00	4.88	
\$ 7 4-Bromofluorobenzene (Surr	95	8.917	8.917	0.000	91	341028	5.00	5.06	
9 Dichlorodifluoromethane	85	1.517	1.517	0.000	99	274441	5.00	5.00	
10 Chloromethane	50	1.636	1.648	-0.012	99	391248	5.00	5.03	
11 Vinyl chloride	62	1.743	1.743	0.000	98	353417	5.00	5.03	
12 Butadiene	54	1.766	1.766	0.000	96	332014	5.00	5.04	
13 Bromomethane	94	2.015	2.027	-0.012	90	115029	5.00	4.95	
14 Chloroethane	64	2.110	2.110	0.000	99	189192	5.00	5.07	
15 Dichlorofluoromethane	67	2.264	2.276	-0.012	97	414459	5.00	5.05	
16 Trichlorofluoromethane	101	2.300	2.300	0.000	98	206100	5.00	4.90	
17 Ethyl ether	59	2.525	2.525	0.000	90	186739	5.00	4.72	
18 Acrolein	56	2.656	2.656	0.000	99	116080	25.0	25.3	
20 1,1,2-Trichloro-1,2,2-trif	151	2.739	2.739	0.000	73	172263	5.00	4.83	
19 1,1-Dichloroethene	96	2.739	2.739	0.000	97	237007	5.00	4.83	
22 Acetone	43	2.786	2.786	0.000	100	146250	10.0	10.3	
23 Iodomethane	142	2.869	2.869	0.000	97	365381	5.00	4.89	
24 Carbon disulfide	76	2.928	2.929	-0.001	99	673419	5.00	4.72	
25 3-Chloro-1-propene	76	3.035	3.035	0.000	92	129902	5.00	4.66	
27 Methyl acetate	43	3.047	3.047	0.000	98	630724	25.0	24.2	
28 Methylene Chloride	84	3.142	3.142	0.000	92	287307	5.00	4.90	
29 2-Methyl-2-propanol	59	3.225	3.225	0.000	86	80496	50.0	51.0	
31 Methyl tert-butyl ether	73	3.343	3.344	-0.001	94	463381	5.00	4.81	
30 trans-1,2-Dichloroethene	96	3.355	3.355	0.000	69	258409	5.00	4.86	
32 Acrylonitrile	53	3.355	3.355	0.000	100	708836	50.0	48.9	
33 Hexane	86	3.557	3.557	0.000	93	59250	5.00	4.55	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.711	3.711	0.000	96	440269	5.00	4.86	
36 Vinyl acetate	43	3.735	3.735	0.000	97	283912	5.00	4.72	
39 cis-1,2-Dichloroethene	96	4.185	4.186	-0.001	81	277142	5.00	4.85	
40 2,2-Dichloropropane	77	4.185	4.186	-0.001	78	137623	5.00	4.76	
41 2-Butanone (MEK)	43	4.197	4.197	0.000	100	162840	10.0	9.60	
45 Chlorobromomethane	128	4.399	4.399	0.000	94	124357	5.00	4.89	
46 Tetrahydrofuran	42	4.423	4.423	0.000	89	89497	10.0	9.45	
47 Chloroform	83	4.446	4.446	0.000	92	407237	5.00	4.81	
48 1,1,1-Trichloroethane	97	4.600	4.601	-0.001	98	245712	5.00	4.77	
49 Cyclohexane	56	4.636	4.636	0.000	89	427675	5.00	4.79	
51 1,1-Dichloropropene	75	4.731	4.731	0.000	97	337773	5.00	4.79	
50 Carbon tetrachloride	117	4.731	4.731	0.000	69	196757	5.00	4.63	
52 Isobutyl alcohol	41	4.814	4.814	0.000	93	102363	125.0	127.0	
53 Benzene	78	4.909	4.909	0.000	95	1027408	5.00	4.75	
54 1,2-Dichloroethane	62	4.932	4.933	-0.001	97	298918	5.00	4.85	
56 n-Heptane	100	5.087	5.087	0.000	92	55905	5.00	4.73	
58 Trichloroethene	130	5.442	5.443	-0.001	97	260945	5.00	4.83	
60 Methylcyclohexane	83	5.597	5.597	0.000	88	384006	5.00	4.76	
61 1,2-Dichloropropane	63	5.644	5.644	0.000	97	229954	5.00	4.79	
63 Dibromomethane	93	5.751	5.751	0.000	91	122976	5.00	4.85	
64 1,4-Dioxane	88	5.763	5.763	0.000	39	37134	100.0	107.0	
65 Dichlorobromomethane	83	5.881	5.881	0.000	100	241601	5.00	4.70	
67 2-Chloroethyl vinyl ether	63	6.118	6.118	0.000	92	228738	10.0	9.40	
68 cis-1,3-Dichloropropene	75	6.261	6.261	0.000	95	269857	5.00	4.41	
69 4-Methyl-2-pentanone (MIBK)	43	6.391	6.391	0.000	96	278264	10.0	9.55	
70 Toluene	91	6.557	6.557	0.000	99	1083109	5.00	4.69	
71 trans-1,3-Dichloropropene	75	6.747	6.747	0.000	92	197993	5.00	4.18	
72 Ethyl methacrylate	69	6.806	6.806	0.000	89	209911	5.00	4.57	
73 1,1,2-Trichloroethane	97	6.925	6.925	0.000	90	189917	5.00	4.78	
74 Tetrachloroethene	164	7.043	7.032	0.011	97	208541	5.00	4.67	
75 1,3-Dichloropropane	76	7.079	7.079	0.000	89	354169	5.00	4.77	
76 2-Hexanone	43	7.138	7.138	0.000	95	204217	10.0	9.82	
79 Chlorodibromomethane	129	7.280	7.281	-0.001	90	159774	5.00	4.55	
80 Ethylene Dibromide	107	7.399	7.399	0.000	99	177983	5.00	4.73	
82 Chlorobenzene	112	7.838	7.838	0.000	96	715092	5.00	4.81	
83 1,1,1,2-Tetrachloroethane	131	7.909	7.909	0.000	95	183911	5.00	4.69	
84 Ethylbenzene	106	7.921	7.921	0.000	98	376622	5.00	4.79	
85 m-Xylene & p-Xylene	91	8.028	8.028	0.000	93	930985	5.00	4.78	
86 o-Xylene	106	8.407	8.407	0.000	97	449885	5.00	4.86	
87 Styrene	104	8.431	8.431	0.000	95	752906	5.00	4.85	
88 Bromoform	173	8.620	8.621	-0.001	98	79115	5.00	4.32	
89 Isopropylbenzene	105	8.763	8.763	0.000	95	1062899	5.00	4.86	
93 1,1,2,2-Tetrachloroethane	83	9.059	9.059	0.000	95	209034	5.00	4.74	
92 Bromobenzene	156	9.071	9.071	0.000	94	283235	5.00	4.82	
94 1,2,3-Trichloropropane	110	9.107	9.107	0.000	83	68244	5.00	4.89	
95 trans-1,4-Dichloro-2-buten	53	9.119	9.119	0.000	65	56722	5.00	4.58	
96 N-Propylbenzene	120	9.154	9.154	0.000	98	284834	5.00	4.80	
97 2-Chlorotoluene	126	9.249	9.249	0.000	99	252046	5.00	4.88	
98 1,3,5-Trimethylbenzene	105	9.320	9.320	0.000	93	805236	5.00	4.79	
99 4-Chlorotoluene	91	9.356	9.356	0.000	97	865284	5.00	4.83	
101 tert-Butylbenzene	119	9.640	9.640	0.000	92	653200	5.00	4.80	
103 1,2,4-Trimethylbenzene	105	9.688	9.688	0.000	94	820390	5.00	4.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.854	9.854	0.000	94	872177	5.00	4.79	
106 1,3-Dichlorobenzene	146	9.984	9.984	0.000	98	476108	5.00	4.87	
107 4-Isopropyltoluene	119	9.996	9.996	0.000	97	741221	5.00	4.84	
108 1,4-Dichlorobenzene	146	10.067	10.067	0.000	96	484088	5.00	4.84	
111 n-Butylbenzene	91	10.399	10.399	0.000	98	578770	5.00	4.75	
112 1,2-Dichlorobenzene	146	10.447	10.447	0.000	99	431124	5.00	4.82	
113 1,2-Dibromo-3-Chloropropan	157	11.229	11.229	0.000	79	21663	5.00	4.55	
115 1,2,4-Trichlorobenzene	180	12.036	12.036	0.000	94	229477	5.00	4.95	
116 Hexachlorobutadiene	225	12.190	12.190	0.000	94	105293	5.00	4.93	
117 Naphthalene	128	12.285	12.285	0.000	96	496820	5.00	5.08	
118 1,2,3-Trichlorobenzene	180	12.534	12.534	0.000	96	210753	5.00	5.14	
S 127 1,2-Dichloroethene, Total	96				0			9.71	
S 128 1,3-Dichloropropene, Total	75				0			8.59	
S 129 Xylenes, Total	106				0		10.0	9.64	
S 130 Trihalomethanes, Total	1				0		20.0	18.4	

Reagents:

vm50ss_stk_00069	Amount Added: 4.00	Units: uL
VM50IS_00055	Amount Added: 1.00	Units: uL
VMRPRIMW_00191	Amount Added: 4.00	Units: uL
VMRGAS_00158	Amount Added: 4.00	Units: uL
VMAROLISTDW_00153	Amount Added: 4.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9011.D

Injection Date: 23-Jun-2016 13:08:30

Instrument ID: A3UX15

Lims ID: STD8260 L3

Client ID:

Operator ID:

Worklist Smp#: 5

Purge Vol: 5.000 mL

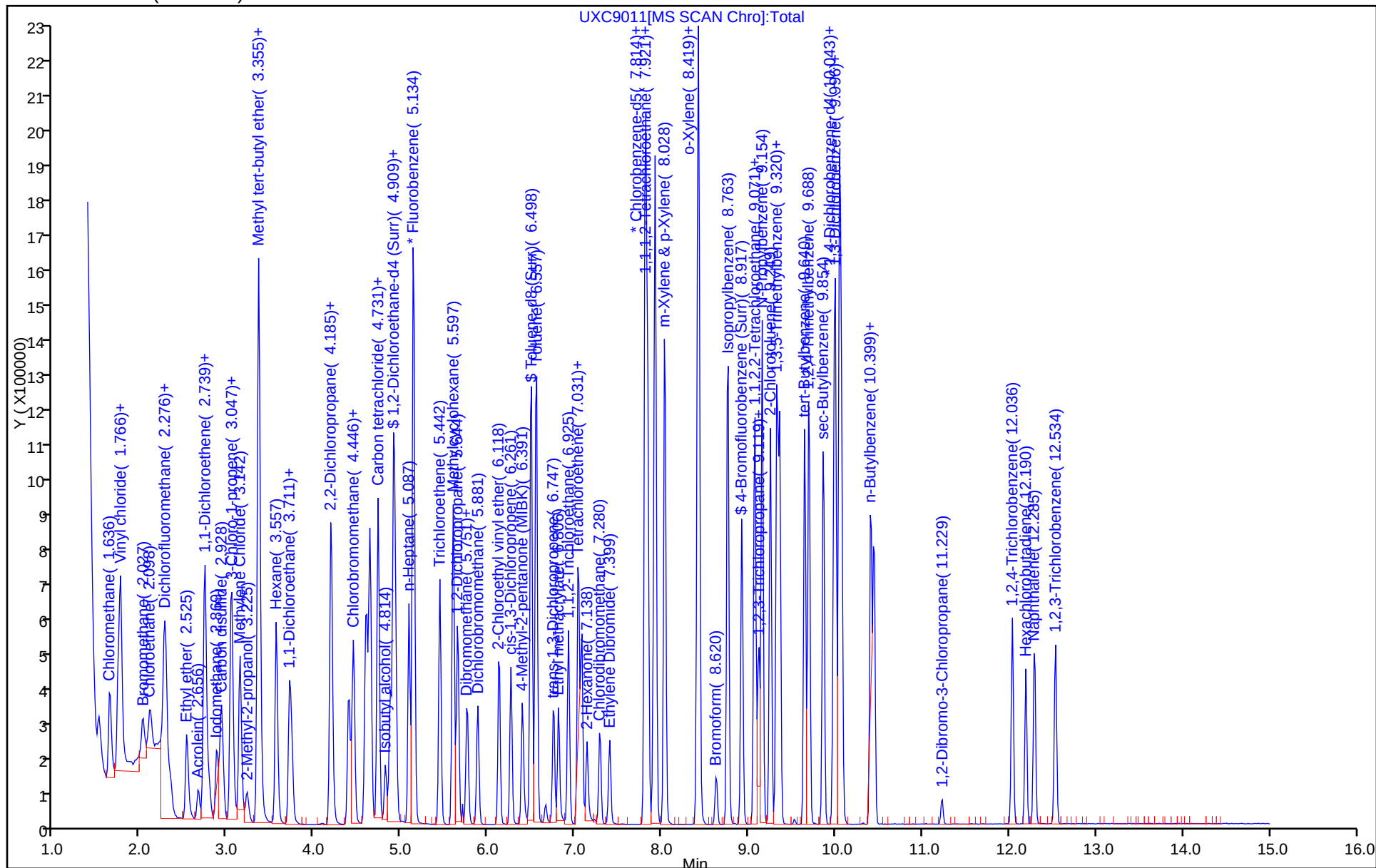
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9012.D
 Lims ID: STD8260 L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 23-Jun-2016 13:31:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0055685-006
 Misc. Info.: C60623A-IC,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist: chrom-8260_15*sub72
 Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 24-Jun-2016 09:16:46 Calib Date: 23-Jun-2016 16:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: evansle

Date: 23-Jun-2016 14:03:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.134	5.134	0.000	99	1663469	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.814	7.814	0.000	87	1261620	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.043	10.044	-0.001	94	540028	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.588	4.589	-0.001	93	83478	2.00	1.93	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	0	103057	2.00	1.97	
\$ 6 Toluene-d8 (Surr)	98	6.498	6.498	0.000	93	375796	2.00	1.93	
\$ 7 4-Bromofluorobenzene (Surr	95	8.917	8.917	0.000	90	131047	2.00	1.97	
9 Dichlorodifluoromethane	85	1.517	1.517	0.000	99	105410	2.00	1.92	
10 Chloromethane	50	1.636	1.648	-0.012	99	158822	2.00	2.05	
11 Vinyl chloride	62	1.731	1.743	-0.012	98	138092	2.00	1.97	
12 Butadiene	54	1.766	1.766	0.000	97	127624	2.00	1.94	
13 Bromomethane	94	2.027	2.027	0.000	89	46331	2.00	2.00	
14 Chloroethane	64	2.110	2.110	0.000	99	74250	2.00	1.99	
15 Dichlorofluoromethane	67	2.264	2.276	-0.012	80	167634	2.00	2.05	
16 Trichlorofluoromethane	101	2.300	2.300	0.000	97	84337	2.00	2.01	
17 Ethyl ether	59	2.525	2.525	0.000	90	81466	2.00	2.06	
18 Acrolein	56	2.656	2.656	0.000	99	44766	10.0	9.75	
20 1,1,2-Trichloro-1,2,2-trif	151	2.739	2.739	0.000	91	74571	2.00	2.10	
19 1,1-Dichloroethene	96	2.727	2.739	-0.012	98	97683	2.00	1.99	
22 Acetone	43	2.786	2.786	0.000	100	74384	4.00	4.24	
23 Iodomethane	142	2.869	2.869	0.000	97	157756	2.00	2.11	
24 Carbon disulfide	76	2.928	2.929	-0.001	99	280189	2.00	1.97	
25 3-Chloro-1-propene	76	3.035	3.035	0.000	91	52428	2.00	1.88	
27 Methyl acetate	43	3.047	3.047	0.000	97	265861	10.0	10.2	
28 Methylene Chloride	84	3.142	3.142	0.000	92	141323	2.00	2.09	
29 2-Methyl-2-propanol	59	3.225	3.225	0.000	84	33607	20.0	21.3	
31 Methyl tert-butyl ether	73	3.355	3.344	0.011	93	194215	2.00	2.02	
30 trans-1,2-Dichloroethene	96	3.355	3.355	0.000	71	108973	2.00	2.05	
32 Acrylonitrile	53	3.355	3.355	0.000	99	301718	20.0	20.8	
33 Hexane	86	3.557	3.557	0.000	91	26430	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.711	3.711	0.000	97	185806	2.00	2.05	
36 Vinyl acetate	43	3.735	3.735	0.000	97	111189	2.00	1.85	
39 cis-1,2-Dichloroethene	96	4.185	4.186	-0.001	81	118007	2.00	2.07	
40 2,2-Dichloropropane	77	4.185	4.186	-0.001	71	55617	2.00	1.93	
41 2-Butanone (MEK)	43	4.197	4.197	0.000	99	71513	4.00	4.22	
45 Chlorobromomethane	128	4.399	4.399	0.000	94	51721	2.00	2.04	
46 Tetrahydrofuran	42	4.422	4.423	-0.001	87	38759	4.00	4.10	
47 Chloroform	83	4.446	4.446	0.000	92	176362	2.00	2.09	
48 1,1,1-Trichloroethane	97	4.600	4.601	-0.001	98	100159	2.00	1.95	
49 Cyclohexane	56	4.636	4.636	0.000	90	176846	2.00	1.98	
51 1,1-Dichloropropene	75	4.731	4.731	0.000	96	143524	2.00	2.04	
50 Carbon tetrachloride	117	4.731	4.731	0.000	68	79673	2.00	1.88	
52 Isobutyl alcohol	41	4.814	4.814	0.000	93	41883	50.0	52.0	
53 Benzene	78	4.909	4.909	0.000	95	448345	2.00	2.08	
54 1,2-Dichloroethane	62	4.932	4.933	-0.001	97	128819	2.00	2.09	
56 n-Heptane	100	5.087	5.087	0.000	89	22548	2.00	1.91	
58 Trichloroethene	130	5.442	5.443	-0.001	98	109905	2.00	2.04	
60 Methylcyclohexane	83	5.596	5.597	-0.001	87	160647	2.00	1.99	
61 1,2-Dichloropropane	63	5.644	5.644	0.000	96	98717	2.00	2.06	
63 Dibromomethane	93	5.751	5.751	0.000	92	51449	2.00	2.03	
64 1,4-Dioxane	88	5.762	5.763	-0.001	38	13752	40.0	39.7	
65 Dichlorobromomethane	83	5.881	5.881	0.000	99	97780	2.00	1.90	
67 2-Chloroethyl vinyl ether	63	6.118	6.118	0.000	91	92131	4.00	3.79	
68 cis-1,3-Dichloropropene	75	6.261	6.261	0.000	95	104387	2.00	2.01	
69 4-Methyl-2-pentanone (MIBK)	43	6.391	6.391	0.000	96	110394	4.00	3.79	
70 Toluene	91	6.557	6.557	0.000	99	460534	2.00	2.02	
71 trans-1,3-Dichloropropene	75	6.747	6.747	0.000	93	75746	2.00	1.99	
72 Ethyl methacrylate	69	6.806	6.806	0.000	89	81602	2.00	1.80	
73 1,1,2-Trichloroethane	97	6.925	6.925	0.000	91	78276	2.00	1.99	
74 Tetrachloroethene	164	7.043	7.032	0.011	98	89429	2.00	2.03	
75 1,3-Dichloropropane	76	7.079	7.079	0.000	90	150849	2.00	2.05	
76 2-Hexanone	43	7.138	7.138	0.000	96	74175	4.00	3.61	
79 Chlorodibromomethane	129	7.280	7.281	-0.001	90	62455	2.00	1.80	
80 Ethylene Dibromide	107	7.399	7.399	0.000	99	73856	2.00	1.98	
82 Chlorobenzene	112	7.838	7.838	0.000	97	300027	2.00	2.04	
83 1,1,1,2-Tetrachloroethane	131	7.909	7.909	0.000	90	72483	2.00	1.87	
84 Ethylbenzene	106	7.921	7.921	0.000	98	156737	2.00	2.01	
85 m-Xylene & p-Xylene	91	8.027	8.028	-0.001	92	392735	2.00	2.04	
86 o-Xylene	106	8.407	8.407	0.000	96	185926	2.00	2.03	
87 Styrene	104	8.431	8.431	0.000	95	303226	2.00	1.97	
88 Bromoform	173	8.620	8.621	-0.001	97	29607	2.00	1.99	
89 Isopropylbenzene	105	8.763	8.763	0.000	95	430308	2.00	1.99	
93 1,1,2,2-Tetrachloroethane	83	9.059	9.059	0.000	93	86262	2.00	2.06	
92 Bromobenzene	156	9.071	9.071	0.000	93	116245	2.00	2.08	
94 1,2,3-Trichloropropane	110	9.118	9.107	0.011	83	27103	2.00	2.04	
95 trans-1,4-Dichloro-2-buten	53	9.118	9.119	-0.001	67	23186	2.00	1.97	
96 N-Propylbenzene	120	9.154	9.154	0.000	98	116805	2.00	2.07	
97 2-Chlorotoluene	126	9.249	9.249	0.000	99	103264	2.00	2.10	
98 1,3,5-Trimethylbenzene	105	9.320	9.320	0.000	94	322320	2.00	2.01	
99 4-Chlorotoluene	91	9.356	9.356	0.000	97	357682	2.00	2.10	
101 tert-Butylbenzene	119	9.640	9.640	0.000	92	259157	2.00	2.00	
103 1,2,4-Trimethylbenzene	105	9.688	9.688	0.000	94	329665	2.00	2.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.854	9.854	0.000	94	348238	2.00	2.01	
106 1,3-Dichlorobenzene	146	9.984	9.984	0.000	98	191662	2.00	2.06	
107 4-Isopropyltoluene	119	9.996	9.996	0.000	97	284055	2.00	1.95	
108 1,4-Dichlorobenzene	146	10.067	10.067	0.000	96	196508	2.00	2.06	
111 n-Butylbenzene	91	10.399	10.399	0.000	97	224939	2.00	1.94	
112 1,2-Dichlorobenzene	146	10.447	10.447	0.000	99	176829	2.00	2.08	
113 1,2-Dibromo-3-Chloropropan	157	11.229	11.229	0.000	78	8373	2.00	1.85	
115 1,2,4-Trichlorobenzene	180	12.036	12.036	0.000	94	88892	2.00	2.01	
116 Hexachlorobutadiene	225	12.190	12.190	0.000	93	43488	2.00	2.14	
117 Naphthalene	128	12.285	12.285	0.000	96	173642	2.00	1.86	
118 1,2,3-Trichlorobenzene	180	12.534	12.534	0.000	95	79480	2.00	2.04	
S 127 1,2-Dichloroethene, Total	96				0			4.12	
S 128 1,3-Dichloropropene, Total	75				0			4.00	
S 129 Xylenes, Total	106				0		4.00	4.07	
S 130 Trihalomethanes, Total	1				0		8.00	7.78	

Reagents:

vm50ss_stk_00069	Amount Added: 1.60	Units: uL
VM50IS_00055	Amount Added: 1.00	Units: uL
VMRPRIMW_00191	Amount Added: 1.60	Units: uL
VMRGAS_00158	Amount Added: 1.60	Units: uL
VMAROLISTDW_00153	Amount Added: 1.60	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9012.D

Injection Date: 23-Jun-2016 13:31:30

Instrument ID: A3UX15

Lims ID: STD8260 L2

Client ID:

Operator ID:

Worklist Smp#: 6

Purge Vol: 5.000 mL

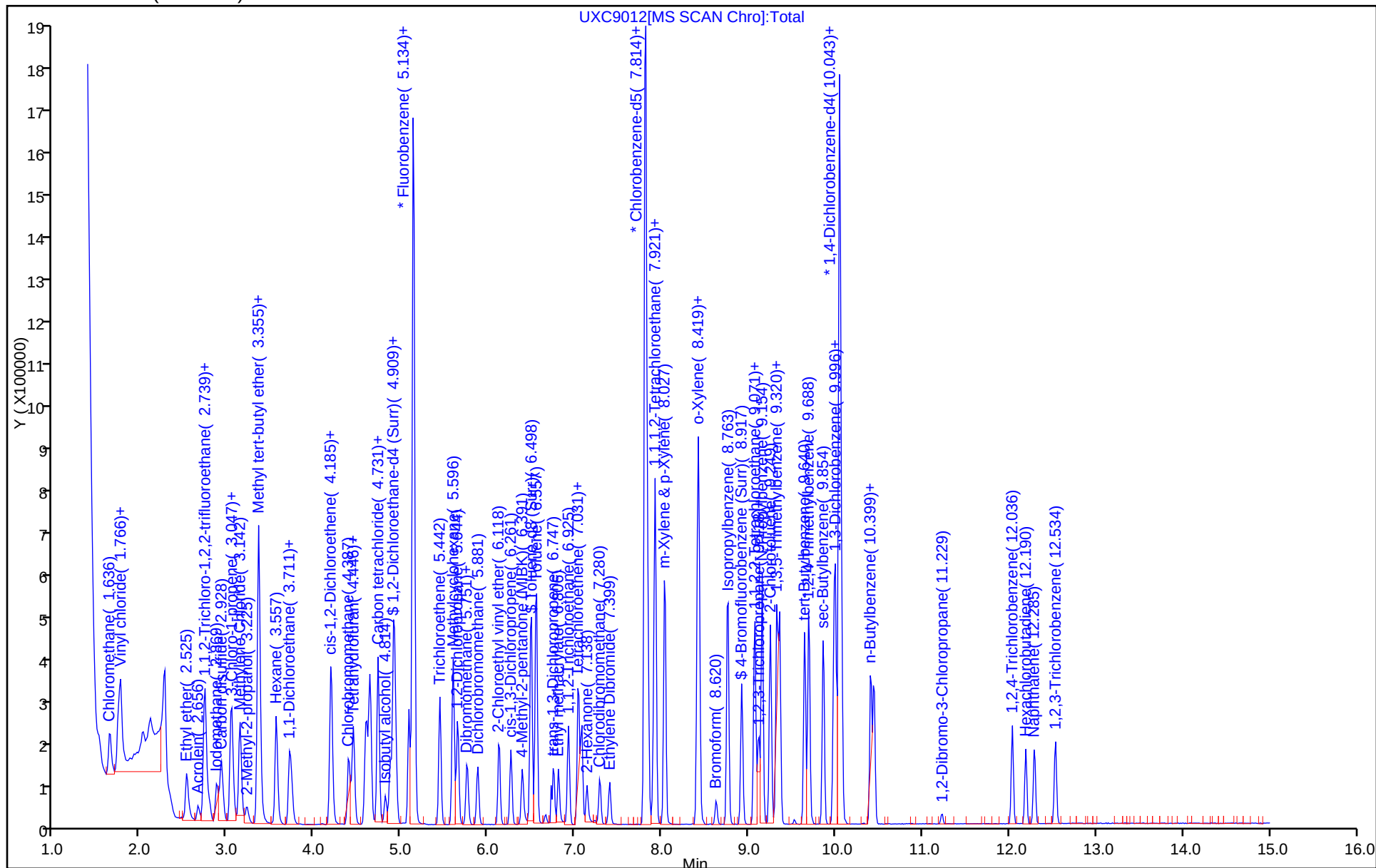
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9013.D
 Lims ID: STD8260 L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 23-Jun-2016 13:53:30 ALS Bottle#: 6 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0055685-007
 Misc. Info.: C60623A-IC,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist: chrom-8260_15*sub72
 Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 24-Jun-2016 09:16:50 Calib Date: 23-Jun-2016 16:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

First Level Reviewer: evansle

Date: 23-Jun-2016 14:33:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.134	5.134	0.000	99	1656646	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.814	7.814	0.000	85	1220190	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.044	10.044	0.000	95	547449	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.589	4.589	0.000	94	41850	1.00	0.9714	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	0	55060	1.00	1.05	
\$ 6 Toluene-d8 (Surr)	98	6.498	6.498	0.000	92	189479	1.00	1.01	
\$ 7 4-Bromofluorobenzene (Surr	95	8.917	8.917	0.000	90	64450	1.00	1.00	
9 Dichlorodifluoromethane	85	1.517	1.517	0.000	99	55024	1.00	1.01	
10 Chloromethane	50	1.648	1.648	0.000	98	86283	1.00	1.12	
11 Vinyl chloride	62	1.743	1.743	0.000	98	72739	1.00	1.04	
12 Butadiene	54	1.766	1.766	0.000	97	66485	1.00	1.02	
13 Bromomethane	94	2.027	2.027	0.000	90	22196	1.00	0.9616	
14 Chloroethane	64	2.110	2.110	0.000	98	39185	1.00	1.06	
15 Dichlorofluoromethane	67	2.276	2.276	0.000	97	83499	1.00	1.02	
16 Trichlorofluoromethane	101	2.312	2.300	0.012	97	41091	1.00	0.9828	
17 Ethyl ether	59	2.537	2.525	0.012	89	41022	1.00	1.04	
18 Acrolein	56	2.656	2.656	0.000	98	22626	5.00	4.95	
20 1,1,2-Trichloro-1,2,2-trif	151	2.739	2.739	0.000	87	33852	1.00	0.9555	
19 1,1-Dichloroethene	96	2.739	2.739	0.000	98	48857	1.00	1.00	
22 Acetone	43	2.798	2.786	0.012	100	46220	2.00	1.86	
23 Iodomethane	142	2.881	2.869	0.012	97	71203	1.00	0.9579	
24 Carbon disulfide	76	2.928	2.929	-0.001	98	136890	1.00	0.9646	
25 3-Chloro-1-propene	76	3.035	3.035	0.000	90	25745	1.00	0.9285	
27 Methyl acetate	43	3.047	3.047	0.000	97	134041	5.00	5.18	
28 Methylene Chloride	84	3.142	3.142	0.000	91	81766	1.00	0.9499	
29 2-Methyl-2-propanol	59	3.225	3.225	0.000	85	15845	10.0	10.1	
31 Methyl tert-butyl ether	73	3.355	3.344	0.011	93	91351	1.00	0.9540	
30 trans-1,2-Dichloroethene	96	3.355	3.355	0.000	73	53675	1.00	1.02	
32 Acrylonitrile	53	3.355	3.355	0.000	100	143273	10.0	9.93	
33 Hexane	86	3.557	3.557	0.000	91	13602	1.00	1.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.711	3.711	0.000	96	89192	1.00	0.9894	
36 Vinyl acetate	43	3.747	3.735	0.012	97	55121	1.00	0.9223	
39 cis-1,2-Dichloroethene	96	4.185	4.186	-0.001	79	57867	1.00	1.02	
40 2,2-Dichloropropane	77	4.185	4.186	-0.001	74	25956	1.00	0.9030	
41 2-Butanone (MEK)	43	4.209	4.197	0.012	100	38303	2.00	2.27	
45 Chlorobromomethane	128	4.399	4.399	0.000	96	25519	1.00	1.01	
46 Tetrahydrofuran	42	4.423	4.423	0.000	89	18942	2.00	2.01	
47 Chloroform	83	4.446	4.446	0.000	92	83655	1.00	0.99	
48 1,1,1-Trichloroethane	97	4.600	4.601	-0.001	96	47244	1.00	0.9219	
49 Cyclohexane	56	4.636	4.636	0.000	89	86402	1.00	0.9738	
51 1,1-Dichloropropene	75	4.731	4.731	0.000	96	69032	1.00	0.9839	
50 Carbon tetrachloride	117	4.731	4.731	0.000	69	38089	1.00	0.9013	
52 Isobutyl alcohol	41	4.814	4.814	0.000	92	18236	25.0	22.8	
53 Benzene	78	4.909	4.909	0.000	95	214485	1.00	1.00	
54 1,2-Dichloroethane	62	4.933	4.933	0.000	97	62483	1.00	1.02	
56 n-Heptane	100	5.087	5.087	0.000	92	11712	1.00	1.00	
58 Trichloroethene	130	5.442	5.443	-0.001	97	53963	1.00	1.00	
60 Methylcyclohexane	83	5.597	5.597	0.000	88	78279	1.00	0.9751	
61 1,2-Dichloropropane	63	5.644	5.644	0.000	96	44995	1.00	0.9423	
63 Dibromomethane	93	5.751	5.751	0.000	94	24464	1.00	0.9695	
64 1,4-Dioxane	88	5.763	5.763	0.000	38	5989	20.0	17.4	
65 Dichlorobromomethane	83	5.881	5.881	0.000	98	45637	1.00	0.8921	
67 2-Chloroethyl vinyl ether	63	6.130	6.118	0.012	91	42581	2.00	1.76	
68 cis-1,3-Dichloropropene	75	6.261	6.261	0.000	95	46728	1.00	1.18	
69 4-Methyl-2-pentanone (MIBK)	43	6.391	6.391	0.000	96	51663	2.00	1.78	
70 Toluene	91	6.557	6.557	0.000	99	225168	1.00	1.02	
71 trans-1,3-Dichloropropene	75	6.759	6.747	0.012	93	33265	1.00	1.24	
72 Ethyl methacrylate	69	6.806	6.806	0.000	87	36781	1.00	0.8375	
73 1,1,2-Trichloroethane	97	6.925	6.925	0.000	89	38897	1.00	1.02	
74 Tetrachloroethene	164	7.043	7.032	0.011	96	44067	1.00	1.03	
75 1,3-Dichloropropane	76	7.079	7.079	0.000	90	71787	1.00	1.01	
76 2-Hexanone	43	7.138	7.138	0.000	98	33826	2.00	1.70	
79 Chlorodibromomethane	129	7.281	7.281	0.000	91	27591	1.00	0.8222	
80 Ethylene Dibromide	107	7.399	7.399	0.000	99	33852	1.00	0.9400	
82 Chlorobenzene	112	7.838	7.838	0.000	96	145951	1.00	1.03	
83 1,1,1,2-Tetrachloroethane	131	7.909	7.909	0.000	88	33248	1.00	0.8869	
84 Ethylbenzene	106	7.921	7.921	0.000	98	73812	1.00	0.9808	
85 m-Xylene & p-Xylene	91	8.028	8.028	0.000	92	185158	1.00	0.99	
86 o-Xylene	106	8.407	8.407	0.000	97	84676	1.00	0.9571	
87 Styrene	104	8.431	8.431	0.000	94	133220	1.00	0.8969	
88 Bromoform	173	8.632	8.621	0.011	95	12996	1.00	1.22	
89 Isopropylbenzene	105	8.763	8.763	0.000	95	202439	1.00	0.9673	
93 1,1,2,2-Tetrachloroethane	83	9.059	9.059	0.000	94	41297	1.00	0.9707	
92 Bromobenzene	156	9.071	9.071	0.000	93	53560	1.00	0.9441	
94 1,2,3-Trichloropropane	110	9.119	9.107	0.012	85	12643	1.00	0.9387	
95 trans-1,4-Dichloro-2-buten	53	9.119	9.119	0.000	69	10981	1.00	0.9187	
96 N-Propylbenzene	120	9.154	9.154	0.000	99	52678	1.00	0.9196	
97 2-Chlorotoluene	126	9.249	9.249	0.000	99	46742	1.00	0.9366	
98 1,3,5-Trimethylbenzene	105	9.320	9.320	0.000	93	157371	1.00	0.9698	
99 4-Chlorotoluene	91	9.356	9.356	0.000	97	166259	1.00	0.9619	
101 tert-Butylbenzene	119	9.640	9.640	0.000	92	123979	1.00	0.9432	
103 1,2,4-Trimethylbenzene	105	9.688	9.688	0.000	94	164392	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.854	9.854	0.000	94	165502	1.00	0.9410	
106 1,3-Dichlorobenzene	146	9.984	9.984	0.000	98	96057	1.00	1.02	
107 4-Isopropyltoluene	119	9.996	9.996	0.000	97	136924	1.00	0.9265	
108 1,4-Dichlorobenzene	146	10.067	10.067	0.000	95	101928	1.00	1.05	
111 n-Butylbenzene	91	10.399	10.399	0.000	98	109753	1.00	0.9319	
112 1,2-Dichlorobenzene	146	10.447	10.447	0.000	99	89610	1.00	1.04	
113 1,2-Dibromo-3-Chloropropan	157	11.229	11.229	0.000	76	3901	1.00	0.8492	
115 1,2,4-Trichlorobenzene	180	12.036	12.036	0.000	93	47724	1.00	1.07	
116 Hexachlorobutadiene	225	12.190	12.190	0.000	94	23461	1.00	1.14	
117 Naphthalene	128	12.285	12.285	0.000	97	89542	1.00	0.9479	
118 1,2,3-Trichlorobenzene	180	12.534	12.534	0.000	96	43674	1.00	1.10	
S 127 1,2-Dichloroethene, Total	96				0			2.03	
S 128 1,3-Dichloropropene, Total	75				0			2.42	
S 129 Xylenes, Total	106				0		2.00	1.95	
S 130 Trihalomethanes, Total	1				0		4.00	3.92	

Reagents:

vm50ss_stk_00069	Amount Added: 0.80	Units: uL
VM50IS_00055	Amount Added: 1.00	Units: uL
VMRPRIMW_00191	Amount Added: 0.80	Units: uL
VMRGAS_00158	Amount Added: 0.80	Units: uL
VMAROLISTDW_00153	Amount Added: 0.80	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9013.D

Injection Date: 23-Jun-2016 13:53:30

Instrument ID: A3UX15

Lims ID: STD8260 L1

Client ID:

Operator ID:

Worklist Smp#: 7

Purge Vol: 5.000 mL

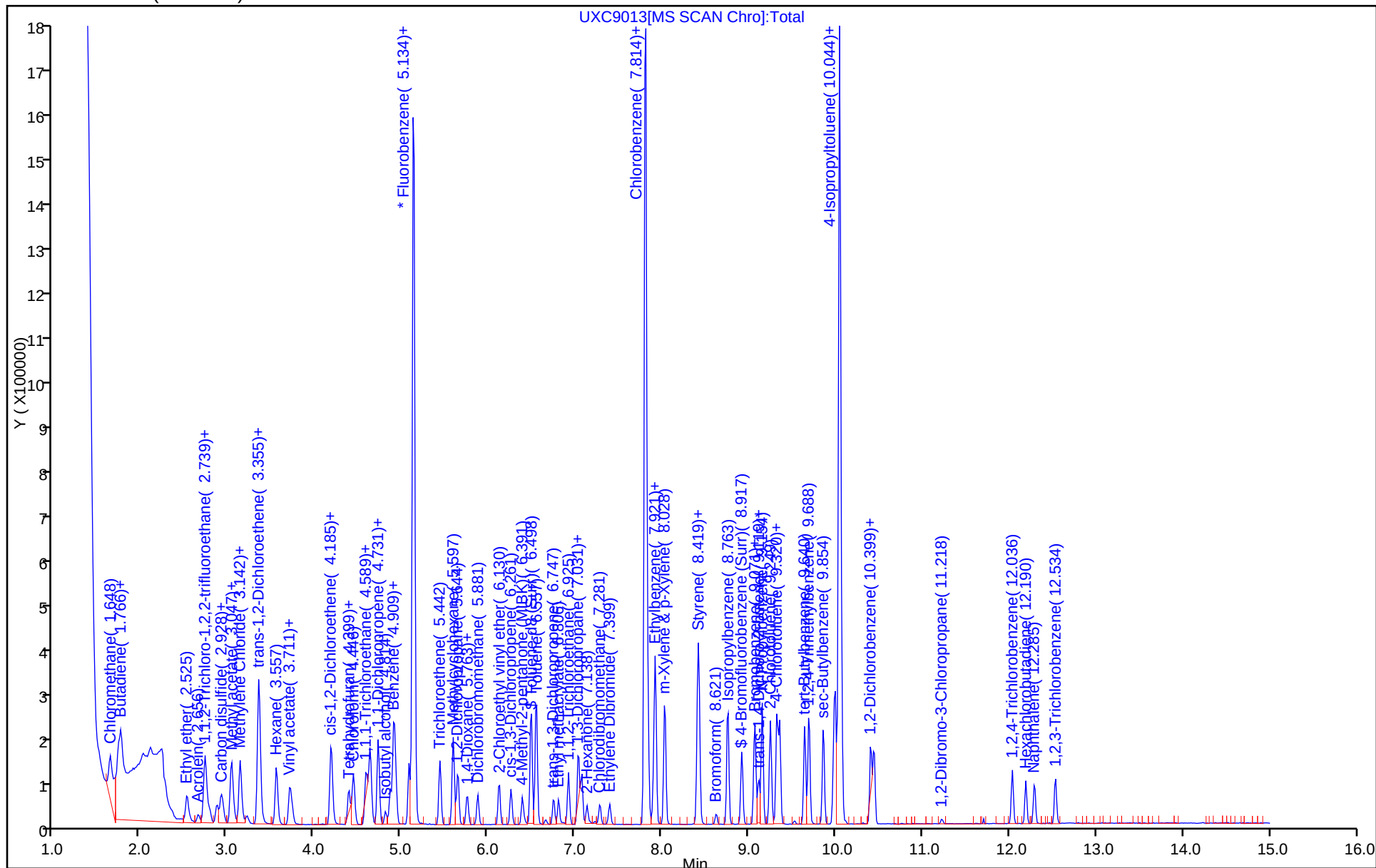
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-245430/6	UXM7645.D
Level 2	STD8260 240-245430/7	UXM7646.D
Level 3	STD8260 240-245430/8	UXM7647.D
Level 4	ICIS 240-245430/9	UXM7648.D
Level 5	STD8260 240-245430/10	UXM7649.D
Level 6	STD8260 240-245430/11	UXM7650.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								
Dichlorodifluoromethane	0.2964 0.2824	0.2784	0.3055	0.2471	0.2588	Ave		0.2781				7.9		15.0			
Chloromethane	0.3944 0.3913	0.3679	0.3925	0.3634	0.3807	Ave		0.3817			0.1000	3.5		15.0			
Vinyl chloride	0.3796 0.3692	0.3253	0.3671	0.3375	0.3532	Ave		0.3553				5.8		15.0			
Butadiene	0.3938 0.3354	0.3134	0.3433	0.3036	0.3151	Ave		0.3341				9.8		15.0			
Bromomethane	0.2170 0.1835	0.1898	0.1955	0.1783	0.1769	Ave		0.1902				7.8		15.0			
Chloroethane	0.2032 0.2183	0.2061	0.2212	0.2047	0.2110	Ave		0.2108				3.6		15.0			
Dichlorofluoromethane	0.5256 0.5090	0.4876	0.5140	0.4759	0.4851	Ave		0.4995				3.9		15.0			
Trichlorofluoromethane	0.3608 0.3425	0.3166	0.3571	0.3107	0.3198	Ave		0.3346				6.5		15.0			
Ethyl ether	0.2097 0.1966	0.1851	0.1936	0.1878	0.1909	Ave		0.1940				4.5		15.0			
Acrolein	0.0343 0.0281	0.0310	0.0272	0.0261	0.0277	Ave		0.0291				10.4		15.0			
1,1-Dichloroethene	0.2174 0.2511	0.2288	0.2410	0.2430	0.2488	Ave		0.2383				5.4		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	++++ 0.1603	0.1431	0.1520	0.1487	0.1523	Ave		0.1513				4.1		15.0			
Acetone	++++ 0.0427	0.1213	0.0526	0.0493	0.0438	Lin1	0.1652	0.0423							0.9990		0.9900
Iodomethane	0.3734 0.3925	0.3921	0.4056	0.3872	0.3881	Ave		0.3898				2.7		15.0			
Carbon disulfide	0.9225 0.9229	0.8595	0.9086	0.8777	0.8985	Ave		0.8983				2.8		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

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								
3-Chloro-1-propene	0.1651 0.1876	0.1603	0.1796	0.1722	0.1799	Ave		0.1741				5.9		15.0			
Methyl acetate	0.1336 0.1144	0.1074	0.1096	0.1084	0.1103	Ave		0.1139				8.7		15.0			
Methylene Chloride	++++ 0.3064	0.6659	0.3423	0.3090	0.3043	Lin1	0.3695	0.2975							1.0000		0.9900
2-Methyl-2-propanol	0.0131 0.0131	0.0114	0.0115	0.0119	0.0121	Ave		0.0122				6.2		15.0			
Acrylonitrile	0.0606 0.0614	0.0603	0.0584	0.0568	0.0592	Ave		0.0594				2.8		15.0			
trans-1,2-Dichloroethene	0.2852 0.3013	0.2721	0.2954	0.2898	0.2961	Ave		0.2900				3.6		15.0			
Methyl tert-butyl ether	0.6621 0.6927	0.6761	0.6835	0.6560	0.6608	Ave		0.6719				2.2		15.0			
Hexane	0.2884 0.2770	0.2866	0.2484	0.2532	0.2649	Ave		0.2697				6.3		15.0			
1,1-Dichloroethane	0.4903 0.5264	0.4734	0.5134	0.4983	0.5133	Ave		0.5025			0.1000	3.8		15.0			
Vinyl acetate	0.3776 0.3676	0.3456	0.3600	0.3514	0.3608	Ave		0.3605				3.2		15.0			
cis-1,2-Dichloroethene	0.3248 0.3150	0.3032	0.3041	0.3002	0.3099	Ave		0.3095				3.0		15.0			
2,2-Dichloropropane	0.3336 0.3825	0.3662	0.3884	0.3740	0.3730	Ave		0.3696				5.2		15.0			
2-Butanone (MEK)	0.0724 0.0599	0.0632	0.0596	0.0587	0.0584	Ave		0.0621				8.6		15.0			
Chlorobromomethane	0.1290 0.1268	0.1205	0.1233	0.1201	0.1243	Ave		0.1240				2.8		15.0			
Tetrahydrofuran	++++ 0.0428	0.0379	0.0412	0.0399	0.0411	Ave		0.0406				4.5		15.0			
Chloroform	0.4798 0.4729	0.4386	0.4534	0.4511	0.4582	Ave		0.4590				3.3		15.0			
1,1,1-Trichloroethane	0.3081 0.4024	0.3439	0.3766	0.3901	0.3952	Ave		0.3694				9.9		15.0			
Cyclohexane	0.3409 0.4530	0.3931	0.4085	0.4161	0.4371	Ave		0.4081				9.6		15.0			
1,1-Dichloropropene	0.3206 0.3859	0.3208	0.3535	0.3628	0.3693	Ave		0.3522				7.5		15.0			
Carbon tetrachloride	0.2145 0.3285	0.2708	0.2976	0.3060	0.3192	Ave		0.2894				14.4		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

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								
Isobutyl alcohol	0.0045 0.0039	0.0035	0.0035	0.0036	0.0036	Ave		0.0038				10.2		15.0			
Benzene	1.2117 1.2123	1.1128	1.1716	1.1460	1.1847	Ave		1.1732				3.3		15.0			
1,2-Dichloroethane	0.3202 0.3105	0.2996	0.3009	0.3011	0.3023	Ave		0.3058				2.6		15.0			
n-Heptane	++++ 0.1244	0.7151	0.1654	0.1390	0.1274	Lin1	0.5948	0.1125							0.9990		0.9900
Trichloroethene	0.2741 0.2841	0.2542	0.2732	0.2827	0.2792	Ave		0.2746				4.0		15.0			
Methylcyclohexane	0.3442 0.3840	0.3491	0.3405	0.3507	0.3686	Ave		0.3562				4.7		15.0			
1,2-Dichloropropane	0.2636 0.2758	0.2631	0.2685	0.2627	0.2692	Ave		0.2672				1.9		15.0			
Dibromomethane	0.1306 0.1193	0.1154	0.1181	0.1173	0.1200	Ave		0.1201				4.5		15.0			
1,4-Dioxane	++++ 0.0013	++++	0.0010	0.0011	0.0012	Ave		0.0011				9.9		15.0			
Dichlorobromomethane	0.3324 0.3308	0.3027	0.3176	0.3127	0.3278	Ave		0.3207				3.7		15.0			
2-Chloroethyl vinyl ether	0.1142 0.1191	0.1056	0.1114	0.1131	0.1227	Ave		0.1143				5.3		15.0			
cis-1,3-Dichloropropene	0.4252 0.4292	0.3840	0.4230	0.4125	0.4258	Ave		0.4166				4.1		15.0			
4-Methyl-2-pentanone (MIBK)	0.1371 0.1420	0.1262	0.1351	0.1336	0.1378	Ave		0.1353				3.9		15.0			
Toluene	1.7512 1.7872	1.5727	1.7282	1.6984	1.7218	Ave		1.7099				4.3		15.0			
trans-1,3-Dichloropropene	0.4907 0.4905	0.4258	0.4585	0.4597	0.4779	Ave		0.4672				5.3		15.0			
Ethyl methacrylate	0.3199 0.3566	0.3152	0.3330	0.3238	0.3474	Ave		0.3327				4.9		15.0			
1,1,2-Trichloroethane	0.2737 0.2588	0.2294	0.2537	0.2468	0.2540	Ave		0.2527				5.8		15.0			
1,3-Dichloropropane	0.4673 0.4810	0.4784	0.4775	0.4691	0.4856	Ave		0.4765				1.5		15.0			
Tetrachloroethene	0.2611 0.2926	0.2648	0.2726	0.2768	0.2850	Ave		0.2755				4.3		15.0			
2-Hexanone	0.1223 0.1259	0.1205	0.1170	0.1194	0.1226	Ave		0.1213				2.5		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 245430
SDG No.: _____
Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

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								
Chlorodibromomethane	0.2666 0.2982	0.2415	0.2769	0.2750	0.2867	Ave		0.2742				7.0		15.0			
Ethylene Dibromide	0.2402 0.2480	0.2338	0.2359	0.2320	0.2392	Ave		0.2382				2.4		15.0			
Chlorobenzene	1.1963 1.1143	1.0283	1.0882	1.0620	1.0871	Ave		1.0960			0.3000	5.2		15.0			
1,1,1,2-Tetrachloroethane	0.3154 0.3735	0.3379	0.3512	0.3485	0.3531	Ave		0.3466				5.5		15.0			
Ethylbenzene	0.5329 0.6219	0.5215	0.5871	0.5872	0.6053	Ave		0.5760				7.0		15.0			
m-Xylene & p-Xylene	0.6942 0.7581	0.6718	0.7389	0.7300	0.7403	Ave		0.7222				4.5		15.0			
o-Xylene	0.7531 0.7776	0.6703	0.7605	0.7368	0.7361	Ave		0.7391				5.0		15.0			
Styrene	1.1185 1.2977	1.0691	1.2198	1.1980	1.2501	Ave		1.1922				7.1		15.0			
Bromoform	0.1372 0.1558	0.1159	0.1429	0.1384	0.1451	Ave		0.1392			0.1000	9.5		15.0			
Isopropylbenzene	1.6297 1.9023	1.5616	1.7557	1.7736	1.7736	Ave		1.7327				7.0		15.0			
1,1,2,2-Tetrachloroethane	0.5692 0.5674	0.5407	0.5634	0.5573	0.5661	Ave		0.5607			0.3000	1.9		15.0			
Bromobenzene	0.8058 0.8109	0.7520	0.7926	0.7636	0.8087	Ave		0.7889				3.2		15.0			
1,2,3-Trichloropropane	0.1324 0.1639	0.1034	0.1609	0.1598	0.1638	Lin1	-0.031	0.1638							1.0000		0.9900
trans-1,4-Dichloro-2-butene	++++ 0.1641	0.1320	0.1506	0.1487	0.1568	Ave		0.1504				7.9		15.0			
N-Propylbenzene	0.7978 0.9271	0.7609	0.8868	0.8787	0.9235	Ave		0.8625				7.9		15.0			
2-Chlorotoluene	0.8312 0.8160	0.7192	0.7894	0.7888	0.8057	Ave		0.7917				4.9		15.0			
1,3,5-Trimethylbenzene	2.6432 2.9051	2.3806	2.7635	2.7988	2.8501	Ave		2.7236				7.0		15.0			
4-Chlorotoluene	0.9315 0.8526	0.7597	0.8365	0.8251	0.8497	Ave		0.8425				6.6		15.0			
tert-Butylbenzene	2.1944 2.3365	1.9618	2.1840	2.2589	2.2838	Ave		2.2032				6.0		15.0			
1,2,4-Trimethylbenzene	3.0717 3.0699	2.6361	2.9096	2.9217	2.9663	Ave		2.9292				5.5		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 245430
SDG No.: _____
Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N
Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

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								
sec-Butylbenzene	2.9529 3.2166	2.5454	2.9398	3.0428	3.1243	Ave		2.9703				7.8		15.0			
1,3-Dichlorobenzene	1.8134 1.5999	1.5519	1.5482	1.5704	1.5551	Ave		1.6065				6.4		15.0			
4-Isopropyltoluene	2.6759 2.8186	2.3165	2.5826	2.6836	2.7180	Ave		2.6325				6.6		15.0			
1,4-Dichlorobenzene	1.9186 1.5931	1.5778	1.5767	1.5533	1.5671	Ave		1.6311				8.7		15.0			
n-Butylbenzene	2.4226 2.2797	1.8931	2.0729	2.1667	2.2237	Ave		2.1764				8.3		15.0			
1,2-Dichlorobenzene	1.6093 1.4624	1.3677	1.4397	1.4140	1.4259	Ave		1.4532				5.7		15.0			
1,2-Dibromo-3-Chloropropane	++++ 0.0926	0.0585	0.0810	0.0873	0.0880	Lin1	-0.039	0.0907							0.9990		0.9900
1,2,4-Trichlorobenzene	1.1622 0.7731	0.6890	0.7259	0.7368	0.7653	Lin1	0.0951	0.7581							0.9990		0.9900
Hexachlorobutadiene	++++ 0.2920	0.3142	0.2602	0.2694	0.2924	Ave		0.2856				7.5		15.0			
Naphthalene	2.0934 1.7538	1.4478	1.5379	1.5801	1.6693	Ave		1.6804				13.6		15.0			
1,2,3-Trichlorobenzene	0.9661 0.6502	0.5768	0.6227	0.6314	0.6337	Lin1	0.0808	0.6372							0.9990		0.9900
Dibromofluoromethane (Surr)	0.2038 0.2452	0.2227	0.2225	0.2387	0.2402	Ave		0.2289				6.8		15.0			
1,2-Dichloroethane-d4 (Surr)	0.2364 0.2580	0.2230	0.2369	0.2570	0.2561	Ave		0.2446				5.9		15.0			
Toluene-d8 (Surr)	1.4326 1.5541	1.3434	1.3971	1.5040	1.5171	Ave		1.4580				5.5		15.0			
4-Bromofluorobenzene (Surr)	0.5715 0.5667	0.4653	0.5109	0.5567	0.5503	Ave		0.5369				7.7		15.0			

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 Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-245430/6	UXM7645.D
Level 2	STD8260 240-245430/7	UXM7646.D
Level 3	STD8260 240-245430/8	UXM7647.D
Level 4	ICIS 240-245430/9	UXM7648.D
Level 5	STD8260 240-245430/10	UXM7649.D
Level 6	STD8260 240-245430/11	UXM7650.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	7523 853105	13751	154829	251372	521260	0.500 60.0	1.00	10.0	20.0	40.0
Chloromethane	FB	Ave	10008 1181916	18175	198954	369691	766875	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl chloride	FB	Ave	9634 1115105	16071	186050	343381	711508	0.500 60.0	1.00	10.0	20.0	40.0
Butadiene	FB	Ave	9994 1013157	15483	174019	308833	634633	0.500 60.0	1.00	10.0	20.0	40.0
Bromomethane	FB	Ave	5506 554208	9378	99092	181390	356276	0.500 60.0	1.00	10.0	20.0	40.0
Chloroethane	FB	Ave	5158 659381	10179	112135	208215	425081	0.500 60.0	1.00	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	13339 1537534	24088	260522	484168	977064	0.500 60.0	1.00	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	9156 1034413	15640	181007	316095	644209	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl ether	FB	Ave	5321 593848	9146	98153	191097	384576	0.500 60.0	1.00	10.0	20.0	40.0
Acrolein	FB	Ave	4355 424932	7651	68995	132865	279390	2.50 300	5.00	50.0	100	200
1,1-Dichloroethene	FB	Ave	5516 758417	11304	122182	247185	501119	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	++++ 484331	7069	77066	151258	306772	++++ 60.0	1.00	10.0	20.0	40.0
Acetone	FB	Lin1	++++ 258127	11981	53357	100311	176530	++++ 120	2.00	20.0	40.0	80.0
Iodomethane	FB	Ave	9477 1185618	19368	205597	393872	781684	0.500 60.0	1.00	10.0	20.0	40.0
Carbon disulfide	FB	Ave	23411 2787477	42457	460537	892879	1809775	0.500 60.0	1.00	10.0	20.0	40.0
3-Chloro-1-propene	FB	Ave	4190 566754	7921	91024	175205	362330	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	16948 1727021	26530	277806	551163	1110434	2.50 300	5.00	50.0	100	200
Methylene Chloride	FB	Lin1	++++ 925375	32896	173509	314346	612844	++++ 60.0	1.00	10.0	20.0	40.0
2-Methyl-2-propanol	FB	Ave	3325 395539	5637	58313	121140	243176	5.00 600	10.0	100	200	400
Acrylonitrile	FB	Ave	15374 1853994	29776	295958	577946	1193211	5.00 600	10.0	100	200	400
trans-1,2-Dichloroethene	FB	Ave	7237 910191	13441	149734	294780	596495	0.500 60.0	1.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	16802 2092270	33400	346466	667322	1331005	0.500 60.0	1.00	10.0	20.0	40.0
Hexane	FB	Ave	7318 836591	14160	125900	257581	533483	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	12442 1589882	23386	260219	506966	1033883	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl acetate	FB	Ave	9583 1110328	17071	182452	357507	726705	0.500 60.0	1.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	8243 951589	14979	154142	305424	624121	0.500 60.0	1.00	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	8465 1155275	18088	196855	380420	751196	0.500 60.0	1.00	10.0	20.0	40.0
2-Butanone (MEK)	FB	Ave	3674 361763	6246	60461	119512	235391	1.00 120	2.00	20.0	40.0	80.0
Chlorobromomethane	FB	Ave	3273 382939	5954	62481	122207	250390	0.500 60.0	1.00	10.0	20.0	40.0
Tetrahydrofuran	FB	Ave	++++ 258316	3745	41799	81171	165693	++++ 120	2.00	20.0	40.0	80.0
Chloroform	FB	Ave	12176 1428250	21668	229820	458943	922878	0.500 60.0	1.00	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	7819 1215453	16989	190898	396852	795960	0.500 60.0	1.00	10.0	20.0	40.0
Cyclohexane	FB	Ave	8652 1368363	19418	207056	423279	880403	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	8136 1165728	15845	179197	369048	743915	0.500 60.0	1.00	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	5444 992122	13376	150830	311276	642845	0.500 60.0	1.00	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	2844 298014	4271	44616	92642	180842	12.5 1500	25.0	250	500	1000
Benzene	FB	Ave	30752 3661852	54973	593839	1165842	2386277	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			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-Dichloroethane	FB	Ave	8125 938005	14799	152502	306271	608925	0.500 60.0	1.00	10.0	20.0	40.0
n-Heptane	FB	Lin1	++++ 375839	35327	83821	141362	256678	++++ 60.0	1.00	10.0	20.0	40.0
Trichloroethene	FB	Ave	6956 858104	12557	138458	287608	562337	0.500 60.0	1.00	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	8735 1159985	17246	172604	356755	742475	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	6690 833142	12996	136100	267293	542271	0.500 60.0	1.00	10.0	20.0	40.0
Dibromomethane	FB	Ave	3314 360471	5701	59851	119288	241742	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	++++ 76212	++++	10310	21652	47695	++++ 1200	++++	200	400	800
Dichlorobromomethane	FB	Ave	8437 999322	14951	160964	318075	660310	0.500 60.0	1.00	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	5794 719737	10431	112884	230080	494412	1.00 120	2.00	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	10790 1296316	18968	214391	419680	857708	0.500 60.0	1.00	10.0	20.0	40.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	6958 857708	12467	136923	271852	555095	1.00 120	2.00	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	31133 3816588	55749	626743	1232800	2531999	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	8723 1047424	15094	166264	333649	702828	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	5687 761447	11173	120762	235058	510917	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4865 552567	8130	92010	179120	373570	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	8308 1027251	16958	173173	340520	714119	0.500 60.0	1.00	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	4641 624796	9385	98871	200949	419063	0.500 60.0	1.00	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	4349 537585	8543	84868	173402	360611	1.00 120	2.00	20.0	40.0	80.0
Chlorodibromomethane	CBNZ d5	Ave	4740 636823	8561	100434	199602	421557	0.500 60.0	1.00	10.0	20.0	40.0
Ethylene Dibromide	CBNZ d5	Ave	4271 529565	8286	85538	168437	351742	0.500 60.0	1.00	10.0	20.0	40.0
Chlorobenzene	CBNZ d5	Ave	21267 2379580	36451	394653	770889	1598603	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	5608 797603	11978	127381	252939	519219	0.500 60.0	1.00	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	9474 1328105	18485	212906	426215	890140	0.500 60.0	1.00	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	12342 1618824	23815	267971	529919	1088657	0.500 60.0	1.00	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	13388 1660662	23761	275788	534851	1082466	0.500 60.0	1.00	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	19884 2771203	37898	442378	869593	1838358	0.500 60.0	1.00	10.0	20.0	40.0
Bromoform	CBNZ d5	Ave	2439 332626	4109	51827	100453	213366	0.500 60.0	1.00	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	28972 4062481	55355	636731	1287409	2608077	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5325 652252	9970	107547	210721	425024	0.500 60.0	1.00	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	7538 932194	13865	151298	288716	607200	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Lin1	1239 188391	1907	30717	60401	122998	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	++++ 188602	2433	28756	56228	117743	++++ 60.0	1.00	10.0	20.0	40.0
N-Propylbenzene	DCBd 4	Ave	7463 1065878	14029	169269	332236	693417	0.500 60.0	1.00	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	7776 938112	13260	150678	298240	604951	0.500 60.0	1.00	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	24727 3339843	43893	527519	1058183	2140028	0.500 60.0	1.00	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	8714 980146	14007	159671	311962	638008	0.500 60.0	1.00	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	20528 2686102	36172	416891	854069	1714775	0.500 60.0	1.00	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	28735 3529310	48604	555409	1104631	2227231	0.500 60.0	1.00	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	27624 3697907	46932	561161	1150431	2345885	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	16964 1839346	28614	295529	593740	1167633	0.500 60.0	1.00	10.0	20.0	40.0
4-Isopropyltoluene	DCBd 4	Ave	25032 3240360	42712	492976	1014632	2040838	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dichlorobenzene	DCBd 4	Ave	17948 1831491	29092	300973	587284	1176698	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-71709-1 Analy Batch No.: 245430

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35911

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	22663 2620807	34905	395682	819187	1669676	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	15055 1681236	25217	274819	534603	1070643	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	++++ 106502	1078	15462	33010	66054	++++ 60.0	1.00	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Lin1	10872 888813	12703	138572	278556	574630	0.500 60.0	1.00	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	++++ 335653	5794	49676	101851	219545	++++ 60.0	1.00	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	19583 2016259	26694	293564	597404	1253409	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Lin1	9038 747481	10635	118862	238727	475806	0.500 60.0	1.00	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	5173 740719	10999	112793	242855	483883	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	5999 779157	11018	120090	261493	515818	0.500 60.0	1.00	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	25468 3318698	47620	506688	1091734	2230907	0.500 60.0	1.00	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	10160 1210196	16495	185268	404107	809182	0.500 60.0	1.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7645.D
 Lims ID: std8260 L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 02-Sep-2016 18:19:30 ALS Bottle#: 2 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0057729-006
 Operator ID: 001904 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 06-Sep-2016 14:22:09 Calib Date: 02-Sep-2016 22:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK001

First Level Reviewer: laveyt

Date: 02-Sep-2016 18:57:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	1015136	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.866	7.854	0.012	86	711119	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	98	374191	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	87	5173	0.5000	0.4453	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	95	5999	0.5000	0.4833	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	25468	0.5000	0.4913	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	83	10160	0.5000	0.5322	
9 Dichlorodifluoromethane	85	1.391	1.391	0.000	95	7523	0.5000	0.5330	
10 Chloromethane	50	1.510	1.510	0.000	96	10008	0.5000	0.5166	
11 Vinyl chloride	62	1.605	1.605	0.000	95	9634	0.5000	0.5342	
12 Butadiene	54	1.640	1.640	0.000	93	9994	0.5000	0.5893	
13 Bromomethane	94	1.901	1.901	0.000	75	5506	0.5000	0.5705	
14 Chloroethane	64	1.984	1.984	0.000	92	5158	0.5000	0.4822	
15 Dichlorofluoromethane	67	2.162	2.174	-0.012	92	13339	0.5000	0.5261	
16 Trichlorofluoromethane	101	2.221	2.210	0.011	93	9156	0.5000	0.5391	
17 Ethyl ether	59	2.470	2.459	0.011	86	5321	0.5000	0.5405	
18 Acrolein	56	2.577	2.565	0.012	94	4355	2.50	2.95	
19 1,1-Dichloroethene	96	2.672	2.660	0.012	95	5516	0.5000	0.4559	
20 1,1,2-Trichloro-1,2,2-trif	151		2.696				ND	ND	
21 Acetone	43		2.708				ND	ND	
23 Iodomethane	142	2.802	2.791	0.011	95	9477	0.5000	0.4790	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	2.862	2.862	0.000	98	23411	0.5000	0.5135	
26 3-Chloro-1-propene	76	2.992	2.980	0.012	89	4190	0.5000	0.4741	
27 Methyl acetate	43	3.004	3.004	0.000	97	16948	2.50	2.93	
28 Methylene Chloride	84		3.087				ND	ND	
29 2-Methyl-2-propanol	59	3.194	3.194	0.000	88	3325	5.00	5.38	
30 Acrylonitrile	53	3.301	3.301	-0.001	98	15374	5.00	5.10	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	97	7237	0.5000	0.4917	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	98	16802	0.5000	0.4927	
33 Hexane	57	3.585	3.585	0.000	93	7318	0.5000	0.5345	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	92	12442	0.5000	0.4878	
35 Vinyl acetate	43	3.739	3.739	0.000	94	9583	0.5000	0.5237	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	78	8243	0.5000	0.5246	
40 2-Butanone (MEK)	43	4.214	4.202	0.012	33	3674	1.00	1.17	
41 2,2-Dichloropropane	77	4.202	4.206	-0.004	64	8465	0.5000	0.4513	
45 Chlorobromomethane	128	4.391	4.392	-0.001	94	3273	0.5000	0.5200	
46 Tetrahydrofuran	42		4.439				ND	ND	
47 Chloroform	83	4.463	4.463	0.000	91	12176	0.5000	0.5226	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	93	7819	0.5000	0.4170	
49 Cyclohexane	56	4.676	4.676	0.000	83	8652	0.5000	0.4177	
50 1,1-Dichloropropene	75	4.771	4.759	0.012	94	8136	0.5000	0.4552	
51 Carbon tetrachloride	117	4.771	4.771	0.000	95	5444	0.5000	0.3706	
52 Isobutyl alcohol	41	4.854	4.854	0.000	82	2844	12.5	14.8	
54 Benzene	78	4.937	4.937	0.000	95	30752	0.5000	0.5164	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	53	8125	0.5000	0.5235	
56 n-Heptane	57		5.174				ND	ND	
58 Trichloroethene	130	5.494	5.494	0.000	95	6956	0.5000	0.4991	
60 Methylcyclohexane	83	5.672	5.672	0.000	90	8735	0.5000	0.4831	
61 1,2-Dichloropropane	63	5.684	5.672	0.012	90	6690	0.5000	0.4933	
63 Dibromomethane	93	5.779	5.779	0.000	94	3314	0.5000	0.5436	
64 1,4-Dioxane	88		5.791				ND	ND	
65 Dichlorobromomethane	83	5.909	5.909	0.000	92	8437	0.5000	0.5184	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	86	5794	1.00	1.00	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	94	10790	0.5000	0.5103	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	96	6958	1.00	1.01	
70 Toluene	91	6.609	6.609	0.000	98	31133	0.5000	0.5121	
71 trans-1,3-Dichloropropene	75	6.799	6.787	0.012	94	8723	0.5000	0.5251	
72 Ethyl methacrylate	69	6.882	6.882	0.000	87	5687	0.5000	0.4808	
73 1,1,2-Trichloroethane	97	6.965	6.953	0.012	82	4865	0.5000	0.5414	
75 Tetrachloroethene	164	7.107	7.107	0.000	88	4641	0.5000	0.4738	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	90	8308	0.5000	0.4904	
76 2-Hexanone	43	7.190	7.178	0.012	96	4349	1.00	1.01	
78 Chlorodibromomethane	129	7.321	7.321	0.000	82	4740	0.5000	0.4863	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	7.427	7.427	0.000	97	4271	0.5000	0.5043	
82 Chlorobenzene	112	7.890	7.890	0.000	97	21267	0.5000	0.5457	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	88	5608	0.5000	0.4551	
84 Ethylbenzene	106	7.996	7.985	0.011	98	9474	0.5000	0.4626	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	95	12342	0.5000	0.4806	
86 o-Xylene	106	8.471	8.471	0.000	97	13388	0.5000	0.5095	
87 Styrene	104	8.483	8.483	0.000	92	19884	0.5000	0.4691	
88 Bromoform	173	8.661	8.649	0.012	83	2439	0.5000	0.4928	
89 Isopropylbenzene	105	8.827	8.827	0.000	94	28972	0.5000	0.4703	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	84	5325	0.5000	0.5076	
93 Bromobenzene	156	9.123	9.111	0.012	92	7538	0.5000	0.5107	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	1	1239	0.5000	0.5931	
94 trans-1,4-Dichloro-2-buten	53		9.147				ND	ND	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	7463	0.5000	0.4625	
97 2-Chlorotoluene	126	9.301	9.301	0.000	95	7776	0.5000	0.5250	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	24727	0.5000	0.4853	
100 4-Chlorotoluene	126	9.408	9.408	0.000	98	8714	0.5000	0.5528	
102 tert-Butylbenzene	119	9.716	9.704	0.012	90	20528	0.5000	0.4980	
104 1,2,4-Trimethylbenzene	105	9.763	9.752	0.011	96	28735	0.5000	0.5243	
105 sec-Butylbenzene	105	9.929	9.929	0.000	92	27624	0.5000	0.4971	
106 1,3-Dichlorobenzene	146	10.036	10.024	0.012	96	16964	0.5000	0.5644	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	95	25032	0.5000	0.5082	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	92	17948	0.5000	0.5881	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	22663	0.5000	0.5566	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	95	15055	0.5000	0.5537	
113 1,2-Dibromo-3-Chloropropan	157		11.246				ND	ND	
115 1,2,4-Trichlorobenzene	180	12.088	12.088	0.000	91	10872	0.5000	0.6411	
116 Hexachlorobutadiene	225		12.266				ND	ND	
117 Naphthalene	128	12.325	12.325	0.000	95	19583	0.5000	0.6229	
118 1,2,3-Trichlorobenzene	180	12.574	12.562	0.012	94	9038	0.5000	0.6314	
S 134 Trihalomethanes, Total	1				0		2.00	2.02	
S 158 Total BTEX	1				0		2.50	2.48	
S 131 1,2-Dichloroethene, Total	96				0			1.02	
S 132 1,3-Dichloropropene, Total	75				0			1.04	
S 133 Xylenes, Total	106				0		1.00	0.99	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

vm100is_stk_00028	Amount Added: 1.00	Units: uL
vmrgas_00167	Amount Added: 0.40	Units: uL
vmarolistdw_00163	Amount Added: 0.40	Units: uL
vmrprimw_00200	Amount Added: 0.40	Units: uL
vm50ss_00254	Amount Added: 0.40	Units: uL
BTEX_SUMM_00001	Amount Added: 0.40	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7645.D

Injection Date: 02-Sep-2016 18:19:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: std8260 L1

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

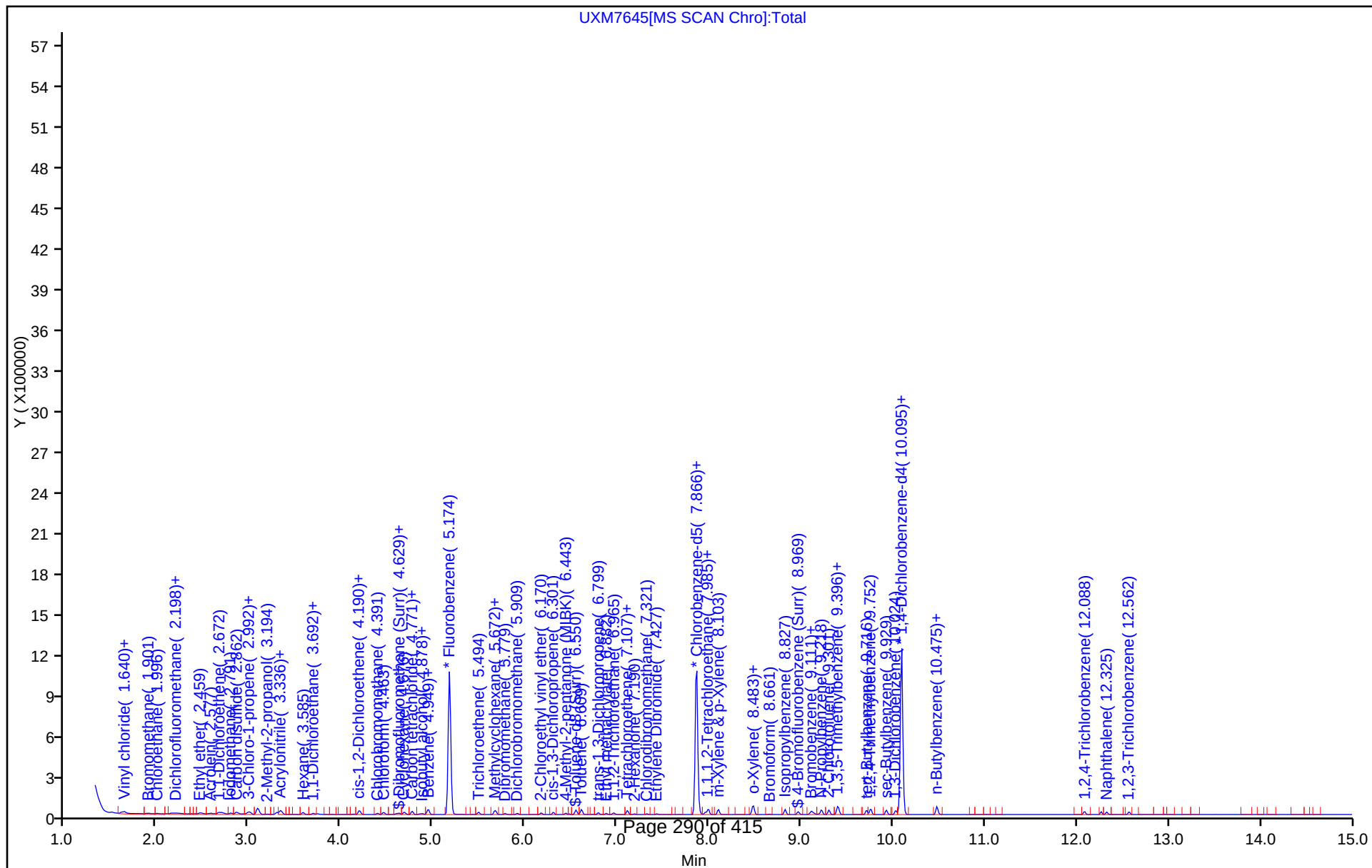
ALS Bottle#: 2

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7646.D
 Lims ID: std8260 L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 02-Sep-2016 18:42:30 ALS Bottle#: 3 Worklist Smp#: 7
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0057729-007
 Operator ID: 001904 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 06-Sep-2016 14:22:12 Calib Date: 02-Sep-2016 22:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK001

First Level Reviewer: laveyt

Date: 02-Sep-2016 19:12:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	987982	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.866	7.854	0.012	86	708954	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	95	368759	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	88	10999	1.00	0.9729	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	11018	1.00	0.9120	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	94	47620	1.00	0.9214	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	86	16495	1.00	0.8667	
9 Dichlorodifluoromethane	85	1.391	1.391	0.000	96	13751	1.00	1.00	
10 Chloromethane	50	1.498	1.510	-0.012	97	18175	1.00	0.9639	
11 Vinyl chloride	62	1.605	1.605	0.000	95	16071	1.00	0.9156	
12 Butadiene	54	1.640	1.640	0.000	96	15483	1.00	0.9381	
13 Bromomethane	94	1.901	1.901	0.000	84	9378	1.00	1.00	
14 Chloroethane	64	1.984	1.984	0.000	96	10179	1.00	0.9777	
15 Dichlorofluoromethane	67	2.162	2.174	-0.012	94	24088	1.00	0.9761	
16 Trichlorofluoromethane	101	2.210	2.210	0.000	95	15640	1.00	0.9463	
17 Ethyl ether	59	2.470	2.459	0.011	90	9146	1.00	0.9545	
18 Acrolein	56	2.577	2.565	0.012	97	7651	5.00	5.32	
19 1,1-Dichloroethene	96	2.672	2.660	0.012	97	11304	1.00	0.9601	
20 1,1,2-Trichloro-1,2,2-trif	151	2.708	2.696	0.012	90	7069	1.00	0.9458	
21 Acetone	43	2.708	2.708	0.000	98	11981	2.00	1.83	
23 Iodomethane	142	2.802	2.791	0.011	96	19368	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	2.862	2.862	0.000	98	42457	1.00	0.9568	
26 3-Chloro-1-propene	76	2.992	2.980	0.012	91	7921	1.00	0.9208	
27 Methyl acetate	43	3.004	3.004	0.000	97	26530	5.00	4.71	
28 Methylene Chloride	84	3.087	3.087	0.000	91	32896	1.00	1.00	
29 2-Methyl-2-propanol	59	3.206	3.194	0.012	96	5637	10.0	9.37	
30 Acrylonitrile	53	3.301	3.301	-0.001	98	29776	10.0	10.1	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	96	13441	1.00	0.9383	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	95	33400	1.00	1.01	
33 Hexane	57	3.585	3.585	0.000	90	14160	1.00	1.06	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	94	23386	1.00	0.9421	
35 Vinyl acetate	43	3.739	3.739	0.000	97	17071	1.00	0.9586	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	82	14979	1.00	0.9796	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	35	6246	2.00	2.04	
41 2,2-Dichloropropane	77	4.190	4.206	-0.016	74	18088	1.00	0.99	
45 Chlorobromomethane	128	4.391	4.392	-0.001	98	5954	1.00	0.9720	
46 Tetrahydrofuran	42	4.439	4.439	0.000	63	3745	2.00	1.87	
47 Chloroform	83	4.463	4.463	0.000	93	21668	1.00	0.9556	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	96	16989	1.00	0.9310	
49 Cyclohexane	56	4.688	4.676	0.012	88	19418	1.00	0.9632	
50 1,1-Dichloropropene	75	4.771	4.759	0.012	92	15845	1.00	0.9108	
51 Carbon tetrachloride	117	4.771	4.771	0.000	95	13376	1.00	0.9356	
52 Isobutyl alcohol	41	4.854	4.854	0.000	91	4271	25.0	22.9	
54 Benzene	78	4.937	4.937	0.000	95	54973	1.00	0.9485	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	54	14799	1.00	0.9798	
56 n-Heptane	57	5.174	5.174	0.000	37	35327	1.00	1.07	
58 Trichloroethene	130	5.494	5.494	0.000	95	12557	1.00	0.9258	
60 Methylcyclohexane	83	5.672	5.672	0.000	89	17246	1.00	0.9801	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	93	12996	1.00	0.9847	
63 Dibromomethane	93	5.779	5.779	0.000	93	5701	1.00	0.9608	
64 1,4-Dioxane	88		5.791				ND	ND	
65 Dichlorobromomethane	83	5.909	5.909	0.000	98	14951	1.00	0.9438	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	91	10431	2.00	1.85	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	95	18968	1.00	0.9217	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	93	12467	2.00	1.87	
70 Toluene	91	6.609	6.609	0.000	98	55749	1.00	0.9198	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	93	15094	1.00	0.9115	
72 Ethyl methacrylate	69	6.882	6.882	0.000	86	11173	1.00	0.9475	
73 1,1,2-Trichloroethane	97	6.965	6.953	0.012	86	8130	1.00	0.9076	
75 Tetrachloroethene	164	7.107	7.107	0.000	94	9385	1.00	0.9611	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	89	16958	1.00	1.00	
76 2-Hexanone	43	7.190	7.178	0.012	98	8543	2.00	1.99	
78 Chlorodibromomethane	129	7.321	7.321	0.000	88	8561	1.00	0.8809	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	7.427	7.427	0.000	95	8286	1.00	0.9814	
82 Chlorobenzene	112	7.890	7.890	0.000	95	36451	1.00	0.9382	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	92	11978	1.00	0.9749	
84 Ethylbenzene	106	7.985	7.985	0.000	98	18485	1.00	0.9054	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	96	23815	1.00	0.9302	
86 o-Xylene	106	8.471	8.471	0.000	96	23761	1.00	0.9070	
87 Styrene	104	8.483	8.483	0.000	93	37898	1.00	0.8968	
88 Bromoform	173	8.661	8.649	0.012	88	4109	1.00	0.8327	
89 Isopropylbenzene	105	8.827	8.827	0.000	96	55355	1.00	0.9012	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	88	9970	1.00	0.9644	
93 Bromobenzene	156	9.111	9.111	0.000	93	13865	1.00	0.9532	
95 1,2,3-Trichloropropane	110	9.147	9.135	0.012	9	1907	1.00	0.8202	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	66	2433	1.00	0.8772	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	14029	1.00	0.8822	
97 2-Chlorotoluene	126	9.301	9.301	0.000	96	13260	1.00	0.9084	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	96	43893	1.00	0.8741	
100 4-Chlorotoluene	126	9.408	9.408	0.000	98	14007	1.00	0.9017	
102 tert-Butylbenzene	119	9.716	9.704	0.012	92	36172	1.00	0.8904	
104 1,2,4-Trimethylbenzene	105	9.752	9.752	0.000	97	48604	1.00	0.8999	
105 sec-Butylbenzene	105	9.929	9.929	0.000	93	46932	1.00	0.8570	
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	97	28614	1.00	0.9660	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	96	42712	1.00	0.8800	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	93	29092	1.00	0.9673	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	34905	1.00	0.8698	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	98	25217	1.00	0.9412	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	58	1078	1.00	1.07	
115 1,2,4-Trichlorobenzene	180	12.088	12.088	0.000	92	12703	1.00	0.7833	
116 Hexachlorobutadiene	225	12.266	12.266	0.000	91	5794	1.00	1.10	
117 Naphthalene	128	12.325	12.325	0.000	95	26694	1.00	0.8616	
118 1,2,3-Trichlorobenzene	180	12.562	12.562	0.000	93	10635	1.00	0.7785	
S 134 Trihalomethanes, Total	1				0		4.00	3.61	
S 158 Total BTEX	1				0		5.00	4.61	
S 131 1,2-Dichloroethene, Total	96				0			1.92	
S 132 1,3-Dichloropropene, Total	75				0			1.83	
S 133 Xylenes, Total	106				0		2.00	1.84	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

vm100is_stk_00028	Amount Added: 1.00	Units: uL
vmrgas_00167	Amount Added: 0.80	Units: uL
vmarolistdw_00163	Amount Added: 0.80	Units: uL
vmrprimw_00200	Amount Added: 0.80	Units: uL
vm50ss_00254	Amount Added: 0.80	Units: uL
BTEX_SUMM_00001	Amount Added: 0.80	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7646.D

Injection Date: 02-Sep-2016 18:42:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: std8260 L2

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

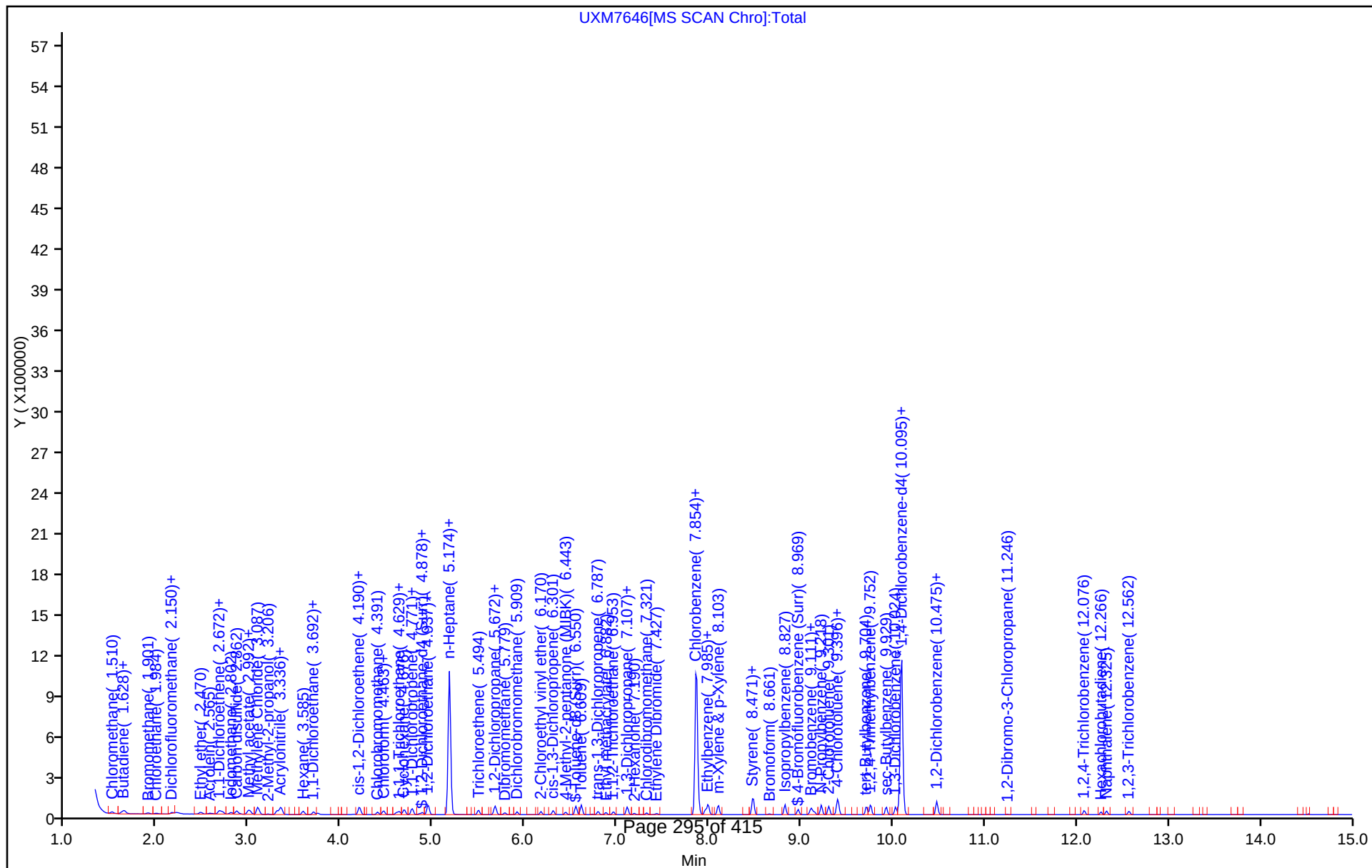
ALS Bottle#: 3

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7647.D
 Lims ID: std8260 L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 02-Sep-2016 19:05:30 ALS Bottle#: 4 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0057729-008
 Operator ID: 001904 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 06-Sep-2016 14:22:14 Calib Date: 02-Sep-2016 22:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK001

First Level Reviewer: laveyt

Date: 02-Sep-2016 19:45:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	98	1013756	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.866	7.854	0.012	87	725326	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	97	381772	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	112793	10.0	9.72	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	100	120090	10.0	9.69	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	506688	10.0	9.58	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	185268	10.0	9.51	
9 Dichlorodifluoromethane	85	1.391	1.391	0.000	99	154829	10.0	11.0	
10 Chloromethane	50	1.510	1.510	0.000	99	198954	10.0	10.3	
11 Vinyl chloride	62	1.616	1.605	0.011	98	186050	10.0	10.3	
12 Butadiene	54	1.640	1.640	0.000	98	174019	10.0	10.3	
13 Bromomethane	94	1.901	1.901	0.000	90	99092	10.0	10.3	
14 Chloroethane	64	1.996	1.984	0.012	99	112135	10.0	10.5	
15 Dichlorofluoromethane	67	2.174	2.174	0.000	97	260522	10.0	10.3	
16 Trichlorofluoromethane	101	2.209	2.210	-0.001	97	181007	10.0	10.7	
17 Ethyl ether	59	2.470	2.459	0.011	89	98153	10.0	9.98	
18 Acrolein	56	2.565	2.565	0.000	99	68995	50.0	46.8	
19 1,1-Dichloroethene	96	2.672	2.660	0.012	97	122182	10.0	10.1	
20 1,1,2-Trichloro-1,2,2-trif	151	2.707	2.696	0.011	96	77066	10.0	10.0	
21 Acetone	43	2.707	2.708	-0.001	100	53357	20.0	21.0	
23 Iodomethane	142	2.802	2.791	0.011	97	205597	10.0	10.4	

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7647.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	2.862	2.862	0.000	99	460537	10.0	10.1	
26 3-Chloro-1-propene	76	2.980	2.980	0.000	92	91024	10.0	10.3	
27 Methyl acetate	43	3.004	3.004	0.000	98	277806	50.0	48.1	
28 Methylene Chloride	84	3.087	3.087	0.000	90	173509	10.0	10.3	
29 2-Methyl-2-propanol	59	3.194	3.194	0.000	99	58313	100.0	94.4	
30 Acrylonitrile	53	3.300	3.301	-0.001	100	295958	100.0	98.2	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	99	149734	10.0	10.2	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	95	346466	10.0	10.2	
33 Hexane	57	3.585	3.585	0.000	91	125900	10.0	9.21	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	260219	10.0	10.2	
35 Vinyl acetate	43	3.739	3.739	0.000	97	182452	10.0	9.99	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	82	154142	10.0	9.82	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	99	60461	20.0	19.2	
41 2,2-Dichloropropane	77	4.190	4.206	-0.016	90	196855	10.0	10.5	
45 Chlorobromomethane	128	4.391	4.392	-0.001	97	62481	10.0	9.94	
46 Tetrahydrofuran	42	4.439	4.439	0.000	87	41799	20.0	20.3	
47 Chloroform	83	4.463	4.463	0.000	93	229820	10.0	9.88	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	98	190898	10.0	10.2	
49 Cyclohexane	56	4.676	4.676	0.000	89	207056	10.0	10.0	
50 1,1-Dichloropropene	75	4.759	4.759	0.000	95	179197	10.0	10.0	
51 Carbon tetrachloride	117	4.771	4.771	0.000	97	150830	10.0	10.3	
52 Isobutyl alcohol	41	4.854	4.854	0.000	93	44616	250.0	233.2	
54 Benzene	78	4.937	4.937	0.000	95	593839	10.0	9.99	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	97	152502	10.0	9.84	
56 n-Heptane	57	5.174	5.174	0.000	43	83821	10.0	9.41	
58 Trichloroethene	130	5.494	5.494	0.000	98	138458	10.0	9.95	
60 Methylcyclohexane	83	5.672	5.672	0.000	89	172604	10.0	9.56	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	97	136100	10.0	10.1	
63 Dibromomethane	93	5.779	5.779	0.000	96	59851	10.0	9.83	
64 1,4-Dioxane	88	5.791	5.791	0.000	87	10310	200.0	179.7	
65 Dichlorobromomethane	83	5.909	5.909	0.000	99	160964	10.0	9.90	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	91	112884	20.0	19.5	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	95	214391	10.0	10.2	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	96	136923	20.0	20.0	
70 Toluene	91	6.609	6.609	0.000	98	626743	10.0	10.1	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	93	166264	10.0	9.81	
72 Ethyl methacrylate	69	6.882	6.882	0.000	88	120762	10.0	10.0	
73 1,1,2-Trichloroethane	97	6.965	6.953	0.012	90	92010	10.0	10.0	
75 Tetrachloroethene	164	7.107	7.107	0.000	95	98871	10.0	9.90	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	91	173173	10.0	10.0	
76 2-Hexanone	43	7.190	7.178	0.012	95	84868	20.0	19.3	
78 Chlorodibromomethane	129	7.320	7.321	-0.001	91	100434	10.0	10.1	

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7647.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	7.427	7.427	0.000	99	85538	10.0	9.90	
82 Chlorobenzene	112	7.890	7.890	0.000	96	394653	10.0	9.93	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	96	127381	10.0	10.1	
84 Ethylbenzene	106	7.985	7.985	-0.001	98	212906	10.0	10.2	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	97	267971	10.0	10.2	
86 o-Xylene	106	8.471	8.471	0.000	94	275788	10.0	10.3	
87 Styrene	104	8.483	8.483	0.000	94	442378	10.0	10.2	
88 Bromoform	173	8.649	8.649	0.000	96	51827	10.0	10.3	
89 Isopropylbenzene	105	8.826	8.827	-0.001	96	636731	10.0	10.1	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	93	107547	10.0	10.0	
93 Bromobenzene	156	9.111	9.111	0.000	95	151298	10.0	10.0	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	82	30717	10.0	10.0	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	73	28756	10.0	10.0	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	169269	10.0	10.3	
97 2-Chlorotoluene	126	9.301	9.301	0.000	96	150678	10.0	9.97	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	527519	10.0	10.1	
100 4-Chlorotoluene	126	9.408	9.408	0.000	99	159671	10.0	9.93	
102 tert-Butylbenzene	119	9.716	9.704	0.012	91	416891	10.0	9.91	
104 1,2,4-Trimethylbenzene	105	9.751	9.752	-0.001	97	555409	10.0	9.93	
105 sec-Butylbenzene	105	9.929	9.929	0.000	94	561161	10.0	9.90	
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	98	295529	10.0	9.64	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	492976	10.0	9.81	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	97	300973	10.0	9.67	
111 n-Butylbenzene	91	10.475	10.475	0.000	99	395682	10.0	9.52	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	98	274819	10.0	9.91	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	82	15462	10.0	9.36	
115 1,2,4-Trichlorobenzene	180	12.088	12.088	0.000	93	138572	10.0	9.45	
116 Hexachlorobutadiene	225	12.265	12.266	-0.001	96	49676	10.0	9.11	
117 Naphthalene	128	12.325	12.325	0.000	97	293564	10.0	9.15	
118 1,2,3-Trichlorobenzene	180	12.574	12.562	0.012	96	118862	10.0	9.65	
S 134 Trihalomethanes, Total	1				0		40.0	40.1	
S 158 Total BTEX	1				0		50.0	50.8	
S 131 1,2-Dichloroethene, Total	96				0			20.0	
S 132 1,3-Dichloropropene, Total	75				0			20.0	
S 133 Xylenes, Total	106				0		20.0	20.5	

Reagents:

vm100is_stk_00028	Amount Added: 1.00	Units: uL
vmrgas_00167	Amount Added: 8.00	Units: uL
vmarolistdw_00163	Amount Added: 8.00	Units: uL
vmrprimw_00200	Amount Added: 8.00	Units: uL
vm50ss_00254	Amount Added: 8.00	Units: uL
BTEX_SUMM_00001	Amount Added: 8.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7647.D

Injection Date: 02-Sep-2016 19:05:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: std8260 L3

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

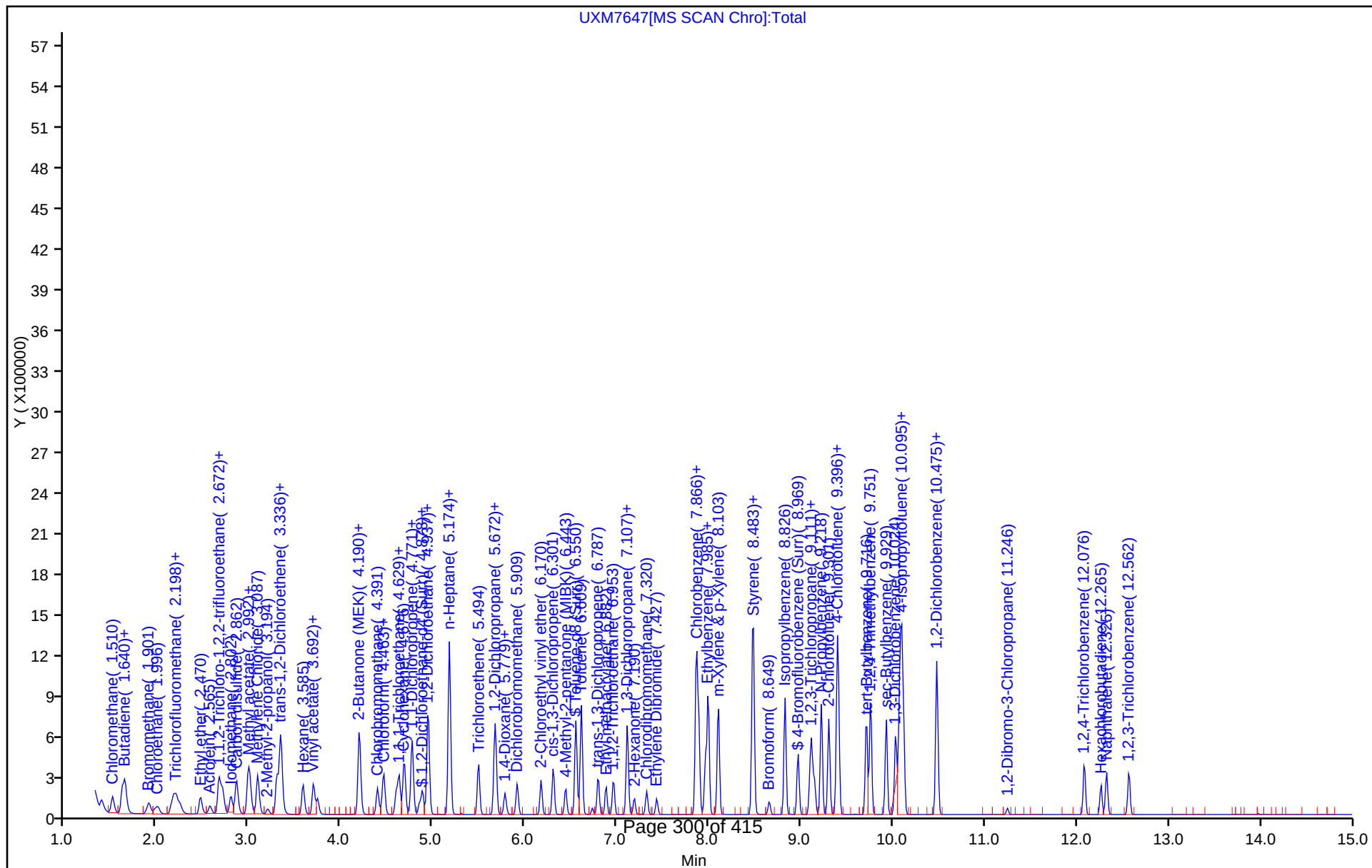
ALS Bottle#: 4

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7648.D
 Lims ID: ICIS L4
 Client ID:
 Sample Type: ICIS Calib Level: 4
 Inject. Date: 02-Sep-2016 19:28:30 ALS Bottle#: 5 Worklist Smp#: 9
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0057729-009
 Operator ID: 001904 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 06-Sep-2016 14:22:16 Calib Date: 02-Sep-2016 22:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK001

First Level Reviewer: laveyt

Date: 02-Sep-2016 19:50:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	97	1017298	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.866	7.866	0.000	86	725873	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	96	378084	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	242855	20.0	20.9	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	98	261493	20.0	21.0	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	1091734	20.0	20.6	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	404107	20.0	20.7	
9 Dichlorodifluoromethane	85	1.391	1.391	0.000	99	251372	20.0	17.8	
10 Chloromethane	50	1.510	1.510	0.000	99	369691	20.0	19.0	
11 Vinyl chloride	62	1.605	1.605	0.000	98	343381	20.0	19.0	
12 Butadiene	54	1.640	1.640	0.000	98	308833	20.0	18.2	
13 Bromomethane	94	1.901	1.901	0.000	89	181390	20.0	18.8	
14 Chloroethane	64	1.984	1.984	0.000	99	208215	20.0	19.4	
15 Dichlorofluoromethane	67	2.174	2.174	0.000	98	484168	20.0	19.1	
16 Trichlorofluoromethane	101	2.210	2.210	0.000	97	316095	20.0	18.6	
17 Ethyl ether	59	2.459	2.459	0.000	91	191097	20.0	19.4	
18 Acrolein	56	2.565	2.565	0.000	99	132865	100.0	89.8	
19 1,1-Dichloroethene	96	2.660	2.660	0.000	98	247185	20.0	20.4	
20 1,1,2-Trichloro-1,2,2-trif	151	2.696	2.696	0.000	97	151258	20.0	19.7	
21 Acetone	43	2.708	2.708	0.000	100	100311	40.0	42.7	
23 Iodomethane	142	2.791	2.791	0.000	97	393872	20.0	19.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	2.862	2.862	0.000	99	892879	20.0	19.5	
26 3-Chloro-1-propene	76	2.980	2.980	0.000	92	175205	20.0	19.8	
27 Methyl acetate	43	3.004	3.004	0.000	97	551163	100.0	95.1	
28 Methylene Chloride	84	3.087	3.087	0.000	91	314346	20.0	19.5	
29 2-Methyl-2-propanol	59	3.194	3.194	0.000	99	121140	200.0	195.5	
30 Acrylonitrile	53	3.301	3.301	0.000	99	577946	200.0	191.1	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	98	294780	20.0	20.0	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	95	667322	20.0	19.5	
33 Hexane	57	3.585	3.585	0.000	91	257581	20.0	18.8	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	506966	20.0	19.8	
35 Vinyl acetate	43	3.739	3.739	0.000	97	357507	20.0	19.5	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	85	305424	20.0	19.4	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	99	119512	40.0	37.9	
41 2,2-Dichloropropane	77	4.190	4.206	-0.016	90	380420	20.0	20.2	
45 Chlorobromomethane	128	4.392	4.392	0.000	96	122207	20.0	19.4	
46 Tetrahydrofuran	42	4.439	4.439	0.000	87	81171	40.0	39.3	
47 Chloroform	83	4.463	4.463	0.000	93	458943	20.0	19.7	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	98	396852	20.0	21.1	
49 Cyclohexane	56	4.676	4.676	0.000	89	423279	20.0	20.4	
50 1,1-Dichloropropene	75	4.759	4.759	0.000	96	369048	20.0	20.6	
51 Carbon tetrachloride	117	4.771	4.771	0.000	97	311276	20.0	21.1	
52 Isobutyl alcohol	41	4.854	4.854	0.000	94	92642	500.0	482.6	
54 Benzene	78	4.937	4.937	0.000	96	1165842	20.0	19.5	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	96	306271	20.0	19.7	
56 n-Heptane	57	5.174	5.174	0.000	50	141362	20.0	19.4	
58 Trichloroethene	130	5.494	5.494	0.000	97	287608	20.0	20.6	
60 Methylcyclohexane	83	5.672	5.672	0.000	89	356755	20.0	19.7	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	96	267293	20.0	19.7	
63 Dibromomethane	93	5.779	5.779	0.000	97	119288	20.0	19.5	
64 1,4-Dioxane	88	5.791	5.791	0.000	92	21652	400.0	376.1	
65 Dichlorobromomethane	83	5.909	5.909	0.000	99	318075	20.0	19.5	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	92	230080	40.0	39.6	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	95	419680	20.0	19.8	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	95	271852	40.0	39.5	
70 Toluene	91	6.609	6.609	0.000	99	1232800	20.0	19.9	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	94	333649	20.0	19.7	
72 Ethyl methacrylate	69	6.882	6.882	0.000	88	235058	20.0	19.5	
73 1,1,2-Trichloroethane	97	6.953	6.953	0.000	90	179120	20.0	19.5	
75 Tetrachloroethene	164	7.107	7.107	0.000	96	200949	20.0	20.1	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	91	340520	20.0	19.7	
76 2-Hexanone	43	7.178	7.178	0.000	95	173402	40.0	39.4	
78 Chlorodibromomethane	129	7.321	7.321	0.000	91	199602	20.0	20.1	

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7648.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	7.427	7.427	0.000	98	168437	20.0	19.5	
82 Chlorobenzene	112	7.890	7.890	0.000	96	770889	20.0	19.4	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	97	252939	20.0	20.1	
84 Ethylbenzene	106	7.985	7.985	0.000	98	426215	20.0	20.4	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	97	529919	20.0	20.2	
86 o-Xylene	106	8.471	8.471	0.000	95	534851	20.0	19.9	
87 Styrene	104	8.483	8.483	0.000	94	869593	20.0	20.1	
88 Bromoform	173	8.649	8.649	0.000	97	100453	20.0	19.9	
89 Isopropylbenzene	105	8.827	8.827	0.000	95	1287409	20.0	20.5	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	93	210721	20.0	19.9	
93 Bromobenzene	156	9.111	9.111	0.000	95	288716	20.0	19.4	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	81	60401	20.0	19.7	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	76	56228	20.0	19.8	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	332236	20.0	20.4	
97 2-Chlorotoluene	126	9.301	9.301	0.000	96	298240	20.0	19.9	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	1058183	20.0	20.6	
100 4-Chlorotoluene	126	9.408	9.408	0.000	99	311962	20.0	19.6	
102 tert-Butylbenzene	119	9.704	9.704	0.000	92	854069	20.0	20.5	
104 1,2,4-Trimethylbenzene	105	9.752	9.752	0.000	96	1104631	20.0	19.9	
105 sec-Butylbenzene	105	9.929	9.929	0.000	94	1150431	20.0	20.5	
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	98	593740	20.0	19.6	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	1014632	20.0	20.4	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	97	587284	20.0	19.0	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	819187	20.0	19.9	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	98	534603	20.0	19.5	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	84	33010	20.0	19.7	
115 1,2,4-Trichlorobenzene	180	12.088	12.088	0.000	94	278556	20.0	19.3	
116 Hexachlorobutadiene	225	12.266	12.266	0.000	96	101851	20.0	18.9	
117 Naphthalene	128	12.325	12.325	0.000	97	597404	20.0	18.8	
118 1,2,3-Trichlorobenzene	180	12.562	12.562	0.000	95	238727	20.0	19.7	
S 134 Trihalomethanes, Total	1				0		80.0	79.1	
S 158 Total BTEX	1				0		100.0	99.9	
S 133 Xylenes, Total	106				0		40.0	40.2	

Reagents:

vm100is_stk_00028	Amount Added: 1.00	Units: uL
vmrgas_00167	Amount Added: 16.00	Units: uL
vmarolistdw_00163	Amount Added: 16.00	Units: uL
vmrprimw_00200	Amount Added: 16.00	Units: uL
vm50ss_00254	Amount Added: 16.00	Units: uL
BTEX_SUMM_00001	Amount Added: 16.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7648.D

Injection Date: 02-Sep-2016 19:28:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: ICIS L4

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

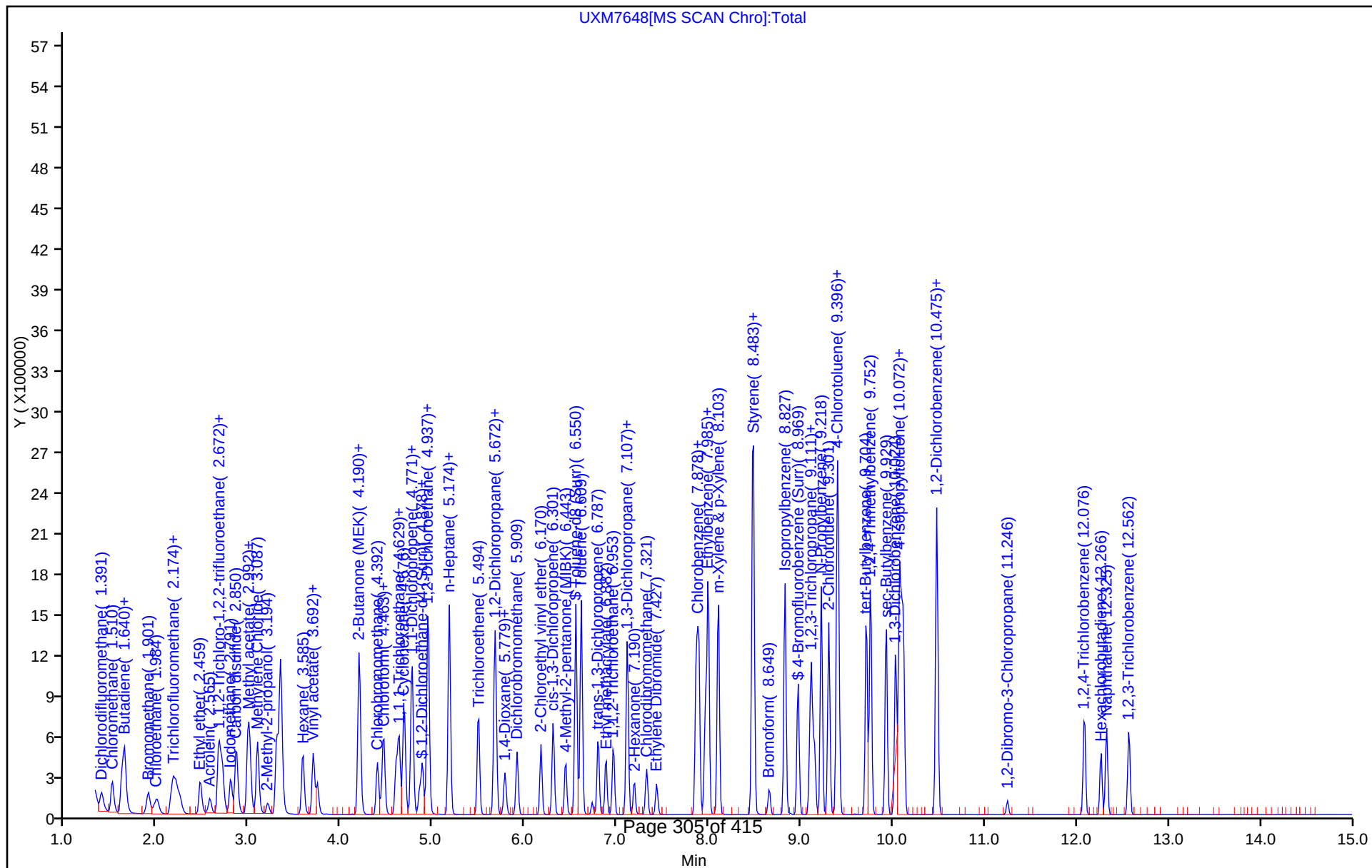
ALS Bottle#: 5

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7649.D
 Lims ID: std8260 L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 02-Sep-2016 19:51:30 ALS Bottle#: 6 Worklist Smp#: 10
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0057729-010
 Operator ID: 001904 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 06-Sep-2016 14:22:19 Calib Date: 02-Sep-2016 22:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK001

First Level Reviewer: laveyt

Date: 02-Sep-2016 20:34:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	94	1007096	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	87	735257	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	95	375428	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	483883	40.0	42.0	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	100	515818	40.0	41.9	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	2230907	40.0	41.6	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	86	809182	40.0	41.0	
9 Dichlorodifluoromethane	85	1.391	1.391	0.000	99	521260	40.0	37.2	
10 Chloromethane	50	1.510	1.510	0.000	99	766875	40.0	39.9	
11 Vinyl chloride	62	1.617	1.617	0.000	98	711508	40.0	39.8	
12 Butadiene	54	1.640	1.640	0.000	97	634633	40.0	37.7	
13 Bromomethane	94	1.901	1.901	0.000	90	356276	40.0	37.2	
14 Chloroethane	64	1.996	1.996	0.000	100	425081	40.0	40.1	
15 Dichlorofluoromethane	67	2.174	2.174	0.000	97	977064	40.0	38.8	
16 Trichlorofluoromethane	101	2.198	2.198	0.000	99	644209	40.0	38.2	
17 Ethyl ether	59	2.458	2.458	0.000	90	384576	40.0	39.4	
18 Acrolein	56	2.565	2.565	0.000	99	279390	200.0	190.8	
19 1,1-Dichloroethene	96	2.660	2.660	0.000	97	501119	40.0	41.8	
20 1,1,2-Trichloro-1,2,2-trif	151	2.708	2.708	0.000	97	306772	40.0	40.3	
21 Acetone	43	2.708	2.708	0.000	100	176530	80.0	79.0	
23 Iodomethane	142	2.791	2.791	0.000	97	781684	40.0	39.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	2.850	2.850	0.000	99	1809775	40.0	40.0	
26 3-Chloro-1-propene	76	2.980	2.980	0.000	92	362330	40.0	41.3	
27 Methyl acetate	43	3.004	3.004	0.000	98	1110434	200.0	193.6	
28 Methylene Chloride	84	3.087	3.087	0.000	92	612844	40.0	39.7	
29 2-Methyl-2-propanol	59	3.206	3.206	0.000	98	243176	400.0	396.4	
30 Acrylonitrile	53	3.300	3.300	0.000	99	1193211	400.0	398.6	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	99	596495	40.0	40.8	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	95	1331005	40.0	39.3	
33 Hexane	57	3.573	3.573	0.000	91	533483	40.0	39.3	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	1033883	40.0	40.9	
35 Vinyl acetate	43	3.739	3.739	0.000	97	726705	40.0	40.0	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	82	624121	40.0	40.0	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	100	235391	80.0	75.3	
41 2,2-Dichloropropane	77	4.190	4.206	-0.016	89	751196	40.0	40.4	
45 Chlorobromomethane	128	4.391	4.391	0.000	96	250390	40.0	40.1	
46 Tetrahydrofuran	42	4.439	4.439	0.000	88	165693	80.0	81.1	
47 Chloroform	83	4.463	4.463	0.000	93	922878	40.0	39.9	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	99	795960	40.0	42.8	
49 Cyclohexane	56	4.676	4.676	0.000	89	880403	40.0	42.8	
50 1,1-Dichloropropene	75	4.759	4.759	0.000	96	743915	40.0	42.0	
51 Carbon tetrachloride	117	4.771	4.771	0.000	96	642845	40.0	44.1	
52 Isobutyl alcohol	41	4.854	4.854	0.000	94	180842	1000.0	951.7	
54 Benzene	78	4.937	4.937	0.000	96	2386277	40.0	40.4	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	97	608925	40.0	39.6	
56 n-Heptane	57	5.174	5.174	0.000	66	256678	40.0	40.0	
58 Trichloroethene	130	5.494	5.494	0.000	99	562337	40.0	40.7	
60 Methylcyclohexane	83	5.660	5.660	0.000	90	742475	40.0	41.4	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	97	542271	40.0	40.3	
63 Dibromomethane	93	5.779	5.779	0.000	97	241742	40.0	40.0	
64 1,4-Dioxane	88	5.791	5.791	0.000	95	47695	800.0	837.0	
65 Dichlorobromomethane	83	5.909	5.909	0.000	99	660310	40.0	40.9	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	92	494412	80.0	85.9	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	95	857708	40.0	40.9	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	95	555095	80.0	81.5	
70 Toluene	91	6.609	6.609	0.000	98	2531999	40.0	40.3	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	93	702828	40.0	40.9	
72 Ethyl methacrylate	69	6.882	6.882	0.000	88	510917	40.0	41.8	
73 1,1,2-Trichloroethane	97	6.953	6.953	0.000	90	373570	40.0	40.2	
75 Tetrachloroethene	164	7.107	7.107	0.000	95	419063	40.0	41.4	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	91	714119	40.0	40.8	
76 2-Hexanone	43	7.178	7.178	0.000	95	360611	80.0	80.9	
78 Chlorodibromomethane	129	7.320	7.320	0.000	90	421557	40.0	41.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	7.427	7.427	0.000	99	351742	40.0	40.2	
82 Chlorobenzene	112	7.890	7.890	0.000	95	1598603	40.0	39.7	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	96	519219	40.0	40.7	
84 Ethylbenzene	106	7.985	7.985	0.000	98	890140	40.0	42.0	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	97	1088657	40.0	41.0	
86 o-Xylene	106	8.471	8.471	0.000	97	1082466	40.0	39.8	
87 Styrene	104	8.483	8.483	0.000	93	1838358	40.0	41.9	
88 Bromoform	173	8.649	8.649	0.000	97	213366	40.0	41.7	
89 Isopropylbenzene	105	8.827	8.827	0.000	95	2608077	40.0	40.9	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	93	425024	40.0	40.4	
93 Bromobenzene	156	9.111	9.111	0.000	94	607200	40.0	41.0	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	82	122998	40.0	40.2	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	76	117743	40.0	41.7	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	693417	40.0	42.8	
97 2-Chlorotoluene	126	9.301	9.301	0.000	96	604951	40.0	40.7	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	94	2140028	40.0	41.9	
100 4-Chlorotoluene	126	9.408	9.408	0.000	98	638008	40.0	40.3	
102 tert-Butylbenzene	119	9.716	9.716	0.000	91	1714775	40.0	41.5	
104 1,2,4-Trimethylbenzene	105	9.751	9.751	0.000	96	2227231	40.0	40.5	
105 sec-Butylbenzene	105	9.929	9.929	0.000	94	2345885	40.0	42.1	
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	98	1167633	40.0	38.7	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	2040838	40.0	41.3	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	95	1176698	40.0	38.4	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	1669676	40.0	40.9	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	97	1070643	40.0	39.2	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	85	66054	40.0	39.2	
115 1,2,4-Trichlorobenzene	180	12.076	12.076	0.000	94	574630	40.0	40.3	
116 Hexachlorobutadiene	225	12.265	12.265	0.000	95	219545	40.0	40.9	
117 Naphthalene	128	12.325	12.325	0.000	97	1253409	40.0	39.7	
118 1,2,3-Trichlorobenzene	180	12.562	12.562	0.000	96	475806	40.0	39.7	
S 134 Trihalomethanes, Total	1				0		160.0	164.3	
S 158 Total BTEX	1				0		200.0	203.6	
S 131 1,2-Dichloroethene, Total	96				0			80.9	
S 132 1,3-Dichloropropene, Total	75				0			81.8	
S 133 Xylenes, Total	106				0		80.0	80.8	

Reagents:

vm100is_stk_00028	Amount Added: 1.00	Units: uL
vmrgas_00167	Amount Added: 32.00	Units: uL
vmarolistdw_00163	Amount Added: 32.00	Units: uL
vmrprimw_00200	Amount Added: 32.00	Units: uL
vm50ss_00254	Amount Added: 32.00	Units: uL
BTEX_SUMM_00001	Amount Added: 32.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7649.D

Injection Date: 02-Sep-2016 19:51:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: std8260 L5

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

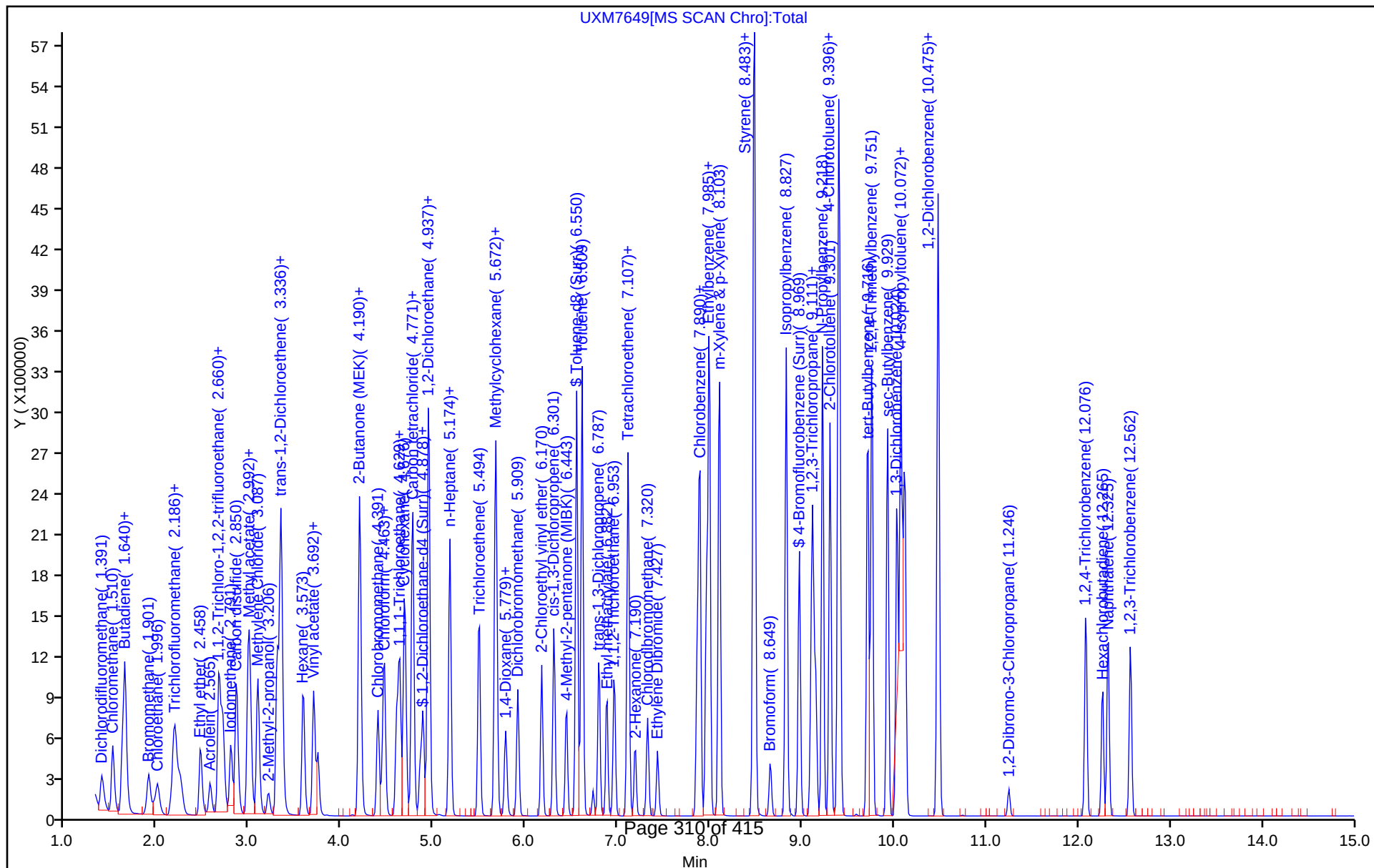
ALS Bottle#: 6

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7650.D
 Lims ID: std8260 L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 02-Sep-2016 20:14:30 ALS Bottle#: 7 Worklist Smp#: 11
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0057729-011
 Operator ID: 001904 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 06-Sep-2016 14:22:22 Calib Date: 02-Sep-2016 22:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK001

First Level Reviewer: laveyt

Date: 02-Sep-2016 20:38:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	91	1006829	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	711836	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	95	383212	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	740719	60.0	64.3	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	98	779157	60.0	63.3	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	3318698	60.0	64.0	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	88	1210196	60.0	63.3	
9 Dichlorodifluoromethane	85	1.391	1.391	0.000	100	853105	60.0	60.9	
10 Chloromethane	50	1.510	1.510	0.000	99	1181916	60.0	61.5	
11 Vinyl chloride	62	1.617	1.617	0.000	98	1115105	60.0	62.3	
12 Butadiene	54	1.640	1.640	0.000	98	1013157	60.0	60.2	
13 Bromomethane	94	1.889	1.901	-0.012	89	554208	60.0	57.9	
14 Chloroethane	64	1.984	1.996	-0.012	99	659381	60.0	62.1	
15 Dichlorofluoromethane	67	2.162	2.174	-0.012	97	1537534	60.0	61.1	
16 Trichlorofluoromethane	101	2.198	2.198	0.000	97	1034413	60.0	61.4	
17 Ethyl ether	59	2.459	2.458	0.001	91	593848	60.0	60.8	
18 Acrolein	56	2.565	2.565	0.000	99	424932	300.0	290.2	
19 1,1-Dichloroethene	96	2.660	2.660	0.000	97	758417	60.0	63.2	
20 1,1,2-Trichloro-1,2,2-trif	151	2.696	2.708	-0.012	95	484331	60.0	63.6	
21 Acetone	43	2.708	2.708	0.000	100	258127	120.0	117.4	
23 Iodomethane	142	2.791	2.791	0.000	96	1185618	60.0	60.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	2.850	2.850	0.000	99	2787477	60.0	61.6	
26 3-Chloro-1-propene	76	2.980	2.980	0.000	93	566754	60.0	64.7	
27 Methyl acetate	43	3.004	3.004	0.000	98	1727021	300.0	301.1	
28 Methylene Chloride	84	3.087	3.087	0.000	92	925375	60.0	60.5	
29 2-Methyl-2-propanol	59	3.206	3.206	0.000	99	395539	600.0	645.0	
30 Acrylonitrile	53	3.289	3.300	-0.011	99	1853994	600.0	619.5	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	99	910191	60.0	62.3	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	95	2092270	60.0	61.9	
33 Hexane	57	3.573	3.573	0.000	91	836591	60.0	61.6	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	1589882	60.0	62.8	
35 Vinyl acetate	43	3.739	3.739	0.000	97	1110328	60.0	61.2	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	87	951589	60.0	61.1	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	99	361763	120.0	115.8	
41 2,2-Dichloropropane	77	4.190	4.206	-0.016	88	1155275	60.0	62.1	
45 Chlorobromomethane	128	4.392	4.391	0.001	97	382939	60.0	61.3	
46 Tetrahydrofuran	42	4.439	4.439	0.000	87	258316	120.0	126.4	
47 Chloroform	83	4.463	4.463	0.000	93	1428250	60.0	61.8	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	99	1215453	60.0	65.4	
49 Cyclohexane	56	4.676	4.676	0.000	89	1368363	60.0	66.6	
50 1,1-Dichloropropene	75	4.759	4.759	0.000	96	1165728	60.0	65.8	
51 Carbon tetrachloride	117	4.771	4.771	0.000	96	992122	60.0	68.1	
52 Isobutyl alcohol	41	4.854	4.854	0.000	94	298014	1500.0	1568.7	
54 Benzene	78	4.937	4.937	0.000	95	3661852	60.0	62.0	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	97	938005	60.0	60.9	
56 n-Heptane	57	5.174	5.174	0.000	81	375839	60.0	61.1	
58 Trichloroethene	130	5.494	5.494	0.000	98	858104	60.0	62.1	
60 Methylcyclohexane	83	5.660	5.660	0.000	91	1159985	60.0	64.7	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	97	833142	60.0	61.9	
63 Dibromomethane	93	5.779	5.779	0.000	96	360471	60.0	59.6	
64 1,4-Dioxane	88	5.791	5.791	0.000	94	76212	1200.0	1337.7	
65 Dichlorobromomethane	83	5.909	5.909	0.000	99	999322	60.0	61.9	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	92	719737	120.0	125.0	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	95	1296316	60.0	61.8	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	95	857708	120.0	125.9	
70 Toluene	91	6.609	6.609	0.000	98	3816588	60.0	62.7	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	93	1047424	60.0	63.0	
72 Ethyl methacrylate	69	6.882	6.882	0.000	89	761447	60.0	64.3	
73 1,1,2-Trichloroethane	97	6.953	6.953	0.000	90	552567	60.0	61.4	
75 Tetrachloroethene	164	7.107	7.107	0.000	95	624796	60.0	63.7	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	92	1027251	60.0	60.6	
76 2-Hexanone	43	7.190	7.178	0.012	95	537585	120.0	124.5	
78 Chlorodibromomethane	129	7.321	7.320	0.001	91	636823	60.0	65.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	7.427	7.427	0.000	99	529565	60.0	62.5	
82 Chlorobenzene	112	7.890	7.890	0.000	95	2379580	60.0	61.0	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	96	797603	60.0	64.7	
84 Ethylbenzene	106	7.985	7.985	0.000	98	1328105	60.0	64.8	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	96	1618824	60.0	63.0	
86 o-Xylene	106	8.471	8.471	0.000	96	1660662	60.0	63.1	
87 Styrene	104	8.483	8.483	0.000	93	2771203	60.0	65.3	
88 Bromoform	173	8.649	8.649	0.000	97	332626	60.0	67.1	
89 Isopropylbenzene	105	8.827	8.827	0.001	95	4062481	60.0	65.9	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	93	652252	60.0	60.7	
93 Bromobenzene	156	9.111	9.111	0.000	94	932194	60.0	61.7	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	80	188391	60.0	60.2	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	86	188602	60.0	65.4	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	1065878	60.0	64.5	
97 2-Chlorotoluene	126	9.301	9.301	0.000	96	938112	60.0	61.8	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	3339843	60.0	64.0	
100 4-Chlorotoluene	126	9.408	9.408	0.000	98	980146	60.0	60.7	
102 tert-Butylbenzene	119	9.716	9.716	0.000	91	2686102	60.0	63.6	
104 1,2,4-Trimethylbenzene	105	9.752	9.751	0.001	96	3529310	60.0	62.9	
105 sec-Butylbenzene	105	9.929	9.929	0.000	93	3697907	60.0	65.0	
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	98	1839346	60.0	59.8	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	3240360	60.0	64.2	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	95	1831491	60.0	58.6	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	2620807	60.0	62.8	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	99	1681236	60.0	60.4	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	84	106502	60.0	61.7	
115 1,2,4-Trichlorobenzene	180	12.088	12.076	0.012	94	888813	60.0	61.1	
116 Hexachlorobutadiene	225	12.266	12.265	0.001	96	335653	60.0	61.3	
117 Naphthalene	128	12.325	12.325	0.000	96	2016259	60.0	62.6	
118 1,2,3-Trichlorobenzene	180	12.562	12.562	0.000	95	747481	60.0	61.1	
S 134 Trihalomethanes, Total	1				0		240.0	256.1	
S 158 Total BTEX	1				0		300.0	315.6	
S 131 1,2-Dichloroethene, Total	96				0			123.4	
S 132 1,3-Dichloropropene, Total	75				0			124.8	
S 133 Xylenes, Total	106				0		120.0	126.1	

Reagents:

vm100is_stk_00028	Amount Added: 1.00	Units: uL
vmrgas_00167	Amount Added: 48.00	Units: uL
vmarolistdw_00163	Amount Added: 48.00	Units: uL
vmrprimw_00200	Amount Added: 48.00	Units: uL
vm50ss_00254	Amount Added: 48.00	Units: uL
BTEX_SUMM_00001	Amount Added: 48.00	Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7650.D

Injection Date: 02-Sep-2016 20:14:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: std8260 L6

Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

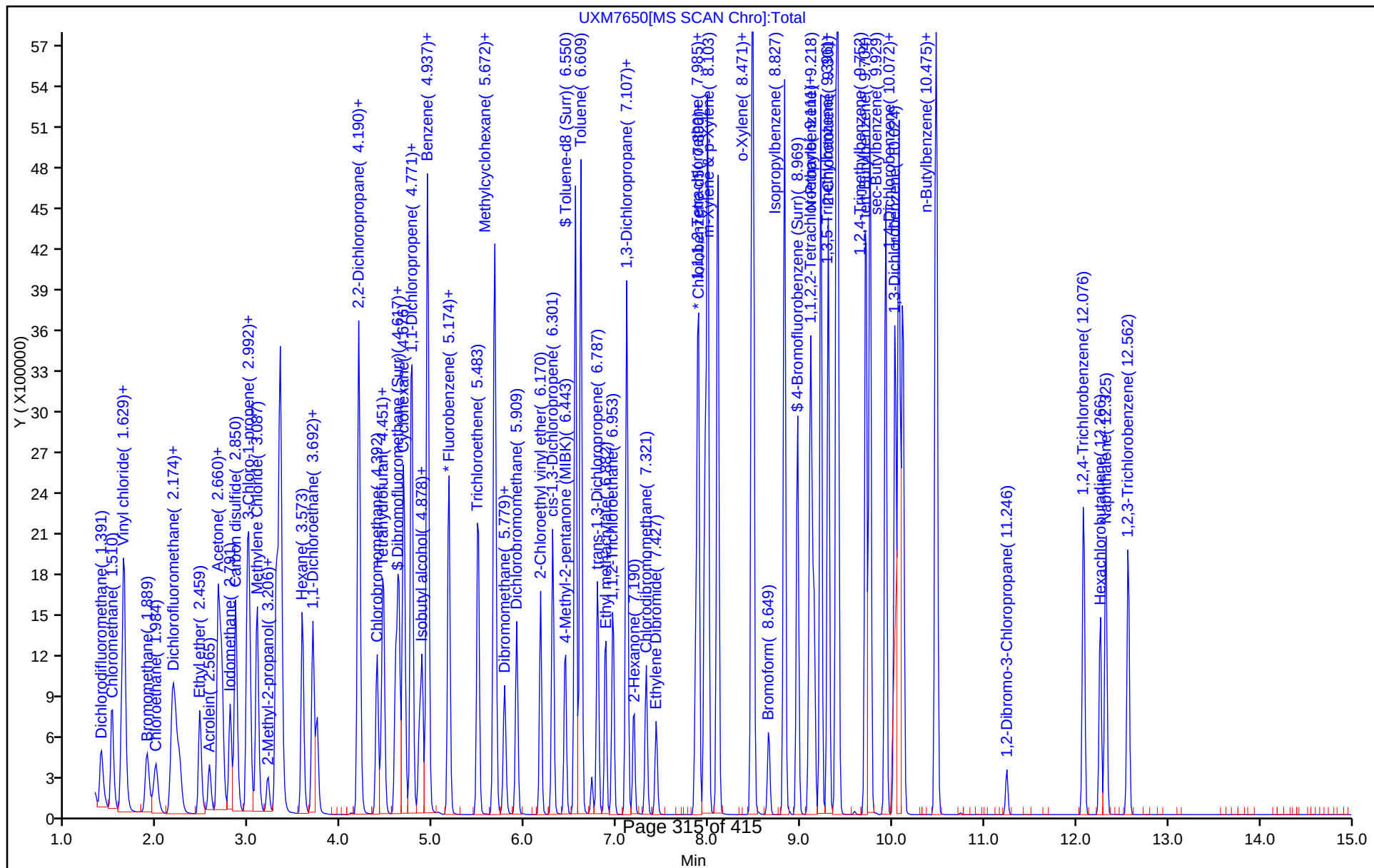
ALS Bottle#: 7

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: ICV 240-235700/14 Calibration Date: 06/23/2016 14:16

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9014.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3296	0.3164		0.00960	0.0100	-4.0	50.0
Chloromethane	Ave	0.4664	0.4448	0.1000	0.00954	0.0100	-4.6	50.0
Vinyl chloride	Ave	0.4213	0.4126		0.00979	0.0100	-2.1	20.0
Butadiene	Ave	0.3951	0.3681		0.00932	0.0100	-6.8	50.0
Bromomethane	Ave	0.1393	0.1386		0.00995	0.0100	-0.5	50.0
Chloroethane	Ave	0.2241	0.2155		0.00962	0.0100	-3.8	50.0
Dichlorofluoromethane	Ave	0.4924	0.4860		0.00987	0.0100	-1.3	50.0
Trichlorofluoromethane	Ave	0.2524	0.2694		0.0107	0.0100	6.8	50.0
Ethyl ether	Ave	0.2373	0.2405		0.0101	0.0100	1.4	50.0
Acrolein	Ave	0.0276	0.0413		0.0749	0.0500	49.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2139	0.2353		0.0110	0.0100	10.0	50.0
1,1-Dichloroethene	Ave	0.2948	0.3180		0.0108	0.0100	7.9	20.0
Acetone	Lin1		0.0617		0.0154	0.0200	-23.0	50.0
Iodomethane	Ave	0.4487	0.5028		0.0112	0.0100	12.1	50.0
Carbon disulfide	Ave	0.8567	0.9472		0.0111	0.0100	10.6	50.0
3-Chloro-1-propene	Ave	0.1674	0.1872		0.0112	0.0100	11.9	50.0
Methyl acetate	Ave	0.1562	0.1548		0.0495	0.0500	-0.9	50.0
Methylene Chloride	Lin1		0.3544		0.0107	0.0100	7.3	50.0
2-Methyl-2-propanol	Ave	0.0095	0.0086		0.0907	0.100	-9.3	50.0
Acrylonitrile	Ave	0.0871	0.0893		0.103	0.100	2.6	50.0
Methyl tert-butyl ether	Ave	0.5780	0.6020		0.0104	0.0100	4.1	50.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3457		0.0108	0.0100	8.4	50.0
Hexane	Ave	0.0781	0.0849		0.0109	0.0100	8.7	20.0
1,1-Dichloroethane	Ave	0.5441	0.5576	0.1000	0.0102	0.0100	2.5	50.0
Vinyl acetate	Ave	0.3607	0.4002		0.0111	0.0100	10.9	50.0
2,2-Dichloropropane	Ave	0.1735	0.1819		0.0105	0.0100	4.8	50.0
cis-1,2-Dichloroethene	Ave	0.3431	0.3582		0.0104	0.0100	4.4	50.0
2-Butanone (MEK)	Ave	0.1018	0.0930		0.0183	0.0200	-8.6	50.0
Chlorobromomethane	Ave	0.1527	0.1581		0.0104	0.0100	3.6	50.0
Tetrahydrofuran	Ave	0.0568	0.0553		0.0195	0.0200	-2.6	50.0
Chloroform	Ave	0.5085	0.5370		0.0106	0.0100	5.6	20.0
1,1,1-Trichloroethane	Ave	0.3093	0.3345		0.0108	0.0100	8.1	50.0
Cyclohexane	Ave	0.5356	0.5820		0.0109	0.0100	8.7	50.0
1,1-Dichloropropene	Ave	0.4235	0.4371		0.0103	0.0100	3.2	50.0
Carbon tetrachloride	Ave	0.2551	0.2760		0.0108	0.0100	8.2	50.0
Isobutyl alcohol	Ave	0.0048	0.0045		0.231	0.250	-7.7	50.0
Benzene	Ave	1.297	1.346		0.0104	0.0100	3.7	50.0
1,2-Dichloroethane	Ave	0.3701	0.3803		0.0103	0.0100	2.8	50.0
n-Heptane	Ave	0.0709	0.0751		0.0106	0.0100	6.0	50.0
Trichloroethene	Ave	0.3242	0.3424		0.0106	0.0100	5.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: ICV 240-235700/14 Calibration Date: 06/23/2016 14:16

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9014.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4846	0.5143		0.0106	0.0100	6.1	50.0
1,2-Dichloropropane	Ave	0.2882	0.3125		0.0108	0.0100	8.4	20.0
Dibromomethane	Ave	0.1523	0.1580		0.0104	0.0100	3.7	50.0
1,4-Dioxane	Ave	0.0021	0.0016		0.153	0.200	-23.6	50.0
Dichlorobromomethane	Ave	0.3088	0.3286		0.0106	0.0100	6.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1461	0.1547		0.0106	0.0100	5.9	50.0
cis-1,3-Dichloropropene	Lin1		0.3799		0.00967	0.0100	-3.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1749	0.1785		0.0204	0.0200	2.1	50.0
Toluene	Ave	1.810	1.889		0.0104	0.0100	4.4	20.0
trans-1,3-Dichloropropene	Lin1		0.3654		0.00901	0.0100	-9.9	50.0
Ethyl methacrylate	Ave	0.3599	0.4014		0.0112	0.0100	11.5	50.0
1,1,2-Trichloroethane	Ave	0.3112	0.3226		0.0104	0.0100	3.7	50.0
Tetrachloroethene	Ave	0.3500	0.3627		0.0104	0.0100	3.6	50.0
1,3-Dichloropropane	Ave	0.5823	0.6023		0.0103	0.0100	3.4	50.0
2-Hexanone	Ave	0.1630	0.1674		0.0205	0.0200	2.7	50.0
Chlorodibromomethane	Ave	0.2750	0.2891		0.0105	0.0100	5.1	50.0
Ethylene Dibromide	Ave	0.2951	0.3176		0.0108	0.0100	7.6	50.0
Chlorobenzene	Ave	1.164	1.192	0.3000	0.0102	0.0100	2.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3072	0.3146		0.0102	0.0100	2.4	50.0
Ethylbenzene	Ave	0.6168	0.6406		0.0104	0.0100	3.9	20.0
m-Xylene & p-Xylene	Ave	1.527	1.578		0.0103	0.0100	3.3	50.0
o-Xylene	Ave	0.7251	0.7431		0.0102	0.0100	2.5	50.0
Styrene	Ave	1.217	1.297		0.0107	0.0100	6.6	50.0
Bromoform	Lin1		0.1506	0.1000	0.00968	0.0100	-3.2	50.0
Isopropylbenzene	Ave	1.715	1.785		0.0104	0.0100	4.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7771	0.8287	0.3000	0.0107	0.0100	6.6	50.0
Bromobenzene	Ave	1.036	1.111		0.0107	0.0100	7.2	50.0
1,2,3-Trichloropropane	Ave	0.2460	0.2711		0.0110	0.0100	10.2	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2183	0.2313		0.0106	0.0100	5.9	50.0
N-Propylbenzene	Ave	1.046	1.121		0.0107	0.0100	7.2	50.0
2-Chlorotoluene	Ave	0.9116	0.9667		0.0106	0.0100	6.0	50.0
1,3,5-Trimethylbenzene	Ave	2.964	3.080		0.0104	0.0100	3.9	50.0
4-Chlorotoluene	Ave	3.157	3.319		0.0105	0.0100	5.1	50.0
tert-Butylbenzene	Ave	2.401	2.534		0.0106	0.0100	5.6	50.0
1,2,4-Trimethylbenzene	Ave	3.007	3.055		0.0102	0.0100	1.6	50.0
sec-Butylbenzene	Ave	3.213	3.336		0.0104	0.0100	3.8	50.0
1,3-Dichlorobenzene	Ave	1.723	1.718		0.00997	0.0100	-0.3	50.0
4-Isopropyltoluene	Ave	2.700	2.773		0.0103	0.0100	2.7	50.0
1,4-Dichlorobenzene	Ave	1.765	1.763		0.00999	0.0100	-0.1	50.0
n-Butylbenzene	Ave	2.151	2.130		0.00990	0.0100	-1.0	50.0
1,2-Dichlorobenzene	Ave	1.577	1.548		0.00981	0.0100	-1.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Lab Sample ID: ICV 240-235700/14 Calibration Date: 06/23/2016 14:16
 Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 06/23/2016 13:53
 Lab File ID: UXC9014.D Conc. Units: ng/uL 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	Ave	0.0839	0.0824		0.00982	0.0100	-1.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8173	0.7237		0.00885	0.0100	-11.5	50.0
Hexachlorobutadiene	Ave	0.3769	0.3089		0.00820	0.0100	-18.0	50.0
Naphthalene	Ave	1.726	1.505		0.00872	0.0100	-12.8	50.0
1,2,3-Trichlorobenzene	Ave	0.7228	0.5970		0.00826	0.0100	-17.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2601	0.2609		0.00804	0.00801	0.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3152	0.3049		0.00775	0.00801	-3.3	50.0
Toluene-d8 (Surr)	Ave	1.543	1.568		0.00814	0.00801	1.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5279	0.5475		0.00831	0.00801	3.7	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9014.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 23-Jun-2016 14:16:30 ALS Bottle#: 7 Worklist Smp#: 14
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0055685-014
 Misc. Info.: C60623A-IC,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist:
 Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 24-Jun-2016 09:17:09 Calib Date: 23-Jun-2016 16:30:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.134	5.134	0.000	99	1661685	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.814	7.814	0.000	90	1268289	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	10.043	10.044	-0.001	93	530949	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.589	4.589	0.000	95	347252	8.01	8.04	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.873	4.873	0.000	0	405839	8.01	7.75	
\$ 6 Toluene-d8 (Surr)	98	6.498	6.498	0.000	93	1592998	8.01	8.14	
\$ 7 4-Bromofluorobenzene (Surr	95	8.917	8.917	0.000	90	556192	8.01	8.31	
9 Dichlorodifluoromethane	85	1.517	1.517	0.000	99	525667	10.0	9.60	
10 Chloromethane	50	1.648	1.648	0.000	99	739066	10.0	9.54	
11 Vinyl chloride	62	1.743	1.743	-0.001	98	685564	10.0	9.79	
12 Butadiene	54	1.766	1.766	0.000	98	611686	10.0	9.32	
13 Bromomethane	94	2.027	2.027	0.000	89	230379	10.0	9.95	
14 Chloroethane	64	2.110	2.110	0.000	99	358154	10.0	9.62	
15 Dichlorofluoromethane	67	2.276	2.276	0.000	97	807510	10.0	9.87	
16 Trichlorofluoromethane	101	2.312	2.300	0.012	97	447726	10.0	10.7	
17 Ethyl ether	59	2.525	2.525	0.000	90	399697	10.0	10.1	
18 Acrolein	56	2.656	2.656	0.000	99	343333	50.0	74.9	
20 1,1,2-Trichloro-1,2,2-trif	151	2.739	2.739	0.000	91	390951	10.0	11.0	
19 1,1-Dichloroethene	96	2.739	2.739	0.000	98	528484	10.0	10.8	
22 Acetone	43	2.786	2.786	0.000	100	205130	20.0	15.4	
23 Iodomethane	142	2.881	2.869	0.012	97	835532	10.0	11.2	
24 Carbon disulfide	76	2.928	2.929	-0.001	99	1573987	10.0	11.1	
25 3-Chloro-1-propene	76	3.035	3.035	0.000	92	311077	10.0	11.2	
27 Methyl acetate	43	3.047	3.047	0.000	97	1285834	50.0	49.5	
28 Methylene Chloride	84	3.142	3.142	0.000	91	588947	10.0	10.7	
29 2-Methyl-2-propanol	59	3.225	3.225	0.000	86	142592	100.0	90.7	
31 Methyl tert-butyl ether	73	3.355	3.344	0.011	95	1000284	10.0	10.4	
30 trans-1,2-Dichloroethene	96	3.355	3.355	0.000	72	574416	10.0	10.8	
32 Acrylonitrile	53	3.355	3.355	0.000	99	1484144	100.0	102.6	
33 Hexane	86	3.557	3.557	0.000	91	141074	10.0	10.9	
34 1,1-Dichloroethane	63	3.711	3.711	0.000	96	926574	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 Vinyl acetate	43	3.735	3.735	0.000	97	665051	10.0	11.1	
39 cis-1,2-Dichloroethene	96	4.185	4.186	-0.001	81	595163	10.0	10.4	
40 2,2-Dichloropropane	77	4.185	4.186	-0.001	79	302260	10.0	10.5	
41 2-Butanone (MEK)	43	4.197	4.197	0.000	99	309166	20.0	18.3	
45 Chlorobromomethane	128	4.399	4.399	0.000	93	262773	10.0	10.4	
46 Tetrahydrofuran	42	4.423	4.423	0.000	88	183900	20.0	19.5	
47 Chloroform	83	4.446	4.446	0.000	92	892340	10.0	10.6	
48 1,1,1-Trichloroethane	97	4.600	4.601	-0.001	98	555786	10.0	10.8	
49 Cyclohexane	56	4.636	4.636	0.000	90	967023	10.0	10.9	
51 1,1-Dichloropropene	75	4.731	4.731	0.000	96	726266	10.0	10.3	
50 Carbon tetrachloride	117	4.731	4.731	0.000	72	458566	10.0	10.8	
52 Isobutyl alcohol	41	4.814	4.814	0.000	93	185491	250.0	230.7	
53 Benzene	78	4.909	4.909	0.000	95	2236504	10.0	10.4	
54 1,2-Dichloroethane	62	4.932	4.933	-0.001	97	631884	10.0	10.3	
56 n-Heptane	100	5.087	5.087	0.000	92	124826	10.0	10.6	
58 Trichloroethene	130	5.442	5.443	-0.001	98	568969	10.0	10.6	
60 Methylcyclohexane	83	5.597	5.597	0.000	89	854628	10.0	10.6	
61 1,2-Dichloropropane	63	5.644	5.644	0.000	97	519327	10.0	10.8	
63 Dibromomethane	93	5.751	5.751	0.000	92	262534	10.0	10.4	
64 1,4-Dioxane	88	5.763	5.763	0.000	84	52885	200.0	152.9	
65 Dichlorobromomethane	83	5.881	5.881	0.000	100	546099	10.0	10.6	
67 2-Chloroethyl vinyl ether	63	6.130	6.118	0.012	92	256982	10.0	10.6	
68 cis-1,3-Dichloropropene	75	6.261	6.261	0.000	95	631209	10.0	9.67	
69 4-Methyl-2-pentanone (MIBK)	43	6.391	6.391	0.000	96	593182	20.0	20.4	
70 Toluene	91	6.557	6.557	0.000	98	2395337	10.0	10.4	
71 trans-1,3-Dichloropropene	75	6.747	6.747	0.000	92	463435	10.0	9.01	
72 Ethyl methacrylate	69	6.806	6.806	0.000	89	509058	10.0	11.2	
73 1,1,2-Trichloroethane	97	6.925	6.925	0.000	91	409151	10.0	10.4	
74 Tetrachloroethene	164	7.031	7.032	-0.001	97	459950	10.0	10.4	
75 1,3-Dichloropropane	76	7.079	7.079	0.000	89	763937	10.0	10.3	
76 2-Hexanone	43	7.138	7.138	0.000	96	424582	20.0	20.5	
79 Chlorodibromomethane	129	7.280	7.281	-0.001	91	366623	10.0	10.5	
80 Ethylene Dibromide	107	7.399	7.399	0.000	99	402811	10.0	10.8	
82 Chlorobenzene	112	7.838	7.838	0.000	95	1511301	10.0	10.2	
83 1,1,1,2-Tetrachloroethane	131	7.909	7.909	0.000	93	399056	10.0	10.2	
84 Ethylbenzene	106	7.921	7.921	0.000	98	812401	10.0	10.4	
85 m-Xylene & p-Xylene	91	8.028	8.028	0.000	93	2000945	10.0	10.3	
86 o-Xylene	106	8.407	8.407	0.000	96	942432	10.0	10.2	
87 Styrene	104	8.431	8.431	0.000	95	1645117	10.0	10.7	
88 Bromoform	173	8.620	8.621	-0.001	98	190957	10.0	9.68	
89 Isopropylbenzene	105	8.763	8.763	0.000	95	2264044	10.0	10.4	
93 1,1,2,2-Tetrachloroethane	83	9.059	9.059	0.000	94	439977	10.0	10.7	
92 Bromobenzene	156	9.071	9.071	0.000	93	589782	10.0	10.7	
94 1,2,3-Trichloropropane	110	9.107	9.107	0.000	83	143951	10.0	11.0	
95 trans-1,4-Dichloro-2-buten	53	9.118	9.119	-0.001	65	122790	10.0	10.6	
96 N-Propylbenzene	120	9.154	9.154	0.000	98	595372	10.0	10.7	
97 2-Chlorotoluene	126	9.249	9.249	0.000	98	513248	10.0	10.6	
98 1,3,5-Trimethylbenzene	105	9.320	9.320	0.000	94	1635416	10.0	10.4	
99 4-Chlorotoluene	91	9.356	9.356	0.000	97	1762079	10.0	10.5	
101 tert-Butylbenzene	119	9.640	9.640	0.000	92	1345662	10.0	10.6	
103 1,2,4-Trimethylbenzene	105	9.688	9.688	0.000	94	1621955	10.0	10.2	
105 sec-Butylbenzene	105	9.854	9.854	0.000	94	1771027	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	9.984	9.984	0.000	99	911995	10.0	9.97	
107 4-Isopropyltoluene	119	9.996	9.996	0.000	97	1472076	10.0	10.3	
108 1,4-Dichlorobenzene	146	10.067	10.067	0.000	96	935926	10.0	9.99	
111 n-Butylbenzene	91	10.399	10.399	0.000	97	1130951	10.0	9.90	
112 1,2-Dichlorobenzene	146	10.447	10.447	0.000	99	821860	10.0	9.81	
113 1,2-Dibromo-3-Chloropropan	157	11.229	11.229	0.000	86	43764	10.0	9.82	
115 1,2,4-Trichlorobenzene	180	12.036	12.036	0.000	94	384219	10.0	8.85	
116 Hexachlorobutadiene	225	12.190	12.190	0.000	94	164018	10.0	8.20	
117 Naphthalene	128	12.285	12.285	0.000	97	798876	10.0	8.72	
118 1,2,3-Trichlorobenzene	180	12.534	12.534	0.000	96	316967	10.0	8.26	
S 129 Xylenes, Total	106				0		20.0	20.6	
S 130 Trihalomethanes, Total	1				0		40.0	41.4	

Reagents:

VMFASPW_00160	Amount Added: 8.00	Units: uL	
VMFASAW_00144	Amount Added: 8.00	Units: uL	
VMFASGW_00161	Amount Added: 8.00	Units: uL	
vm50ss_stk_00069	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00055	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00072	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9014.D

Injection Date: 23-Jun-2016 14:16:30

Instrument ID: A3UX15

Lims ID: ICV

Operator ID:

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

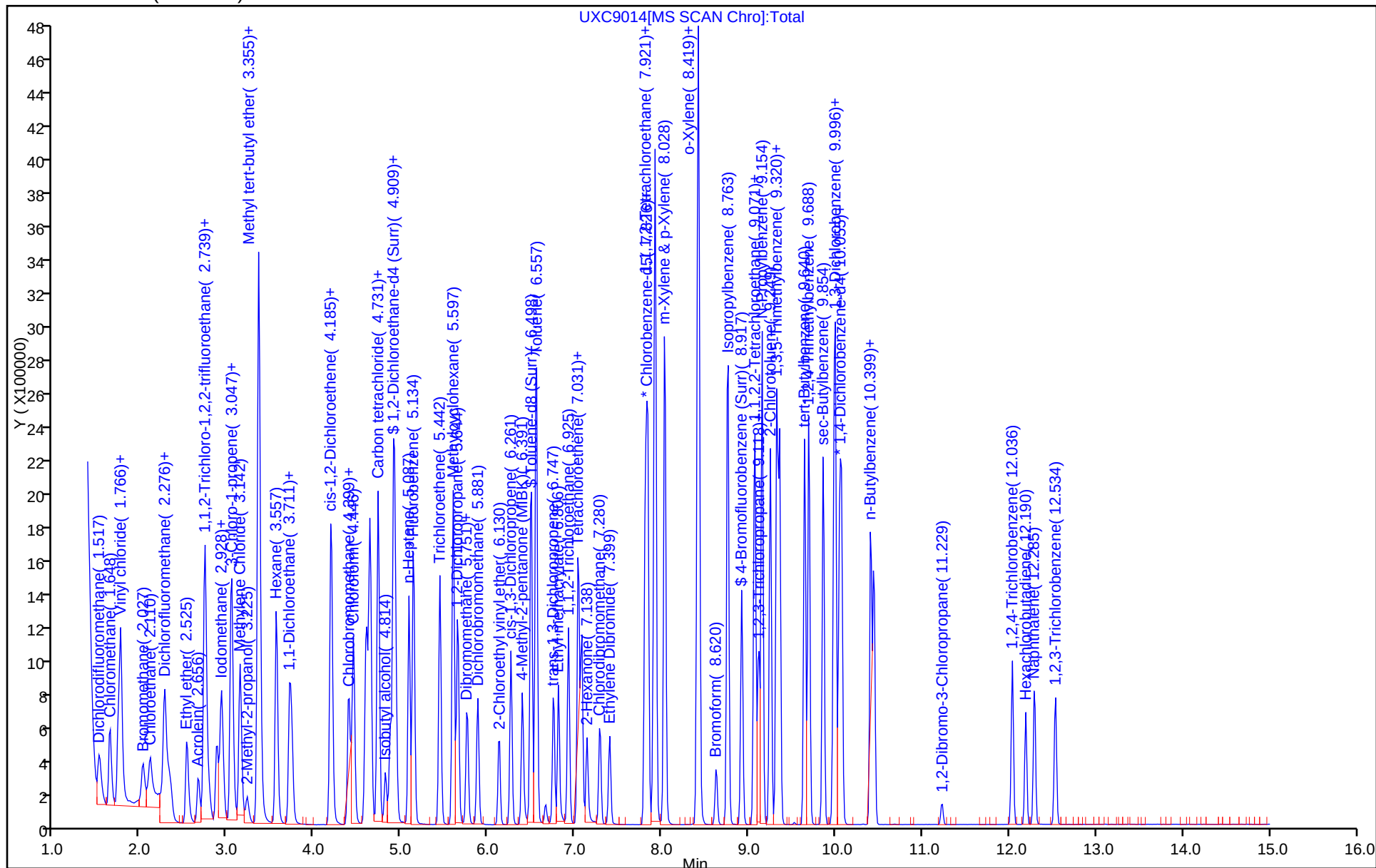
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: CCVIS 240-255552/2 Calibration Date: 11/14/2016 10:04

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9701.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3296	0.5287		0.0160	0.0100	60.4*	50.0
Chloromethane	Ave	0.4664	0.4761	0.1000	0.0102	0.0100	2.1	50.0
Vinyl chloride	Ave	0.4213	0.3855		0.00915	0.0100	-8.5	20.0
Butadiene	Ave	0.3951	0.1906		0.00482	0.0100	-51.8*	50.0
Bromomethane	Ave	0.1393	0.0724		0.00520	0.0100	-48.0	50.0
Chloroethane	Ave	0.2241	0.1198		0.00535	0.0100	-46.5	50.0
Dichlorofluoromethane	Ave	0.4924	0.4772		0.00969	0.0100	-3.1	50.0
Trichlorofluoromethane	Ave	0.2524	0.4834		0.0192	0.0100	91.5*	50.0
Ethyl ether	Ave	0.2373	0.2178		0.00918	0.0100	-8.2	50.0
Acrolein	Ave	0.0276	0.0315		0.0572	0.0500	14.3	50.0
1,1-Dichloroethene	Ave	0.2948	0.3056		0.0104	0.0100	3.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2139	0.2681		0.0125	0.0100	25.4	50.0
Acetone	Lin1		0.0743		0.0190	0.0200	-5.2	50.0
Iodomethane	Ave	0.4487	0.5039		0.0112	0.0100	12.3	50.0
Carbon disulfide	Ave	0.8567	0.8895		0.0104	0.0100	3.8	50.0
3-Chloro-1-propene	Ave	0.1674	0.1849		0.0111	0.0100	10.5	50.0
Methyl acetate	Ave	0.1562	0.1585		0.0507	0.0500	1.4	50.0
Methylene Chloride	Lin1		0.3730		0.0113	0.0100	13.3	50.0
2-Methyl-2-propanol	Ave	0.0095	0.0084		0.0884	0.100	-11.6	50.0
Acrylonitrile	Ave	0.0871	0.0856		0.0984	0.100	-1.6	50.0
Methyl tert-butyl ether	Ave	0.5780	0.6253		0.0108	0.0100	8.2	50.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3380		0.0106	0.0100	6.0	50.0
Hexane	Ave	0.0781	0.0809		0.0104	0.0100	3.6	20.0
1,1-Dichloroethane	Ave	0.5441	0.5553	0.1000	0.0102	0.0100	2.1	50.0
Vinyl acetate	Ave	0.3607	0.3630		0.0101	0.0100	0.6	50.0
2,2-Dichloropropane	Ave	0.1735	0.2256		0.0130	0.0100	30.0	50.0
cis-1,2-Dichloroethene	Ave	0.3431	0.3592		0.0105	0.0100	4.7	50.0
2-Butanone (MEK)	Ave	0.1018	0.0945		0.0186	0.0200	-7.2	50.0
Chlorobromomethane	Ave	0.1527	0.1717		0.0112	0.0100	12.5	50.0
Tetrahydrofuran	Ave	0.0568	0.0631		0.0222	0.0200	11.1	50.0
Chloroform	Ave	0.5085	0.5436		0.0107	0.0100	6.9	20.0
1,1,1-Trichloroethane	Ave	0.3093	0.3886		0.0126	0.0100	25.6	50.0
Cyclohexane	Ave	0.5356	0.5521		0.0103	0.0100	3.1	50.0
1,1-Dichloropropene	Ave	0.4235	0.4462		0.0105	0.0100	5.3	50.0
Carbon tetrachloride	Ave	0.2551	0.3843		0.0151	0.0100	50.7*	50.0
Isobutyl alcohol	Ave	0.0048	0.0047		0.245	0.250	-1.9	50.0
Benzene	Ave	1.297	1.378		0.0106	0.0100	6.2	50.0
1,2-Dichloroethane	Ave	0.3701	0.3930		0.0106	0.0100	6.2	50.0
n-Heptane	Ave	0.0709	0.0737		0.0104	0.0100	4.0	50.0
Trichloroethene	Ave	0.3242	0.3655		0.0113	0.0100	12.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: CCVIS 240-255552/2 Calibration Date: 11/14/2016 10:04

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9701.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4846	0.5117		0.0106	0.0100	5.6	50.0
1,2-Dichloropropane	Ave	0.2882	0.3011		0.0104	0.0100	4.5	20.0
1,4-Dioxane	Ave	0.0021	0.0015		0.140	0.200	-29.9	50.0
Dibromomethane	Ave	0.1523	0.1656		0.0109	0.0100	8.7	50.0
Dichlorobromomethane	Ave	0.3088	0.3590		0.0116	0.0100	16.3	50.0
2-Chloroethyl vinyl ether	Ave	0.1461	0.1530		0.0209	0.0200	4.7	50.0
cis-1,3-Dichloropropene	Lin1		0.4087		0.0104	0.0100	3.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1749	0.1841		0.0211	0.0200	5.3	50.0
Toluene	Ave	1.810	1.888		0.0104	0.0100	4.3	20.0
trans-1,3-Dichloropropene	Lin1		0.3981		0.00977	0.0100	-2.3	50.0
Ethyl methacrylate	Ave	0.3599	0.3803		0.0106	0.0100	5.7	50.0
1,1,2-Trichloroethane	Ave	0.3112	0.3244		0.0104	0.0100	4.2	50.0
Tetrachloroethene	Ave	0.3500	0.4076		0.0116	0.0100	16.4	50.0
1,3-Dichloropropane	Ave	0.5823	0.6011		0.0103	0.0100	3.2	50.0
2-Hexanone	Ave	0.1630	0.1592		0.0195	0.0200	-2.3	50.0
Chlorodibromomethane	Ave	0.2750	0.3340		0.0121	0.0100	21.5	50.0
Ethylene Dibromide	Ave	0.2951	0.3198		0.0108	0.0100	8.4	50.0
Chlorobenzene	Ave	1.164	1.226	0.3000	0.0105	0.0100	5.3	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3072	0.3841		0.0125	0.0100	25.0	50.0
Ethylbenzene	Ave	0.6168	0.6490		0.0105	0.0100	5.2	20.0
m-Xylene & p-Xylene	Ave	1.527	1.594		0.0104	0.0100	4.4	50.0
o-Xylene	Ave	0.7251	0.7834		0.0108	0.0100	8.0	50.0
Styrene	Ave	1.217	1.349		0.0111	0.0100	10.8	50.0
Bromoform	Lin1		0.1797	0.1000	0.0114	0.0100	14.4	50.0
Isopropylbenzene	Ave	1.715	1.876		0.0109	0.0100	9.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7771	0.6468	0.3000	0.00832	0.0100	-16.8	50.0
Bromobenzene	Ave	1.036	0.9192		0.00887	0.0100	-11.3	50.0
1,2,3-Trichloropropane	Ave	0.2460	0.2060		0.00837	0.0100	-16.3	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2183	0.1860		0.00852	0.0100	-14.8	50.0
N-Propylbenzene	Ave	1.046	0.9259		0.00885	0.0100	-11.5	50.0
2-Chlorotoluene	Ave	0.9116	0.7970		0.00874	0.0100	-12.6	50.0
1,3,5-Trimethylbenzene	Ave	2.964	2.641		0.00891	0.0100	-10.9	50.0
4-Chlorotoluene	Ave	3.157	2.786		0.00882	0.0100	-11.8	50.0
tert-Butylbenzene	Ave	2.401	2.250		0.00937	0.0100	-6.3	50.0
1,2,4-Trimethylbenzene	Ave	3.007	2.750		0.00915	0.0100	-8.5	50.0
sec-Butylbenzene	Ave	3.213	2.958		0.00921	0.0100	-7.9	50.0
1,3-Dichlorobenzene	Ave	1.723	1.662		0.00964	0.0100	-3.6	50.0
4-Isopropyltoluene	Ave	2.700	2.605		0.00965	0.0100	-3.5	50.0
1,4-Dichlorobenzene	Ave	1.765	1.686		0.00955	0.0100	-4.5	50.0
n-Butylbenzene	Ave	2.151	2.025		0.00941	0.0100	-5.9	50.0
1,2-Dichlorobenzene	Ave	1.577	1.540		0.00976	0.0100	-2.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-255552/2 Calibration Date: 11/14/2016 10:04
 Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 06/23/2016 13:53
 Lab File ID: UXC9701.D Conc. Units: ng/uL 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	Ave	0.0839	0.0884		0.0105	0.0100	5.4	50.0
1,2,4-Trichlorobenzene	Ave	0.8173	0.7980		0.00976	0.0100	-2.4	50.0
Hexachlorobutadiene	Ave	0.3769	0.3831		0.0102	0.0100	1.6	50.0
Naphthalene	Ave	1.726	1.452		0.00842	0.0100	-15.8	50.0
1,2,3-Trichlorobenzene	Ave	0.7228	0.7062		0.00977	0.0100	-2.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2601	0.2835		0.00873	0.00801	9.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3152	0.3095		0.00786	0.00801	-1.8	50.0
Toluene-d8 (Surr)	Ave	1.543	1.601		0.00831	0.00801	3.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5279	0.5717		0.00867	0.00801	8.3	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9701.D
 Lims ID: CCVIS L4 8260
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 14-Nov-2016 10:04:30 ALS Bottle#: 1 Worklist Smp#: 2
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-002
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Sublist: chrom-8260_15*sub72
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:24 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 11:26:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1440866	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	90	1126162	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.913	9.913	0.000	91	644886	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	327135	8.01	8.73	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.766	4.766	0.000	0	357147	8.01	7.86	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	93	1444062	8.01	8.31	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	97	515671	8.01	8.67	
9 Dichlorodifluoromethane	85	1.458	1.458	0.000	99	761770	10.0	16.0	
10 Chloromethane	50	1.600	1.600	0.000	99	685989	10.0	10.2	
11 Vinyl chloride	62	1.695	1.695	0.000	98	555456	10.0	9.15	
12 Butadiene	54	1.719	1.719	0.000	97	274596	10.0	4.82	
13 Bromomethane	94	1.968	1.968	0.000	89	104361	10.0	5.20	
14 Chloroethane	64	2.063	2.063	0.000	99	172658	10.0	5.35	
15 Dichlorofluoromethane	67	2.217	2.217	0.000	97	687574	10.0	9.69	
16 Trichlorofluoromethane	101	2.229	2.229	0.000	99	696484	10.0	19.2	
17 Ethyl ether	59	2.454	2.454	0.000	88	313879	10.0	9.18	
18 Acrolein	56	2.584	2.584	0.000	99	227245	50.0	57.2	
19 1,1-Dichloroethene	96	2.644	2.644	0.000	98	440373	10.0	10.4	
20 1,1,2-Trichloro-1,2,2-trif	151	2.679	2.679	0.000	91	386339	10.0	12.5	
22 Acetone	43	2.703	2.703	0.000	100	214168	20.0	19.0	
23 Iodomethane	142	2.786	2.786	0.000	97	726115	10.0	11.2	
24 Carbon disulfide	76	2.833	2.833	0.000	98	1281653	10.0	10.4	
25 3-Chloro-1-propene	76	2.952	2.952	0.000	93	266477	10.0	11.1	
27 Methyl acetate	43	2.964	2.964	0.000	97	1141572	50.0	50.7	
28 Methylene Chloride	84	3.047	3.047	0.000	91	537376	10.0	11.3	
29 2-Methyl-2-propanol	59	3.130	3.130	0.000	89	120536	100.0	88.4	
31 Methyl tert-butyl ether	73	3.260	3.260	0.000	95	900979	10.0	10.8	
32 Acrylonitrile	53	3.260	3.260	0.000	99	1233961	100.0	98.4	
30 trans-1,2-Dichloroethene	96	3.260	3.260	0.000	75	487003	10.0	10.6	
33 Hexane	86	3.462	3.462	0.000	91	116541	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 1,1-Dichloroethane	63	3.616	3.616	0.000	96	800139	10.0	10.2	
36 Vinyl acetate	43	3.640	3.640	0.000	97	523089	10.0	10.1	
40 2,2-Dichloropropane	77	4.079	4.079	0.000	86	325057	10.0	13.0	
39 cis-1,2-Dichloroethene	96	4.090	4.090	0.000	82	517566	10.0	10.5	
41 2-Butanone (MEK)	43	4.102	4.102	0.000	99	272263	20.0	18.6	
45 Chlorobromomethane	128	4.292	4.292	0.000	90	247356	10.0	11.2	
46 Tetrahydrofuran	42	4.316	4.316	0.000	88	181940	20.0	22.2	
47 Chloroform	83	4.339	4.339	0.000	93	783256	10.0	10.7	
48 1,1,1-Trichloroethane	97	4.494	4.494	0.000	98	559964	10.0	12.6	
49 Cyclohexane	56	4.529	4.529	0.000	88	795480	10.0	10.3	
50 Carbon tetrachloride	117	4.624	4.624	0.000	85	553767	10.0	15.1	
51 1,1-Dichloropropene	75	4.624	4.624	0.000	97	642882	10.0	10.5	
52 Isobutyl alcohol	41	4.707	4.707	0.000	93	170878	250.0	245.1	
53 Benzene	78	4.802	4.802	0.000	95	1985146	10.0	10.6	
54 1,2-Dichloroethane	62	4.826	4.826	0.000	97	566301	10.0	10.6	
56 n-Heptane	100	4.980	4.980	0.000	90	106217	10.0	10.4	
58 Trichloroethene	130	5.336	5.336	0.000	96	526635	10.0	11.3	
60 Methylcyclohexane	83	5.478	5.478	0.000	87	737319	10.0	10.6	
61 1,2-Dichloropropane	63	5.537	5.537	0.000	96	433839	10.0	10.4	
64 1,4-Dioxane	88	5.644	5.644	0.000	32	42074	200.0	140.2	
63 Dibromomethane	93	5.644	5.644	0.000	90	238535	10.0	10.9	
65 Dichlorobromomethane	83	5.762	5.762	0.000	99	517263	10.0	11.6	
67 2-Chloroethyl vinyl ether	63	6.012	6.012	0.000	92	440798	20.0	20.9	
68 cis-1,3-Dichloropropene	75	6.142	6.142	0.000	96	588875	10.0	10.4	
69 4-Methyl-2-pentanone (MIBK)	43	6.272	6.272	0.000	95	530497	20.0	21.1	
70 Toluene	91	6.438	6.438	0.000	99	2126648	10.0	10.4	
71 trans-1,3-Dichloropropene	75	6.640	6.640	0.000	91	448370	10.0	9.77	
72 Ethyl methacrylate	69	6.699	6.699	0.000	88	428290	10.0	10.6	
73 1,1,2-Trichloroethane	97	6.806	6.806	0.000	91	365297	10.0	10.4	
74 Tetrachloroethene	164	6.925	6.925	0.000	96	459012	10.0	11.6	
75 1,3-Dichloropropane	76	6.960	6.960	0.000	88	676913	10.0	10.3	
76 2-Hexanone	43	7.019	7.019	0.000	96	358572	20.0	19.5	
79 Chlorodibromomethane	129	7.162	7.162	0.000	89	376149	10.0	12.1	
80 Ethylene Dibromide	107	7.280	7.280	0.000	98	360139	10.0	10.8	
82 Chlorobenzene	112	7.719	7.719	0.000	97	1380976	10.0	10.5	
83 1,1,1,2-Tetrachloroethane	131	7.790	7.790	0.000	95	432581	10.0	12.5	
84 Ethylbenzene	106	7.802	7.802	0.000	98	730888	10.0	10.5	
85 m-Xylene & p-Xylene	91	7.909	7.909	0.000	93	1794751	10.0	10.4	
86 o-Xylene	106	8.288	8.288	0.000	97	882189	10.0	10.8	
87 Styrene	104	8.312	8.312	0.000	96	1518754	10.0	11.1	
88 Bromoform	173	8.502	8.502	0.000	99	202408	10.0	11.4	
89 Isopropylbenzene	105	8.632	8.632	0.000	95	2112851	10.0	10.9	
93 1,1,2,2-Tetrachloroethane	83	8.941	8.941	0.000	72	417092	10.0	8.32	
92 Bromobenzene	156	8.952	8.952	0.000	90	592749	10.0	8.87	
94 1,2,3-Trichloropropane	110	8.988	8.988	0.000	84	132869	10.0	8.37	
95 trans-1,4-Dichloro-2-buten	53	9.000	9.000	0.000	79	119940	10.0	8.52	
96 N-Propylbenzene	120	9.035	9.035	0.000	98	597066	10.0	8.85	
97 2-Chlorotoluene	126	9.130	9.130	0.000	98	513987	10.0	8.74	
98 1,3,5-Trimethylbenzene	105	9.201	9.201	0.000	95	1703331	10.0	8.91	
99 4-Chlorotoluene	91	9.225	9.225	0.000	98	1796354	10.0	8.82	
101 tert-Butylbenzene	119	9.522	9.522	0.000	91	1451102	10.0	9.37	
103 1,2,4-Trimethylbenzene	105	9.569	9.569	0.000	94	1773409	10.0	9.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 sec-Butylbenzene	105	9.735	9.735	0.000	93	1907790	10.0	9.21	
106 1,3-Dichlorobenzene	146	9.854	9.854	0.000	98	1071636	10.0	9.64	
107 4-Isopropyltoluene	119	9.877	9.877	0.000	97	1679752	10.0	9.65	
108 1,4-Dichlorobenzene	146	9.937	9.937	0.000	96	1087028	10.0	9.55	
111 n-Butylbenzene	91	10.281	10.281	0.000	97	1306124	10.0	9.41	
112 1,2-Dichlorobenzene	146	10.316	10.316	0.000	99	993081	10.0	9.76	
113 1,2-Dibromo-3-Chloropropan	157	11.099	11.099	0.000	88	57010	10.0	10.5	
115 1,2,4-Trichlorobenzene	180	11.905	11.905	0.000	94	514597	10.0	9.76	
116 Hexachlorobutadiene	225	12.059	12.059	0.000	93	247068	10.0	10.2	
117 Naphthalene	128	12.154	12.154	0.000	96	936525	10.0	8.42	
118 1,2,3-Trichlorobenzene	180	12.391	12.391	0.000	96	455438	10.0	9.77	
S 129 Xylenes, Total	106				0		20.0	21.2	
S 130 Trihalomethanes, Total	1				0		40.0	45.9	

Reagents:

VMAROLISTDW_00172	Amount Added: 8.00	Units: uL	
VMRGAS_00177	Amount Added: 8.00	Units: uL	
VMRPRIMW_00212	Amount Added: 8.00	Units: uL	
vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9701.D

Injection Date: 14-Nov-2016 10:04:30

Instrument ID: A3UX15

Lims ID: CCVIS L4 8260

Client ID:

Operator ID:

Worklist Smp#: 2

Purge Vol: 5.000 mL

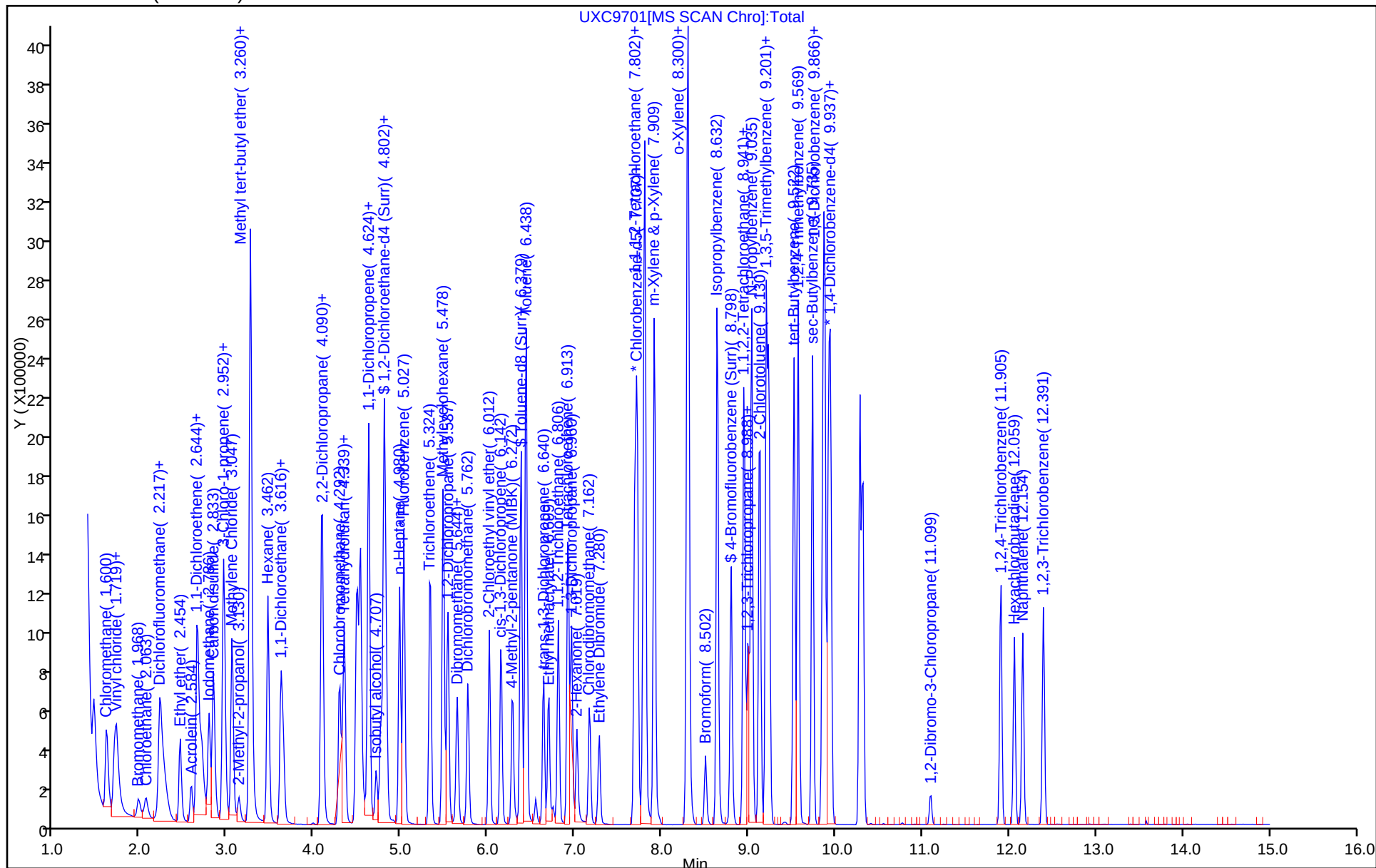
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: ICV 240-245430/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2781	0.2946		0.0212	0.0200	5.9	50.0
Chloromethane	Ave	0.3817	0.3579	0.1000	0.0188	0.0200	-6.2	50.0
Vinyl chloride	Ave	0.3553	0.3449		0.0194	0.0200	-2.9	20.0
Butadiene	Ave	0.3341	0.3114		0.0186	0.0200	-6.8	50.0
Bromomethane	Ave	0.1902	0.1762		0.0185	0.0200	-7.4	50.0
Chloroethane	Ave	0.2108	0.2032		0.0193	0.0200	-3.6	50.0
Dichlorofluoromethane	Ave	0.4995	0.4743		0.0190	0.0200	-5.1	50.0
Trichlorofluoromethane	Ave	0.3346	0.3314		0.0198	0.0200	-0.9	50.0
Ethyl ether	Ave	0.1940	0.1870		0.0193	0.0200	-3.6	50.0
Acrolein	Ave	0.0291	0.0285		0.0980	0.100	-2.0	50.0
1,1-Dichloroethene	Ave	0.2383	0.2532		0.0212	0.0200	6.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1513	0.1743		0.0230	0.0200	15.2	50.0
Acetone	Lin1		0.0445		0.0382	0.0400	-4.4	50.0
Iodomethane	Ave	0.3898	0.4036		0.0207	0.0200	3.5	50.0
Carbon disulfide	Ave	0.8983	0.9347		0.0208	0.0200	4.1	50.0
3-Chloro-1-propene	Ave	0.1741	0.1764		0.0203	0.0200	1.3	50.0
Methyl acetate	Ave	0.1139	0.1106		0.0971	0.100	-2.9	50.0
Methylene Chloride	Lin1		0.3001		0.0189	0.0200	-5.3	50.0
2-Methyl-2-propanol	Ave	0.0122	0.0117		0.192	0.200	-4.2	50.0
Acrylonitrile	Ave	0.0594	0.0593		0.199	0.200	-0.3	50.0
trans-1,2-Dichloroethene	Ave	0.2900	0.2902		0.0200	0.0200	0.0	50.0
Methyl tert-butyl ether	Ave	0.6719	0.6606		0.0197	0.0200	-1.7	50.0
Hexane	Ave	0.2697	0.3269		0.0242	0.0200	21.2*	20.0
1,1-Dichloroethane	Ave	0.5025	0.4762	0.1000	0.0190	0.0200	-5.2	50.0
Vinyl acetate	Ave	0.3605	0.3574		0.0198	0.0200	-0.9	50.0
2,2-Dichloropropane	Ave	0.3696	0.3605		0.0195	0.0200	-2.4	50.0
cis-1,2-Dichloroethene	Ave	0.3095	0.2971		0.0192	0.0200	-4.0	50.0
2-Butanone (MEK)	Ave	0.0621	0.0596		0.0384	0.0400	-4.0	50.0
Chlorobromomethane	Ave	0.1240	0.1178		0.0190	0.0200	-5.0	50.0
Tetrahydrofuran	Ave	0.0406	0.0406		0.0400	0.0400	-0.0	50.0
Chloroform	Ave	0.4590	0.4308		0.0188	0.0200	-6.1	20.0
1,1,1-Trichloroethane	Ave	0.3694	0.3778		0.0205	0.0200	2.3	50.0
Cyclohexane	Ave	0.4081	0.4727		0.0232	0.0200	15.8	50.0
1,1-Dichloropropene	Ave	0.3522	0.3663		0.0208	0.0200	4.0	50.0
Carbon tetrachloride	Ave	0.2894	0.3133		0.0216	0.0200	8.2	50.0
Isobutyl alcohol	Ave	0.0038	0.0035		0.467	0.500	-6.6	50.0
Benzene	Ave	1.173	1.123		0.0191	0.0200	-4.3	50.0
1,2-Dichloroethane	Ave	0.3058	0.2978		0.0195	0.0200	-2.6	50.0
n-Heptane	Lin1		0.1689		0.0247	0.0200	23.7	50.0
Trichloroethene	Ave	0.2746	0.2737		0.0199	0.0200	-0.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: ICV 240-245430/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3562	0.3978		0.0223	0.0200	11.7	50.0
1,2-Dichloropropane	Ave	0.2672	0.2647		0.0198	0.0200	-0.9	20.0
Dibromomethane	Ave	0.1201	0.1171		0.0195	0.0200	-2.5	50.0
1,4-Dioxane	Ave	0.0011	0.0009		0.309	0.400	-22.9	50.0
Dichlorobromomethane	Ave	0.3207	0.3032		0.0189	0.0200	-5.5	50.0
2-Chloroethyl vinyl ether	Ave	0.1143	0.1155		0.0202	0.0200	1.0	50.0
cis-1,3-Dichloropropene	Ave	0.4166	0.4069		0.0195	0.0200	-2.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1353	0.1405		0.0415	0.0400	3.9	50.0
Toluene	Ave	1.710	1.667		0.0195	0.0200	-2.5	20.0
trans-1,3-Dichloropropene	Ave	0.4672	0.4393		0.0188	0.0200	-6.0	50.0
Ethyl methacrylate	Ave	0.3327	0.3487		0.0210	0.0200	4.8	50.0
1,1,2-Trichloroethane	Ave	0.2527	0.2490		0.0197	0.0200	-1.5	50.0
1,3-Dichloropropane	Ave	0.4765	0.4654		0.0195	0.0200	-2.3	50.0
Tetrachloroethene	Ave	0.2755	0.2793		0.0203	0.0200	1.4	50.0
2-Hexanone	Ave	0.1213	0.1249		0.0412	0.0400	2.9	50.0
Chlorodibromomethane	Ave	0.2742	0.2707		0.0197	0.0200	-1.3	50.0
Ethylene Dibromide	Ave	0.2382	0.2432		0.0204	0.0200	2.1	50.0
Chlorobenzene	Ave	1.096	1.020	0.3000	0.0186	0.0200	-6.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3466	0.3334		0.0192	0.0200	-3.8	50.0
Ethylbenzene	Ave	0.5760	0.5612		0.0195	0.0200	-2.6	20.0
m-Xylene & p-Xylene	Ave	0.7222	0.7013		0.0194	0.0200	-2.9	50.0
o-Xylene	Ave	0.7391	0.6910		0.0187	0.0200	-6.5	50.0
Styrene	Ave	1.192	1.151		0.0193	0.0200	-3.5	50.0
Bromoform	Ave	0.1392	0.1448	0.1000	0.0208	0.0200	4.0	50.0
Isopropylbenzene	Ave	1.733	1.698		0.0196	0.0200	-2.0	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5607	0.5729	0.3000	0.0204	0.0200	2.2	50.0
Bromobenzene	Ave	0.7889	0.7696		0.0195	0.0200	-2.5	50.0
1,2,3-Trichloropropane	Lin1		0.1684		0.0207	0.0200	3.7	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1504	0.1489		0.0198	0.0200	-1.0	50.0
N-Propylbenzene	Ave	0.8625	0.8636		0.0200	0.0200	0.1	50.0
2-Chlorotoluene	Ave	0.7917	0.7546		0.0191	0.0200	-4.7	50.0
1,3,5-Trimethylbenzene	Ave	2.724	2.643		0.0194	0.0200	-3.0	50.0
4-Chlorotoluene	Ave	0.8425	0.8074		0.0192	0.0200	-4.2	50.0
tert-Butylbenzene	Ave	2.203	2.122		0.0193	0.0200	-3.7	50.0
1,2,4-Trimethylbenzene	Ave	2.929	2.756		0.0188	0.0200	-5.9	50.0
sec-Butylbenzene	Ave	2.970	2.894		0.0195	0.0200	-2.6	50.0
1,3-Dichlorobenzene	Ave	1.606	1.477		0.0184	0.0200	-8.1	50.0
4-Isopropyltoluene	Ave	2.633	2.522		0.0192	0.0200	-4.2	50.0
1,4-Dichlorobenzene	Ave	1.631	1.505		0.0185	0.0200	-7.7	50.0
n-Butylbenzene	Ave	2.176	1.997		0.0183	0.0200	-8.3	50.0
1,2-Dichlorobenzene	Ave	1.453	1.383		0.0190	0.0200	-4.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Lab Sample ID: ICV 240-245430/20 Calibration Date: 09/02/2016 23:42
 Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 09/02/2016 20:14
 Lab File ID: UXM7659.D Conc. Units: ng/uL 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		0.0939		0.0211	0.0200	5.6	50.0
1,2,4-Trichlorobenzene	Lin1		0.7127		0.0187	0.0200	-6.6	50.0
Hexachlorobutadiene	Ave	0.2856	0.2529		0.0177	0.0200	-11.5	50.0
Naphthalene	Ave	1.680	1.646		0.0196	0.0200	-2.0	50.0
1,2,3-Trichlorobenzene	Lin1		0.5985		0.0187	0.0200	-6.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2289	0.2051		0.0179	0.0200	-10.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2213		0.0181	0.0200	-9.5	50.0
Toluene-d8 (Surr)	Ave	1.458	1.318		0.0181	0.0200	-9.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.4819		0.0179	0.0200	-10.3	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7659.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 02-Sep-2016 23:42:30 ALS Bottle#: 16 Worklist Smp#: 20
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0057729-020
 Operator ID: 001904 Instrument ID: A3UX16
 Sublist:
 Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 06-Sep-2016 14:22:35 Calib Date: 02-Sep-2016 22:56:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK001

First Level Reviewer: bosworthh

Date: 06-Sep-2016 12:45:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	96	1038034	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	740042	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	96	381864	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	212920	20.0	17.9	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	98	229684	20.0	18.1	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	975252	20.0	18.1	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	356592	20.0	17.9	
9 Dichlorodifluoromethane	85	1.391	1.391	0.000	99	305766	20.0	21.2	
10 Chloromethane	50	1.498	1.510	-0.012	99	371484	20.0	18.8	
11 Vinyl chloride	62	1.605	1.617	-0.012	98	358008	20.0	19.4	
12 Butadiene	54	1.640	1.640	0.000	99	323253	20.0	18.6	
13 Bromomethane	94	1.889	1.901	-0.012	89	182860	20.0	18.5	
14 Chloroethane	64	1.984	1.996	-0.012	99	210928	20.0	19.3	
15 Dichlorofluoromethane	67	2.162	2.174	-0.012	97	492325	20.0	19.0	
16 Trichlorofluoromethane	101	2.210	2.198	0.012	97	344045	20.0	19.8	
17 Ethyl ether	59	2.459	2.458	0.001	90	194136	20.0	19.3	
18 Acrolein	56	2.565	2.565	0.000	100	147936	100.0	98.0	
19 1,1-Dichloroethene	96	2.660	2.660	0.000	97	262842	20.0	21.2	
20 1,1,2-Trichloro-1,2,2-trif	151	2.696	2.708	-0.012	95	180873	20.0	23.0	
21 Acetone	43	2.708	2.708	0.000	100	92424	40.0	38.2	
23 Iodomethane	142	2.791	2.791	0.000	96	418894	20.0	20.7	

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7659.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
24 Carbon disulfide	76	2.850	2.850	0.000	99	970284	20.0	20.8	
26 3-Chloro-1-propene	76	2.980	2.980	0.000	92	183103	20.0	20.3	
27 Methyl acetate	43	3.004	3.004	0.000	98	574033	100.0	97.1	
28 Methylene Chloride	84	3.087	3.087	0.000	91	311501	20.0	18.9	
29 2-Methyl-2-propanol	59	3.194	3.206	-0.012	99	121126	200.0	191.6	
30 Acrylonitrile	53	3.301	3.300	0.000	98	615022	200.0	199.3	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	98	301192	20.0	20.0	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	95	685682	20.0	19.7	
33 Hexane	57	3.573	3.573	0.000	91	339376	20.0	24.2	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	494265	20.0	19.0	
35 Vinyl acetate	43	3.739	3.739	0.000	97	370937	20.0	19.8	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	82	308355	20.0	19.2	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	99	123697	40.0	38.4	
41 2,2-Dichloropropane	77	4.190	4.206	-0.016	89	374253	20.0	19.5	
45 Chlorobromomethane	128	4.391	4.391	0.000	96	122305	20.0	19.0	
46 Tetrahydrofuran	42	4.439	4.439	0.000	86	84215	40.0	40.0	
47 Chloroform	83	4.463	4.463	0.000	93	447207	20.0	18.8	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	99	392182	20.0	20.5	
49 Cyclohexane	56	4.676	4.676	0.000	89	490685	20.0	23.2	
50 1,1-Dichloropropene	75	4.759	4.759	0.000	96	380270	20.0	20.8	
51 Carbon tetrachloride	117	4.771	4.771	0.000	97	325170	20.0	21.6	
52 Isobutyl alcohol	41	4.854	4.854	0.000	95	91469	500.0	467.0	
54 Benzene	78	4.937	4.937	0.000	95	1165385	20.0	19.1	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	97	309106	20.0	19.5	
56 n-Heptane	57	5.174	5.174	0.000	54	175311	20.0	24.7	
58 Trichloroethene	130	5.494	5.494	0.000	98	284104	20.0	19.9	
60 Methylcyclohexane	83	5.660	5.660	0.000	92	412898	20.0	22.3	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	97	274711	20.0	19.8	
63 Dibromomethane	93	5.779	5.779	0.000	97	121508	20.0	19.5	
64 1,4-Dioxane	88	5.791	5.791	0.000	89	18123	400.0	308.5	
65 Dichlorobromomethane	83	5.909	5.909	0.000	100	314704	20.0	18.9	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	91	119880	20.0	20.2	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	95	422335	20.0	19.5	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	96	291740	40.0	41.5	
70 Toluene	91	6.609	6.609	0.000	98	1233343	20.0	19.5	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	93	325128	20.0	18.8	
72 Ethyl methacrylate	69	6.882	6.882	0.000	89	258014	20.0	21.0	
73 1,1,2-Trichloroethane	97	6.953	6.953	0.000	90	184240	20.0	19.7	
75 Tetrachloroethene	164	7.107	7.107	0.000	94	206672	20.0	20.3	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	91	344439	20.0	19.5	
76 2-Hexanone	43	7.178	7.178	0.000	94	184797	40.0	41.2	
78 Chlorodibromomethane	129	7.321	7.320	0.001	90	200306	20.0	19.7	

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7659.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
80 Ethylene Dibromide	107	7.427	7.427	0.000	98	179994	20.0	20.4	
82 Chlorobenzene	112	7.890	7.890	0.000	95	754883	20.0	18.6	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	96	246730	20.0	19.2	
84 Ethylbenzene	106	7.985	7.985	0.000	98	415271	20.0	19.5	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	97	518984	20.0	19.4	
86 o-Xylene	106	8.471	8.471	0.000	97	511377	20.0	18.7	
87 Styrene	104	8.483	8.483	0.000	93	851481	20.0	19.3	
88 Bromoform	173	8.649	8.649	0.000	97	107118	20.0	20.8	
89 Isopropylbenzene	105	8.827	8.827	0.001	95	1256244	20.0	19.6	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	94	218768	20.0	20.4	
93 Bromobenzene	156	9.111	9.111	0.000	96	293866	20.0	19.5	
95 1,2,3-Trichloropropane	110	9.147	9.135	0.012	81	64296	20.0	20.7	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	86	56852	20.0	19.8	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	329785	20.0	20.0	
97 2-Chlorotoluene	126	9.301	9.301	0.000	96	288157	20.0	19.1	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	1009336	20.0	19.4	
100 4-Chlorotoluene	126	9.408	9.408	0.000	98	308319	20.0	19.2	
102 tert-Butylbenzene	119	9.716	9.716	0.000	91	810453	20.0	19.3	
104 1,2,4-Trimethylbenzene	105	9.752	9.751	0.001	96	1052508	20.0	18.8	
105 sec-Butylbenzene	105	9.929	9.929	0.000	94	1104930	20.0	19.5	
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	98	563889	20.0	18.4	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	962993	20.0	19.2	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	96	574797	20.0	18.5	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	762458	20.0	18.3	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	99	528112	20.0	19.0	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	84	35858	20.0	21.1	
115 1,2,4-Trichlorobenzene	180	12.076	12.076	0.000	94	272170	20.0	18.7	
116 Hexachlorobutadiene	225	12.266	12.265	0.001	96	96559	20.0	17.7	
117 Naphthalene	128	12.325	12.325	0.000	97	628521	20.0	19.6	
118 1,2,3-Trichlorobenzene	180	12.562	12.562	0.000	96	228533	20.0	18.7	
S 134 Trihalomethanes, Total	1				0		80.0	78.2	
S 133 Xylenes, Total	106				0		40.0	38.1	

Reagents:

vmfasgw_00171	Amount Added: 16.00	Units: uL	
vmfasaw_00155	Amount Added: 16.00	Units: uL	
vmfaspw_00170	Amount Added: 16.00	Units: uL	
vm100is_stk_00028	Amount Added: 1.00	Units: uL	Run Reagent
vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00077	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7659.D

Injection Date: 02-Sep-2016 23:42:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: ICV

Worklist Smp#: 20

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

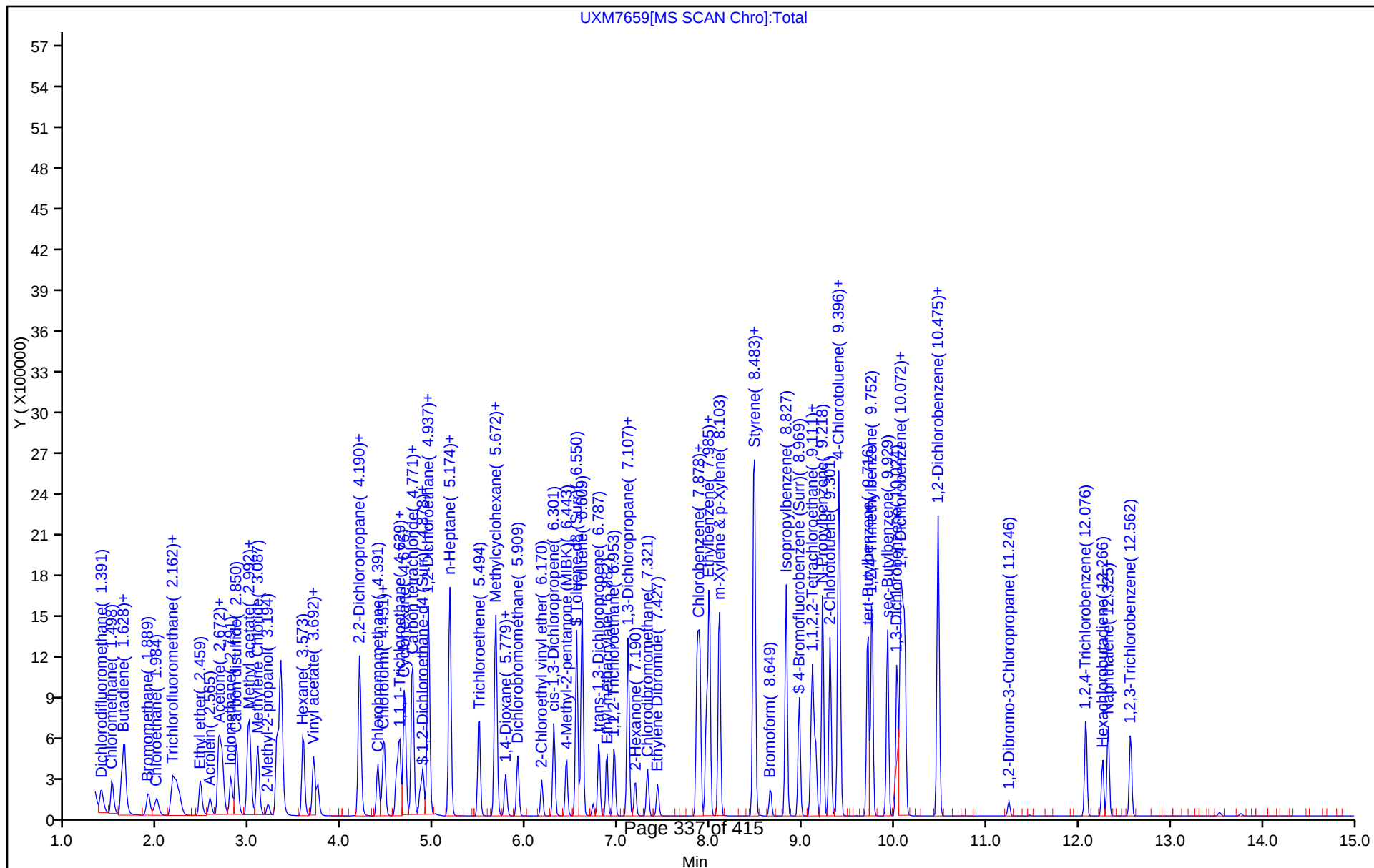
ALS Bottle#: 16

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: CCVIS 240-255306/4 Calibration Date: 11/11/2016 11:01

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM9301.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2781	0.2791		0.0201	0.0200	0.3	50.0
Chloromethane	Ave	0.3817	0.3575	0.1000	0.0187	0.0200	-6.3	50.0
Vinyl chloride	Ave	0.3553	0.3369		0.0190	0.0200	-5.2	20.0
Butadiene	Ave	0.3341	0.3110		0.0186	0.0200	-6.9	50.0
Bromomethane	Ave	0.1902	0.1835		0.0193	0.0200	-3.5	50.0
Chloroethane	Ave	0.2108	0.2062		0.0196	0.0200	-2.2	50.0
Dichlorofluoromethane	Ave	0.4995	0.4338		0.0174	0.0200	-13.2	50.0
Trichlorofluoromethane	Ave	0.3346	0.2846		0.0170	0.0200	-15.0	50.0
Ethyl ether	Ave	0.1940	0.2187		0.0226	0.0200	12.8	50.0
Acrolein	Ave	0.0291	0.0307		0.106	0.100	5.5	50.0
1,1-Dichloroethene	Ave	0.2383	0.2324		0.0195	0.0200	-2.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1513	0.1501		0.0198	0.0200	-0.8	50.0
Acetone	Lin1		0.0562		0.0493	0.0400	23.2	50.0
Iodomethane	Ave	0.3898	0.3533		0.0181	0.0200	-9.4	50.0
Carbon disulfide	Ave	0.8983	0.8317		0.0185	0.0200	-7.4	50.0
3-Chloro-1-propene	Ave	0.1741	0.1593		0.0183	0.0200	-8.5	50.0
Methyl acetate	Ave	0.1139	0.1465		0.129	0.100	28.6	50.0
Methylene Chloride	Lin1		0.2786		0.0175	0.0200	-12.6	50.0
2-Methyl-2-propanol	Ave	0.0122	0.0168		0.275	0.200	37.5	50.0
Acrylonitrile	Ave	0.0594	0.0773		0.260	0.200	30.1	50.0
trans-1,2-Dichloroethene	Ave	0.2900	0.2667		0.0184	0.0200	-8.0	50.0
Methyl tert-butyl ether	Ave	0.6719	0.6906		0.0206	0.0200	2.8	50.0
Hexane	Ave	0.2697	0.2666		0.0198	0.0200	-1.2	20.0
1,1-Dichloroethane	Ave	0.5025	0.4858	0.1000	0.0193	0.0200	-3.3	50.0
Vinyl acetate	Ave	0.3605	0.3849		0.0214	0.0200	6.8	50.0
cis-1,2-Dichloroethene	Ave	0.3095	0.2871		0.0186	0.0200	-7.2	50.0
2,2-Dichloropropane	Ave	0.3696	0.3084		0.0167	0.0200	-16.6	50.0
2-Butanone (MEK)	Ave	0.0621	0.0753		0.0485	0.0400	21.3	50.0
Chlorobromomethane	Ave	0.1240	0.1229		0.0198	0.0200	-0.9	50.0
Tetrahydrofuran	Ave	0.0406	0.0553		0.0545	0.0400	36.2	50.0
Chloroform	Ave	0.4590	0.4228		0.0184	0.0200	-7.9	20.0
1,1,1-Trichloroethane	Ave	0.3694	0.3369		0.0182	0.0200	-8.8	50.0
Cyclohexane	Ave	0.4081	0.4114		0.0202	0.0200	0.8	50.0
1,1-Dichloropropene	Ave	0.3522	0.3513		0.0200	0.0200	-0.2	50.0
Carbon tetrachloride	Ave	0.2894	0.2718		0.0188	0.0200	-6.1	50.0
Isobutyl alcohol	Ave	0.0038	0.0056		0.747	0.500	49.4	50.0
Benzene	Ave	1.173	1.082		0.0184	0.0200	-7.8	50.0
1,2-Dichloroethane	Ave	0.3058	0.2933		0.0192	0.0200	-4.1	50.0
n-Heptane	Lin1		0.1279		0.0174	0.0200	-12.8	50.0
Trichloroethene	Ave	0.2746	0.2499		0.0182	0.0200	-9.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1

SDG No.: _____

Lab Sample ID: CCVIS 240-255306/4 Calibration Date: 11/11/2016 11:01

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM9301.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2672	0.2440		0.0183	0.0200	-8.7	20.0
Methylcyclohexane	Ave	0.3562	0.3266		0.0183	0.0200	-8.3	50.0
Dibromomethane	Ave	0.1201	0.1214		0.0202	0.0200	1.0	50.0
Dichlorobromomethane	Ave	0.3207	0.2938		0.0183	0.0200	-8.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1143	0.1151		0.0403	0.0400	0.7	50.0
cis-1,3-Dichloropropene	Ave	0.4166	0.3725		0.0179	0.0200	-10.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1353	0.1640		0.0485	0.0400	21.2	50.0
Toluene	Ave	1.710	1.518		0.0178	0.0200	-11.2	20.0
trans-1,3-Dichloropropene	Ave	0.4672	0.4390		0.0188	0.0200	-6.0	50.0
Ethyl methacrylate	Ave	0.3327	0.3554		0.0214	0.0200	6.8	50.0
1,1,2-Trichloroethane	Ave	0.2527	0.2557		0.0202	0.0200	1.2	50.0
1,3-Dichloropropane	Ave	0.4765	0.4657		0.0195	0.0200	-2.3	50.0
Tetrachloroethene	Ave	0.2755	0.2449		0.0178	0.0200	-11.1	50.0
2-Hexanone	Ave	0.1213	0.1535		0.0506	0.0400	26.5	50.0
Chlorodibromomethane	Ave	0.2742	0.2655		0.0194	0.0200	-3.1	50.0
Ethylene Dibromide	Ave	0.2382	0.2395		0.0201	0.0200	0.6	50.0
Chlorobenzene	Ave	1.096	0.9370	0.3000	0.0171	0.0200	-14.5	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3466	0.3083		0.0178	0.0200	-11.0	50.0
Ethylbenzene	Ave	0.5760	0.5106		0.0177	0.0200	-11.4	20.0
m-Xylene & p-Xylene	Ave	0.7222	0.6368		0.0176	0.0200	-11.8	50.0
o-Xylene	Ave	0.7391	0.6530		0.0177	0.0200	-11.6	50.0
Styrene	Ave	1.192	1.060		0.0178	0.0200	-11.1	50.0
Bromoform	Ave	0.1392	0.1469	0.1000	0.0211	0.0200	5.6	50.0
Isopropylbenzene	Ave	1.733	1.521		0.0176	0.0200	-12.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.5607	0.6259	0.3000	0.0223	0.0200	11.6	50.0
Bromobenzene	Ave	0.7889	0.6965		0.0177	0.0200	-11.7	50.0
1,2,3-Trichloropropane	Lin1		0.1740		0.0214	0.0200	7.1	50.0
trans-1,4-Dichloro-2-butene	Ave	0.1504	0.1561		0.0208	0.0200	3.8	50.0
N-Propylbenzene	Ave	0.8625	0.7302		0.0169	0.0200	-15.3	50.0
2-Chlorotoluene	Ave	0.7917	0.6553		0.0166	0.0200	-17.2	50.0
1,3,5-Trimethylbenzene	Ave	2.724	2.278		0.0167	0.0200	-16.4	50.0
4-Chlorotoluene	Ave	0.8425	0.6894		0.0164	0.0200	-18.2	50.0
tert-Butylbenzene	Ave	2.203	1.779		0.0162	0.0200	-19.2	50.0
1,2,4-Trimethylbenzene	Ave	2.929	2.417		0.0165	0.0200	-17.5	50.0
sec-Butylbenzene	Ave	2.970	2.419		0.0163	0.0200	-18.6	50.0
1,3-Dichlorobenzene	Ave	1.606	1.296		0.0161	0.0200	-19.3	50.0
4-Isopropyltoluene	Ave	2.633	2.104		0.0160	0.0200	-20.1	50.0
1,4-Dichlorobenzene	Ave	1.631	1.345		0.0165	0.0200	-17.5	50.0
n-Butylbenzene	Ave	2.176	1.752		0.0161	0.0200	-19.5	50.0
1,2-Dichlorobenzene	Ave	1.453	1.277		0.0176	0.0200	-12.1	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.1000		0.0225	0.0200	12.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-255306/4 Calibration Date: 11/11/2016 11:01
 Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 09/02/2016 20:14
 Lab File ID: UXM9301.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Lin1		0.6286		0.0165	0.0200	-17.7	50.0
Hexachlorobutadiene	Ave	0.2856	0.2103		0.0147	0.0200	-26.4	50.0
Naphthalene	Ave	1.680	1.730		0.0206	0.0200	2.9	50.0
1,2,3-Trichlorobenzene	Lin1		0.5623		0.0175	0.0200	-12.4	50.0
Dibromofluoromethane (Surr)	Ave	0.2289	0.2053		0.0179	0.0200	-10.3	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2323		0.0190	0.0200	-5.0	50.0
Toluene-d8 (Surr)	Ave	1.458	1.274		0.0175	0.0200	-12.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.4832		0.0180	0.0200	-10.0	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9301.D
 Lims ID: CCVIS L4 8260
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 11-Nov-2016 11:01:30 ALS Bottle#: 2 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-004
 Operator ID: 001765 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 12:34:13 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK022

First Level Reviewer: bosworthh

Date: 11-Nov-2016 12:34:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	97	807971	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.866	7.866	0.000	86	555719	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	96	301490	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	165842	20.0	17.9	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	187658	20.0	19.0	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	707884	20.0	17.5	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	268535	20.0	18.0	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	225476	20.0	20.1	
10 Chloromethane	50	1.510	1.510	0.000	99	288831	20.0	18.7	
11 Vinyl chloride	62	1.628	1.628	0.000	97	272231	20.0	19.0	
12 Butadiene	54	1.652	1.652	0.000	97	251299	20.0	18.6	
13 Bromomethane	94	1.901	1.901	0.000	90	148272	20.0	19.3	
14 Chloroethane	64	1.996	1.996	0.000	99	166574	20.0	19.6	
15 Dichlorofluoromethane	67	2.174	2.174	0.000	97	350508	20.0	17.4	
16 Trichlorofluoromethane	101	2.209	2.209	0.000	97	229906	20.0	17.0	
17 Ethyl ether	59	2.470	2.470	0.000	90	176726	20.0	22.6	
18 Acrolein	56	2.577	2.577	0.000	98	124018	100.0	105.5	
19 1,1-Dichloroethene	96	2.672	2.672	0.000	98	187747	20.0	19.5	
20 1,1,2-Trichloro-1,2,2-trif	151	2.707	2.707	0.000	95	121269	20.0	19.8	
21 Acetone	43	2.707	2.707	0.000	99	90844	40.0	49.3	
23 Iodomethane	142	2.802	2.802	0.000	96	285440	20.0	18.1	
24 Carbon disulfide	76	2.862	2.862	0.000	99	671966	20.0	18.5	
26 3-Chloro-1-propene	76	2.992	2.992	0.000	94	128666	20.0	18.3	
27 Methyl acetate	43	3.004	3.004	0.000	98	591927	100.0	128.6	
28 Methylene Chloride	84	3.087	3.087	0.000	92	225102	20.0	17.5	
29 2-Methyl-2-propanol	59	3.206	3.206	0.000	99	135381	200.0	275.1	
30 Acrylonitrile	53	3.300	3.300	0.000	100	624746	200.0	260.1	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	99	215493	20.0	18.4	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	94	558020	20.0	20.6	
33 Hexane	57	3.585	3.585	0.000	89	215423	20.0	19.8	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	392518	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.739	3.739	0.000	97	311012	20.0	21.4	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	83	231986	20.0	18.6	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	99	121633	40.0	48.5	
41 2,2-Dichloropropane	77	4.202	4.206	-0.004	86	249179	20.0	16.7	
45 Chlorobromomethane	128	4.391	4.391	0.000	98	99330	20.0	19.8	
46 Tetrahydrofuran	42	4.439	4.439	0.000	89	89309	40.0	54.5	
47 Chloroform	83	4.463	4.463	0.000	93	341579	20.0	18.4	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	98	272200	20.0	18.2	
49 Cyclohexane	56	4.688	4.688	0.000	89	332406	20.0	20.2	
50 1,1-Dichloropropene	75	4.771	4.771	0.000	97	283822	20.0	20.0	
51 Carbon tetrachloride	117	4.771	4.771	0.000	95	219625	20.0	18.8	
52 Isobutyl alcohol	41	4.854	4.854	0.000	95	113893	500.0	747.1	
54 Benzene	78	4.937	4.937	0.000	95	874397	20.0	18.4	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	96	236980	20.0	19.2	
56 n-Heptane	57	5.174	5.174	0.000	49	103312	20.0	17.4	
58 Trichloroethene	130	5.494	5.494	0.000	99	201906	20.0	18.2	
60 Methylcyclohexane	83	5.672	5.672	0.000	91	263877	20.0	18.3	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	97	197133	20.0	18.3	
63 Dibromomethane	93	5.779	5.779	0.000	95	98063	20.0	20.2	
64 1,4-Dioxane	88	5.791	5.791	0.000	93	31556	400.0	721.7	
65 Dichlorobromomethane	83	5.909	5.909	0.000	100	237406	20.0	18.3	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	92	185979	40.0	40.3	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	96	300961	20.0	17.9	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	95	265010	40.0	48.5	
70 Toluene	91	6.609	6.609	0.000	99	843516	20.0	17.8	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	92	243931	20.0	18.8	
72 Ethyl methacrylate	69	6.882	6.882	0.000	89	197510	20.0	21.4	
73 1,1,2-Trichloroethane	97	6.953	6.953	0.000	89	142086	20.0	20.2	
75 Tetrachloroethene	164	7.107	7.107	0.000	96	136083	20.0	17.8	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	90	258817	20.0	19.5	
76 2-Hexanone	43	7.190	7.190	0.000	95	170589	40.0	50.6	
78 Chlorodibromomethane	129	7.320	7.320	0.000	91	147555	20.0	19.4	
80 Ethylene Dibromide	107	7.427	7.427	0.000	99	133096	20.0	20.1	
82 Chlorobenzene	112	7.890	7.890	0.000	95	520730	20.0	17.1	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	96	171347	20.0	17.8	
84 Ethylbenzene	106	7.996	7.996	0.000	98	283734	20.0	17.7	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	97	353905	20.0	17.6	
86 o-Xylene	106	8.471	8.471	0.000	94	362904	20.0	17.7	
87 Styrene	104	8.483	8.483	0.000	94	588815	20.0	17.8	
88 Bromoform	173	8.649	8.649	0.000	97	81660	20.0	21.1	
89 Isopropylbenzene	105	8.826	8.826	0.000	95	845275	20.0	17.6	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	91	188700	20.0	22.3	
93 Bromobenzene	156	9.111	9.111	0.000	95	210001	20.0	17.7	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	79	52444	20.0	21.4	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	87	47066	20.0	20.8	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	220137	20.0	16.9	
97 2-Chlorotoluene	126	9.301	9.301	0.000	97	197552	20.0	16.6	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	686826	20.0	16.7	
100 4-Chlorotoluene	126	9.408	9.408	0.000	99	207851	20.0	16.4	
102 tert-Butylbenzene	119	9.716	9.716	0.000	92	536460	20.0	16.2	
104 1,2,4-Trimethylbenzene	105	9.763	9.763	0.000	96	728820	20.0	16.5	
105 sec-Butylbenzene	105	9.929	9.929	0.000	94	729242	20.0	16.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	98	390828	20.0	16.1	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	634465	20.0	16.0	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	96	405481	20.0	16.5	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	528099	20.0	16.1	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	99	384949	20.0	17.6	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	84	30152	20.0	22.5	
115 1,2,4-Trichlorobenzene	180	12.088	12.088	0.000	94	189523	20.0	16.5	
116 Hexachlorobutadiene	225	12.265	12.265	0.000	96	63397	20.0	14.7	
117 Naphthalene	128	12.325	12.325	0.000	97	521526	20.0	20.6	
118 1,2,3-Trichlorobenzene	180	12.574	12.574	0.000	96	169539	20.0	17.5	
S 158 Total BTEX	1				0		100.0	89.2	
S 134 Trihalomethanes, Total	1				0		80.0	77.2	
S 133 Xylenes, Total	106				0		40.0	35.3	

Reagents:

vmrprimw_00212	Amount Added: 16.00	Units: uL	
vmarolistdw_00172	Amount Added: 16.00	Units: uL	
vmrgas_00177	Amount Added: 16.00	Units: uL	
BTEX_SUMM_00002	Amount Added: 16.00	Units: uL	
vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9301.D

Injection Date: 11-Nov-2016 11:01:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: CCVIS L4 8260

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

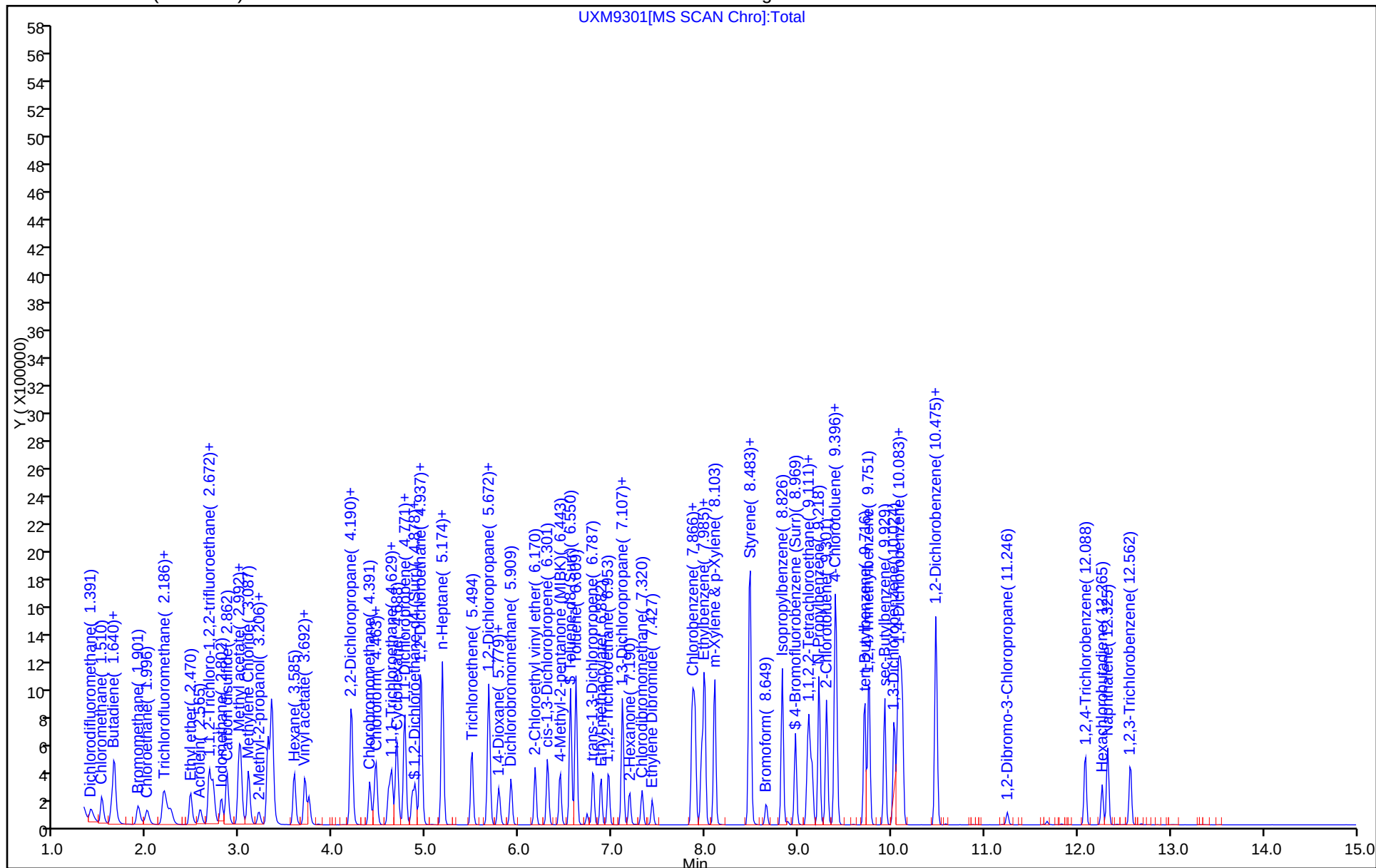
ALS Bottle#: 2

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71709-1
SDG No.: _____
Lab Sample ID: CCVIS 240-255306/4 Calibration Date: 11/11/2016 11:01
Instrument ID: A3UX16 Calib Start Date: 09/06/2016 18:05
GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 09/06/2016 20:18
Lab File ID: UXM9301.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0011	0.0020		0.722	0.400	80.4*	50.0

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9301.D
 Lims ID: CCVIS L4 8260
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 11-Nov-2016 11:01:30 ALS Bottle#: 2 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-004
 Operator ID: 001765 Instrument ID: A3UX16
 Sublist: chrom-8260_16*sub69
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 12:34:13 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK022

First Level Reviewer: bosworthh

Date: 11-Nov-2016 12:34:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	97	807971	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.866	7.866	0.000	86	555719	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	96	301490	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	93	165842	20.0	17.9	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	187658	20.0	19.0	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	707884	20.0	17.5	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	268535	20.0	18.0	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	225476	20.0	20.1	
10 Chloromethane	50	1.510	1.510	0.000	99	288831	20.0	18.7	
11 Vinyl chloride	62	1.628	1.628	0.000	97	272231	20.0	19.0	
12 Butadiene	54	1.652	1.652	0.000	97	251299	20.0	18.6	
13 Bromomethane	94	1.901	1.901	0.000	90	148272	20.0	19.3	
14 Chloroethane	64	1.996	1.996	0.000	99	166574	20.0	19.6	
15 Dichlorofluoromethane	67	2.174	2.174	0.000	97	350508	20.0	17.4	
16 Trichlorofluoromethane	101	2.209	2.209	0.000	97	229906	20.0	17.0	
17 Ethyl ether	59	2.470	2.470	0.000	90	176726	20.0	22.6	
18 Acrolein	56	2.577	2.577	0.000	98	124018	100.0	105.5	
19 1,1-Dichloroethene	96	2.672	2.672	0.000	98	187747	20.0	19.5	
20 1,1,2-Trichloro-1,2,2-trif	151	2.707	2.707	0.000	95	121269	20.0	19.8	
21 Acetone	43	2.707	2.707	0.000	99	90844	40.0	49.3	
23 Iodomethane	142	2.802	2.802	0.000	96	285440	20.0	18.1	
24 Carbon disulfide	76	2.862	2.862	0.000	99	671966	20.0	18.5	
26 3-Chloro-1-propene	76	2.992	2.992	0.000	94	128666	20.0	18.3	
27 Methyl acetate	43	3.004	3.004	0.000	98	591927	100.0	128.6	
28 Methylene Chloride	84	3.087	3.087	0.000	92	225102	20.0	17.5	
29 2-Methyl-2-propanol	59	3.206	3.206	0.000	99	135381	200.0	275.1	
30 Acrylonitrile	53	3.300	3.300	0.000	100	624746	200.0	260.1	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	99	215493	20.0	18.4	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	94	558020	20.0	20.6	
33 Hexane	57	3.585	3.585	0.000	89	215423	20.0	19.8	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	392518	20.0	19.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43	3.739	3.739	0.000	97	311012	20.0	21.4	
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	83	231986	20.0	18.6	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	99	121633	40.0	48.5	
41 2,2-Dichloropropane	77	4.202	4.206	-0.004	86	249179	20.0	16.7	
45 Chlorobromomethane	128	4.391	4.391	0.000	98	99330	20.0	19.8	
46 Tetrahydrofuran	42	4.439	4.439	0.000	89	89309	40.0	54.5	
47 Chloroform	83	4.463	4.463	0.000	93	341579	20.0	18.4	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	98	272200	20.0	18.2	
49 Cyclohexane	56	4.688	4.688	0.000	89	332406	20.0	20.2	
50 1,1-Dichloropropene	75	4.771	4.771	0.000	97	283822	20.0	20.0	
51 Carbon tetrachloride	117	4.771	4.771	0.000	95	219625	20.0	18.8	
52 Isobutyl alcohol	41	4.854	4.854	0.000	95	113893	500.0	747.1	
54 Benzene	78	4.937	4.937	0.000	95	874397	20.0	18.4	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	96	236980	20.0	19.2	
56 n-Heptane	57	5.174	5.174	0.000	49	103312	20.0	17.4	
58 Trichloroethene	130	5.494	5.494	0.000	99	201906	20.0	18.2	
60 Methylcyclohexane	83	5.672	5.672	0.000	91	263877	20.0	18.3	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	97	197133	20.0	18.3	
63 Dibromomethane	93	5.779	5.779	0.000	95	98063	20.0	20.2	
64 1,4-Dioxane	88	5.791	5.791	0.000	93	31556	400.0	721.7	
65 Dichlorobromomethane	83	5.909	5.909	0.000	100	237406	20.0	18.3	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	92	185979	40.0	40.3	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	96	300961	20.0	17.9	
69 4-Methyl-2-pentanone (MIBK)	43	6.443	6.443	0.000	95	265010	40.0	48.5	
70 Toluene	91	6.609	6.609	0.000	99	843516	20.0	17.8	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	92	243931	20.0	18.8	
72 Ethyl methacrylate	69	6.882	6.882	0.000	89	197510	20.0	21.4	
73 1,1,2-Trichloroethane	97	6.953	6.953	0.000	89	142086	20.0	20.2	
75 Tetrachloroethene	164	7.107	7.107	0.000	96	136083	20.0	17.8	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	90	258817	20.0	19.5	
76 2-Hexanone	43	7.190	7.190	0.000	95	170589	40.0	50.6	
78 Chlorodibromomethane	129	7.320	7.320	0.000	91	147555	20.0	19.4	
80 Ethylene Dibromide	107	7.427	7.427	0.000	99	133096	20.0	20.1	
82 Chlorobenzene	112	7.890	7.890	0.000	95	520730	20.0	17.1	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	96	171347	20.0	17.8	
84 Ethylbenzene	106	7.996	7.996	0.000	98	283734	20.0	17.7	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	97	353905	20.0	17.6	
86 o-Xylene	106	8.471	8.471	0.000	94	362904	20.0	17.7	
87 Styrene	104	8.483	8.483	0.000	94	588815	20.0	17.8	
88 Bromoform	173	8.649	8.649	0.000	97	81660	20.0	21.1	
89 Isopropylbenzene	105	8.826	8.826	0.000	95	845275	20.0	17.6	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	91	188700	20.0	22.3	
93 Bromobenzene	156	9.111	9.111	0.000	95	210001	20.0	17.7	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	79	52444	20.0	21.4	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	87	47066	20.0	20.8	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	220137	20.0	16.9	
97 2-Chlorotoluene	126	9.301	9.301	0.000	97	197552	20.0	16.6	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	686826	20.0	16.7	
100 4-Chlorotoluene	126	9.408	9.408	0.000	99	207851	20.0	16.4	
102 tert-Butylbenzene	119	9.716	9.716	0.000	92	536460	20.0	16.2	
104 1,2,4-Trimethylbenzene	105	9.763	9.763	0.000	96	728820	20.0	16.5	
105 sec-Butylbenzene	105	9.929	9.929	0.000	94	729242	20.0	16.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	98	390828	20.0	16.1	
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	634465	20.0	16.0	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	96	405481	20.0	16.5	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	528099	20.0	16.1	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	99	384949	20.0	17.6	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	84	30152	20.0	22.5	
115 1,2,4-Trichlorobenzene	180	12.088	12.088	0.000	94	189523	20.0	16.5	
116 Hexachlorobutadiene	225	12.265	12.265	0.000	96	63397	20.0	14.7	
117 Naphthalene	128	12.325	12.325	0.000	97	521526	20.0	20.6	
118 1,2,3-Trichlorobenzene	180	12.574	12.574	0.000	96	169539	20.0	17.5	
S 158 Total BTEX	1				0		100.0	89.2	
S 134 Trihalomethanes, Total	1				0		80.0	77.2	
S 133 Xylenes, Total	106				0		40.0	35.3	

Reagents:

vmrprimw_00212	Amount Added: 16.00	Units: uL	
vmarolistdw_00172	Amount Added: 16.00	Units: uL	
vmrgas_00177	Amount Added: 16.00	Units: uL	
BTEX_SUMM_00002	Amount Added: 16.00	Units: uL	
vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9301.D

Injection Date: 11-Nov-2016 11:01:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: CCVIS L4 8260

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

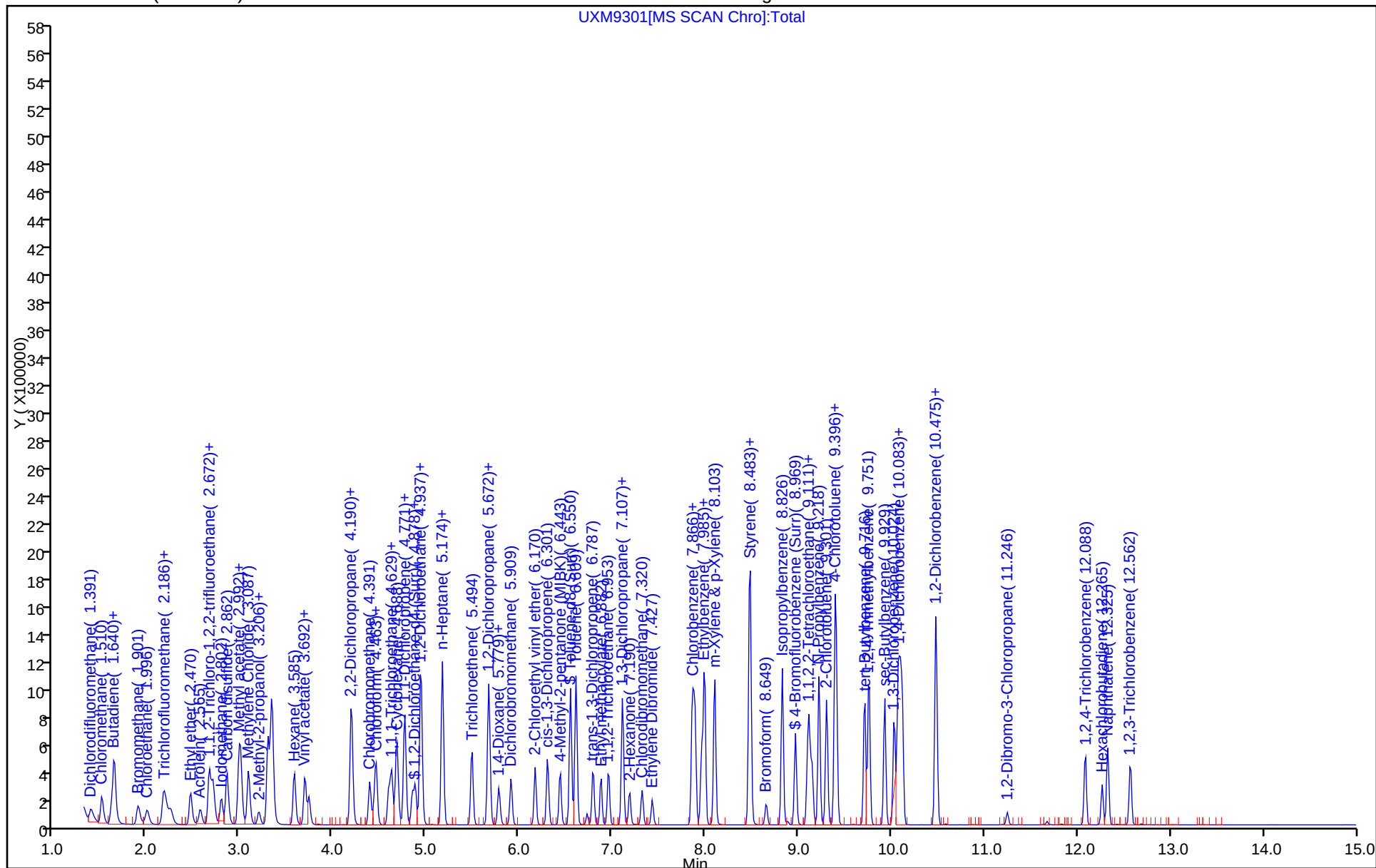
ALS Bottle#: 2

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\BFB619.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 23-Jun-2016 11:35:30 ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C60623A-IC,BFBUX15,,43582
Operator ID: 43582 Instrument ID: A3UX15
Method: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 24-Jun-2016 09:16:23 Calib Date: 23-Jun-2016 16:30:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\UXC9020.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK025

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

\$ 8 BFB	95	3.678	3.678	0.000	0	516860	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00016

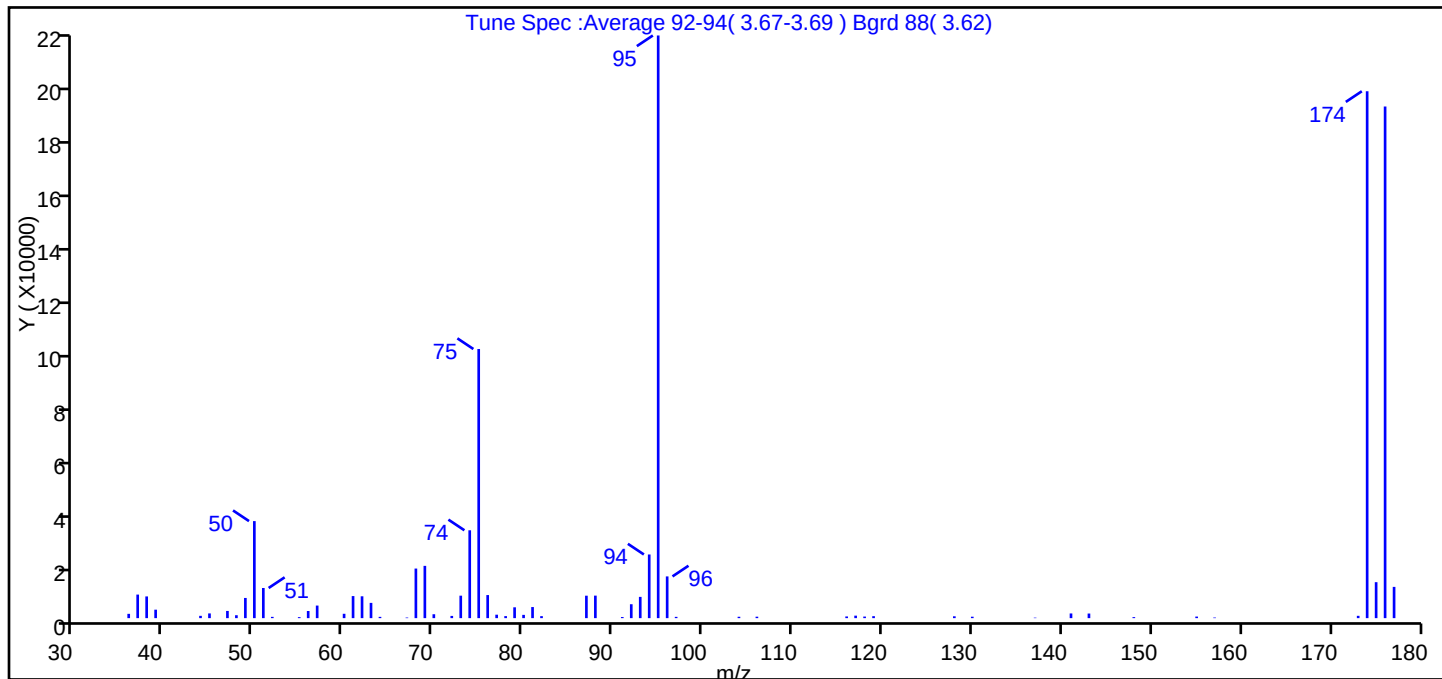
Amount Added: 1.00

Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\BFB619.D
Injection Date: 23-Jun-2016 11:35:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: 43582 ALS Bottle#: 29 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

\$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.7
75	30 to 60% of m/z 95	46.2
96	5 to 9% of m/z 95	7.2
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	90.4
175	5 to 9% of m/z 174	6.2 (6.8)
176	Greater than 95% but less than 101% of m/z 174	87.8 (97.1)
177	5 to 9% of m/z 176	5.4 (6.1)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\BFB619.D\8260_15.rsl\spectra.d
Injection Date: 23-Jun-2016 11:35:30
Spectrum: Tune Spec :Average 92-94(3.67-3.69) Bgrd 88(3.62)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1626	61.00	8332	80.00	1238	118.00	597
37.00	8895	62.00	8249	81.00	4186	119.00	742
38.00	8198	63.00	5760	82.00	755	128.00	695
39.00	3196	64.00	484	87.00	8475	130.00	542
44.00	871	67.00	225	88.00	8499	137.00	181
45.00	1783	68.00	18720	91.00	417	141.00	1771
47.00	2716	69.00	19736	92.00	5254	143.00	1740
48.00	1105	70.00	1474	93.00	8027	148.00	384
49.00	7622	72.00	842	94.00	24032	155.00	595
50.00	36632	73.00	8483	95.00	219968	157.00	225
51.00	11382	74.00	33168	96.00	15755	173.00	877
52.00	484	75.00	101600	97.00	487	174.00	198912
55.00	377	76.00	8713	104.00	522	175.00	13578
56.00	2693	77.00	1302	106.00	548	176.00	193152
57.00	4748	78.00	767	116.00	641	177.00	11800
60.00	1646	79.00	4091	117.00	940		

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20160623-55685.b\BFB619.D

Injection Date: 23-Jun-2016 11:35:30

Instrument ID: A3UX15

Operator ID: 43582

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

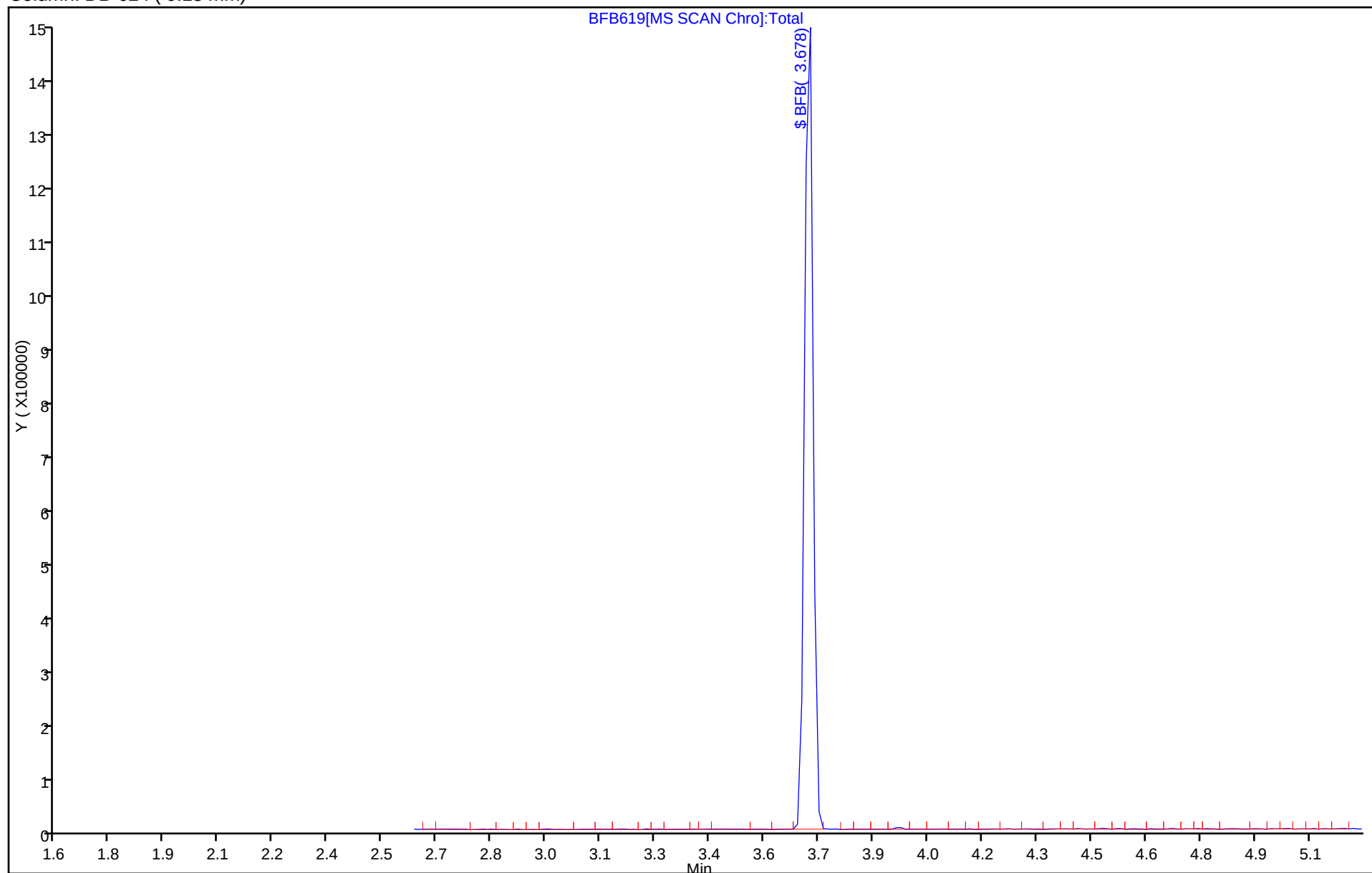
Dil. Factor: 1.0000

ALS Bottle#: 29

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\BFB61114A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 14-Nov-2016 09:41:30 ALS Bottle#: 28 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: C61114A,BFBUX15,,43582
Operator ID: Instrument ID: A3UX15
Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 15-Nov-2016 09:08:22 Calib Date: 17-Sep-2016 00:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 09:46:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags

\$ 8 BFB	95	3.571	3.571	0.000	0	349719	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00016

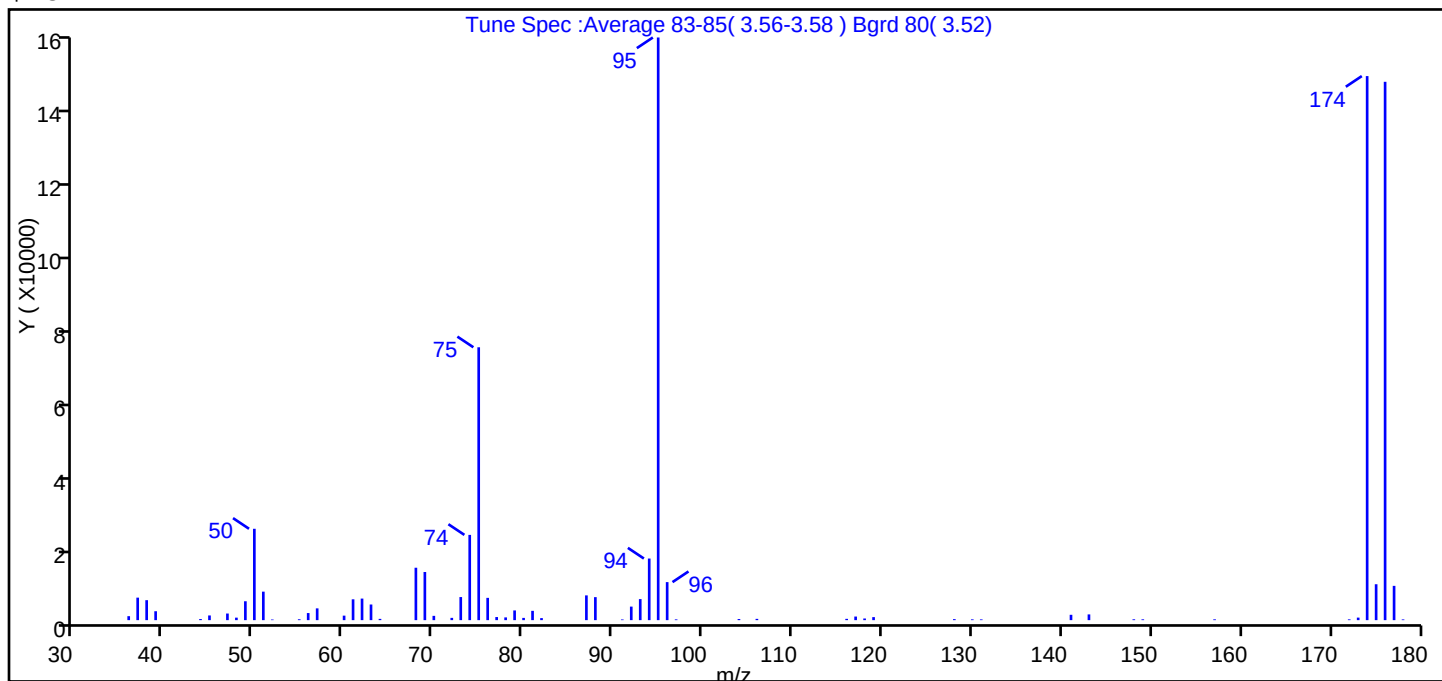
Amount Added: 1.00

Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\BFB61114A.D
Injection Date: 14-Nov-2016 09:41:30 Instrument ID: A3UX15
Lims ID: BFB
Client ID:
Operator ID: ALS Bottle#: 28 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_15 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

\$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.7
75	30 to 60% of m/z 95	46.8
96	5 to 9% of m/z 95	6.5
173	Less than 2% of m/z 174	0.4 (0.5)
174	50 to 120% of m/z 95	93.4
175	5 to 9% of m/z 174	6.2 (6.6)
176	Greater than 95% but less than 101% of m/z 174	92.4 (98.9)
177	5 to 9% of m/z 176	5.9 (6.4)

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\BFB61114A.D\8260_15.rsl\spectra.d
Injection Date: 14-Nov-2016 09:41:30
Spectrum: Tune Spec :Average 83-85(3.56-3.58) Bgrd 80(3.52)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1068	61.00	5596	81.00	2498	119.00	813
37.00	6043	62.00	5790	82.00	548	128.00	269
38.00	5362	63.00	4201	87.00	6650	130.00	209
39.00	2392	64.00	339	88.00	6176	131.00	198
44.00	294	68.00	14075	91.00	181	141.00	1435
45.00	1259	69.00	12929	92.00	3637	143.00	1539
47.00	1776	70.00	1151	93.00	5653	148.00	226
48.00	671	72.00	612	94.00	16544	149.00	217
49.00	5072	73.00	6200	95.00	156480	157.00	218
50.00	24536	74.00	22896	96.00	10213	172.00	213
51.00	7654	75.00	73280	97.00	203	173.00	681
52.00	166	76.00	5984	104.00	297	174.00	146112
55.00	237	77.00	831	106.00	344	175.00	9644
56.00	1904	78.00	736	116.00	348	176.00	144576
57.00	3162	79.00	2609	117.00	967	177.00	9206
60.00	1209	80.00	605	118.00	444	178.00	192

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\BFB61114A.D

Injection Date: 14-Nov-2016 09:41:30

Instrument ID: A3UX15

Operator ID:

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

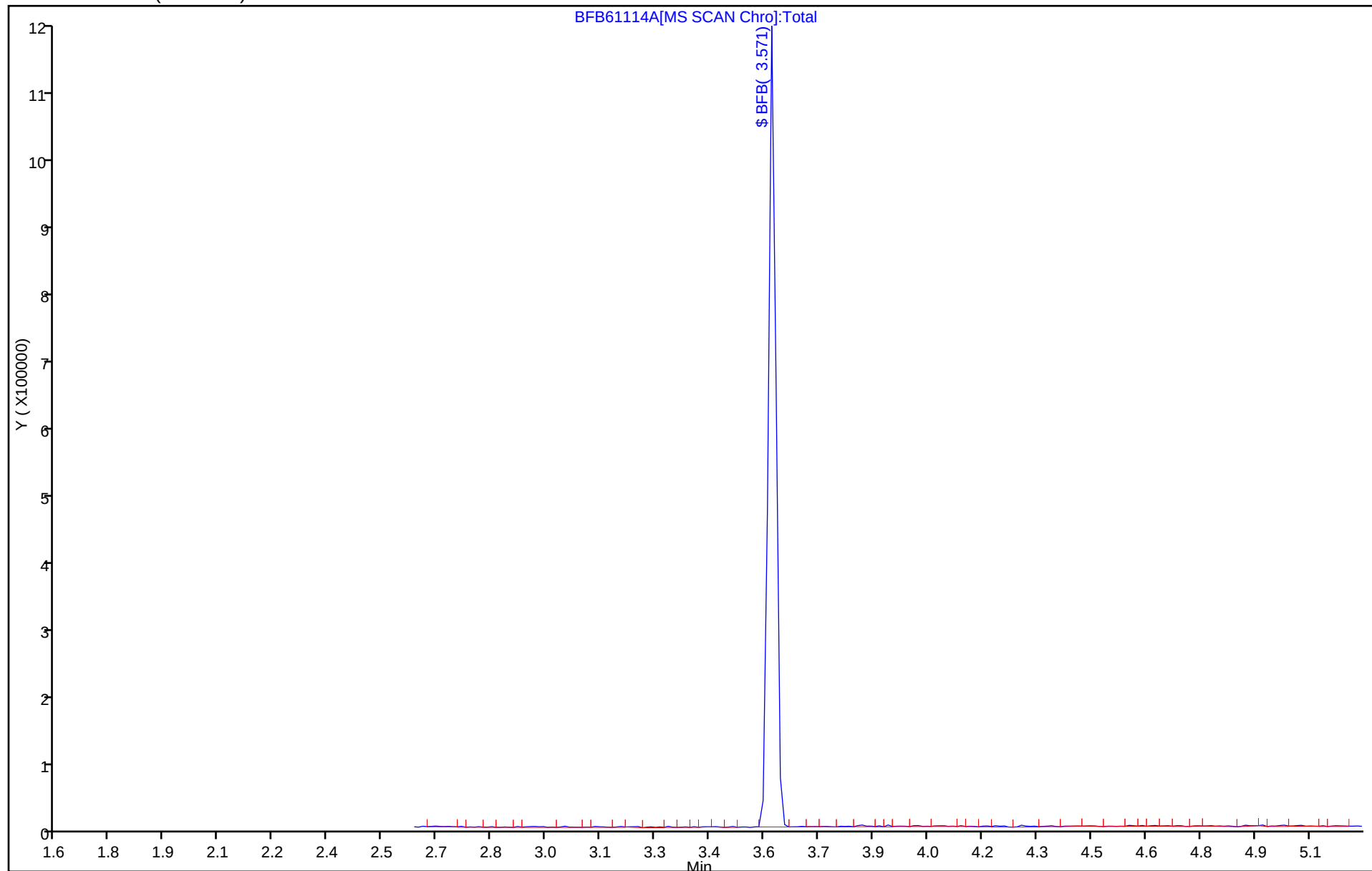
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\BFB4965.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 02-Sep-2016 17:51:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0057729-001
Operator ID: 001904 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 06-Sep-2016 14:22:40 Calib Date: 02-Sep-2016 22:56:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\UXM7657.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: laveyt

Date: 02-Sep-2016 19:07:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 8 BFB	95	3.407	3.443	-0.036	0	93153	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00016

Amount Added: 1.00

Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\BFB4965.D

Injection Date: 02-Sep-2016 17:51:30

Instrument ID: A3UX16

Lims ID: BFB

Client ID:

Operator ID: 001904

ALS Bottle#: 1

Worklist Smp#: 1

Injection Vol: 5.0 mL

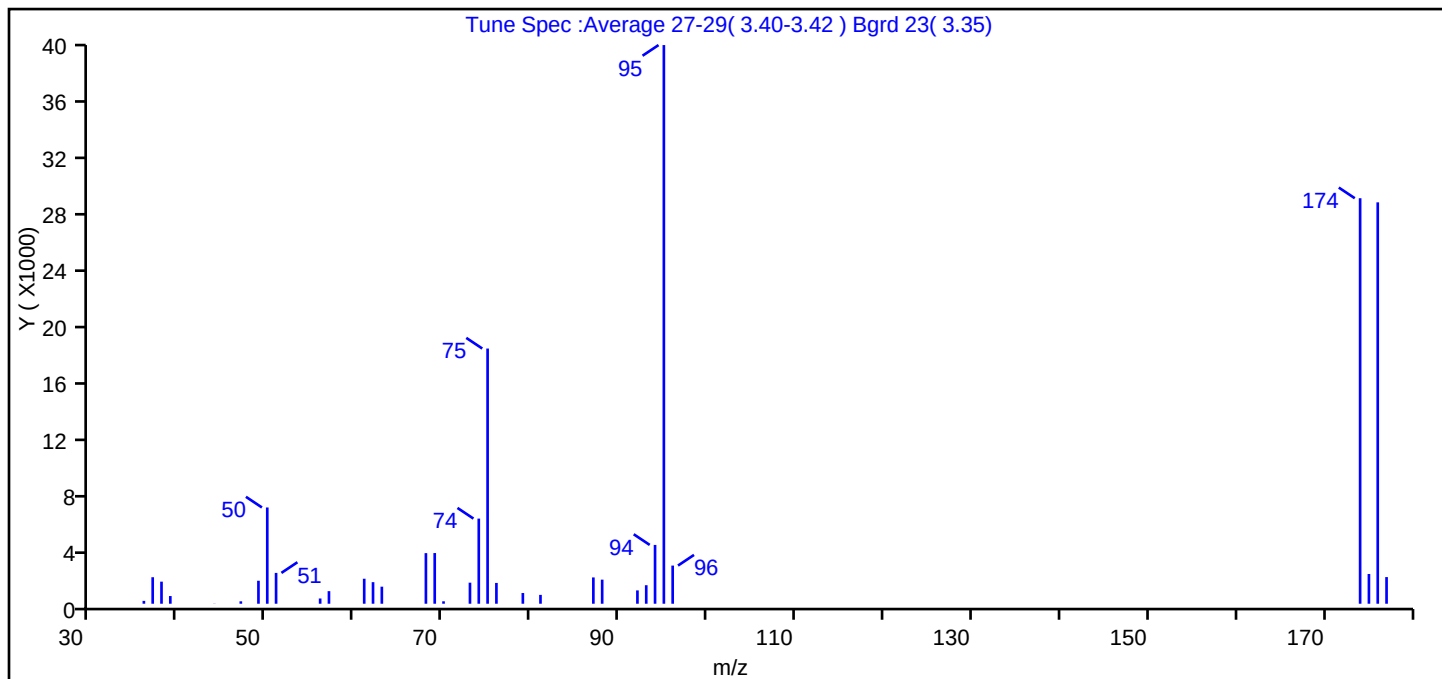
Dil. Factor: 1.0000

Method: 8260_16

Limit Group: MSV 8260B ICAL

Tune Method: BFB Method 8260

\$ 8 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	45.7
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	72.6
175	5 to 9% of m/z 174	5.3 (7.3)
176	Greater than 95% but less than 101% of m/z 174	71.8 (99.0)
177	5 to 9% of m/z 176	4.8 (6.6)

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\BFB4965.D\8260_16.rslt\spectra.d

Injection Date: 02-Sep-2016 17:51:30

Spectrum: Tune Spec :Average 27-29(3.40-3.42) Bgrd 23(3.35)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 34

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	201	56.00	368	74.00	5968	94.00	4122
37.00	1858	57.00	882	75.00	17888	95.00	39160
38.00	1548	61.00	1753	76.00	1458	96.00	2675
39.00	539	62.00	1512	79.00	751	174.00	28424
44.00	11	63.00	1196	81.00	621	175.00	2085
47.00	170	68.00	3547	87.00	1844	176.00	28136
49.00	1611	69.00	3553	88.00	1689	177.00	1868
50.00	6748	70.00	171	92.00	935		
51.00	2161	73.00	1476	93.00	1298		

Report Date: 06-Sep-2016 14:22:40

Chrom Revision: 2.2 20-Apr-2016 13:59:46

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20160902-57729.b\BFB4965.D

Injection Date: 02-Sep-2016 17:51:30

Instrument ID: A3UX16

Operator ID: 001904

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

Dil. Factor: 1.0000

ALS Bottle#: 1

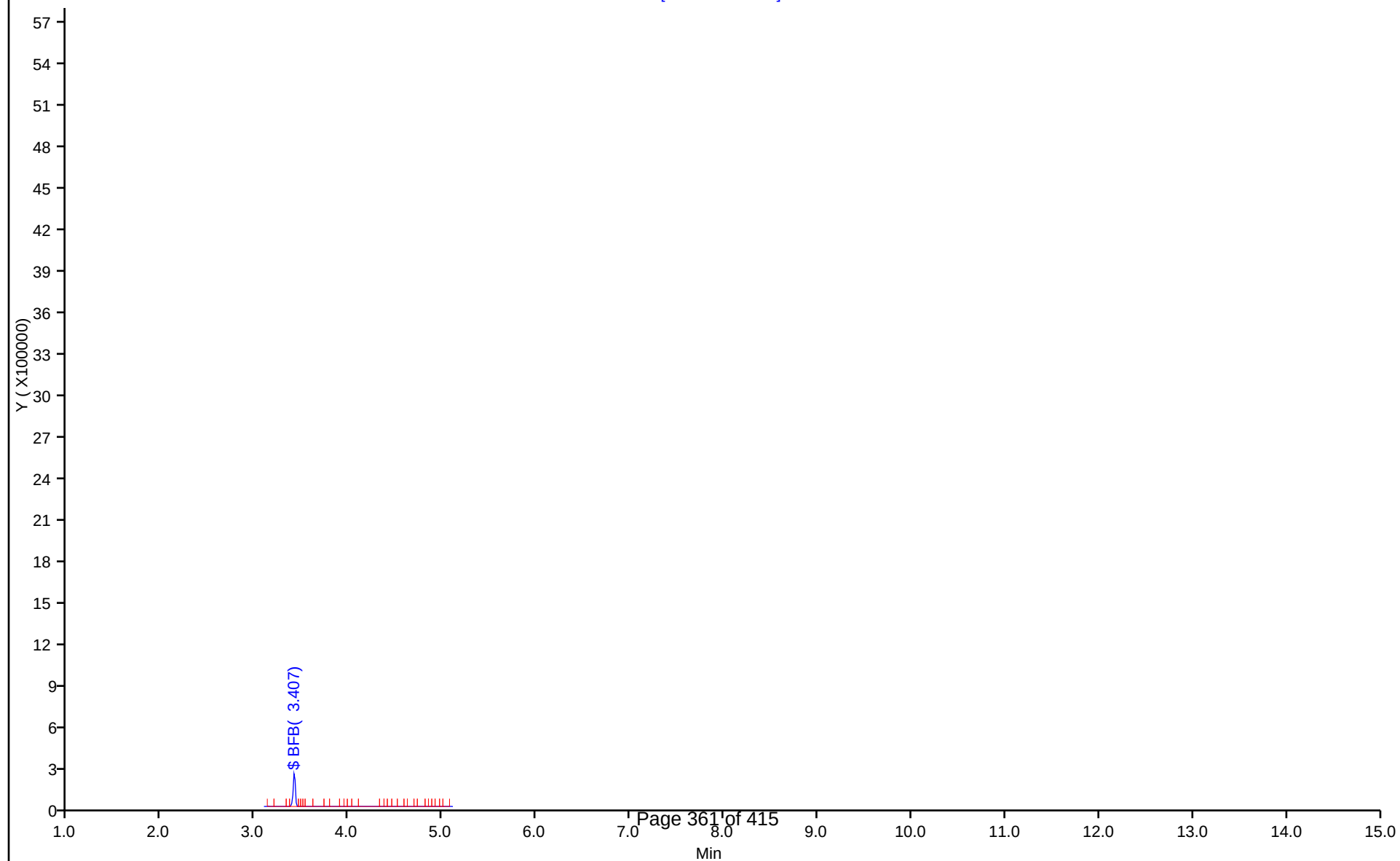
Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value

BFB4965[MS SCAN Chro]:Total



TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\BFB5052.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 11-Nov-2016 10:25:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Sample Info: 240-0059904-001
Operator ID: 001765 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Nov-2016 13:17:56 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bosworthh

Date: 11-Nov-2016 13:17:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 8 BFB	95	3.431	3.443	-0.012	0	135371	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

vmbfb_00016

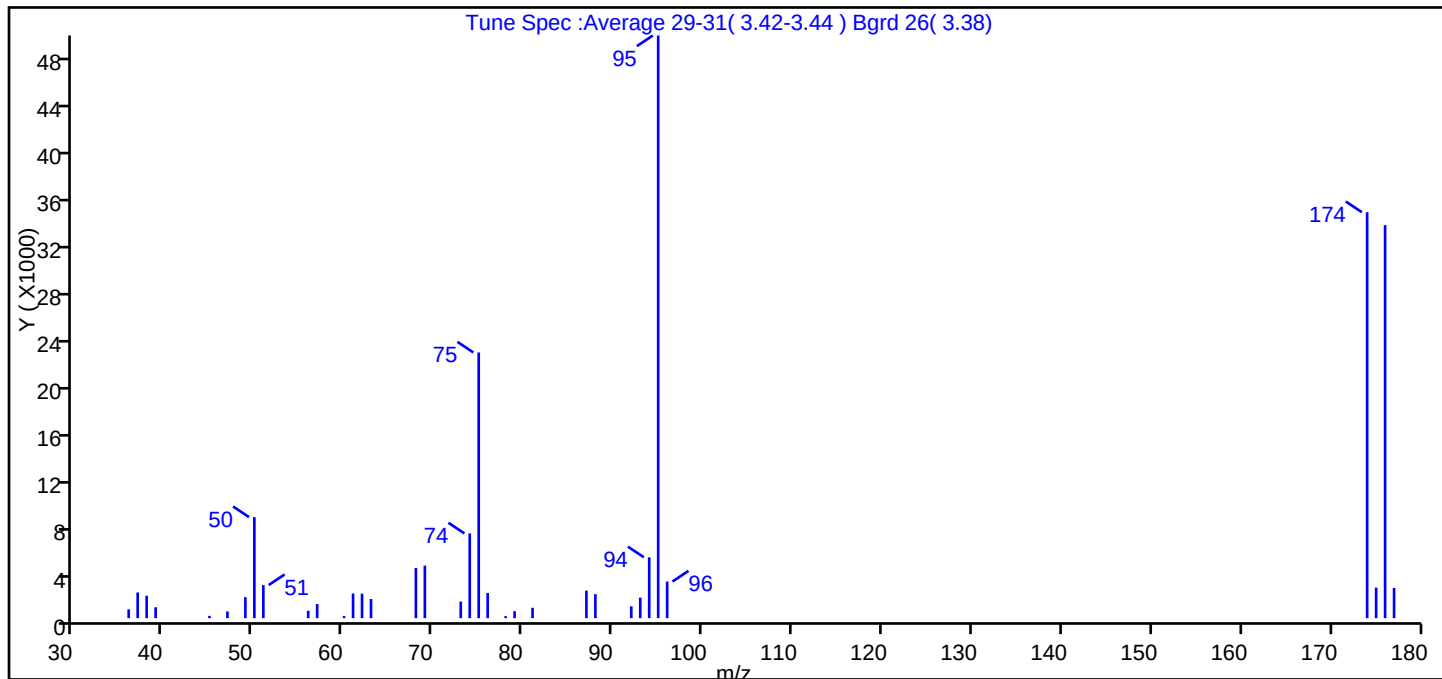
Amount Added: 1.00

Units: uL

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\BFB5052.D
Injection Date: 11-Nov-2016 10:25:30 Instrument ID: A3UX16
Lims ID: BFB
Client ID:
Operator ID: 001765 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 mL Dil. Factor: 1.0000
Method: 8260_16 Limit Group: MSV 8260B ICAL
Tune Method: BFB Method 8260

\$ 8 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.3
75	30 to 60% of m/z 95	45.6
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	69.7
175	5 to 9% of m/z 174	5.2 (7.5)
176	Greater than 95% but less than 101% of m/z 174	67.5 (96.8)
177	5 to 9% of m/z 176	5.2 (7.7)

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\BFB5052.D\8260_16.rslt\spectra.d
Injection Date: 11-Nov-2016 10:25:30
Spectrum: Tune Spec :Average 29-31(3.42-3.44) Bgrd 26(3.38)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 35

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	737	56.00	622	74.00	7131	93.00	1726
37.00	2160	57.00	1181	75.00	22360	94.00	5122
38.00	1888	60.00	173	76.00	2117	95.00	49040
39.00	916	61.00	2073	78.00	170	96.00	3081
45.00	191	62.00	2060	79.00	586	174.00	34168
47.00	566	63.00	1609	81.00	873	175.00	2570
49.00	1765	68.00	4216	87.00	2317	176.00	33080
50.00	8502	69.00	4421	88.00	2012	177.00	2544
51.00	2783	73.00	1394	92.00	999		

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\BFB5052.D

Injection Date: 11-Nov-2016 10:25:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

Dil. Factor: 1.0000

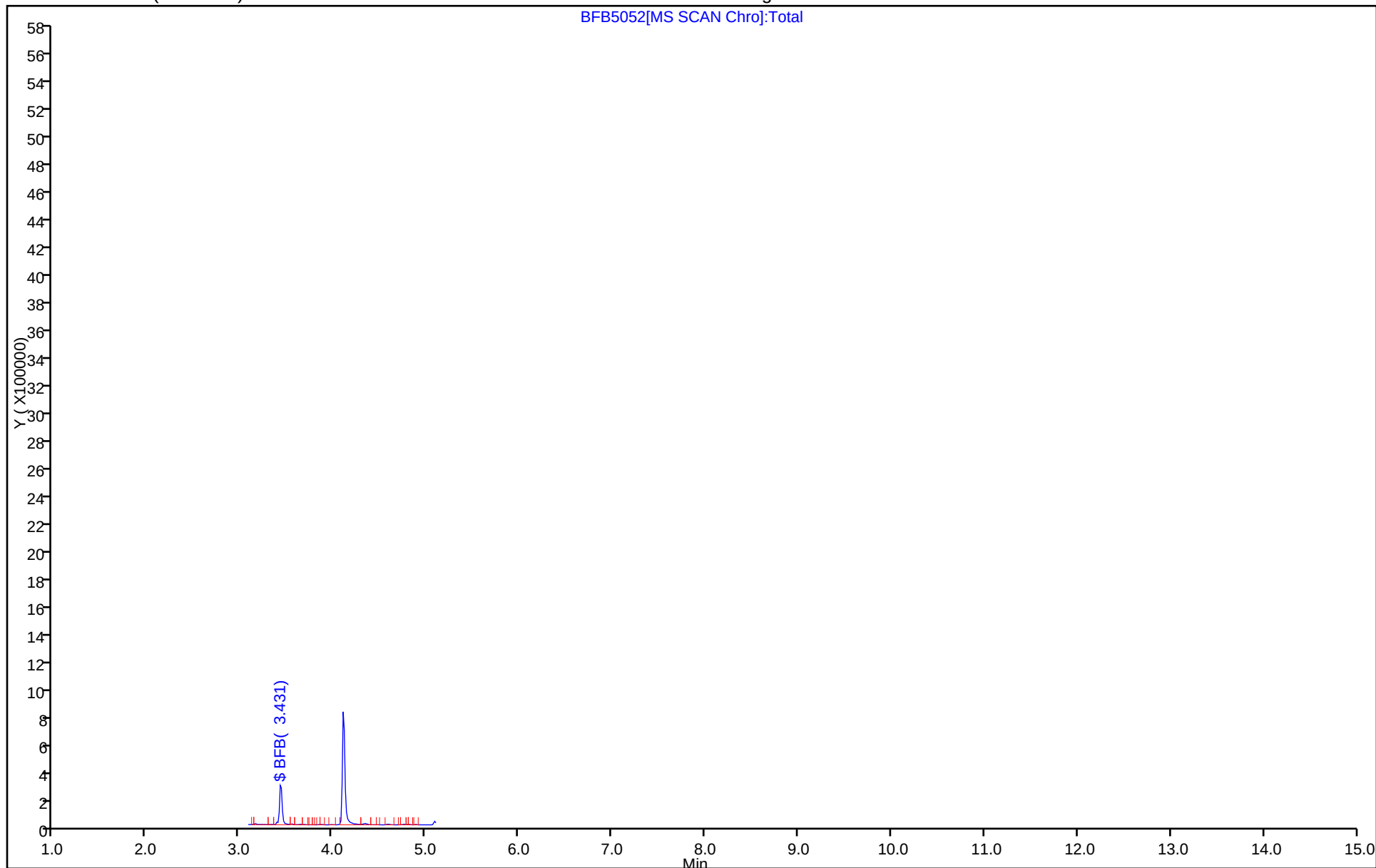
ALS Bottle#: 1

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: _____	Lab Sample ID: <u>MB 240-255306/8</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXM9305.D</u>
Analysis Method: <u>8260B</u>	Date Collected: _____
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/11/2016 12:34</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>1</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255306</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-255306/8
 Matrix: Water Lab File ID: UXM9305.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 12:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		63-132
460-00-4	4-Bromofluorobenzene (Surr)	88		73-120
2037-26-5	Toluene-d8 (Surr)	83		73-124
1868-53-7	Dibromofluoromethane (Surr)	88		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9305.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 11-Nov-2016 12:34:30 ALS Bottle#: 6 Worklist Smp#: 8
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-008
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 13:20:13 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK022

First Level Reviewer: bosworthh

Date: 11-Nov-2016 13:20:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	99	797887	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.854	0.000	86	542672	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.096	-0.001	96	272674	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	161291	20.0	17.7	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	97	183822	20.0	18.8	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	659272	20.0	16.7	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	86	255067	20.0	17.5	
9 Dichlorodifluoromethane	85		1.403					ND	
10 Chloromethane	50		1.510					ND	
11 Vinyl chloride	62		1.628					ND	
12 Butadiene	54		1.652					ND	
123 Ethylene oxide	44		1.854					ND	
13 Bromomethane	94		1.901					ND	
14 Chloroethane	64		1.996					ND	
15 Dichlorofluoromethane	67		2.174					ND	
16 Trichlorofluoromethane	101		2.209					ND	
17 Ethyl ether	59		2.470					ND	
120 Propene oxide	58		2.518					ND	
18 Acrolein	56		2.577					ND	
19 1,1-Dichloroethene	96		2.672					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.707					ND	
23 Iodomethane	142		2.802					ND	
22 Methylal	45		2.929					ND	
25 Acetonitrile	41		2.945					ND	
26 3-Chloro-1-propene	76		2.992					ND	
27 Methyl acetate	43		3.004					ND	
29 2-Methyl-2-propanol	59		3.206					ND	
30 Acrylonitrile	53		3.300					ND	
32 trans-1,2-Dichloroethene	96		3.336					ND	
31 Methyl tert-butyl ether	73		3.348					ND	
33 Hexane	57		3.585					ND	
34 1,1-Dichloroethane	63		3.692					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Vinyl acetate	43		3.739					ND	
36 Isopropyl ether	87		3.775					ND	
37 2-Chloro-1,3-butadiene	53		3.775					ND	
38 Tert-butyl ethyl ether	59		4.083					ND	
39 cis-1,2-Dichloroethene	96		4.190					ND	
40 2-Butanone (MEK)	43		4.202					ND	
41 2,2-Dichloropropane	77		4.206					ND	
42 Propionitrile	54		4.249					ND	
43 Ethyl acetate	43		4.261					ND	
44 Methacrylonitrile	41		4.380					ND	
45 Chlorobromomethane	128		4.391					ND	
46 Tetrahydrofuran	42		4.439					ND	
47 Chloroform	83		4.463					ND	
48 1,1,1-Trichloroethane	97		4.629					ND	
49 Cyclohexane	56		4.688					ND	
50 1,1-Dichloropropene	75		4.771					ND	
51 Carbon tetrachloride	117		4.771					ND	
52 Isobutyl alcohol	41		4.854					ND	
54 Benzene	78		4.937					ND	
53 1,2-Dichloroethane	62		4.949					ND	
55 Tert-amyl methyl ether	73		5.044					ND	
56 n-Heptane	57		5.174					ND	
57 n-Butanol	56		5.411					ND	
58 Trichloroethene	130		5.494					ND	
59 Ethyl acrylate	55		5.566					ND	
61 1,2-Dichloropropane	63		5.672					ND	
60 Methylcyclohexane	83		5.672					ND	
62 Methyl methacrylate	41		5.767					ND	
63 Dibromomethane	93		5.779					ND	
64 1,4-Dioxane	88		5.791					ND	
65 Dichlorobromomethane	83		5.909					ND	
66 2-Nitropropane	41		6.099					ND	
67 2-Chloroethyl vinyl ether	63		6.170					ND	
121 Epichlorohydrin	57		6.218					ND	
68 cis-1,3-Dichloropropene	75		6.301					ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.443					ND	
71 trans-1,3-Dichloropropene	75		6.787					ND	
72 Ethyl methacrylate	69		6.882					ND	
73 1,1,2-Trichloroethane	97		6.953					ND	
75 Tetrachloroethene	164		7.107					ND	
74 1,3-Dichloropropane	76		7.107					ND	
76 2-Hexanone	43		7.190					ND	
77 n-Butyl acetate	43		7.297					ND	
78 Chlorodibromomethane	129		7.320					ND	
79 Tetrahydrothiophene	60		7.321					ND	
80 Ethylene Dibromide	107		7.427					ND	
82 Chlorobenzene	112		7.890					ND	
83 1,1,1,2-Tetrachloroethane	131		7.961					ND	
84 Ethylbenzene	106		7.996					ND	
85 m-Xylene & p-Xylene	106		8.103					ND	
86 o-Xylene	106		8.471					ND	
87 Styrene	104		8.483					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
88 Bromoform	173		8.649					ND	
89 Isopropylbenzene	105		8.826					ND	
91 Cyclohexanone	55		8.898					ND	
90 1,4-Dichlorobutane	55		8.910					ND	
92 1,1,2,2-Tetrachloroethane	83		9.099					ND	
93 Bromobenzene	156		9.111					ND	
95 1,2,3-Trichloropropane	110		9.135					ND	
94 trans-1,4-Dichloro-2-buten	53		9.147					ND	
96 N-Propylbenzene	120		9.218					ND	
97 2-Chlorotoluene	126		9.301					ND	
99 1,3,5-Trimethylbenzene	105		9.396					ND	
100 4-Chlorotoluene	126		9.408					ND	
98 3-Ethyltoluene	105		9.590					ND	
102 tert-Butylbenzene	119		9.716					ND	
103 Pentachloroethane	167		9.728					ND	
104 1,2,4-Trimethylbenzene	105		9.763					ND	
101 2-Ethyltoluene	105		9.768					ND	
105 sec-Butylbenzene	105		9.929					ND	
106 1,3-Dichlorobenzene	146		10.024					ND	
107 4-Isopropyltoluene	119		10.072					ND	
108 1,4-Dichlorobenzene	146		10.119					ND	
109 1,2,3-Trimethylbenzene	105		10.167					ND	
110 Benzyl chloride	126		10.250					ND	
111 n-Butylbenzene	91		10.475					ND	
112 1,2-Dichlorobenzene	146		10.487					ND	
113 1,2-Dibromo-3-Chloropropan	157		11.246					ND	
114 1,3,5-Trichlorobenzene	180		11.483					ND	
115 1,2,4-Trichlorobenzene	180		12.088					ND	
116 Hexachlorobutadiene	225		12.265					ND	
117 Naphthalene	128		12.325					ND	
118 1,2,3-Trichlorobenzene	180		12.574					ND	
119 2-Methylnaphthalene	142	13.534	13.534	0.000	89	3018		0.2663	
126 Butyl Methacrylate TIC	1		-0.180					ND	
S 134 Trihalomethanes, Total	1		-0.180					ND	
S 158 Total BTEX	1		-0.180					ND	
S 131 1,2-Dichloroethene, Total	96		0.960					ND	
S 132 1,3-Dichloropropene, Total	75		6.580					ND	
S 133 Xylenes, Total	106		16.350					ND	
T 125 Chlorodifluoromethane TIC	51		1.395					ND	
T 129 Isobutylene TIC	56		1.520					ND	
T 135 Hexachloroethane TIC	1		11.170					ND	
T 127 1,3-Diethylbenzene TIC	119		11.200					ND	

Reagents:

vm100ss_stk_00023

Amount Added: 1.00

Units: uL

Run Reagent

vmDist_H2o_00082

Amount Added: 0.00

Units:

Run Reagent

vm100is_stk_00029

Amount Added: 1.00

Units: uL

Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9305.D

Injection Date: 11-Nov-2016 12:34:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: MB

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

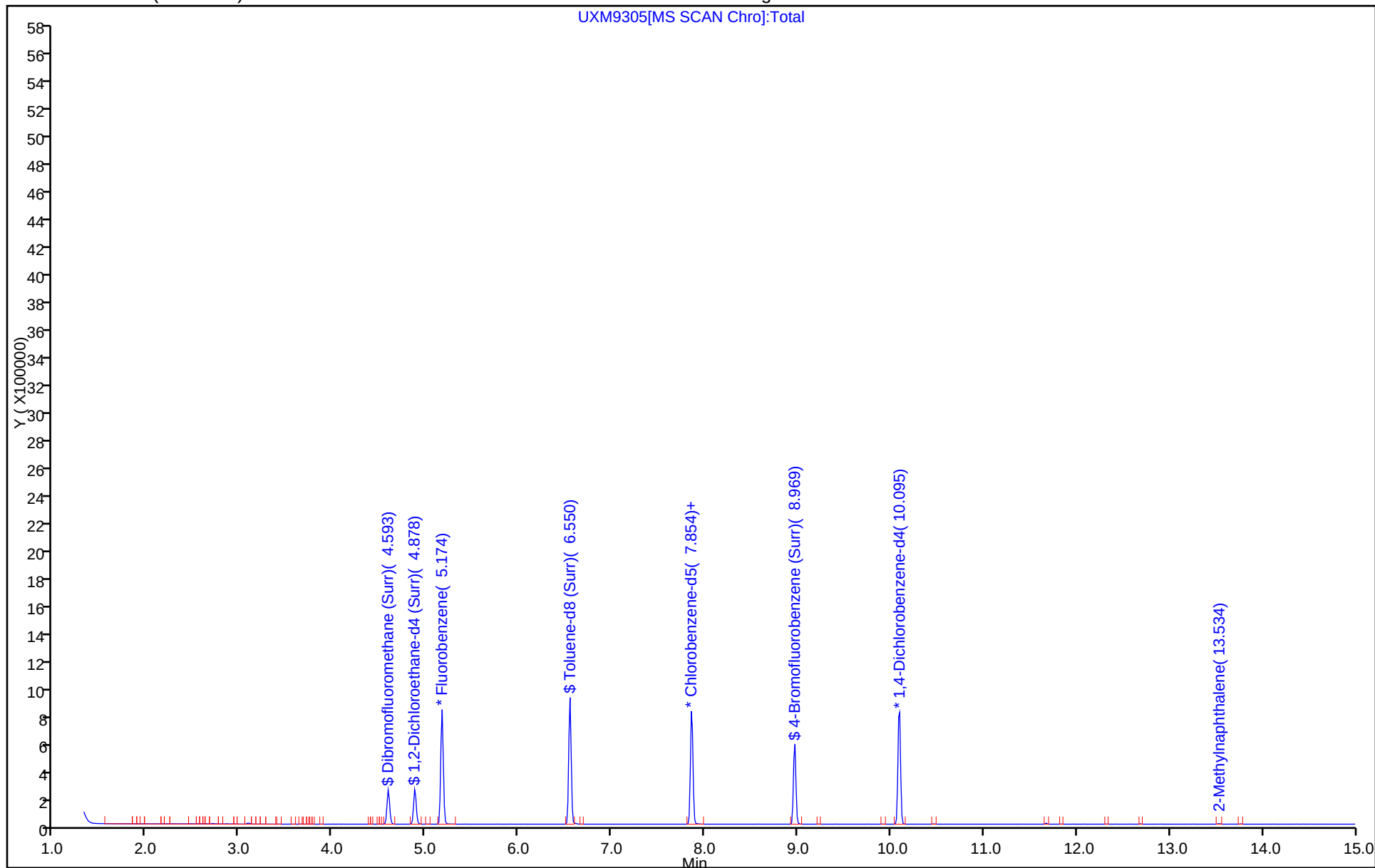
ALS Bottle#: 6

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9305.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 11-Nov-2016 12:34:30 ALS Bottle#: 6 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0059904-008
Operator ID: 001765 Instrument ID: A3UX16
Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
Limit Group: MSV 8260B ICAL
Last Update: 11-Nov-2016 13:20:13 Calib Date: 06-Sep-2016 20:18:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK022

First Level Reviewer: bosworthh

Date: 11-Nov-2016 13:20:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	17.7	88.32
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.8	94.20
\$ 6 Toluene-d8 (Surr)	20.0	16.7	83.32
\$ 7 4-Bromofluorobenzene (Surr)	20.0	17.5	87.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-255552/6
 Matrix: Water Lab File ID: UXC9707.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 12:19
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		10	
71-43-2	Benzene	ND		1.0	
75-27-4	Dichlorobromomethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
591-78-6	2-Hexanone	ND		10	
75-09-2	Methylene Chloride	ND		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		10	
100-42-5	Styrene	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
110-82-7	Cyclohexane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		2.0	
106-93-4	Ethylene Dibromide	ND		1.0	
75-71-8	Dichlorodifluoromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-255552/6
 Matrix: Water Lab File ID: UXC9707.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 12:19
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
98-82-8	Isopropylbenzene	ND		1.0	
79-20-9	Methyl acetate	ND		10	
1634-04-4	Methyl tert-butyl ether	ND		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
541-73-1	1,3-Dichlorobenzene	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
124-48-1	Chlorodibromomethane	ND		1.0	
108-87-2	Methylcyclohexane	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-132
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120
2037-26-5	Toluene-d8 (Surr)	100		73-124
1868-53-7	Dibromofluoromethane (Surr)	101		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9707.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 14-Nov-2016 12:19:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-006
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 12:59:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1475505	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	86	1137961	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.925	9.913	0.012	93	643086	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	309367	8.01	8.06	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.766	4.766	0.000	0	368496	8.01	7.92	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	92	1407246	8.01	8.01	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	96	506510	8.01	8.43	
9 Dichlorodifluoromethane	85		1.458					ND	
10 Chloromethane	50		1.600					ND	
11 Vinyl chloride	62		1.695					ND	
12 Butadiene	54		1.719					ND	
13 Bromomethane	94		1.968					ND	
14 Chloroethane	64		2.063					ND	
15 Dichlorofluoromethane	67		2.217					ND	
16 Trichlorofluoromethane	101		2.229					ND	
17 Ethyl ether	59		2.454					ND	
21 Methylal	45		2.560					ND	
18 Acrolein	56		2.584					ND	
19 1,1-Dichloroethene	96		2.644					ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.679					ND	
22 Acetone	43		2.703					ND	
23 Iodomethane	142		2.786					ND	
24 Carbon disulfide	76		2.833					ND	
25 3-Chloro-1-propene	76		2.952					ND	
26 Acetonitrile	41	2.952	2.940	0.012	95	3705		0.9177	
27 Methyl acetate	43		2.964					ND	
28 Methylene Chloride	84	3.047	3.047	0.000	94	34522		0.1175	
29 2-Methyl-2-propanol	59		3.130					ND	
31 Methyl tert-butyl ether	73		3.260					ND	
32 Acrylonitrile	53		3.260					ND	
30 trans-1,2-Dichloroethene	96		3.260					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 Hexane	86		3.462					ND	
125 Chlorodifluoromethane TIC	51		3.571					ND	
34 1,1-Dichloroethane	63		3.616					ND	
36 Vinyl acetate	43		3.640					ND	
35 Isopropyl ether	87		3.640					ND	
37 2-Chloro-1,3-butadiene	53		3.676					ND	
38 Tert-butyl ethyl ether	59		3.925					ND	
40 2,2-Dichloropropane	77		4.079					ND	
39 cis-1,2-Dichloroethene	96		4.090					ND	
41 2-Butanone (MEK)	43		4.102					ND	
42 Ethyl acetate	43		4.126					ND	
43 Propionitrile	54		4.174					ND	
44 Methacrylonitrile	41		4.280					ND	
45 Chlorobromomethane	128		4.292					ND	
46 Tetrahydrofuran	42		4.316					ND	
47 Chloroform	83		4.339					ND	
48 1,1,1-Trichloroethane	97		4.494					ND	
49 Cyclohexane	56		4.529					ND	
50 Carbon tetrachloride	117		4.624					ND	
51 1,1-Dichloropropene	75		4.624					ND	
52 Isobutyl alcohol	41		4.707					ND	
53 Benzene	78		4.802					ND	
54 1,2-Dichloroethane	62		4.826					ND	
55 Tert-amyl methyl ether	73		4.873					ND	
56 n-Heptane	100		4.980					ND	
57 n-Butanol	56		5.265					ND	
58 Trichloroethene	130		5.336					ND	
59 Ethyl acrylate	55		5.407					ND	
60 Methylcyclohexane	83		5.478					ND	
61 1,2-Dichloropropane	63		5.537					ND	
62 Methyl methacrylate	41		5.609					ND	
64 1,4-Dioxane	88		5.644					ND	
63 Dibromomethane	93		5.644					ND	
65 Dichlorobromomethane	83		5.762					ND	
66 2-Nitropropane	41		5.976					ND	
67 2-Chloroethyl vinyl ether	63		6.012					ND	
68 cis-1,3-Dichloropropene	75		6.142					ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.272					ND	
70 Toluene	91		6.438					ND	
71 trans-1,3-Dichloropropene	75		6.640					ND	
72 Ethyl methacrylate	69		6.699					ND	
73 1,1,2-Trichloroethane	97		6.806					ND	
74 Tetrachloroethene	164		6.925					ND	
75 1,3-Dichloropropane	76		6.960					ND	
76 2-Hexanone	43		7.019					ND	
77 n-Butyl acetate	43		7.115					ND	
79 Chlorodibromomethane	129		7.162					ND	
78 Tetrahydrothiophene	60		7.162					ND	
80 Ethylene Dibromide	107		7.280					ND	
81 1-Chlorohexane	91		7.672					ND	
82 Chlorobenzene	112		7.719					ND	
83 1,1,1,2-Tetrachloroethane	131		7.790					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 Ethylbenzene	106		7.802					ND	
85 m-Xylene & p-Xylene	91		7.909					ND	
86 o-Xylene	106		8.288					ND	
87 Styrene	104		8.312					ND	
88 Bromoform	173		8.502					ND	
89 Isopropylbenzene	105		8.632					ND	
90 1,4-Dichlorobutane	55		8.763					ND	
91 Cyclohexanone	55		8.763					ND	
93 1,1,2,2-Tetrachloroethane	83		8.941					ND	
92 Bromobenzene	156		8.952					ND	
94 1,2,3-Trichloropropane	110		8.988					ND	
95 trans-1,4-Dichloro-2-buten	53		9.000					ND	
96 N-Propylbenzene	120		9.035					ND	
97 2-Chlorotoluene	126		9.130					ND	
98 1,3,5-Trimethylbenzene	105		9.201					ND	
99 4-Chlorotoluene	91		9.225					ND	
100 3-Ethyltoluene	105		9.324					ND	
101 tert-Butylbenzene	119		9.522					ND	
102 Pentachloroethane	167		9.557					ND	
103 1,2,4-Trimethylbenzene	105		9.569					ND	
104 2-Ethyltoluene	105	9.569	9.609	-0.040	0	2225		NC	
105 sec-Butylbenzene	105		9.735					ND	
106 1,3-Dichlorobenzene	146		9.854					ND	
107 4-Isopropyltoluene	119		9.877					ND	
108 1,4-Dichlorobenzene	146		9.937					ND	
109 1,2,3-Trimethylbenzene	105		9.984					ND	
110 Benzyl chloride	126		10.079					ND	
111 n-Butylbenzene	91		10.281					ND	
112 1,2-Dichlorobenzene	146		10.316					ND	
113 1,2-Dibromo-3-Chloropropan	157		11.099					ND	
114 1,3,5-Trichlorobenzene	180		11.277					ND	
115 1,2,4-Trichlorobenzene	180	11.905	11.905	0.000	92	11010		0.2095	
116 Hexachlorobutadiene	225	12.059	12.059	0.000	87	5888		0.2429	
117 Naphthalene	128	12.154	12.154	0.000	96	22562		0.2033	
118 1,2,3-Trichlorobenzene	180	12.392	12.391	0.001	91	11595		0.2494	
119 2-Methylnaphthalene	142	13.637	13.637	0.000	88	9986		0.1785	
122 Ethylene oxide	1		0.000					ND	
124 Propene oxide	1		0.000					ND	
120 Epichlorohydrin	1		0.000					ND	
126 1,3-Diethylbenzene TIC	1		0.000					ND	
S 127 1,2-Dichloroethene, Total	96		1.140					ND	
S 128 1,3-Dichloropropene, Total	75		6.760					ND	
S 129 Xylenes, Total	106		16.530					ND	
S 130 Trihalomethanes, Total	1		0.000					ND	
T 131 Isobutylene TIC	56		1.500					ND	
T 133 Butyl Methacrylate TIC	1		8.925					ND	
T 135 Hexachloroethane TIC	1		10.220					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9707.D

Injection Date: 14-Nov-2016 12:19:30

Instrument ID: A3UX15

Lims ID: MB

Operator ID:

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

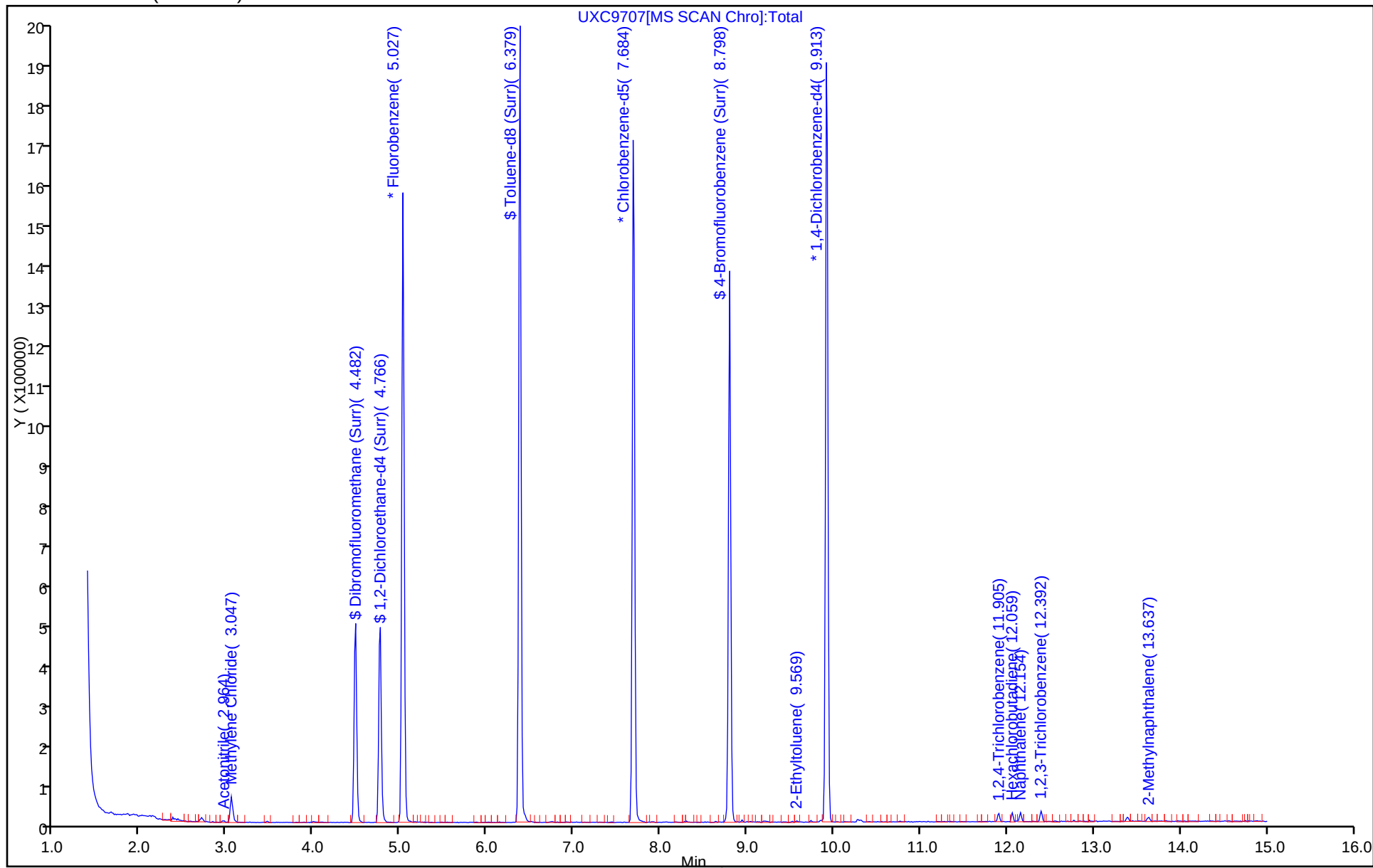
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9707.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 14-Nov-2016 12:19:30 ALS Bottle#: 7 Worklist Smp#: 6
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-006
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

First Level Reviewer: evansle

Date: 14-Nov-2016 12:59:41

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.06	100.65
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	7.92	98.91
\$ 6 Toluene-d8 (Surr)	8.01	8.01	100.03
\$ 7 4-Bromofluorobenzene (Surr)	8.01	8.43	105.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-255306/5
 Matrix: Water Lab File ID: UXM9302.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 11:24
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	45.2		10	
71-43-2	Benzene	19.1		1.0	
75-27-4	Dichlorobromomethane	18.8		1.0	
75-25-2	Bromoform	21.3		1.0	
74-83-9	Bromomethane	18.3		1.0	
78-93-3	2-Butanone (MEK)	46.3		10	
75-15-0	Carbon disulfide	19.5		1.0	
56-23-5	Carbon tetrachloride	18.4		1.0	
108-90-7	Chlorobenzene	17.6		1.0	
75-00-3	Chloroethane	19.4		1.0	
67-66-3	Chloroform	19.3		1.0	
74-87-3	Chloromethane	16.3		1.0	
75-34-3	1,1-Dichloroethane	19.5		1.0	
107-06-2	1,2-Dichloroethane	19.5		1.0	
75-35-4	1,1-Dichloroethene	20.0		1.0	
78-87-5	1,2-Dichloropropane	19.2		1.0	
10061-01-5	cis-1,3-Dichloropropene	18.7		1.0	
10061-02-6	trans-1,3-Dichloropropene	18.7		1.0	
100-41-4	Ethylbenzene	18.2		1.0	
591-78-6	2-Hexanone	48.3		10	
75-09-2	Methylene Chloride	18.5		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	45.9		10	
100-42-5	Styrene	18.4		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	22.6		1.0	
127-18-4	Tetrachloroethene	18.1		1.0	
108-88-3	Toluene	18.7		1.0	
79-01-6	Trichloroethene	18.7		1.0	
75-01-4	Vinyl chloride	17.6		1.0	
1330-20-7	Xylenes, Total	35.5		2.0	
71-55-6	1,1,1-Trichloroethane	18.3		1.0	
79-00-5	1,1,2-Trichloroethane	20.3		1.0	
110-82-7	Cyclohexane	18.6		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	21.6		2.0	
106-93-4	Ethylene Dibromide	21.2		1.0	
75-71-8	Dichlorodifluoromethane	12.7		1.0	
156-59-2	cis-1,2-Dichloroethene	19.5		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-255306/5
 Matrix: Water Lab File ID: UXM9302.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/11/2016 11:24
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255306 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	19.4		1.0	
98-82-8	Isopropylbenzene	17.9		1.0	
79-20-9	Methyl acetate	122		10	
1634-04-4	Methyl tert-butyl ether	20.3		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	18.4		1.0	
120-82-1	1,2,4-Trichlorobenzene	17.4		1.0	
95-50-1	1,2-Dichlorobenzene	17.9		1.0	
541-73-1	1,3-Dichlorobenzene	17.0		1.0	
106-46-7	1,4-Dichlorobenzene	17.1		1.0	
75-69-4	Trichlorofluoromethane	16.4		1.0	
124-48-1	Chlorodibromomethane	19.7		1.0	
108-87-2	Methylcyclohexane	16.9		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		63-132
460-00-4	4-Bromofluorobenzene (Surr)	90		73-120
2037-26-5	Toluene-d8 (Surr)	88		73-124
1868-53-7	Dibromofluoromethane (Surr)	89		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9302.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 11-Nov-2016 11:24:30 ALS Bottle#: 3 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-005
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 13:18:34 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK022

First Level Reviewer: bosworthh

Date: 11-Nov-2016 13:18:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.174	5.174	0.000	97	806219	20.0	20.0	
* 2 Chlorobenzene-d5	117	7.854	7.866	-0.012	86	553032	20.0	20.0	
* 3 1,4-Dichlorobenzene-d4	152	10.095	10.095	0.000	96	293788	20.0	20.0	
\$ 4 Dibromofluoromethane (Surr	113	4.593	4.593	0.000	94	164197	20.0	17.8	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.878	4.878	0.000	98	178278	20.0	18.1	
\$ 6 Toluene-d8 (Surr)	98	6.550	6.550	0.000	93	708381	20.0	17.6	
\$ 7 4-Bromofluorobenzene (Surr	95	8.969	8.969	0.000	87	267390	20.0	18.0	
9 Dichlorodifluoromethane	85	1.403	1.403	0.000	99	142862	20.0	12.7	
10 Chloromethane	50	1.510	1.510	0.000	99	250941	20.0	16.3	
11 Vinyl chloride	62	1.617	1.628	-0.012	97	252123	20.0	17.6	
12 Butadiene	54	1.652	1.652	0.000	97	217259	20.0	16.1	
13 Bromomethane	94	1.901	1.901	0.000	89	139988	20.0	18.3	
14 Chloroethane	64	1.996	1.996	0.000	99	164921	20.0	19.4	
15 Dichlorofluoromethane	67	2.174	2.174	0.000	97	350064	20.0	17.4	
16 Trichlorofluoromethane	101	2.209	2.209	0.000	97	221586	20.0	16.4	
17 Ethyl ether	59	2.470	2.470	0.000	90	178292	20.0	22.8	
18 Acrolein	56	2.565	2.577	-0.012	99	138474	100.0	118.1	
19 1,1-Dichloroethene	96	2.672	2.672	0.000	98	191961	20.0	20.0	
20 1,1,2-Trichloro-1,2,2-trif	151	2.707	2.707	0.000	96	112148	20.0	18.4	
21 Acetone	43	2.707	2.707	0.000	100	83714	40.0	45.2	
23 Iodomethane	142	2.802	2.802	0.000	96	307057	20.0	19.5	
24 Carbon disulfide	76	2.862	2.862	0.000	99	706629	20.0	19.5	
26 3-Chloro-1-propene	76	2.980	2.992	-0.012	94	137689	20.0	19.6	
27 Methyl acetate	43	3.004	3.004	0.000	98	558499	100.0	121.6	
28 Methylene Chloride	84	3.087	3.087	0.000	92	236826	20.0	18.5	
29 2-Methyl-2-propanol	59	3.194	3.206	-0.012	99	128309	200.0	261.3	
30 Acrylonitrile	53	3.300	3.300	0.000	99	603457	200.0	251.8	
32 trans-1,2-Dichloroethene	96	3.336	3.336	0.000	98	227325	20.0	19.4	
31 Methyl tert-butyl ether	73	3.348	3.348	0.000	95	550595	20.0	20.3	
33 Hexane	57	3.585	3.585	0.000	90	201252	20.0	18.5	
34 1,1-Dichloroethane	63	3.692	3.692	0.000	96	394035	20.0	19.5	
35 Vinyl acetate	43	3.739	3.739	0.000	97	292678	20.0	20.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 cis-1,2-Dichloroethene	96	4.190	4.190	0.000	81	243718	20.0	19.5	
40 2-Butanone (MEK)	43	4.202	4.202	0.000	99	115760	40.0	46.3	
41 2,2-Dichloropropane	77	4.190	4.206	-0.016	88	251840	20.0	16.9	
45 Chlorobromomethane	128	4.391	4.391	0.000	98	99176	20.0	19.8	
46 Tetrahydrofuran	42	4.439	4.439	0.000	89	80539	40.0	49.2	
47 Chloroform	83	4.463	4.463	0.000	93	357394	20.0	19.3	
48 1,1,1-Trichloroethane	97	4.629	4.629	0.000	98	273037	20.0	18.3	
49 Cyclohexane	56	4.688	4.688	0.000	89	306752	20.0	18.6	
50 1,1-Dichloropropene	75	4.771	4.771	0.000	98	280870	20.0	19.8	
51 Carbon tetrachloride	117	4.771	4.771	0.000	96	214245	20.0	18.4	
52 Isobutyl alcohol	41	4.854	4.854	0.000	96	101571	500.0	667.7	
54 Benzene	78	4.937	4.937	0.000	95	903533	20.0	19.1	
53 1,2-Dichloroethane	62	4.949	4.949	0.000	97	239904	20.0	19.5	
56 n-Heptane	57	5.174	5.174	0.000	48	99069	20.0	16.6	
58 Trichloroethene	130	5.494	5.494	0.000	99	206735	20.0	18.7	
61 1,2-Dichloropropane	63	5.672	5.672	0.000	98	207281	20.0	19.2	
60 Methylcyclohexane	83	5.660	5.672	-0.012	92	242590	20.0	16.9	
63 Dibromomethane	93	5.779	5.779	0.000	97	97302	20.0	20.1	
64 1,4-Dioxane	88	5.791	5.791	0.000	94	29424	400.0	674.4	
65 Dichlorobromomethane	83	5.909	5.909	0.000	99	243213	20.0	18.8	
67 2-Chloroethyl vinyl ether	63	6.170	6.170	0.000	91	91774	20.0	19.9	
68 cis-1,3-Dichloropropene	75	6.301	6.301	0.000	96	314465	20.0	18.7	
69 4-Methyl-2-pentanone (MIBK)	43	6.431	6.443	-0.012	95	250478	40.0	45.9	
70 Toluene	91	6.609	6.609	0.000	99	883958	20.0	18.7	
71 trans-1,3-Dichloropropene	75	6.787	6.787	0.000	92	241327	20.0	18.7	
72 Ethyl methacrylate	69	6.882	6.882	0.000	88	198040	20.0	21.5	
73 1,1,2-Trichloroethane	97	6.953	6.953	0.000	90	141803	20.0	20.3	
75 Tetrachloroethene	164	7.107	7.107	0.000	96	137793	20.0	18.1	
74 1,3-Dichloropropane	76	7.107	7.107	0.000	90	260753	20.0	19.8	
76 2-Hexanone	43	7.178	7.190	-0.012	95	162043	40.0	48.3	
78 Chlorodibromomethane	129	7.320	7.320	0.000	91	149264	20.0	19.7	
80 Ethylene Dibromide	107	7.427	7.427	0.000	97	139470	20.0	21.2	
82 Chlorobenzene	112	7.890	7.890	0.000	98	531965	20.0	17.6	
83 1,1,1,2-Tetrachloroethane	131	7.961	7.961	0.000	96	175009	20.0	18.3	
84 Ethylbenzene	106	7.985	7.996	-0.011	98	289834	20.0	18.2	
85 m-Xylene & p-Xylene	106	8.103	8.103	0.000	97	356380	20.0	17.8	
86 o-Xylene	106	8.471	8.471	0.000	94	361444	20.0	17.7	
87 Styrene	104	8.483	8.483	0.000	94	607599	20.0	18.4	
88 Bromoform	173	8.649	8.649	0.000	97	81994	20.0	21.3	
89 Isopropylbenzene	105	8.826	8.826	0.000	95	858223	20.0	17.9	
92 1,1,2,2-Tetrachloroethane	83	9.099	9.099	0.000	92	185819	20.0	22.6	
93 Bromobenzene	156	9.111	9.111	0.000	95	209031	20.0	18.0	
95 1,2,3-Trichloropropane	110	9.135	9.135	0.000	81	52133	20.0	21.9	
94 trans-1,4-Dichloro-2-buten	53	9.147	9.147	0.000	74	43656	20.0	19.8	
96 N-Propylbenzene	120	9.218	9.218	0.000	99	223191	20.0	17.6	
97 2-Chlorotoluene	126	9.301	9.301	0.000	96	199575	20.0	17.2	
99 1,3,5-Trimethylbenzene	105	9.396	9.396	0.000	95	699299	20.0	17.5	
100 4-Chlorotoluene	126	9.408	9.408	0.000	98	208908	20.0	16.9	
102 tert-Butylbenzene	119	9.716	9.716	0.000	92	550308	20.0	17.0	
104 1,2,4-Trimethylbenzene	105	9.751	9.763	-0.012	96	732573	20.0	17.0	
105 sec-Butylbenzene	105	9.929	9.929	0.000	94	734397	20.0	16.8	
106 1,3-Dichlorobenzene	146	10.024	10.024	0.000	97	400727	20.0	17.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	10.072	10.072	0.000	97	646492	20.0	16.7	
108 1,4-Dichlorobenzene	146	10.119	10.119	0.000	96	410274	20.0	17.1	
111 n-Butylbenzene	91	10.475	10.475	0.000	98	532763	20.0	16.7	
112 1,2-Dichlorobenzene	146	10.487	10.487	0.000	99	381371	20.0	17.9	
113 1,2-Dibromo-3-Chloropropan	157	11.246	11.246	0.000	83	28276	20.0	21.6	
115 1,2,4-Trichlorobenzene	180	12.076	12.088	-0.012	94	195370	20.0	17.4	
116 Hexachlorobutadiene	225	12.265	12.265	0.000	96	69005	20.0	16.4	
117 Naphthalene	128	12.325	12.325	0.000	97	508800	20.0	20.6	
118 1,2,3-Trichlorobenzene	180	12.562	12.574	-0.012	95	171891	20.0	18.2	
S 134 Trihalomethanes, Total	1				0		80.0	79.1	
S 133 Xylenes, Total	106				0		40.0	35.5	

Reagents:

vmfasaw_00163	Amount Added: 16.00	Units: uL	
vmfasgw_00182	Amount Added: 16.00	Units: uL	
vmfaspw_00179	Amount Added: 16.00	Units: uL	
vm100ss_stk_00023	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent
vm100is_stk_00029	Amount Added: 1.00	Units: uL	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9302.D

Injection Date: 11-Nov-2016 11:24:30

Instrument ID: A3UX16

Operator ID: 001765

Lims ID: LCS

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

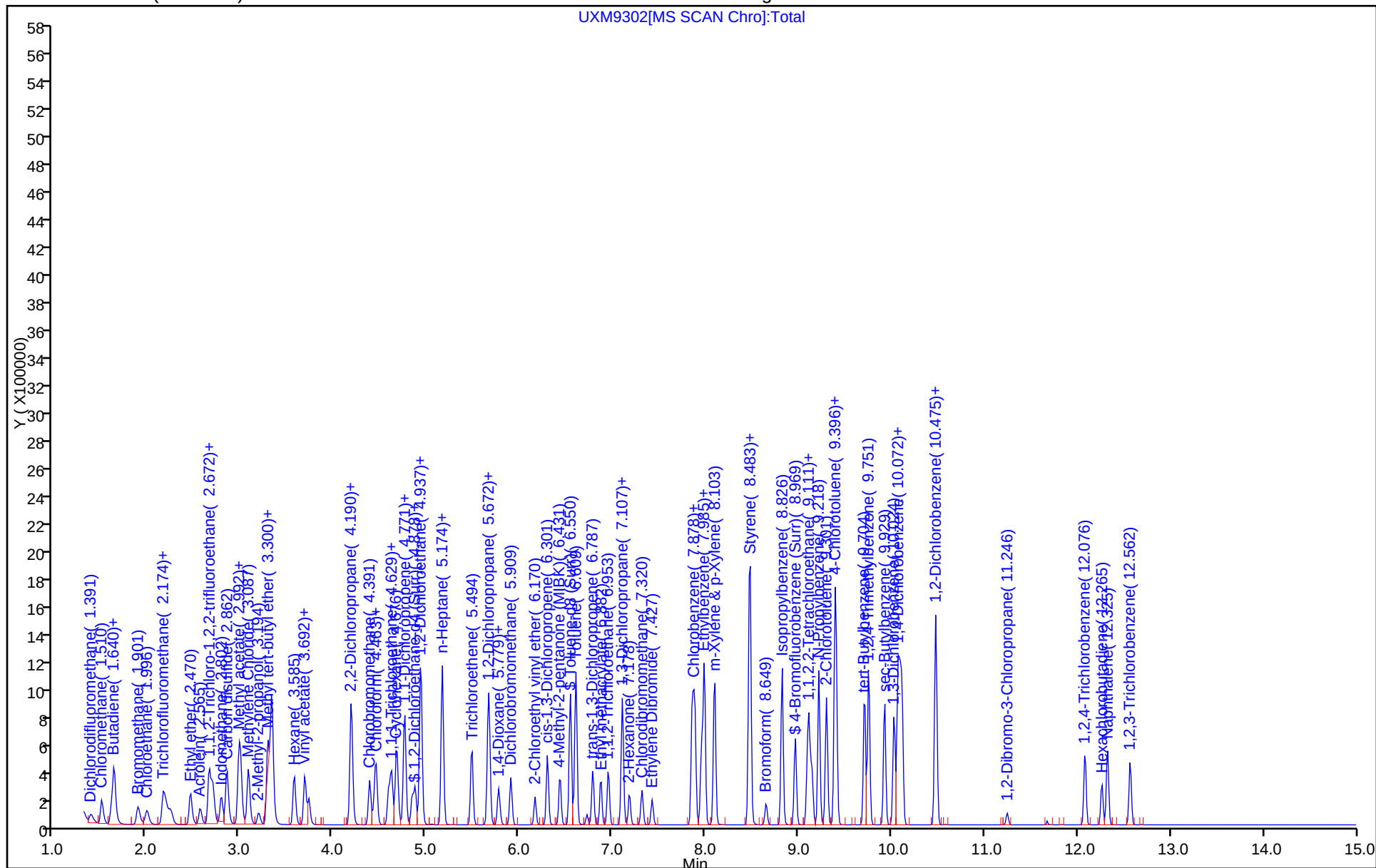
ALS Bottle#: 3

Method: 8260_16

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Y Scaling: Method Defined: Set to Absolute Y Value



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\UXM9302.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 11-Nov-2016 11:24:30 ALS Bottle#: 3 Worklist Smp#: 5
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059904-005
 Operator ID: 001765 Instrument ID: A3UX16
 Method: \\ChromNA\Canton\ChromData\A3UX16\20161111-59904.b\8260_16.m
 Limit Group: MSV 8260B ICAL
 Last Update: 11-Nov-2016 13:18:34 Calib Date: 06-Sep-2016 20:18:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX16\20160906-57784.b\UXM7677.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK022

First Level Reviewer: bosworthh

Date: 11-Nov-2016 13:18:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	20.0	17.8	88.99
\$ 5 1,2-Dichloroethane-d4 (Surr)	20.0	18.1	90.41
\$ 6 Toluene-d8 (Surr)	20.0	17.6	87.85
\$ 7 4-Bromofluorobenzene (Surr)	20.0	18.0	90.05

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-255552/4
 Matrix: Water Lab File ID: UXC9705.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 11:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	8.42	J	10	
71-43-2	Benzene	10.1		1.0	
75-27-4	Dichlorobromomethane	10.3		1.0	
75-25-2	Bromoform	10.2		1.0	
74-83-9	Bromomethane	4.49		1.0	
78-93-3	2-Butanone (MEK)	15.2		10	
75-15-0	Carbon disulfide	10.3		1.0	
56-23-5	Carbon tetrachloride	15.1		1.0	
108-90-7	Chlorobenzene	10.2		1.0	
75-00-3	Chloroethane	4.47		1.0	
67-66-3	Chloroform	10.4		1.0	
74-87-3	Chloromethane	8.61		1.0	
75-34-3	1,1-Dichloroethane	9.73		1.0	
107-06-2	1,2-Dichloroethane	9.77		1.0	
75-35-4	1,1-Dichloroethene	10.5		1.0	
78-87-5	1,2-Dichloropropane	10.3		1.0	
10061-01-5	cis-1,3-Dichloropropene	9.48		1.0	
10061-02-6	trans-1,3-Dichloropropene	9.35		1.0	
100-41-4	Ethylbenzene	10.2		1.0	
591-78-6	2-Hexanone	18.0		10	
75-09-2	Methylene Chloride	10.7		1.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	17.3		10	
100-42-5	Styrene	10.5		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	8.38		1.0	
127-18-4	Tetrachloroethene	11.5		1.0	
108-88-3	Toluene	10.7		1.0	
79-01-6	Trichloroethene	10.8		1.0	
75-01-4	Vinyl chloride	8.54		1.0	
1330-20-7	Xylenes, Total	19.5		2.0	
71-55-6	1,1,1-Trichloroethane	12.6		1.0	
79-00-5	1,1,2-Trichloroethane	10.4		1.0	
110-82-7	Cyclohexane	10.6		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	9.08		2.0	
106-93-4	Ethylene Dibromide	10.8		1.0	
75-71-8	Dichlorodifluoromethane	10.4		1.0	
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-255552/4
 Matrix: Water Lab File ID: UXC9705.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 11:34
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	10.9		1.0	
98-82-8	Isopropylbenzene	10.4		1.0	
79-20-9	Methyl acetate	43.7		10	
1634-04-4	Methyl tert-butyl ether	10.2		1.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	13.4		1.0	
120-82-1	1,2,4-Trichlorobenzene	9.46		1.0	
95-50-1	1,2-Dichlorobenzene	9.58		1.0	
541-73-1	1,3-Dichlorobenzene	9.48		1.0	
106-46-7	1,4-Dichlorobenzene	9.60		1.0	
75-69-4	Trichlorofluoromethane	16.4		1.0	
124-48-1	Chlorodibromomethane	11.1		1.0	
108-87-2	Methylcyclohexane	10.6		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-132
460-00-4	4-Bromofluorobenzene (Surr)	106		73-120
2037-26-5	Toluene-d8 (Surr)	110		73-124
1868-53-7	Dibromofluoromethane (Surr)	105		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9705.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 14-Nov-2016 11:34:30 ALS Bottle#: 5 Worklist Smp#: 4
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0059951-004
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1453579	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	84	1048423	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.913	9.913	0.000	91	551934	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	318043	8.01	8.41	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.767	4.766	0.001	0	352173	8.01	7.69	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	92	1422032	8.01	8.79	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	97	472025	8.01	8.53	
9 Dichlorodifluoromethane	85	1.458	1.458	0.000	99	498491	10.0	10.4	
10 Chloromethane	50	1.589	1.600	-0.011	99	583422	10.0	8.61	
11 Vinyl chloride	62	1.683	1.695	-0.012	98	522803	10.0	8.54	
12 Butadiene	54	1.719	1.719	0.000	98	394678	10.0	6.87	
13 Bromomethane	94	1.968	1.968	0.000	90	90865	10.0	4.49	
14 Chloroethane	64	2.051	2.063	-0.012	99	145629	10.0	4.47	
15 Dichlorofluoromethane	67	2.205	2.217	-0.012	98	596090	10.0	8.33	
16 Trichlorofluoromethane	101	2.217	2.229	-0.012	99	600492	10.0	16.4	
17 Ethyl ether	59	2.442	2.454	-0.012	89	300691	10.0	8.72	
18 Acrolein	56	2.573	2.584	-0.011	100	274832	50.0	68.5	
19 1,1-Dichloroethene	96	2.644	2.644	0.000	98	449103	10.0	10.5	
20 1,1,2-Trichloro-1,2,2-trif	151	2.668	2.679	-0.011	90	418009	10.0	13.4	
22 Acetone	43	2.703	2.703	0.000	100	107922	20.0	8.42	
23 Iodomethane	142	2.786	2.786	0.000	97	781024	10.0	12.0	
24 Carbon disulfide	76	2.834	2.833	0.001	99	1279315	10.0	10.3	
25 3-Chloro-1-propene	76	2.940	2.952	-0.012	94	259854	10.0	10.7	
27 Methyl acetate	43	2.952	2.964	-0.012	97	993116	50.0	43.7	
28 Methylene Chloride	84	3.047	3.047	0.000	90	511731	10.0	10.7	
29 2-Methyl-2-propanol	59	3.130	3.130	0.000	87	68482	100.0	49.8	
31 Methyl tert-butyl ether	73	3.249	3.260	-0.011	95	855222	10.0	10.2	
32 Acrylonitrile	53	3.261	3.260	0.001	100	1029417	100.0	81.3	
30 trans-1,2-Dichloroethene	96	3.261	3.260	0.001	86	505390	10.0	10.9	
33 Hexane	86	3.462	3.462	0.000	91	128750	10.0	11.3	
34 1,1-Dichloroethane	63	3.616	3.616	0.000	97	769594	10.0	9.73	
36 Vinyl acetate	43	3.640	3.640	0.000	97	481976	10.0	9.19	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 2,2-Dichloropropane	77	4.079	4.079	0.000	85	337980	10.0	13.4	
39 cis-1,2-Dichloroethene	96	4.079	4.090	-0.011	82	524240	10.0	10.5	
41 2-Butanone (MEK)	43	4.091	4.102	-0.011	99	224887	20.0	15.2	
45 Chlorobromomethane	128	4.280	4.292	-0.012	95	238625	10.0	10.8	
46 Tetrahydrofuran	42	4.316	4.316	0.000	88	134532	20.0	16.3	
47 Chloroform	83	4.340	4.339	0.001	93	772300	10.0	10.4	
48 1,1,1-Trichloroethane	97	4.494	4.494	0.000	99	565487	10.0	12.6	
49 Cyclohexane	56	4.529	4.529	0.000	88	825068	10.0	10.6	
50 Carbon tetrachloride	117	4.624	4.624	0.000	89	560146	10.0	15.1	
51 1,1-Dichloropropene	75	4.624	4.624	0.000	96	623770	10.0	10.1	
52 Isobutyl alcohol	41	4.707	4.707	0.000	91	110203	250.0	156.7	
53 Benzene	78	4.802	4.802	0.000	95	1903593	10.0	10.1	
54 1,2-Dichloroethane	62	4.826	4.826	0.000	97	525302	10.0	9.77	
56 n-Heptane	100	4.980	4.980	0.000	90	113009	10.0	11.0	
58 Trichloroethene	130	5.336	5.336	0.000	96	506914	10.0	10.8	
60 Methylcyclohexane	83	5.478	5.478	0.000	88	744425	10.0	10.6	
61 1,2-Dichloropropane	63	5.537	5.537	0.000	96	430362	10.0	10.3	
64 1,4-Dioxane	88	5.644	5.644	0.000	28	23132	200.0	76.4	
63 Dibromomethane	93	5.644	5.644	0.000	92	224049	10.0	10.1	
65 Dichlorobromomethane	83	5.763	5.762	0.001	99	460427	10.0	10.3	
67 2-Chloroethyl vinyl ether	63	6.012	6.012	0.000	92	193186	10.0	9.10	
68 cis-1,3-Dichloropropene	75	6.142	6.142	0.000	96	540693	10.0	9.48	
69 4-Methyl-2-pentanone (MIBK)	43	6.273	6.272	0.001	95	440297	20.0	17.3	
70 Toluene	91	6.439	6.438	0.001	98	2037150	10.0	10.7	
71 trans-1,3-Dichloropropene	75	6.640	6.640	0.000	91	398452	10.0	9.35	
72 Ethyl methacrylate	69	6.700	6.699	0.001	87	405705	10.0	10.8	
73 1,1,2-Trichloroethane	97	6.806	6.806	0.000	90	337755	10.0	10.4	
74 Tetrachloroethene	164	6.913	6.925	-0.012	98	420294	10.0	11.5	
75 1,3-Dichloropropane	76	6.960	6.960	0.000	89	616274	10.0	10.1	
76 2-Hexanone	43	7.020	7.019	0.001	95	308130	20.0	18.0	
79 Chlorodibromomethane	129	7.162	7.162	0.000	90	320692	10.0	11.1	
80 Ethylene Dibromide	107	7.281	7.280	0.001	98	334587	10.0	10.8	
82 Chlorobenzene	112	7.719	7.719	0.000	97	1248390	10.0	10.2	
83 1,1,1,2-Tetrachloroethane	131	7.791	7.790	0.001	94	379554	10.0	11.8	
84 Ethylbenzene	106	7.802	7.802	0.000	98	659005	10.0	10.2	
85 m-Xylene & p-Xylene	91	7.909	7.909	0.000	93	1538579	10.0	9.61	
86 o-Xylene	106	8.289	8.288	0.001	96	753445	10.0	9.91	
87 Styrene	104	8.312	8.312	0.000	95	1344406	10.0	10.5	
88 Bromoform	173	8.502	8.502	0.000	99	167190	10.0	10.2	
89 Isopropylbenzene	105	8.632	8.632	0.000	95	1872486	10.0	10.4	
93 1,1,2,2-Tetrachloroethane	83	8.941	8.941	0.000	70	359560	10.0	8.38	
92 Bromobenzene	156	8.941	8.952	-0.011	85	527527	10.0	9.22	
94 1,2,3-Trichloropropane	110	8.988	8.988	0.000	83	119852	10.0	8.83	
95 trans-1,4-Dichloro-2-buten	53	9.000	9.000	0.000	72	101421	10.0	8.42	
96 N-Propylbenzene	120	9.036	9.035	0.001	98	516366	10.0	8.94	
97 2-Chlorotoluene	126	9.131	9.130	0.001	98	443600	10.0	8.82	
98 1,3,5-Trimethylbenzene	105	9.202	9.201	0.001	94	1447897	10.0	8.85	
99 4-Chlorotoluene	91	9.225	9.225	0.000	98	1538385	10.0	8.83	
101 tert-Butylbenzene	119	9.522	9.522	0.000	91	1266417	10.0	9.56	
103 1,2,4-Trimethylbenzene	105	9.569	9.569	0.000	95	1463939	10.0	8.82	
105 sec-Butylbenzene	105	9.735	9.735	0.000	93	1629566	10.0	9.19	
106 1,3-Dichlorobenzene	146	9.854	9.854	0.000	98	901989	10.0	9.48	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
107 4-Isopropyltoluene	119	9.878	9.877	0.001	97	1423576	10.0	9.55	
108 1,4-Dichlorobenzene	146	9.937	9.937	0.000	96	934991	10.0	9.60	
111 n-Butylbenzene	91	10.281	10.281	0.000	97	1074290	10.0	9.05	
112 1,2-Dichlorobenzene	146	10.316	10.316	0.000	99	834308	10.0	9.58	
113 1,2-Dibromo-3-Chloropropan	157	11.099	11.099	0.000	87	42048	10.0	9.08	
115 1,2,4-Trichlorobenzene	180	11.905	11.905	0.000	93	426574	10.0	9.46	
116 Hexachlorobutadiene	225	12.060	12.059	0.001	93	204913	10.0	9.85	
117 Naphthalene	128	12.154	12.154	0.000	96	736698	10.0	7.74	
118 1,2,3-Trichlorobenzene	180	12.392	12.391	0.001	96	372628	10.0	9.34	
S 129 Xylenes, Total	106				0		20.0	19.5	
S 130 Trihalomethanes, Total	1				0		40.0	42.0	

Reagents:

VMFASGW_00183	Amount Added: 8.00	Units: uL	
VMFASAW_00164	Amount Added: 8.00	Units: uL	
VMFASPW_00179	Amount Added: 8.00	Units: uL	
vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9705.D

Injection Date: 14-Nov-2016 11:34:30

Instrument ID: A3UX15

Lims ID: LCS

Client ID:

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: 8260_15

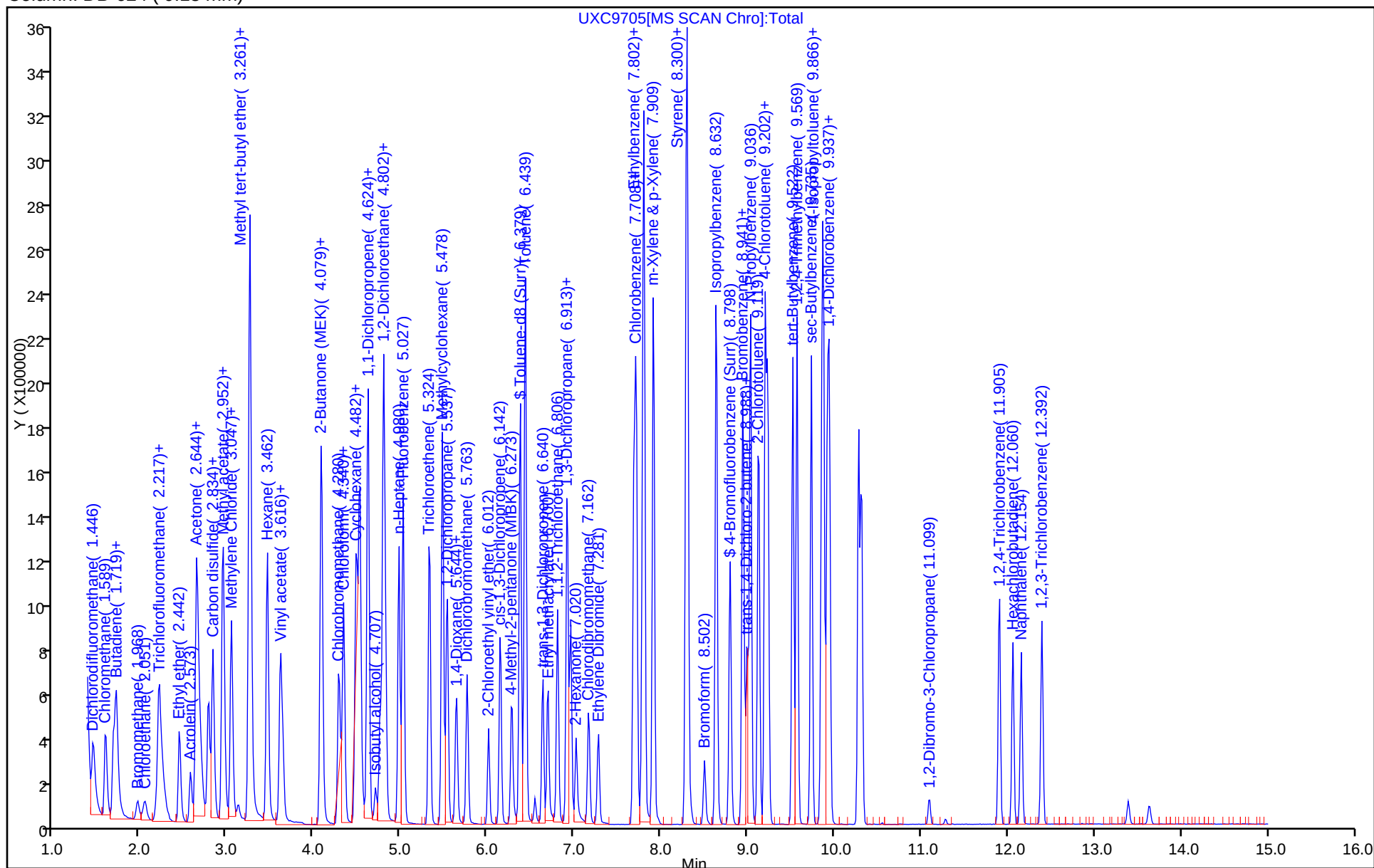
Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Operator ID:

Worklist Smp#: 4

ALS Bottle#: 5



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9705.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 14-Nov-2016 11:34:30 ALS Bottle#: 5 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 240-0059951-004
Misc. Info.: C61114A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.41	105.03
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	7.69	95.96
\$ 6 Toluene-d8 (Surr)	8.01	8.79	109.71
\$ 7 4-Bromofluorobenzene (Surr)	8.01	8.53	106.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-6 MS</u>	Lab Sample ID: <u>240-71709-1 MS</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXC9727.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 09:00</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/14/2016 19:46</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>2</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255552</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	31.4		20	
71-43-2	Benzene	20.5		2.0	
75-27-4	Dichlorobromomethane	21.3		2.0	
75-25-2	Bromoform	21.6		2.0	
74-83-9	Bromomethane	11.9		2.0	
78-93-3	2-Butanone (MEK)	33.7		20	
75-15-0	Carbon disulfide	18.9		2.0	
56-23-5	Carbon tetrachloride	25.6		2.0	
108-90-7	Chlorobenzene	20.1		2.0	
75-00-3	Chloroethane	11.7		2.0	
67-66-3	Chloroform	21.5		2.0	
74-87-3	Chloromethane	17.5		2.0	
75-34-3	1,1-Dichloroethane	19.9		2.0	
107-06-2	1,2-Dichloroethane	20.7		2.0	
75-35-4	1,1-Dichloroethene	19.7		2.0	
78-87-5	1,2-Dichloropropane	20.6		2.0	
10061-01-5	cis-1,3-Dichloropropene	18.1		2.0	
10061-02-6	trans-1,3-Dichloropropene	16.5		2.0	
100-41-4	Ethylbenzene	19.4		2.0	
591-78-6	2-Hexanone	36.6		20	
75-09-2	Methylene Chloride	24.6		2.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	40.4		20	
100-42-5	Styrene	21.9		2.0	
79-34-5	1,1,2,2-Tetrachloroethane	16.4		2.0	
127-18-4	Tetrachloroethene	57.5		2.0	
108-88-3	Toluene	19.5		2.0	
79-01-6	Trichloroethene	28.0		2.0	
75-01-4	Vinyl chloride	15.9		2.0	
1330-20-7	Xylenes, Total	40.5		4.0	
71-55-6	1,1,1-Trichloroethane	23.8		2.0	
79-00-5	1,1,2-Trichloroethane	20.6		2.0	
110-82-7	Cyclohexane	16.9		2.0	
96-12-8	1,2-Dibromo-3-Chloropropane	20.7		4.0	
106-93-4	Ethylene Dibromide	21.0		2.0	
75-71-8	Dichlorodifluoromethane	16.6		2.0	
156-59-2	cis-1,2-Dichloroethene	35.1		2.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-6 MS Lab Sample ID: 240-71709-1 MS
 Matrix: Water Lab File ID: UXC9727.D
 Analysis Method: 8260B Date Collected: 11/01/2016 09:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 19:46
 Soil Aliquot Vol: _____ Dilution Factor: 2
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	21.6		2.0	
98-82-8	Isopropylbenzene	20.9		2.0	
79-20-9	Methyl acetate	102		20	
1634-04-4	Methyl tert-butyl ether	22.1		2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	20.7		2.0	
120-82-1	1,2,4-Trichlorobenzene	20.0		2.0	
95-50-1	1,2-Dichlorobenzene	19.8		2.0	
541-73-1	1,3-Dichlorobenzene	18.5		2.0	
106-46-7	1,4-Dichlorobenzene	18.6		2.0	
75-69-4	Trichlorofluoromethane	27.8		2.0	
124-48-1	Chlorodibromomethane	21.4		2.0	
108-87-2	Methylcyclohexane	16.6		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-132
460-00-4	4-Bromofluorobenzene (Surr)	116		73-120
2037-26-5	Toluene-d8 (Surr)	102		73-124
1868-53-7	Dibromofluoromethane (Surr)	106		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9727.D
 Lims ID: 240-71709-E-1 MS
 Client ID: OW-6
 Sample Type: MS
 Inject. Date: 14-Nov-2016 19:46:30 ALS Bottle#: 27 Worklist Smp#: 52
 Purge Vol: 5.000 mL Dil. Factor: 2.0000
 Sample Info: 240-0059951-052
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.027	5.027	0.000	99	1439662	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	85	1132122	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.925	9.913	0.012	92	711997	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.482	4.482	0.000	95	318512	8.01	8.51	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.767	4.766	0.000	0	358972	8.01	7.91	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	92	1428175	8.01	8.17	
\$ 7 4-Bromofluorobenzene (Surr	95	8.798	8.798	0.000	96	554259	8.01	9.27	
9 Dichlorodifluoromethane	85	1.458	1.458	0.000	99	394713	10.0	8.32	
10 Chloromethane	50	1.588	1.600	-0.012	99	588098	10.0	8.76	
11 Vinyl chloride	62	1.683	1.695	-0.012	98	480752	10.0	7.93	
13 Bromomethane	94	1.956	1.968	-0.012	87	119257	10.0	5.95	
14 Chloroethane	64	2.039	2.063	-0.024	99	188508	10.0	5.84	
16 Trichlorofluoromethane	101	2.229	2.229	0.000	99	505430	10.0	13.9	
19 1,1-Dichloroethene	96	2.644	2.644	0.000	98	418818	10.0	9.87	
20 1,1,2-Trichloro-1,2,2-trif	151	2.668	2.679	-0.011	92	318157	10.0	10.3	
22 Acetone	43	2.703	2.703	0.000	100	180821	20.0	15.7	
24 Carbon disulfide	76	2.834	2.833	0.001	99	1166018	10.0	9.45	
27 Methyl acetate	43	2.952	2.964	-0.012	98	1147942	50.0	51.0	
28 Methylene Chloride	84	3.047	3.047	0.000	89	581331	10.0	12.3	
31 Methyl tert-butyl ether	73	3.249	3.260	-0.011	94	918470	10.0	11.0	
30 trans-1,2-Dichloroethene	96	3.260	3.260	0.000	69	495097	10.0	10.8	
34 1,1-Dichloroethane	63	3.616	3.616	0.000	97	777993	10.0	9.93	
39 cis-1,2-Dichloroethene	96	4.091	4.090	0.001	80	866178	10.0	17.5	
41 2-Butanone (MEK)	43	4.102	4.102	0.000	99	247181	20.0	16.9	
47 Chloroform	83	4.340	4.339	0.001	93	787763	10.0	10.8	
48 1,1,1-Trichloroethane	97	4.494	4.494	0.000	98	529530	10.0	11.9	
49 Cyclohexane	56	4.529	4.529	0.000	88	652096	10.0	8.46	
50 Carbon tetrachloride	117	4.624	4.624	0.000	84	470625	10.0	12.8	
53 Benzene	78	4.802	4.802	0.000	95	1914451	10.0	10.2	
54 1,2-Dichloroethane	62	4.826	4.826	0.000	97	550868	10.0	10.3	
58 Trichloroethene	130	5.336	5.336	0.000	95	654024	10.0	14.0	
60 Methylcyclohexane	83	5.478	5.478	0.000	88	578710	10.0	8.30	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63	5.537	5.537	0.000	97	427812	10.0	10.3	
65 Dichlorobromomethane	83	5.763	5.762	0.001	100	472617	10.0	10.6	
68 cis-1,3-Dichloropropene	75	6.142	6.142	0.000	97	511060	10.0	9.07	
69 4-Methyl-2-pentanone (MIBK)	43	6.273	6.272	0.001	95	508275	20.0	20.2	
70 Toluene	91	6.439	6.438	0.001	99	2002341	10.0	9.77	
71 trans-1,3-Dichloropropene	75	6.640	6.640	0.000	92	377193	10.0	8.27	
73 1,1,2-Trichloroethane	97	6.806	6.806	0.000	90	363159	10.0	10.3	
74 Tetrachloroethene	164	6.925	6.925	0.000	97	1139526	10.0	28.8	
76 2-Hexanone	43	7.020	7.019	0.001	96	338088	20.0	18.3	
79 Chlorodibromomethane	129	7.162	7.162	0.000	91	332653	10.0	10.7	
80 Ethylene Dibromide	107	7.281	7.280	0.000	98	351545	10.0	10.5	
82 Chlorobenzene	112	7.719	7.719	0.000	97	1327073	10.0	10.1	
84 Ethylbenzene	106	7.802	7.802	0.000	98	678480	10.0	9.72	
85 m-Xylene & p-Xylene	91	7.909	7.909	0.000	93	1699167	10.0	9.83	
86 o-Xylene	106	8.288	8.288	0.000	96	852149	10.0	10.4	
87 Styrene	104	8.312	8.312	0.000	96	1507246	10.0	10.9	
88 Bromoform	173	8.502	8.502	0.000	99	191844	10.0	10.8	
89 Isopropylbenzene	105	8.632	8.632	0.000	95	2026230	10.0	10.4	
93 1,1,2,2-Tetrachloroethane	83	8.941	8.941	0.000	73	454269	10.0	8.21	
106 1,3-Dichlorobenzene	146	9.854	9.854	0.000	98	1136734	10.0	9.27	
108 1,4-Dichlorobenzene	146	9.937	9.937	0.000	96	1170128	10.0	9.31	
112 1,2-Dichlorobenzene	146	10.316	10.316	0.000	99	1113179	10.0	9.91	
113 1,2-Dibromo-3-Chloropropan	157	11.099	11.099	0.000	89	61714	10.0	10.3	
115 1,2,4-Trichlorobenzene	180	11.905	11.905	0.000	94	580708	10.0	9.98	
S 129 Xylenes, Total	106				0		20.0	20.2	

Reagents:

VMFASGW_00183	Amount Added: 8.00	Units: uL	
VMFASAW_00164	Amount Added: 8.00	Units: uL	
VMFASPW_00179	Amount Added: 8.00	Units: uL	
vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9727.D

Injection Date: 14-Nov-2016 19:46:30

Instrument ID: A3UX15

Lims ID: 240-71709-E-1 MS

Client ID: OW-6

Purge Vol: 5.000 mL

Dil. Factor: 2.0000

Method: 8260_15

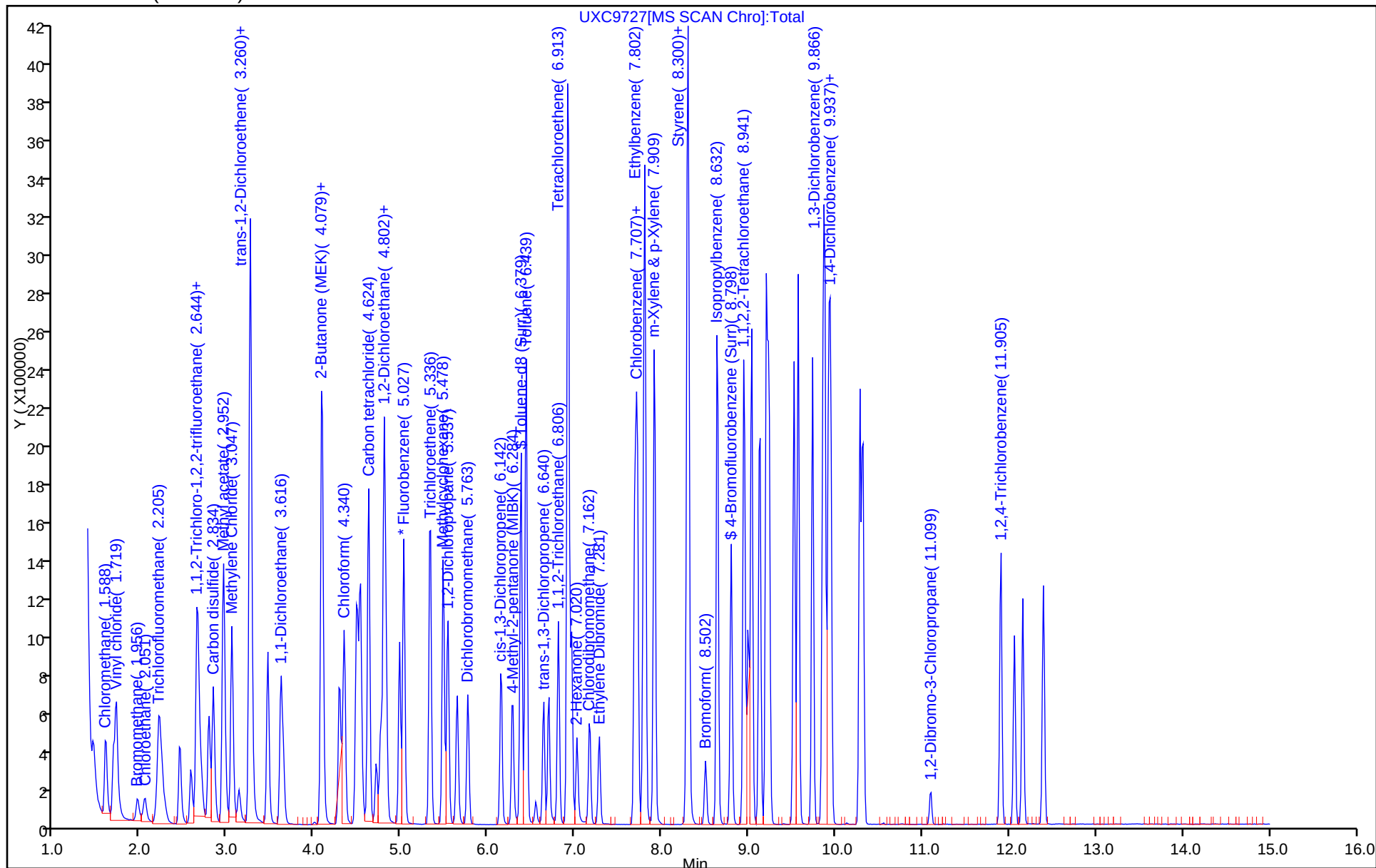
Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)

Operator ID:

Worklist Smp#: 52

ALS Bottle#: 27



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9727.D
Lims ID: 240-71709-E-1 MS
Client ID: OW-6
Sample Type: MS
Inject. Date: 14-Nov-2016 19:46:30 ALS Bottle#: 27 Worklist Smp#: 52
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0059951-052
Misc. Info.: C61114A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.51	106.20
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	7.91	98.75
\$ 6 Toluene-d8 (Surr)	8.01	8.17	102.04
\$ 7 4-Bromofluorobenzene (Surr)	8.01	9.27	115.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Canton</u>	Job No.: <u>240-71709-1</u>
SDG No.: _____	
Client Sample ID: <u>OW-6 MSD</u>	Lab Sample ID: <u>240-71709-1 MSD</u>
Matrix: <u>Water</u>	Lab File ID: <u>UXC9728.D</u>
Analysis Method: <u>8260B</u>	Date Collected: <u>11/01/2016 09:00</u>
Sample wt/vol: <u>5 (mL)</u>	Date Analyzed: <u>11/14/2016 20:08</u>
Soil Aliquot Vol: _____	Dilution Factor: <u>2</u>
Soil Extract Vol.: _____	GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u>
% Moisture: _____	Level: (low/med) <u>Low</u>
Analysis Batch No.: <u>255552</u>	Units: <u>ug/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	32.3		20	
71-43-2	Benzene	21.1		2.0	
75-27-4	Dichlorobromomethane	21.5		2.0	
75-25-2	Bromoform	20.8		2.0	
74-83-9	Bromomethane	13.5		2.0	
78-93-3	2-Butanone (MEK)	31.5		20	
75-15-0	Carbon disulfide	20.9		2.0	
56-23-5	Carbon tetrachloride	29.4		2.0	
108-90-7	Chlorobenzene	21.0		2.0	
75-00-3	Chloroethane	12.6		2.0	
67-66-3	Chloroform	21.8		2.0	
74-87-3	Chloromethane	17.5		2.0	
75-34-3	1,1-Dichloroethane	20.5		2.0	
107-06-2	1,2-Dichloroethane	20.5		2.0	
75-35-4	1,1-Dichloroethene	21.3		2.0	
78-87-5	1,2-Dichloropropane	21.2		2.0	
10061-01-5	cis-1,3-Dichloropropene	18.1		2.0	
10061-02-6	trans-1,3-Dichloropropene	16.3		2.0	
100-41-4	Ethylbenzene	20.9		2.0	
591-78-6	2-Hexanone	33.9		20	
75-09-2	Methylene Chloride	25.3		2.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	38.6		20	
100-42-5	Styrene	22.6		2.0	
79-34-5	1,1,2,2-Tetrachloroethane	15.7		2.0	
127-18-4	Tetrachloroethene	57.7		2.0	
108-88-3	Toluene	20.4		2.0	
79-01-6	Trichloroethene	29.3		2.0	
75-01-4	Vinyl chloride	16.8		2.0	
1330-20-7	Xylenes, Total	42.4		4.0	
71-55-6	1,1,1-Trichloroethane	25.9		2.0	
79-00-5	1,1,2-Trichloroethane	20.1		2.0	
110-82-7	Cyclohexane	20.8		2.0	
96-12-8	1,2-Dibromo-3-Chloropropane	21.3		4.0	
106-93-4	Ethylene Dibromide	20.6		2.0	
75-71-8	Dichlorodifluoromethane	18.7		2.0	
156-59-2	cis-1,2-Dichloroethene	35.2		2.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-71709-1
 SDG No.: _____
 Client Sample ID: OW-6 MSD Lab Sample ID: 240-71709-1 MSD
 Matrix: Water Lab File ID: UXC9728.D
 Analysis Method: 8260B Date Collected: 11/01/2016 09:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/14/2016 20:08
 Soil Aliquot Vol: _____ Dilution Factor: 2
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 255552 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
156-60-5	trans-1,2-Dichloroethene	22.6		2.0	
98-82-8	Isopropylbenzene	22.9		2.0	
79-20-9	Methyl acetate	97.5		20	
1634-04-4	Methyl tert-butyl ether	21.7		2.0	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	24.8		2.0	
120-82-1	1,2,4-Trichlorobenzene	23.7		2.0	
95-50-1	1,2-Dichlorobenzene	20.9		2.0	
541-73-1	1,3-Dichlorobenzene	19.7		2.0	
106-46-7	1,4-Dichlorobenzene	19.7		2.0	
75-69-4	Trichlorofluoromethane	30.7		2.0	
124-48-1	Chlorodibromomethane	21.2		2.0	
108-87-2	Methylcyclohexane	20.3		2.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-132
460-00-4	4-Bromofluorobenzene (Surr)	115		73-120
2037-26-5	Toluene-d8 (Surr)	101		73-124
1868-53-7	Dibromofluoromethane (Surr)	105		80-120

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9728.D
 Lims ID: 240-71709-H-1 MSD
 Client ID: OW-6
 Sample Type: MSD
 Inject. Date: 14-Nov-2016 20:08:30 ALS Bottle#: 28 Worklist Smp#: 53
 Purge Vol: 5.000 mL Dil. Factor: 2.0000
 Sample Info: 240-0059951-053
 Misc. Info.: C61114A,8260LLUX15,,43582
 Operator ID: Instrument ID: A3UX15
 Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
 Limit Group: MSV 8260B ICAL
 Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK029

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.028	5.027	0.001	99	1457876	10.0	10.0	
* 2 Chlorobenzene-d5	117	7.684	7.684	0.000	86	1156497	10.0	10.0	
* 3 1,4-Dichlorobenzene-d4	152	9.913	9.913	0.000	91	720974	10.0	10.0	
\$ 4 Dibromofluoromethane (Surr	113	4.470	4.482	-0.012	94	319256	8.01	8.42	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.755	4.766	-0.011	0	349271	8.01	7.60	
\$ 6 Toluene-d8 (Surr)	98	6.379	6.379	0.000	92	1439426	8.01	8.06	
\$ 7 4-Bromofluorobenzene (Surr	95	8.799	8.798	0.000	97	563610	8.01	9.23	
9 Dichlorodifluoromethane	85	1.446	1.458	-0.012	99	449900	10.0	9.36	
10 Chloromethane	50	1.589	1.600	-0.011	99	595654	10.0	8.76	
11 Vinyl chloride	62	1.683	1.695	-0.012	98	517377	10.0	8.42	
13 Bromomethane	94	1.956	1.968	-0.012	90	137071	10.0	6.75	
14 Chloroethane	64	2.039	2.063	-0.024	99	205746	10.0	6.30	
16 Trichlorofluoromethane	101	2.217	2.229	-0.012	99	565098	10.0	15.4	
19 1,1-Dichloroethene	96	2.644	2.644	0.000	98	457865	10.0	10.7	
20 1,1,2-Trichloro-1,2,2-trif	151	2.656	2.679	-0.023	90	386179	10.0	12.4	
22 Acetone	43	2.703	2.703	0.000	100	187770	20.0	16.1	
24 Carbon disulfide	76	2.834	2.833	0.001	98	1303976	10.0	10.4	
27 Methyl acetate	43	2.952	2.964	-0.012	98	1110144	50.0	48.7	
28 Methylene Chloride	84	3.047	3.047	0.000	91	602940	10.0	12.6	
31 Methyl tert-butyl ether	73	3.249	3.260	-0.011	94	914144	10.0	10.8	
30 trans-1,2-Dichloroethene	96	3.261	3.260	0.001	74	525831	10.0	11.3	
34 1,1-Dichloroethane	63	3.604	3.616	-0.012	97	814872	10.0	10.3	
39 cis-1,2-Dichloroethene	96	4.079	4.090	-0.011	82	880199	10.0	17.6	
41 2-Butanone (MEK)	43	4.091	4.102	-0.011	99	233361	20.0	15.7	
47 Chloroform	83	4.340	4.339	0.001	93	807216	10.0	10.9	
48 1,1,1-Trichloroethane	97	4.494	4.494	0.000	98	584855	10.0	13.0	
49 Cyclohexane	56	4.529	4.529	0.000	88	812100	10.0	10.4	
50 Carbon tetrachloride	117	4.624	4.624	0.000	89	545912	10.0	14.7	
53 Benzene	78	4.802	4.802	0.000	95	1992368	10.0	10.5	
54 1,2-Dichloroethane	62	4.826	4.826	0.000	97	553783	10.0	10.3	
58 Trichloroethene	130	5.324	5.336	-0.012	96	691699	10.0	14.6	
60 Methylcyclohexane	83	5.478	5.478	0.000	88	715591	10.0	10.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 1,2-Dichloropropane	63	5.537	5.537	0.000	97	444420	10.0	10.6	
65 Dichlorobromomethane	83	5.763	5.762	0.001	99	484146	10.0	10.8	
68 cis-1,3-Dichloropropene	75	6.142	6.142	0.000	97	517520	10.0	9.07	
69 4-Methyl-2-pentanone (MIBK)	43	6.273	6.272	0.001	96	492399	20.0	19.3	
70 Toluene	91	6.439	6.438	0.001	99	2136033	10.0	10.2	
71 trans-1,3-Dichloropropene	75	6.640	6.640	0.000	91	379063	10.0	8.15	
73 1,1,2-Trichloroethane	97	6.806	6.806	0.000	90	361927	10.0	10.1	
74 Tetrachloroethene	164	6.913	6.925	-0.012	98	1167044	10.0	28.8	
76 2-Hexanone	43	7.020	7.019	0.001	95	319361	20.0	16.9	
79 Chlorodibromomethane	129	7.162	7.162	0.000	90	336449	10.0	10.6	
80 Ethylene Dibromide	107	7.281	7.280	0.001	98	351317	10.0	10.3	
82 Chlorobenzene	112	7.719	7.719	0.000	97	1414910	10.0	10.5	
84 Ethylbenzene	106	7.802	7.802	0.000	98	744479	10.0	10.4	
85 m-Xylene & p-Xylene	91	7.909	7.909	0.000	93	1838190	10.0	10.4	
86 o-Xylene	106	8.289	8.288	0.001	96	905823	10.0	10.8	
87 Styrene	104	8.300	8.312	-0.012	96	1588135	10.0	11.3	
88 Bromoform	173	8.502	8.502	0.000	99	188113	10.0	10.4	
89 Isopropylbenzene	105	8.632	8.632	0.000	95	2266820	10.0	11.4	
93 1,1,2,2-Tetrachloroethane	83	8.941	8.941	0.000	69	440920	10.0	7.87	
106 1,3-Dichlorobenzene	146	9.854	9.854	0.000	98	1222871	10.0	9.84	
108 1,4-Dichlorobenzene	146	9.937	9.937	0.000	96	1255101	10.0	9.86	
112 1,2-Dichlorobenzene	146	10.316	10.316	0.000	99	1187754	10.0	10.4	
113 1,2-Dibromo-3-Chloropropan	157	11.099	11.099	0.000	89	64409	10.0	10.6	
115 1,2,4-Trichlorobenzene	180	11.905	11.905	0.000	94	698457	10.0	11.9	
S 129 Xylenes, Total	106				0		20.0	21.2	

Reagents:

VMFASGW_00183	Amount Added: 8.00	Units: uL	
VMFASAW_00164	Amount Added: 8.00	Units: uL	
VMFASPW_00179	Amount Added: 8.00	Units: uL	
vm50ss_stk_00071	Amount Added: 0.80	Units: uL	Run Reagent
VM50IS_00058	Amount Added: 1.00	Units: uL	Run Reagent
vmDist_H2o_00082	Amount Added: 0.00	Units:	Run Reagent

TestAmerica Canton

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9728.D

Injection Date: 14-Nov-2016 20:08:30

Instrument ID: A3UX15

Operator ID:

Lims ID: 240-71709-H-1 MSD

Worklist Smp#: 53

Client ID: OW-6

Purge Vol: 5.000 mL

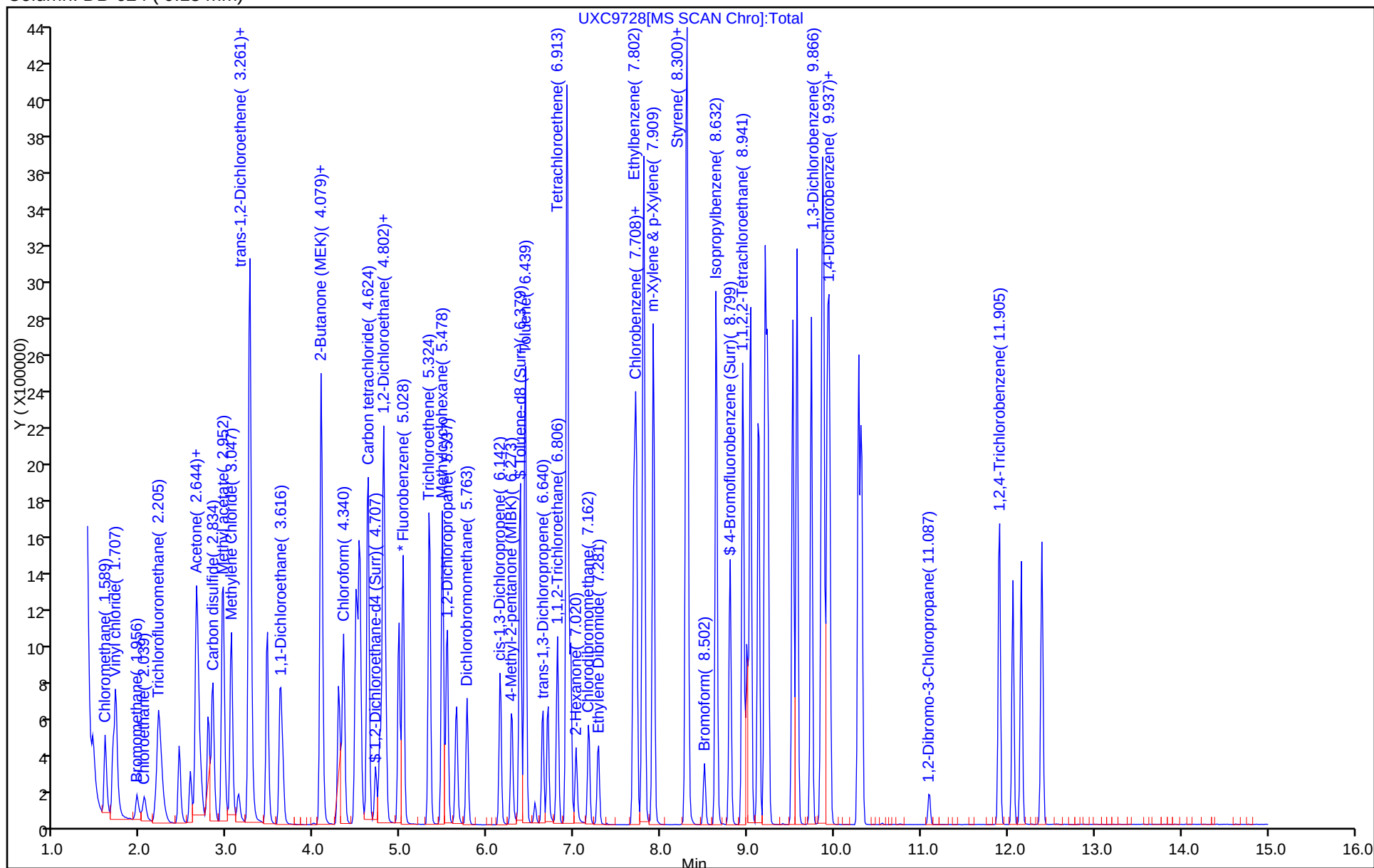
Dil. Factor: 2.0000

ALS Bottle#: 28

Method: 8260_15

Limit Group: MSV 8260B ICAL

Column: DB-624 (0.18 mm)



TestAmerica Canton
Recovery Report

Data File: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\UXC9728.D
Lims ID: 240-71709-H-1 MSD
Client ID: OW-6
Sample Type: MSD
Inject. Date: 14-Nov-2016 20:08:30 ALS Bottle#: 28 Worklist Smp#: 53
Purge Vol: 5.000 mL Dil. Factor: 2.0000
Sample Info: 240-0059951-053
Misc. Info.: C61114A,8260LLUX15,,43582
Operator ID: Instrument ID: A3UX15
Method: \\ChromNA\Canton\ChromData\A3UX15\20161114-59951.b\8260_15.m
Limit Group: MSV 8260B ICAL
Last Update: 15-Nov-2016 09:08:25 Calib Date: 17-Sep-2016 00:05:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Canton\ChromData\A3UX15\20160916-58103.b\UXC8208.D
Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK029

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 Dibromofluoromethane (Surr)	8.01	8.42	105.12
\$ 5 1,2-Dichloroethane-d4 (Surr)	8.01	7.60	94.88
\$ 6 Toluene-d8 (Surr)	8.01	8.06	100.68
\$ 7 4-Bromofluorobenzene (Surr)	8.01	9.23	115.25

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica CantonJob No.: 240-71709-1

SDG No.: _____

Instrument ID: A3UX15Start Date: 06/23/2016 11:35Analysis Batch Number: 235700End Date: 06/23/2016 23:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-235700/1		06/23/2016 11:35	1	BFB619.D	DB-624 0.18 (mm)
STD8260 240-235700/2 IC		06/23/2016 12:01	1	UXC9008.D	DB-624 0.18 (mm)
STD8260 240-235700/3 IC		06/23/2016 12:23	1	UXC9009.D	DB-624 0.18 (mm)
STD8260 240-235700/4 ICIS		06/23/2016 12:46	1	UXC9010.D	DB-624 0.18 (mm)
STD8260 240-235700/5 IC		06/23/2016 13:08	1	UXC9011.D	DB-624 0.18 (mm)
STD8260 240-235700/6 IC		06/23/2016 13:31	1	UXC9012.D	DB-624 0.18 (mm)
STD8260 240-235700/7 IC		06/23/2016 13:53	1	UXC9013.D	DB-624 0.18 (mm)
ICV 240-235700/14		06/23/2016 14:16	1	UXC9014.D	DB-624 0.18 (mm)
STD 240-235700/8 IC		06/23/2016 14:38	1		DB-624 0.18 (mm)
STD 240-235700/9 IC		06/23/2016 15:00	1		DB-624 0.18 (mm)
STD 240-235700/10 IC		06/23/2016 15:22	1		DB-624 0.18 (mm)
STD 240-235700/11 IC		06/23/2016 15:45	1		DB-624 0.18 (mm)
STD 240-235700/12 IC		06/23/2016 16:07	1		DB-624 0.18 (mm)
STD 240-235700/13 IC		06/23/2016 16:30	1		DB-624 0.18 (mm)
ICV 240-235700/15		06/23/2016 16:52	1	UXC9021.D	DB-624 0.18 (mm)
ZZZZZ		06/23/2016 17:15	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 18:00	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 18:23	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 18:45	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 19:08	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 19:30	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 19:53	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 20:15	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 20:37	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 21:00	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 21:22	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 21:45	4		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 22:07	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 22:30	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 22:52	1		DB-624 0.18 (mm)
ZZZZZ		06/23/2016 23:14	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica CantonJob No.: 240-71709-1

SDG No.: _____

Instrument ID: A3UX16Start Date: 09/02/2016 17:51Analysis Batch Number: 245430End Date: 09/03/2016 01:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-245430/1		09/02/2016 17:51	1	BFB4965.D	DB-624 0.18 (mm)
STD8260 240-245430/6 IC		09/02/2016 18:19	1	UXM7645.D	DB-624 0.18 (mm)
STD8260 240-245430/7 IC		09/02/2016 18:42	1	UXM7646.D	DB-624 0.18 (mm)
STD8260 240-245430/8 IC		09/02/2016 19:05	1	UXM7647.D	DB-624 0.18 (mm)
ICIS 240-245430/9		09/02/2016 19:28	1	UXM7648.D	DB-624 0.18 (mm)
STD8260 240-245430/10 IC		09/02/2016 19:51	1	UXM7649.D	DB-624 0.18 (mm)
STD8260 240-245430/11 IC		09/02/2016 20:14	1	UXM7650.D	DB-624 0.18 (mm)
STDA9 240-245430/13 IC		09/02/2016 21:00	1		DB-624 0.18 (mm)
STDA9 240-245430/14 IC		09/02/2016 21:23	1		DB-624 0.18 (mm)
STDA9 240-245430/15 IC		09/02/2016 21:46	1		DB-624 0.18 (mm)
STDA9 240-245430/16 IC		09/02/2016 22:10	1		DB-624 0.18 (mm)
STDA9 240-245430/17 IC		09/02/2016 22:32	1		DB-624 0.18 (mm)
STDA9 240-245430/18 IC		09/02/2016 22:56	1		DB-624 0.18 (mm)
ICV 240-245430/20		09/02/2016 23:42	1	UXM7659.D	DB-624 0.18 (mm)
ICV 240-245430/21		09/03/2016 00:05	1		DB-624 0.18 (mm)
MDLV 240-245430/22		09/03/2016 00:28	1		DB-624 0.18 (mm)
MDLV 240-245430/23		09/03/2016 00:51	1		DB-624 0.18 (mm)
MDLV 240-245430/24		09/03/2016 01:14	1		DB-624 0.18 (mm)
ZZZZZ		09/03/2016 01:38	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica CantonJob No.: 240-71709-1

SDG No.: _____

Instrument ID: A3UX16Start Date: 11/11/2016 10:25Analysis Batch Number: 255306End Date: 11/11/2016 21:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-255306/1		11/11/2016 10:25	1	BFB5052.D	DB-624 0.18 (mm)
CCVIS 240-255306/4		11/11/2016 11:01	1	UXM9301.D	DB-624 0.18 (mm)
LCS 240-255306/5		11/11/2016 11:24	1	UXM9302.D	DB-624 0.18 (mm)
CCV 240-255306/6		11/11/2016 11:48	1	UXM9303.D	DB-624 0.18 (mm)
MB 240-255306/8		11/11/2016 12:34	1	UXM9305.D	DB-624 0.18 (mm)
ZZZZZ		11/11/2016 13:16	50		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 13:40	16.67		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 14:03	50		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 14:27	33.33		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 14:51	500		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 15:14	250		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 15:37	100		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 16:00	2500		DB-624 0.18 (mm)
240-71709-2		11/11/2016 16:23	2.5	UXM9314.D	DB-624 0.18 (mm)
240-71709-3		11/11/2016 16:46	1.25	UXM9315.D	DB-624 0.18 (mm)
240-71709-4		11/11/2016 17:09	1.25	UXM9316.D	DB-624 0.18 (mm)
240-71709-5		11/11/2016 17:32	1	UXM9317.D	DB-624 0.18 (mm)
240-71709-6		11/11/2016 17:56	1	UXM9318.D	DB-624 0.18 (mm)
240-71709-7		11/11/2016 18:19	1	UXM9319.D	DB-624 0.18 (mm)
240-71709-8		11/11/2016 18:42	1	UXM9320.D	DB-624 0.18 (mm)
240-71709-9		11/11/2016 19:05	1	UXM9321.D	DB-624 0.18 (mm)
ZZZZZ		11/11/2016 19:28	16.67		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 19:51	16.67		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 20:14	50		DB-624 0.18 (mm)
ZZZZZ		11/11/2016 20:37	50		DB-624 0.18 (mm)
240-71709-10		11/11/2016 21:23	1	UXM9327.D	DB-624 0.18 (mm)
240-71709-11		11/11/2016 21:46	1	UXM9328.D	DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica CantonJob No.: 240-71709-1

SDG No.: _____

Instrument ID: A3UX15Start Date: 11/14/2016 09:41Analysis Batch Number: 255552End Date: 11/14/2016 21:15

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-255552/1		11/14/2016 09:41	1	BFB61114A.D	DB-624 0.18 (mm)
CCVIS 240-255552/2		11/14/2016 10:04	1	UXC9701.D	DB-624 0.18 (mm)
CCV 240-255552/3		11/14/2016 10:49	1	UXC9703.D	DB-624 0.18 (mm)
LCS 240-255552/4		11/14/2016 11:34	1	UXC9705.D	DB-624 0.18 (mm)
MB 240-255552/6		11/14/2016 12:19	1	UXC9707.D	DB-624 0.18 (mm)
240-71709-1		11/14/2016 12:41	2	UXC9708.D	DB-624 0.18 (mm)
240-71709-12		11/14/2016 13:03	1	UXC9709.D	DB-624 0.18 (mm)
240-71709-13		11/14/2016 13:26	1	UXC9710.D	DB-624 0.18 (mm)
240-71709-14		11/14/2016 13:48	1	UXC9711.D	DB-624 0.18 (mm)
ZZZZZ		11/14/2016 14:11	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 14:33	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 14:56	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 15:18	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 15:41	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 16:03	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 16:25	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 16:48	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 17:10	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 17:32	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 17:55	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 18:17	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 18:39	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 19:02	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 19:24	1		DB-624 0.18 (mm)
240-71709-1 MS		11/14/2016 19:46	2	UXC9727.D	DB-624 0.18 (mm)
240-71709-1 MSD		11/14/2016 20:08	2	UXC9728.D	DB-624 0.18 (mm)
ZZZZZ		11/14/2016 20:31	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 20:53	1		DB-624 0.18 (mm)
ZZZZZ		11/14/2016 21:15	1		DB-624 0.18 (mm)

Shipping and Receiving Documents

TestAmerica Canton Sample Receipt Form/Narrative

 Login # : 77709
Canton Facility

 Client Cardinal Resources Site Name _____

Cooler unpacked by:

Darryl Burns

 Cooler Received on 11/4/16 Opened on 11/4/16
 FedEx: 1st Grd ☒ Exp ☐ UPS ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

 TestAmerica Cooler # _____ Foam Box ☒ ~~Client~~ Cooler ☐ Box ☐ Other _____

 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

 COOLANT: Wet Ice Blue Ice Dry Ice Water None

 1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
 IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp 3.8 °C Corrected Cooler Temp 4.2 °C
 IR GUN #36 (CF +1.3 °C) Observed Cooler Temp _____ °C Corrected Cooler Temp _____ °C

 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 ☒ Yes ☐ No

 -Were custody seals on the outside of the cooler(s) signed & dated? ☒ Yes ☐ No NA

 -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? ☒ Yes ☐ No

 3. Shippers' packing slip attached to the cooler(s)? ☒ Yes ☐ No

 4. Did custody papers accompany the sample(s)? ☒ Yes ☐ No

 5. Were the custody papers relinquished & signed in the appropriate place? ☒ Yes ☐ No

 6. Was/were the person(s) who collected the samples clearly identified on the COC? ☒ Yes ☐ No

 7. Did all bottles arrive in good condition (Unbroken)? ☒ Yes ☐ No

 8. Could all bottle labels be reconciled with the COC? ☒ Yes ☐ No

 9. Were correct bottle(s) used for the test(s) indicated? ☒ Yes ☐ No

 10. Sufficient quantity received to perform indicated analyses? ☒ Yes ☐ No

 11. Are these work share samples? ☒ Yes ☐ No

If yes, Questions 11-15 have been checked at the originating laboratory.

 11. Were sample(s) at the correct pH upon receipt? ☒ Yes ☐ No ☒ NA pH Strip Lot# HC682547

 12. Were VOAs on the COC? ☒ Yes ☐ No ☒ NA

 13. Were air bubbles >6 mm in any VOA vials? ☒ Yes ☐ No NA

 14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered ☒ Yes ☐ No

 15. Was a LL Hg or Me Hg trip blank present? ☒ Yes ☐ No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Part # 156297V-435 RIT2 APV EXP 09/17 ::
5442/25C6/14E8

ORIGIN ID:AVPA (412) 374-0989
BARBARA JONES
CARDINAL RESOURCES
201 PENN CTR BLVD
STE 400
PITTSBURGH, PA 15235
UNITED STATES US

SHIP DATE: 03NOV16
ACTWGT: 37.70 LB
CAD: 006993790/95FE1722
DIMS: 23x13x13 IN
BILL CREDIT CARD

TO DENISE HOWELL
TESTAMERICA
4101 SHUFFEL ST NW

NORTH CANTON OH 44720

(330) 487-8396

INV:
PO:

DEPT:



FedEx
Express



FRI - 04 NOV 3:00P
STANDARD OVERNIGHT

TRK# 7845 3984 7576

0201

ES PHDA

44720
OH-US CLE

