

*2018 Periodic Review Report*

Former Utility Platers and Kingston  
Diagnostics

BCP No. C356035

Schwenck Drive and Washington Avenue  
City of Kingston, Ulster County, New York  
Site County, New York

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Chazen Project No. 41103.00



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## 1.0 EXECUTIVE SUMMARY

On behalf of Woodhaven National Management, LLC, The Chazen Companies, Inc. (Chazen) provides Operations, Maintenance, and Monitoring (OM&M) support for existing remedial systems at the former Utility Platters, Inc./Kingston Diagnostics facility in Kingston, New York (the "Site"). The Site is identified as Brownfield Cleanup Program (BCP) Site No. C356035 and currently houses a CVS pharmacy. A Site Location Map is included as **Figure 1**.

This Periodic Review Report summarizes site conditions and recent on-site treatment system data with respect to the Remedial Action Objectives for the Site and the results, analysis, and conclusions for system operations parameters data and environmental media sampling, collected for the period April 19, 2017 through April 19, 2018. In addition, this 2018 PRR includes the March 2018 results of a limited investigation to further delineate persisting groundwater impacts in the vicinity of well MW-1 and assess potential impact migration onto or off of the CVS site. The Site Management Periodic Review Report Notice and Institutional and Engineering Controls Certification Form, signed appropriately, are attached in **Appendix C**.

### 1.1 Remedial History

The remedy for this site included the 2009 removal of volatile organic compound (VOC) impacted soils from beneath the former on-site Utility Platers building and adjacent areas, the closure and removal of three fuel oil underground storage tanks (USTs) and related petroleum impacted soil, the installation of a sub-slab depressurization (SSDS) system beneath the constructed CVS building, and construction of an impermeable site soil cover system.

### 1.2 Effectiveness of Remedial Program

- Source soil was removed in 2009. Remaining VOC concentrations in soils at the excavation margin were mostly below Part 375 Restricted Residential Use (RRU) Soil Cleanup Objectives (SCOs).
- Post-remedy groundwater monitoring data indicate that remaining impacts have been significantly reduced since implementation of the remedy. CVOC impacts in MW-2 have consistently been less than 50 parts per billion (ppb) since 2015. MW-5 showed an unusual CVOC increase in 2014-2015, that has been decreasing in subsequent sampling events. CVOC concentrations in well MW-1 on the southeastern portion of the site have persistently remained elevated. In Spring 2018, additional groundwater sampling near MW-1 included two new wells (MW-6 and MW-7) and showed the MW-1 concentrations do not appear to be migrating onto or off the Site. The most recent sampling CVOC data are posted on Figure 2 and prior sampling data are provided in **Table 2**.
- Post-remedy indoor air sampling was conducted in March 2017, with results demonstrating continued effectiveness of the SSDS. Based on previous correspondence with NYSDEC allowing a reduced schedule of air sampling, the next routine post-remedy air sample will be collected in March 2022.
- The site cover system remains in place to prevent human or ecological contact with soils or groundwater. The cover system consists of a building footprint and pavement.



### **1.3 Compliance**

The SSDS has been operating as intended/designed, no breaching of the impermeable soil cover has been observed, and groundwater monitoring wells remain operational. The SSDS system was operating normally during the site inspection conducted during this monitoring period.

### **1.4 Recommendations**

Chazen recommends continued semi-annual monitoring of three wells MW-1, MW-2 and MW-5 in accordance with the current monitoring and inspection schedule, sufficient to monitor the continuing VOC attenuation occurring at this Site. We recommend adding new well MW-7 for annual sampling to confirm that CVOCs are not migrating towards the downgradient property boundary.

The SSDS appears to be functioning as designed/expected and no alterations are recommended at this time. As the required frequency of air quality sampling has been reduced to once every five years per the schedule defined in the SMP, the next air quality sample is due in March/April 2022.

Chazen also recommends that the well sampling methodology be switched from standard purging and sampling via dedicated bailers to the USEPA-recognized low-flow sampling technique, utilizing a peristaltic pump and dedicated down-well tubing. Purging a well using a bailer tends to agitate sediments in the well column, which often yields turbid samples. Turbid samples often result in metals concentrations being non-representative of actual groundwater quality since the acid preservative in the sample vessel digests turbidity particles, releasing bound metals into the dissolved phase. Dispensing water from bailers into sample vessels can also entrain air bubbles that can allow for volatilization of VOC compounds. For these reasons, Chazen suggests that low-flow sampling will yield samples that are more representative of site groundwater quality, particularly with respect to metals concentrations.

## 2.0 SITE OVERVIEW

### 2.1 Site Location and Pre-Remedy Conditions

The site is a 1.73-acre parcel located in a commercial area of the City of Kingston, Ulster County, New York. The site is bounded by Schwenck Drive to the north, Trailways Bus Terminal to the south, Esposito's Dry Cleaning to the east, and Washington Avenue to the west. The current main site features include one commercial retail building occupied as a CVS retail store and pharmacy. A Site Layout Map is included as **Figure 2**. The site formerly contained a masonry block structure known as Utility Platers and a commercial medical office building known as Kingston Diagnostics.

Prior uses of the Site, primarily handling/storage/disposal practices at the former Utility Platers facility, appear to have resulted in impacts to on-site soils and groundwater from the release of the chlorinated solvents trichloroethylene (TCE). TCE as well as daughter products 1,2-dichloroethylene (1,2-DCE) and vinyl chloride (VC) are now present on site. Groundwater impacts extended from the Utility Platers parcel onto the adjacent Kingston Diagnostics parcel, both of which were combined to form the BCP site currently occupied by the CVS retail/pharmacy facility.

### 2.2 Chronology of Remedial Program

The site remedy was implemented by DT Consulting Services, Inc. in accordance with the NYSDEC-approved Interim Remedial Measure Work Plan dated July 2009. The following is a summary of Remedial Actions and IRMs performed at the site in the BCP:

- Excavation of soil and fill exceeding Restricted-Residential Use (RRU) Soil Cleanup Objectives (SCOs) encountered during historical site investigations including during the remedial investigation (RI). Impacted materials were excavated from areas beneath and downgradient of the former Utility Platers facility to a depth of 10 to 12 feet below the ground surface (bgs) totaling 4,563 tons of material excavated and removed from the site (September 2009).
- Closure and removal of three No. 2 fuel oil underground storage tanks (USTs) and excavation and removal of approximately 350 tons of related petroleum-impacted soil (September 2009).
- Installation of a Sub-slab Depressurization System (SSDS) to remove VOC vapors from beneath the newly completed site structure (June 2010).
- Construction and maintenance of a soil cover system consisting of asphalt pavement to prevent infiltration of storm water into the plume area, to prevent human exposure to remaining impacted soil/fill at the site, and to extend an impermeable surface over the SSDS footprint for vapor control optimization.
- Execution and recording of an Environmental Easement to restrict land use to prevent future human and environmental exposure to residual site contaminants.
- Development and implementation of a Site Management Plan (SMP) for long term management of remaining impacts as required by the Environmental Easement including: 1) Institutional and Engineering Controls; 2) Monitoring; 3) Operation and Maintenance of the SSDS; and 4) Reporting.

These remedial activities were completed at the site between September 2009 and October 2010.

### 3.0 REMEDY PERFORMANCE, EFFECTIVENESS AND PROTECTIVENESS

In addition to the routine monitoring, this section presents the results of a limited investigation conducted near MW-1, that included the installation of two soil borings with associated monitoring wells. These new wells were sampled during the March 2018 semi-annual routine event for the site.

#### 3.1 Limited Investigation Near MW-1

Chazen conducted a one-day subsurface investigation in the area of MW-1 on March 1, 2018, to assess the extent of CVOC impacts in this area. Chazen contracted with Core Down Drilling (CDD) of Brewster, New York to provide drilling services. Prior to beginning the investigation, CDD contacted Dig Safely New York to mark the locations of buried public utilities on the site. Boring locations were adjusted as needed based on utilities indicated by Dig Safe markings.

Two soil borings were installed during this limited investigation (see **Figure 2**):

- One boring (CB-1) was installed to the south-southwest of well MW-1, near the southern property line, to assess if the recently fluctuating CVOC concentrations may be attributable to an off-Site upgradient source.
- The second boring (CB-2) was placed northeast and downgradient of MW-1, near the western property line, to assess potential off-site migration from the MW-1 area.

These two soil borings were installed with a Geoprobe® Model 7822 DT direct-push drilling rig and were extended to a depth of 30 feet, based on the depth of nearby well MW-1. Soil samples were collected using a Macro Core sampler and dual-tube setup in 5-foot intervals.

Chazen collected soil samples from each interval for visual classification and field screening with a photoionization detector (PID). The physical characteristics, including grain size, color, PID reading, etc., of each soil sample were logged on boring log forms along with general observations including the presence of staining, odors, fill material and wastes, as appropriate.

To obtain PID measurements from soil core samples, the acetate liner surrounding each sample was opened and a representative portion of the soil was collected into a new re-sealable storage bag (e.g., Ziploc). The reserved sample was then screened with the PID and the instrument readings recorded on the field boring log form, along with sample depth. Boring logs are attached in **Appendix A**.

One soil sample from each boring was collected for laboratory analysis. The interval chosen for analysis from both borings (CB-1 and CB-2) was the bottom interval (25 to 30 feet below grade), as no field evidence of impacts (visual/olfactory markers or elevated PID readings) was noted. This interval was chosen since CVOCs are denser than water and tend to sink. The soil samples selected for analysis were collected into laboratory-provided sample vessels. Aliquots for VOC analysis were obtained using disposable TerraCore samplers and preserved in laboratory-prepared 40 mL vial sets.

Both soil borings were finished as a one-inch diameter monitoring wells. Boring CB-1 was converted into well MW-6, while boring CB-2 was converted into well MW-7. Schedule 40 threaded flush-joint polyvinyl chloride (PVC) piping was used to construct the wells, with 0.010-inch (10-slot) screen extending from the base of the boring to two to three feet above the observed water table and solid PVC riser extending from

the top of the well screen to grade. Silica sand filtration media was installed in the annular space around the well screen from the base of the boring/well to two feet above the top of the well screen. A two to three-foot thick seal of hydrated granular bentonite was installed atop the silica sand, and the balance of the annular space was backfilled to grade with unimpacted soil cuttings. Each well was topped with a compression plug (J-Plug), and cast-iron roadboxes were installed flush-to-grade to protect the wells. Representative photographs of the drilling and well installation process are attached in **Appendix B**.

The two new monitoring wells were developed on March 5, 2018 by flushing sediments within the well columns using a surge block and evacuating purged water using a bailer or peristaltic pump. Groundwater was removed until the water cleared visibly. In the case of both wells, ten well volumes were removed. Following completion of the development procedure, each well was allowed to recharge to 90% of the static water column prior to sampling during the March semi-annual event. Samples were collected via bailer/peristaltic pump into laboratory-provided glassware for analysis of VOCs. These samples were packed on ice and transported by laboratory courier to York Analytical Laboratories of Stratford, Connecticut for analysis. Field data sheets from the well development and sampling activities are included in **Appendix A**.

Consistent with the NYSDEC-approved work plan, quality assurance/quality control (QA/QC) sampling included one groundwater field duplicate, one equipment blank, and one trip blank. The duplicate groundwater sample was a separate sample set taken from well MW-6. The equipment blank was collected by pouring laboratory-supplied, deionized water over and through the decontaminated Macro Core sampler's cutting shoe and into the appropriate sample containers. The laboratory supplied trip blank accompanied the sample containers from the laboratory, to the field, and back to the laboratory.

The soil, groundwater, and QA/QC samples collected during this investigation were analyzed for the Target Compound List (TCL) of VOCs by USEPA Method 8260.

Chazen also used a survey transit to provide level run elevation data for the two new wells so that an updated groundwater contour map could be prepared using the expanded site-wide groundwater monitoring well network (see **Figure 3**). Based on these groundwater elevations, the flow of groundwater across the site continues to be generally west to east and appears to trend slightly north of east nearer the east end of the site. These data suggest that well MW-6 lies slightly hydraulically upgradient of MW-1, while well MW-7 appears to be hydraulically equivalent to MW-1 despite being approximately five feet topographically lower than MW-1.

### 3.1.1 Soil Sample Results

Soils from the two soil borings did not exhibit field (visual or olfactory) indications of impacts. PID readings collected from each soil boring interval identified either no volatile organic compounds or de minimis readings (less than 1.0 ppm) interpreted to be humidity interference.

Soil sample data from the two soil samples were compared to the Title 6 New York Codes Rules and Regulations (NYCRR) Part 375 Soil Cleanup Objectives (SCOs) for both Unrestricted and Commercial Use. Soil analytical results are summarized in **Table 3** and the laboratory analytical report is included in **Appendix D**.

Analytical results for the two soil samples were less Unrestricted Use SCOs.

Trace levels of acetone and/or methylene chloride were reported, but are common laboratory contaminants and not considered Site contaminants.

### 3.1.2 Groundwater Sample Results

Groundwater samples collected from the two new monitoring wells exhibited no field (visual or olfactory) indications of impacts.

Groundwater sample data were compared to the NYSDEC Part 703 and TOGS 1.1.1 Class GA Groundwater Standards. Groundwater analytical results are summarized in **Table 4** and the laboratory analytical report is included in **Appendix D**.

Analytical results for the two groundwater samples identified three CVOCs in excess of the groundwater quality standards, as shown in the hit summary table below:

Analyte	Units	TOGS 1.1.1 Groundwater Quality Standard	KC-MW-06	KC-MW-07
<i>cis</i> -1,2-Dichloroethylene	µg/L	5	<b>12</b>	<b>11</b>
Trichloroethylene	µg/L	5	<b>26</b>	<b>39</b>
Vinyl Chloride	µg/L	2	0.23 J	<b>2.90</b>

NOTES: 1) Compounds detected at concentrations exceeding the applicable NYSDEC TOGS 1.1.1 Groundwater Quality Standard are highlighted. 2) The flag 'J' indicates that this compound was detected at a concentration above the method detection limit (MDL) but below the Reporting Limit (RL). The posted concentration is therefore estimated.

Trace concentrations of several other compounds (1,1-dichloroethane; 1,1-dichloroethylene; 1,1,1-trichloroethane; chloroform; *tert*-butyl alcohol (TBA); and *trans*-1,2-dichloroethylene) were also reported, but at concentrations less than their respective groundwater quality standards.

A trace level of acetone was also reported in the MW-6 sample, but this is a common laboratory contaminant and not considered a Site contaminant.

CVOC concentrations in MW-6 and MW-7 are two to three orders of magnitude less than those routinely reported in nearby well MW-1, with total CVOCs or 38.90 ppb for MW-6 and 58.57 ppb for MW-7. The MW-6 and MW-7 results are more consistent with historic data from other existing on-site wells MW-2 and MW-5. As such, the groundwater data for the two new wells do not indicate an off-site upgradient source is causing the increase in CVOCs in MW-1, and do not indicate that elevated CVOCs are migrating off-Site.

### 3.1.3 Quality Control Sample Results

The equipment blank results indicate that decontamination procedures were sufficient to prevent cross-contamination. The trip blank results indicate that sample vessel handling and shipping procedures were sufficient to prevent cross-contamination.

The groundwater field duplicate results were used to evaluate sample precision, which is demonstrated if duplicate values are within 20% of the primary sample value. The table below provides relative percent difference (RPD) values for detected VOCs. The RPD was well below 20% for the detected VOCs with one exception: vinyl chloride which had an RPD of 35.7%. Since vinyl chloride concentrations are estimated, greater variation and therefore higher RPD are expected.

Analyte	Units	KC-MW-06	KC-MW-DUP	Average	RPD
1,1-dichloroethane	µg/L	0.290 J	0.320 J	0.305	9.8 %
1,1,1-trichloroethane	µg/L	0.380 J	0.390 J	0.385	2.6 %
<i>cis</i> -1,2-dichloroethylene	µg/L	12	13	12.5	8.0 %
<i>trans</i> -1,2-dichloroethylene	µg/L	0.380 J	0.380 J	0.380	0.0 %
Trichloroethylene	µg/L	26	27	26.5	3.8 %
Vinyl Chloride	µg/L	0.230 J	0.330 J	0.280	35.7 %

The laboratory has been instructed to provide ASP Class B deliverable packages so data can be validated by a third-party validation firm. The Class B deliverable and Data Usability Summary Report (DUSR) have been received and are attached to this report in **Appendix D**. Modifications to the results from the DUSR have been placed in the data tables as well. Data from this investigation has also been submitted to NYSDEC electronically via the EQUIS system.

### 3.2 Routine Groundwater Monitoring

Routine groundwater monitoring was conducted in accordance with the Department-approved SMP dated September 2010, the Certificate of Completion (COC) dated December 3, 2010 and correspondence from NYSDEC dated September 18, 2013. Semi-annual monitoring events included the collection and analysis of groundwater from three on-site monitoring wells (MW-1, MW-2, and MW-5 – **Figure 2**).

Groundwater samples were collected on November 13, 2017 and March 5, 2018, using methodologies consistent with the approved Field Sampling Plan. The field sampling sheets are in **Appendix A**. Samples were collected in laboratory-provided sample jars and immediately chilled. Duplicate samples were also collected from MW-1 during both sampling events.

The groundwater samples were analyzed for VOCs via USEPA Method 8260 and for priority pollutant metals via USEPA Methods 6010 and 7473. The SMP also included the sampling of semi-volatile organic compounds (SVOCs); however, based on the general absence of SVOCs detected in historic groundwater samples and the low solubility of SVOCs in groundwater, the Department previously agreed to exclude SVOCs analyses from the post-COC sampling events. The laboratory provided ASP Category B deliverable data packages, which were submitted for data validation to DATAVAL, Inc. of Endwell, New York. The laboratory reports and DUSRS are attached electronically in **Appendix D**.

**Table 2** compares groundwater sampling results to groundwater quality standards and total CVOC concentrations are shown on **Figure 2**. Post-remedy groundwater monitoring data indicate that remaining impacts have been significantly reduced since implementation of the remedy.

- MW-1 showed a few unusual CVOC spikes between 2014 and 2017, that were followed by decreased concentrations. Following the November 2017 results, an additional investigation was conducted (see Section 3.1) and results did not identify an off-Site source of CVOCs or indicate that Site impacts were migrating off-Site.

- Total CVOC concentrations in MW-2 have consistently been less than 50 ppb since 2015.
- MW-5 showed CVOC fluctuations in 2014 and 2016 that were followed by decreased concentrations. Total CVOC concentrations in MW-5 have consistently been less than 100 ppb for the last three sampling events.

Analytical results show some metals concentrations greater than groundwater quality standards but generally within historic ranges for these analytes. Previous dissolved metals analyses show correlation between sample turbidity and metal concentrations, suggesting most elevated metals likely derive from turbidity particles rather than site groundwater. Selenium concentrations were slightly greater than historic ranges in the three wells.

### **3.3 Site Inspection and Sub-Slab Depressurization System**

The SSDS system has operated nearly continuously since start-up in 2010. Chazen used a photo-ionization detector (PID) to screen the bulk concentration of VOCs in the airstream during the November 2017 and March 2018 site visits, and results were 0.0 ppm for both events. The recorded bulk VOC concentration was below the detection limit of the instrument, limiting plausible continuing venting concentrations to the high ppb concentrations at most. The next routine post-remedy air sample will be collected in March 2022.

## 4.0 INSTITUTIONAL CONTROL/ENGINEERING CONTROL COMPLIANCE REPORT

### 4.1 IC/EC Requirements and Compliance

The following IC/ECs are in place at the site:

1. A Composite Cover System- exposure to remaining contamination in soil/fill at the site is prevented by a combination of a minimum of 24 inches of clean soil, asphalt pavement, concrete sidewalks or the concrete building slab. The visual integrity of this system is reviewed during each annual site inspection and noted on a Site Inspection Report (**Appendix A**). An Excavation Work Plan presented in the SMP outlines procedures required in the event that the cover system is observed to be breached, penetrated, or any underlying contaminated material is disturbed. Based on the March 2018 inspection, the cover appears to be in-place and does not appear to have been breached.
2. SSDS- An active SSDS was installed on the property in 2010 and contains a blower unit continuously depressurizing a sub-slab gravel layer with slotted PVC piping. The blower vents through the roof of the building, continuously vacuuming air from beneath the sub-slab to draw any impacted air past occupied spaces. Procedures for operating and maintaining the SSDS are documented in the O&M Plan of the SMP. The SSDS is evaluated through an annual inspection of the system and through collection of an air quality sample once every five years. Copies of the annual system inspection forms are included in **Appendix A** and a figure of the SSDS design is included as **Figure 4**.
3. Groundwater Monitoring-Monitored Natural Attenuation – Post-remedy groundwater monitoring activities to assess ongoing natural attenuation are conducted semi-annually, and will continue until residual groundwater concentrations are less than groundwater quality standards or become asymptotic at an acceptable level to the NYSDEC. This report documents groundwater monitoring results.
4. The property may be used for “Restricted-residential use,” “Commercial use” and/or “Industrial use” as described within 6 NYCRR Part 375-1.8(g)(2)(ii), (iii) and (iv). The property continues to be used for commercial purposes.
5. Data and information pertinent to the SMP of the Controlled Property must be reported at the frequency and manner defined in the SMP. This report provides the required annual PRR submittal.
6. Access to the Site must be provided to agents, employees or other representatives of the state of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.

### 4.2 IC/EC Certification

The EC/IC Certification forms are included in **Appendix C**.



## 5.0 MONITORING PLAN COMPLIANCE REPORT

### 5.1 Components of the Monitoring Plan

The Monitoring Plan included sampling of five existing groundwater monitoring wells on a semi-annual basis for the first two years following completion of remedial activities in late 2010, annual sampling of indoor air and SSDS discharge for the first five years followed by sampling every five years thereafter until year 15, and annual visual inspection of the impermeable cover system. NYSDEC authorized the decommissioning of monitoring wells MW-3 and MW-4 in 2013, and reduced the indoor air sampling frequency to every five years in 2015. The remaining monitoring plan components are as follows:

1. Three monitoring wells (MW-1, MW-2 and MW-5) monitor up- and down-gradient conditions at the site. Groundwater sampling is typically conducted semi-annually in March/April and October/November. Well sampling activities are logged on field data sheets (**Appendix A**), which serve as the inspection form for the well network. Groundwater samples are analyzed for VOCs and priority pollutant metals. Wells are inspected during each sampling event. If an event renders the wells unusable, or if the approval is granted that well sampling is no longer required, they will be properly decommissioned and/or replaced. The NYSDEC will be notified prior to any well repair or decommissioning.
2. SSDS discharge monitoring is performed at least annually, by taking a PID reading of the effluent. IAQ sampling is conducted once every five years, during the heating season. Sampling activities for the SSDS are recorded in the designated field book and field logs. IAQ samples are analyzed for VOCs via USEPA Method TO-15. In addition, the SSDS system is inspected periodically to determine if it is functioning properly, if there is foundation damage or building defects that could reduce its effectiveness, and to assess blower conditions. The next indoor air sample will be collected in March 2022.
3. A site-wide inspection of the facility is conducted at least annually in April as well as after a severe weather condition that may affect ECs or monitoring devices. An inspection form is completed after each inspection (**Appendix A**). The inspection assesses compliance with ICs and site usage; condition and continued effectiveness of ECs; general site conditions, site management activities being conducted, and compliance with the O&M Plan.

### 5.2 Summary of Monitoring Completed During Reporting Period

Monitoring completed during the reporting period (November 2017 and March 2018) has included two groundwater sampling events of the three remaining on-site wells, two inspections of the SSDS and two site-wide inspections. This report also includes results of an additional investigation (see Section 3.1). Groundwater sampling points are depicted on **Figure 2**. **Table 1** provides groundwater elevations for each sampling event. **Table 2** shows available pre-remediation groundwater data (2009), and post-remediation groundwater sampling data to the present. Field sampling sheets and copies of the Site-Wide Inspection Forms and SSDS Inspection Forms are attached in **Appendix A**.

### 5.3 Comparisons with Remedial Objectives

#### Soil

- Post excavation sampling completed during the remedy and IRMs confirmed that Track 4 Restricted Residential SCOs were met for most post-excavation soil samples. Post-excavation soil sampling revealed that most remaining soil met Restricted Residential SCOs.
- Soil samples obtained from CB-1 (MW-6) and CB-2 (MW-7) during the March 2018 limited investigation did not identify CVOCs concentrations exceeding Part 375 SCOs.

#### Groundwater

- Dissolved CVOCs in sampled monitoring wells remain above groundwater standards (**Table 2**).
- MW-1 showed a few unusual CVOC spikes between 2014 and 2017, that were followed by decreased concentrations. Following the November 2017 results, an additional investigation was conducted (see Section 3.1) and results from new wells MW-6 and MW-7 did not identify an off-Site source of CVOCs or indicate that Site impacts were migrating off-Site. This well exhibits significant chatter in CVOC concentrations which warrants further observation.
- Total CVOC concentrations in MW-2 have consistently been less than 50 ppb since 2015, with 1,2-DCE and Vinyl Chloride remaining at low concentrations slightly greater than their respective groundwater quality standards.
- MW-5 showed CVOC fluctuations in 2014 and 2016 that were followed by decreased concentrations. Total CVOC concentrations in MW-5 have consistently been less than 100 ppb for the last three sampling events.
- Analytical results show some metals concentrations greater than groundwater quality standards but generally within historic ranges for these analytes. Previous dissolved metals analyses show correlation between sample turbidity and metal concentrations, suggesting most elevated metals likely derive from turbidity particles rather than site groundwater. Selenium concentrations were slightly greater than historic ranges in the three wells.

#### Indoor Air

- The SSDS system was last inspected in March 2018 and appears to be functioning normally. The next air quality sample event is due to be conducted in March 2022.

### 5.4 Monitoring Deficiencies

No monitoring deficiencies were identified during the sampling and reporting period.

### 5.5 Conclusions and Recommendations for Changes

Chazen recommends continued monitoring of wells MW-1, MW-2 and MW-5 in accordance with the current monitoring and inspection schedule, sufficient to monitor the continuing VOC attenuation

occurring at this Site. We recommend adding new well MW-7 for annual sampling to confirm that CVOCs are not migrating towards the downgradient property boundary.

Indoor air quality sampling once every five years (next event March 2022) should be maintained as well as general O&M of the site's paved surfaces.

Chazen also recommends that the well sampling methodology be switched from standard purging and sampling via dedicated bailers to the USEPA-recognized low-flow sampling technique, utilizing a peristaltic pump and dedicated down-well tubing. Purging a well using a bailer tends to agitate sediments in the well column, which often yields turbid samples. Turbid samples often result in metals concentrations being non-representative of actual groundwater quality since the acid preservative in the sample vessel digests turbidity particles, releasing bound metals into the dissolved phase. Dispensing water from bailers into sample vessels can also entrain air bubbles that can allow for volatilization of VOC compounds. For these reasons, Chazen suggests that low-flow sampling will yield samples that are more representative of site groundwater quality, particularly with respect to metals concentrations.

## **6.0 OPERATION AND MAINTENANCE (O&M) PLAN COMPLIANCE REPORT**

### **6.1 Components of the O&M Plan**

The O&M Plan presented in the SMP includes the steps necessary to operate and maintain the on-site SSDS and include an O&M contingency plan. Non-mechanical ECs (i.e., soil cover system) are discussed in the EC/IC Control Plan.

The SSDS has operated at the site continuously since start-up on May 15, 2010. The system includes a vapor barrier, gravel layer, slotted vent pipe network, riser pipe with roof vent and in-line fan. The system must remain powered at all times to operate successfully and a control box is locked securely to prevent unauthorized shut off.

Routine operation of the blower unit includes ensuring availability of a continuous power source to the blower motor and confirmation that the piping does not leak or have blockages. Routine equipment maintenance is to be conducted as needed and includes annual inspection and cleaning of the vapor riser pipe outlets, and collection and analyses of air quality samples per the annual sampling schedule. Non-routine equipment maintenance would include cutting through the concrete floor slab to install new equipment or make other building modifications to maintain the integrity and performance of the SSDS. In the event of a non-routine condition (i.e., system damage or reduced effectiveness which would initiate a red warning light, and/or system component replacements), the Site owner will notify the NYSDEC within 24 hours and proceed with the needed maintenance and/or repair.

### **6.2 Summary of O&M Completed During Reporting Period**

SSDS inspections were conducted in November 2017 and March 2018. No deficiencies in the system were noted which required maintenance or repair from the prior March 2017 inspection to the current period.

### **6.3 Evaluation of Remedial Systems**

Based on the results of the annual monitoring of the SSDS, the SSDS appears to be performing as designed/expected.

### **6.4 O&M Deficiencies**

No O&M deficiencies were noted during the reporting period.

### **6.5 Conclusions and Recommendations for Improvement**

The SSDS appears to be functioning as designed/expected. There are no recommendations for changes to the O&M Plan at this time.

## **7.0 OVERALL PERIODIC REVIEW REPORT CONCLUSIONS AND RECOMMENDATIONS**

### **7.1 Compliance with the Site Management Plan**

IC/ECs in place at the site include an active SSDS and an impermeable cover system.

- Inspection of the SSDS during November 2017 and March 2018 indicate that the SSDS is operating as designed/expected. No maintenance of the system has occurred or was found to be necessary during the reporting period.
- Site-wide inspections conducted in November 2017 and March 2018 indicate that groundwater monitoring wells are in place and in good condition and that no visible breaches in the impermeable cover were noted. In addition, the site is currently occupied as a CVS retail store and pharmacy which is in compliance with the allowed uses of the site.
- Groundwater monitoring was conducted in November 2017 and March 2018. The SMP schedule has been satisfied for this monitoring period.

### **7.2 Performance and Effectiveness of the Remedy and Recommendations**

- Semi-annual groundwater monitoring suggests that remaining impacts have been significantly reduced since implementation of the remedy, with some fluctuations in CVOC concentrations.
- SSDS monitoring and air quality results indicate that the SSDS is working effectively.

The combined results of the site inspection, groundwater sampling, and annual SSDS inspection suggest that the remedy continues to protect the environment and public health. November 2017 and March 2018 groundwater quality data indicate conditions remain stable (MW-2) or continue significant decreases noted in previous reports (MW-5). Well MW-1 results identified a spike in November 2017 followed by a significant decrease in March 2018 and warrant further observation. Results of a limited investigation in the area of MW-1 conducted in March 2018 suggest that impacts noted in MW-1 appear confined to a limited area around MW-1 and do not appear to be migrating onto or off of the Site. Chazen recommends performing scheduled semi-annual sampling in October/November 2018 and March/April 2019.

As described in Section 5.5 (above), Chazen recommends adding well MW-7 to the routine monitoring program, to be sampled annually for TCL VOCs. Chazen also recommends changing the sampling methodology from purging/sampling via dedicated bailer to the USEPA-recognized low-flow sampling technique using a peristaltic pump. Chazen suggests that this change would yield samples more representative of site groundwater quality, particularly with respect to metals.

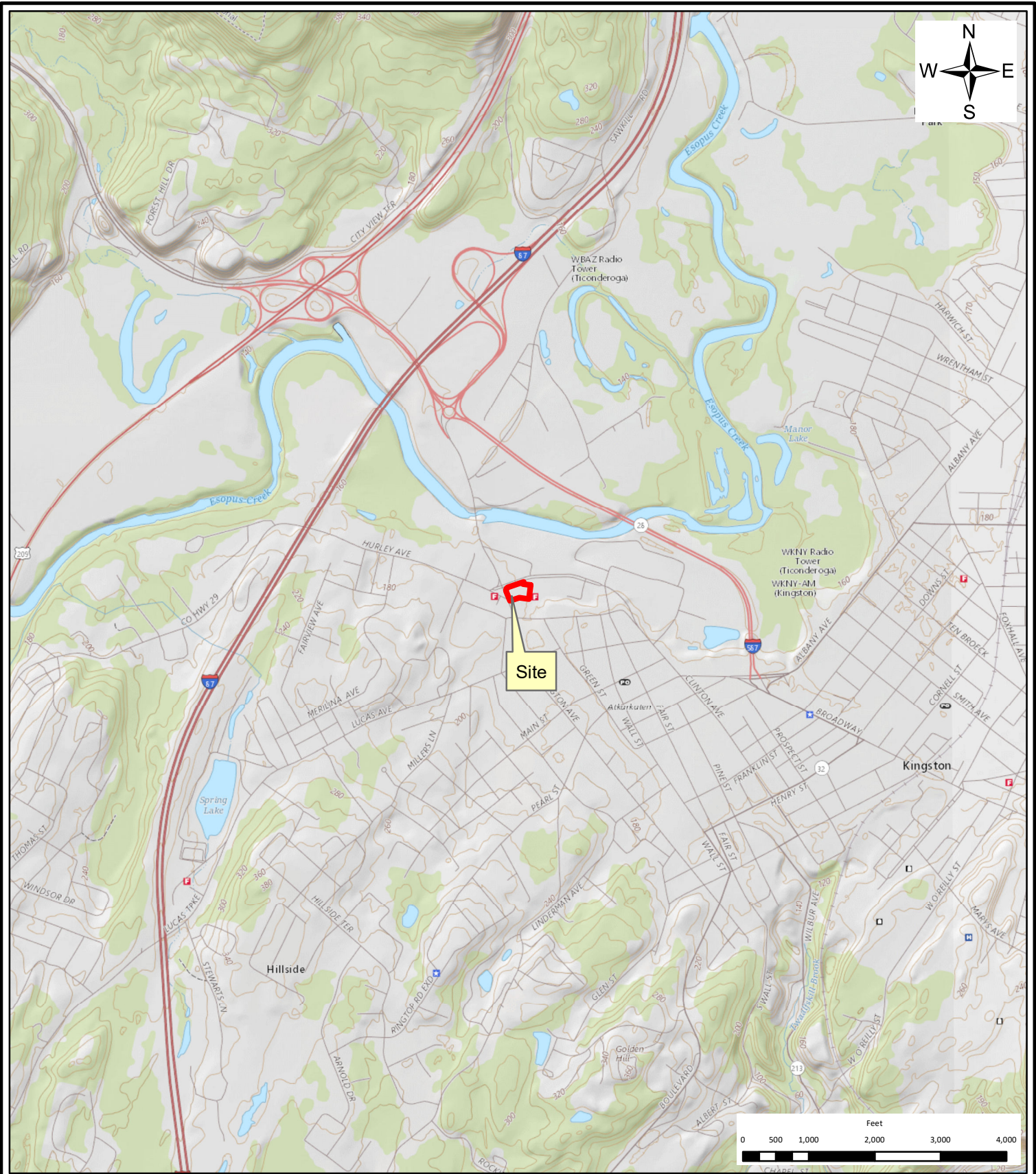
No other recommendations for changes to the O&M or monitoring plans are warranted at this time.

### **7.3 Future PRR Submittals**

Monitoring for the eighth reporting period will include semi-annual groundwater monitoring SSDS monitoring, and a site-wide inspection. An annual report will be submitted to the NYSDEC for these events in May 2019.

## FIGURES





**Former Utility Platers/Kingston Diagnostics Site**

**Figure 1: Site Location Map**

167 Schwenck Drive  
 City of Kingston, Ulster County, New York

THE  
**Chazen**  
 COMPANIES  
Proud to be Employee Owned  
 Engineers  
 Land Surveyors  
 Planners  
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**Dutchess County Office:**  
 21 Fox Street, Poughkeepsie, NY 12601  
 Phone: (845) 454-3980

**Capital District Office:**  
 547 River Street, Troy, NY 12180  
 Phone: (518) 273-0055

**North Country Office:**  
 375 Bay Road, Queensbury, NY 12804  
 Phone: (518) 812-0513



Drawn:	EJO
Date:	November 2017
Scale:	1:24,000
Project:	41103.00
Figure:	1



NOTE: Total CVOC concentrations posted on this figure are based on results of samples collected 3/05/2018.



**LEGEND**

-  Existing Monitoring Well (Total CVOCs)
-  New Soil Boring / Monitoring Well (03/2018) (Total CVOCs)



**Dutchess County Office:**  
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Phone: (518) 812-0513

**Former Utility Platers/Kingston Diagnostics Site**

**Figure 2: Site Layout Map**

167 Schwenck Drive  
City of Kingston, Ulster County, New York

Source: i-Cubed Nationwide Prime orthoimagery program eData, accessed 4/05/2018;  
Ulster County Office of Real Property Services tax parcel data, 2009;  
other site features mapped by Chazen based on field work conducted 2011-2018.

Drawn:	EJO
Date:	April 2018
Scale:	1:600
Project:	41103.00
Figure:	2



NOTE: groundwater elevations were calculated based on depths to water measured on March 5, 2018.



**LEGEND**

- Existing Monitoring Well (Relative Groundwater Elevation)
- New Soil Boring / Monitoring Well (03/2018) (Relative Groundwater Elevation)
- Groundwater Elevation Isopleth



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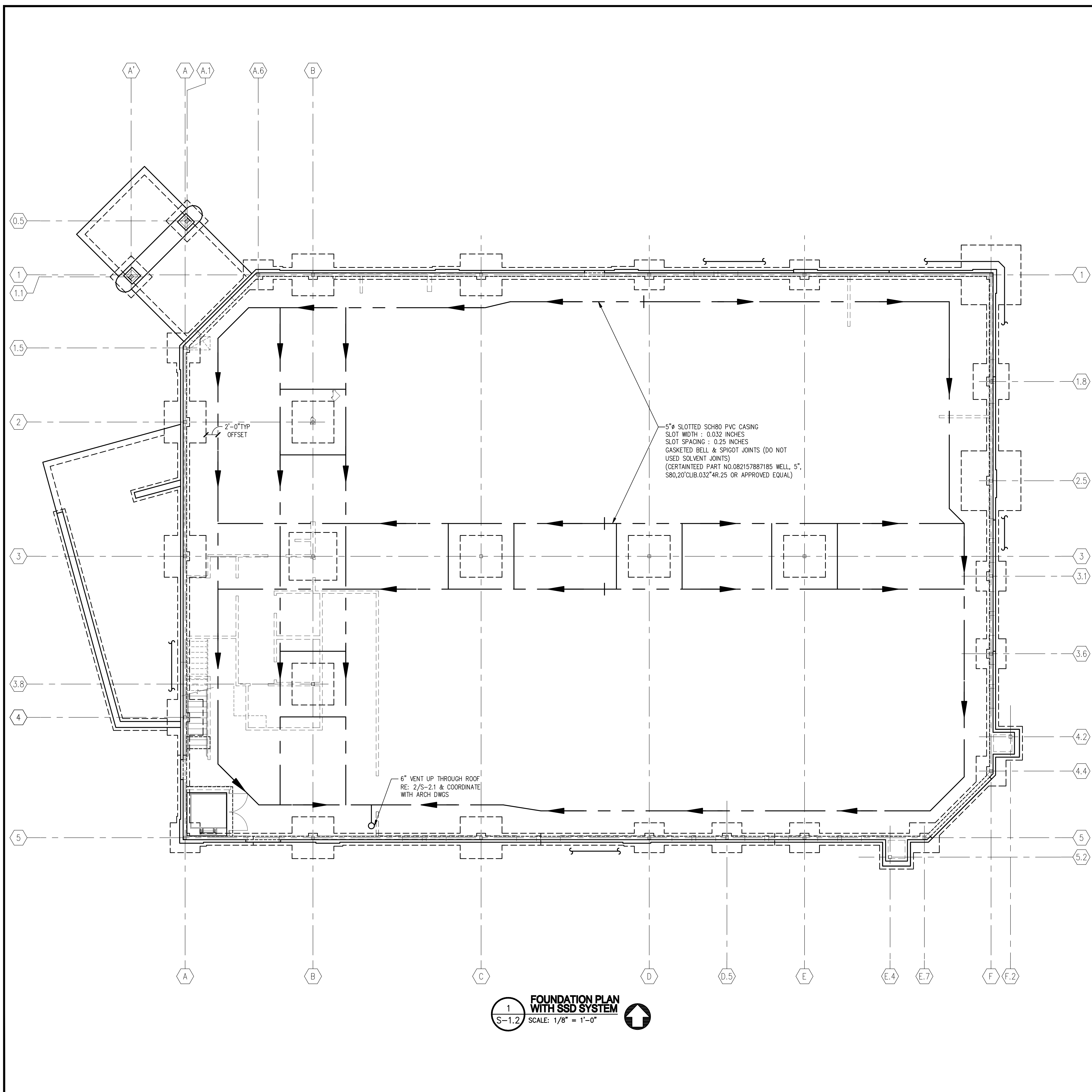
**Former Utility Platers/Kingston Diagnostics Site**

**Figure 3: Groundwater Contour Map**

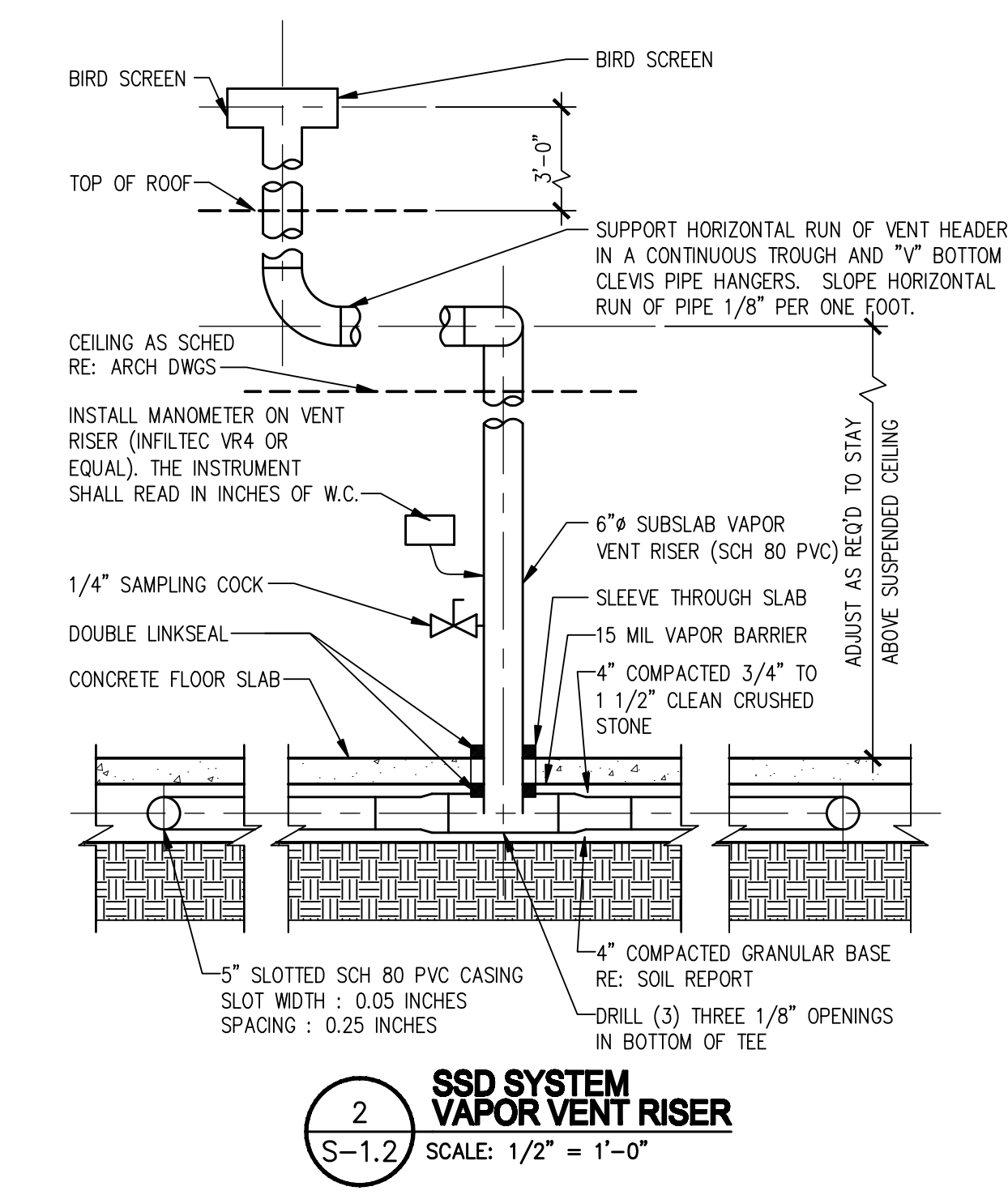
167 Schwenck Drive  
 City of Kingston, Ulster County, New York

Source: i-Cubed Nationwide Prime orthoimagery program eData, accessed 4/05/2018;  
 Ulster County Office of Real Property Services tax parcel data, 2009;  
 other site features mapped by Chazen based on field work conducted 2011-2018.

Drawn:	EJO
Date:	April 2018
Scale:	1:600
Project:	41103.00
Figure:	3



1  
S-1.2 FOUNDATION PLAN WITH SSD SYSTEM  
SCALE: 1/8" = 1'-0"



2  
S-1.2 SSD SYSTEM VAPOR VENT RISER  
SCALE: 1/2" = 1'-0"

NOTE: FOOTINGS ARE CENTERED ON COLUMNS, UNO



**Larson Design Group**

1000 Commerce Park Drive  
Suite 201  
Williamsport, PA 17701  
Phone: 570.323.6603  
Fax: 570.323.9902  
www.larsondesigngroup.com

ARCHITECTS ENGINEERS SURVEYORS

SEAL:



12900  
9.1.06  
TYPE A  
PROJECT TYPE: NEW  
STORE NUMBER: 8945  
WASHINGTON AVE. & SCHWENK DR. (SEC)  
KINGSTON, NY 12401

DEVELOPER:

NORTHEAST RETAIL LEASING  
& MANAGEMENT CO.  
360 BLOOMFIELD AVE.  
SUITE 303  
WINDSOR, CT 06095  
TEL (860) 683-9000  
FAX (860) 683-1600

REVISIONS:

LAYOUT COORDINATOR: T. MARTIN

CONSTRUCTION MGR. B. FLANNERY

DRAWING BY: RLH

DATE: 13 JUL 2009

JOB NUMBER: 6544-002

TITLE:  
SUB-SLAB  
DEPRESSURIZATION SYSTEM

SHEET NUMBER:

**S-1.2**

COMMENTS:

BID DOCUMENT

Figure 4- SSDS Layout

## **TABLES**

**Table 1: Monitoring Well and Groundwater Elevations**

BCP Site No. C356035 - Former Utility Platers and Kingston Diagnostics (Current CVS Building)

Washington Avenue and Schwenck Drive, City of Kingston, Ulster County, New York

Well ID	Top of Casing Elevation (feet AMSL)	Groundwater Elevation (feet AMSL)													
		4/20/2011	10/20/2011	3/27/2012	10/9/2012	3/11/2013	10/25/2013	3/26/2014	10/3/2014	4/6/2015	10/16/2015	3/16/2016	3/23/2017	11/13/2017	3/5/2018
MW-1	164.70	150.47	150.36	149.80	149.67	150.26	149.61	150.67	148.91	149.86	149.29	148.43	149.55	149.32	150.51
MW-2	160.56	148.06	148.02	143.37	143.91	145.70	142.34	147.19	145.02	145.06	143.00	143.23	146.45	142.96	147.72
MW-3	158.75	153.17	153.32	151.54	152.03	151.72	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	168.32	162.40	162.48	161.75	161.80	162.10	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5	162.51	155.67	155.88	154.03	154.14	154.08	153.47	154.57	152.92	153.81	154.21	153.88	154.89	153.94	154.29
MW-6	165.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	151.05
MW-7	159.93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	150.51

NOTES:

- 1) AMSL = Above Mean Sea Level
- 2) Top of Casing Elevations were obtained from a site survey map dated June 2, 2010, created by Brinner and Larios.
- 3) NA - groundwater elevation not applicable, as well was abandoned.



**Table 2: Groundwater Monitoring Data**  
 BCP Site No. C356035 - Former Utility Platers and Kingston Diagnostics Site (Current CVS Building)  
 Washington Avenue and Schwenk Drive, City of Kingston, Ulster County, New York

Sample Location			MW-2																
Sample Date			12/23/2009	4/20/2011	10/20/2011	3/27/2012	10/9/2012	10/9/2012 (DUP)	3/11/2013	10/25/2013	3/26/2014	10/3/2014	4/6/2015	10/16/2015	3/16/2016	3/23/2017	11/13/2017	3/5/2018	
Analyte	Units	Part 703 Groundwater Standard	Pre-Remedy Results	Post-Remedy Results															
EPA Method 8260 Volatile Organic Compounds	ug/L	1,1,1,2-Tetrachloroethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		1,1,1-Trichloroethane	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,1,2-Tetrachloroethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,1,2-Trichloroethane	1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,1-Dichloroethane	5*	ND	1.1 J	1.3 J	1.3 J	1.7 J	1.4 J	ND	ND	ND	1.3	ND	0.53	0.37 J	0.62	0.47 J	0.48 J
		1,1-Dichloroethylene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.41 J	ND	ND	ND	ND	ND	ND
		1,1-Dichloropropylene	NS/5	--	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2,3-Trichlorobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J
		1,2,3-Trichloropropane	0.04	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2,3-Trimethylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2,4-Trichlorobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
		1,2,4-Trimethylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dibromo-3-chloropropane	0.04	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dibromoethane	NS/5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dichlorobenzene	3**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dichloroethane	0.6	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dichloroethylene (Total)	5*	<b>33</b>	<b>17</b>	<b>25</b>	<b>29</b>	<b>48</b>	<b>45</b>	<b>27</b>	<b>18</b>	<b>20.28 J</b>	<b>34.42 J</b>	<b>25 J</b>	<b>11</b>	<b>7.2</b>	<b>17.2</b>	<b>11.21 J</b>	<b>14</b>
		1,2-Dichloropropane	1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,3,5-Trimethylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,3-Dichlorobenzene	3**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,3-Dichloropropane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,4-Dichlorobenzene	3**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1-Chlorohexane	NS	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		2,2-Dichloropropane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
		2-Chlorotoluene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		4-Chlorotoluene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromochloromethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromodichloromethane	NS/50	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromoform	NS/50	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromomethane	5*	--	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND J
		Carbon Tetrachloride	5	--	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Chlorobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Chloroethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Chloroform	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Chloromethane	NS/5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND
		cis-1,3-Dichloropropylene	0.4**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Dibromochloromethane	NS/50	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Dibromomethane	5*	--	ND	ND	ND	ND	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	ND
		Dichlorodifluoromethane	5*	--	ND	ND	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Hexachlorobutadiene	0.5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Isopropylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Methyl tert-butyl ether (MTBE)	NS/10	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5*	4	3.6 JB	4.9 JB	ND	ND	ND	ND	ND	ND	ND	2.6 J	2.6 J	ND	ND	ND	ND		
Naphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
n-Butylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
n-Propylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
o-Xylene	5*	ND	ND	ND	ND	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	ND	ND		
p-&m-Xylenes	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
p-Isopropyltoluene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
sec-Butylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Styrene	5*	--	ND	ND	ND	ND	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	ND		
tert-Butylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND		
Toluene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	0.4**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Trichloroethylene	5*	<b>51</b>	3.6 J	3.2 J	ND	3.3 J	2.8 J	1.8 J	ND	1.4 J	2.2 J	ND J	1.6	0.83 J	1.60	0.88 J	1.7		
Trichlorofluoromethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Vinyl chloride	2	<b>10</b>	<b>7.1</b>	<b>6.7</b>	<b>5.7</b>	<b>8.8</b>	<b>7.0</b>	ND	ND	<b>12</b>	<b>20</b>	<b>6.9</b>	<b>3.7</b>	<b>1.1</b>	<b>3.2</b>	<b>1.4 J</b>	<b>2.2</b>		
<b>TOTAL CVOCs</b>			<b>94</b>	<b>28.8</b>	<b>36.2</b>	<b>36.0</b>	<b>61.8</b>	<b>56.2</b>	<b>28.8</b>	<b>18</b>	<b>33.68</b>	<b>58.33</b>	<b>31.9</b>	<b>16.83</b>	<b>9.5</b>	<b>22.65</b>	<b>13.96</b>	<b>18.38</b>	
EPA Method 6010 Priority Pollutant Metals	ug/L	Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Arsenic	25	<b>29</b>	ND	ND	ND	ND	ND	ND	<b>43</b>	ND	ND	5	6	ND	6	ND J	
		Beryllium	11***	<b>6</b>	ND	ND	ND	ND	ND	ND	<b>5</b>	ND	ND	ND	ND	ND	ND	ND J	
		Cadmium	5	<b>10</b>	ND	ND	ND	ND	ND	4	<b>30</b>	4	ND	ND	ND	5	ND	ND	
		Chromium	50	<b>58</b>	12	7	5	ND	ND	7	<b>160</b>	7	8	8	6	ND	13	ND	
		Copper	200	<b>430</b>	9	5	6 J	6	7	ND	ND	6 J	13	12	40	19	28	R	
		Lead	25	<b>552</b>	10	7	6 J	8	6	7	7	7	9	6	<b>30</b>	11	5	ND	
		Nickel	100	<b>113</b>	41	27	33	18	19	73	73	73	28	30	17	ND	27	28	
		Selenium	10	<b>28</b>	10	12	<b>21 J</b>	<b>18</b>	<b>17</b>	<b>19</b>	<b>19</b>	<b>19</b>	ND	ND J	ND	ND	ND	<b>23 J</b>	
		Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Thallium	8	ND	ND	ND	ND	<b>21</b>	<b>21</b>	ND	ND	ND	ND	ND	8	7	27	ND	
		Zinc	NS/2,000	431	44	26	35	34	43	57	57	57	43	26	127	26	60	57	
		Mercury	0.7	<b>1.6</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND J	ND	ND	ND	

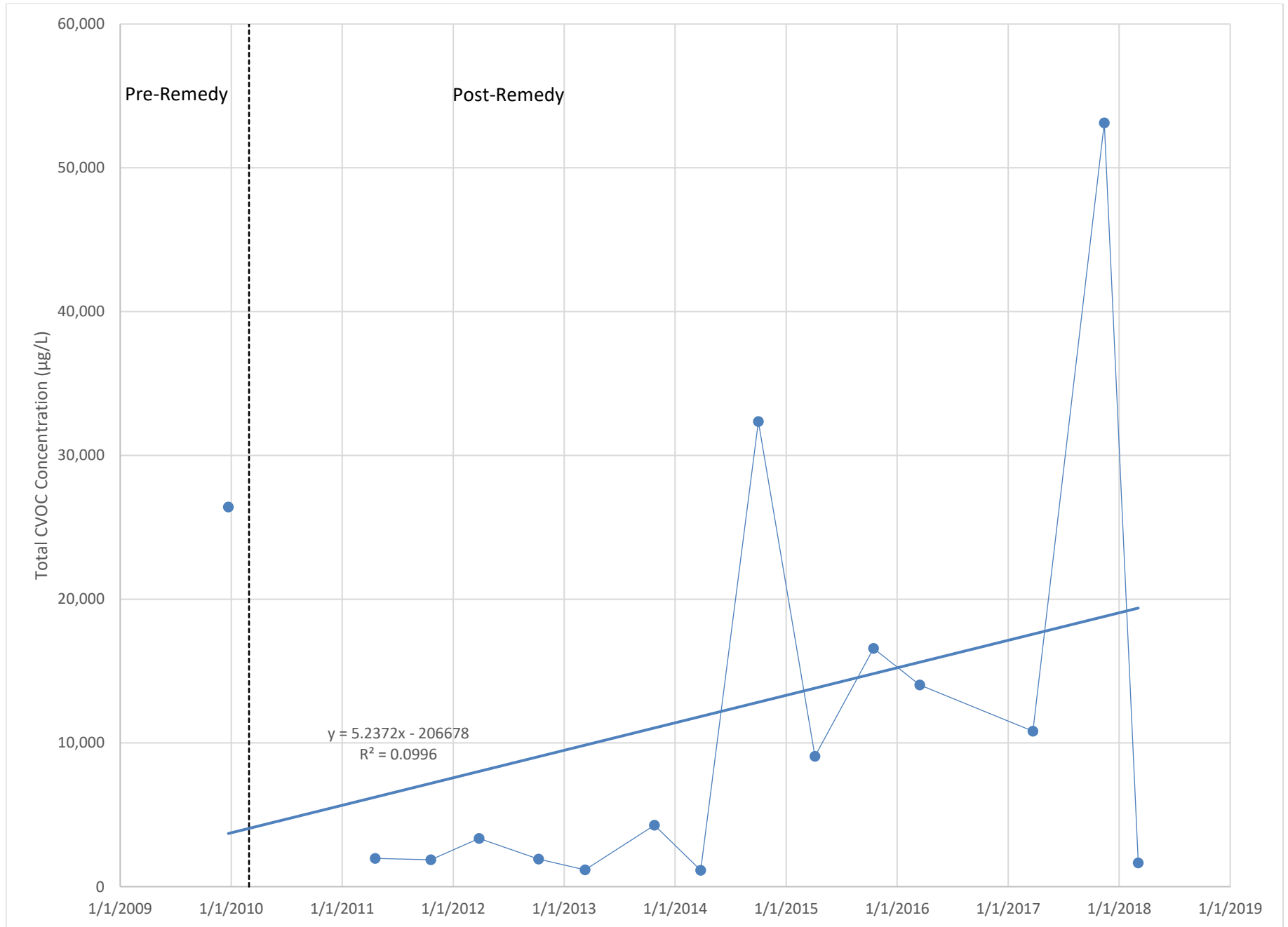


**Table 2: Groundwater Monitoring Data**  
 BCP Site No. C356035 - Former Utility Platers and Kingston Diagnostics Site (Current CVS Building)  
 Washington Avenue and Schwenk Drive, City of Kingston, Ulster County, New York

Sample ID			MW-5																
Sample Date			1/14/2010	4/20/2011	10/20/2011	3/27/2012	10/9/2012	3/11/2013	10/25/2013	10/25/13 (MW-DUP)	3/26/2014	10/2/2014	4/6/2015	10/16/2015	3/16/2016	3/23/2017	11/13/2017	3/5/2018	
Analyte	Units	Part 703 Groundwater Standard	Pre-Remedy Results	Post-Remedy Results															
EPA Method 8260 Volatile Organic Compounds	ug/L	1,1,1,2-Tetrachloroethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		1,1,1-Trichloroethane	5*	ND	ND	ND	ND	ND	ND	ND	0.47 J	ND	ND	ND	0.69	0.27 J	ND	ND	ND
		1,1,2,2-Tetrachloroethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,1,2-Trichloroethane	1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,1-Dichloroethane	5*	ND	ND	ND	ND	0.81 J	ND	ND	ND	0.85	2.1 J	ND	1.9	0.85	0.34 J	0.63 J	0.35 J
		1,1-Dichloroethylene	5*	ND	ND	ND	ND	53	ND	ND	ND	1.1	2.1 J	ND	2.9	1.1	0.37 J	ND	ND
		1,1-Dichloropropylene	NS/5	--	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2,3-Trichlorobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J
		1,2,3-Trichloropropane	0.04	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2,3-Trimethylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2,4-Trichlorobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND
		1,2,4-Trimethylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dibromo-3-chloropropane	0.04	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dibromoethane	NS/5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dichlorobenzene	3**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dichloroethane	0.6	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,2-Dichloroethylene (Total)	5*	ND	ND	3.4 J	ND	ND	7.2	49	51	37.58	95	84 J	96.6	44.56	20.26	36.44 J	20.30 J
		1,2-Dichloropropane	1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,3,5-Trimethylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,3-Dichlorobenzene	3**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,3-Dichloropropane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1,4-Dichlorobenzene	3**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		1-Chlorohexane	NS	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		2,2-Dichloropropane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND
		2-Chlorotoluene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		4-Chlorotoluene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	1	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromochloromethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromodichloromethane	NS/50	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromoform	NS/50	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Bromomethane	5*	--	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND J	ND J
		Carbon Tetrachloride	5	--	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Chlorobenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Chloroethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.56	0.21 J	ND	ND	ND
		Chloroform	7	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.28 J	ND
		Chloromethane	NS/5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND	ND
		cis-1,3-Dichloropropylene	0.4**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Dibromochloromethane	NS/50	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Dibromomethane	5*	--	ND	ND	ND	ND	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	ND
		Dichlorodifluoromethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Hexachlorobutadiene	0.5	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Isopropylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Methyl tert-butyl ether (MTBE)	NS/10	--	ND	ND	ND J	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5*	2	3.9 JB	4.6 JB	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Naphthalene	10	ND	ND	ND	ND J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
n-Butylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
n-Propylbenzene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
o-Xylene	5*	ND	ND	ND	ND	ND	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	ND		
p- & m-Xylenes	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
p-Isopropyltoluene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
sec-Butylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Styrene	5*	--	ND	ND	ND	ND	ND	ND	ND	R	ND	ND	ND	ND	ND	ND	ND		
tert-Butylbenzene	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND	ND		
Toluene	5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	0.4**	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Trichloroethylene	5*	ND	ND	6.1	ND	45	9.4	78	84	110	230	290 J	400 E	150 J	39	56 J	51		
Trichlorofluoromethane	5*	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Vinyl chloride	2	ND	ND	ND	ND	ND	ND J	ND	ND	ND	ND	ND	0.41 J	ND	ND	ND	ND		
<b>TOTAL CVOCs</b>					9.5		98.81	16.6	127	135	150.00	329.2	374	503.06	196.99	59.97	93.35	71.65	
EPA Method 6010 Priority Pollutant Metals	ug/L	Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7	8	ND J	9	
		Arsenic	25	ND	ND	ND	ND	ND	ND	ND	4	ND	7	9	26	7	ND J	ND	
		Beryllium	11***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Chromium	50	7	ND	ND	ND	ND	ND	ND	ND	ND	9	8	ND	6	ND	ND	ND
		Copper	200	94	ND	7	ND J	ND	ND	5	4	R	ND	10	46	14	24	R	13
		Lead	25	47	3	6	ND J	ND	ND	4	4	ND	ND	3	27	6	4	ND	ND
		Nickel	100	29	8	5	ND	ND	5	12	12	5	18	13	36	ND	ND	ND J	ND
		Selenium	10	ND	ND	ND	ND	ND	11	ND	ND	ND	11	ND J	ND	ND	ND	ND	99
		Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Thallium	8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND	9	ND	ND
		Zinc	NS/2,000	80	35	25	ND	20	22	29	29	22	32	19	154	29	38	ND	ND
		Mercury	0.7	ND	ND	ND	ND J	ND J	ND	ND	ND	ND	ND	ND J	ND J	ND	ND	ND	ND

**Graph 1: Linear Regression of Total CVOCs in Monitoring Well MW-1**

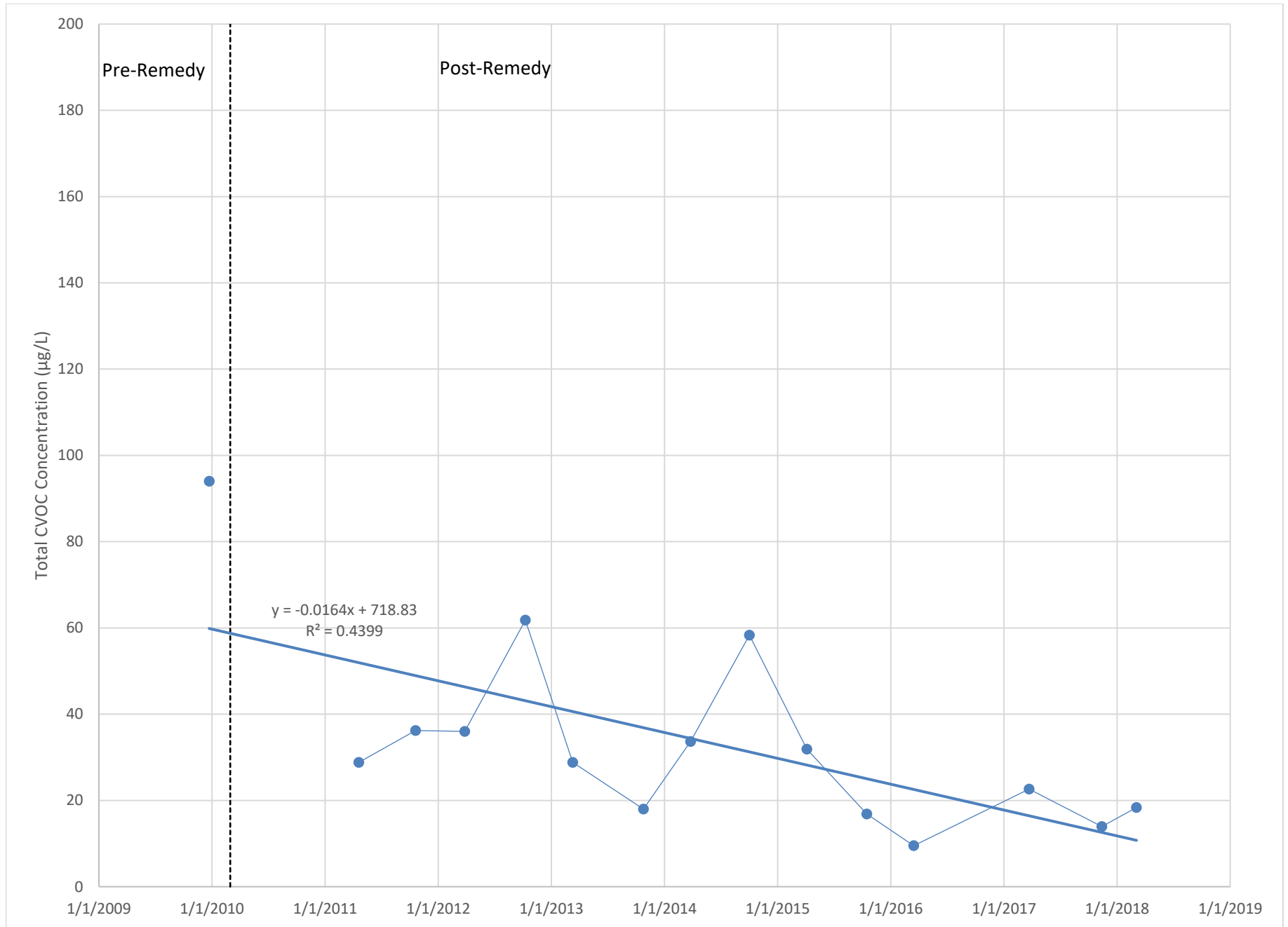
Former Utility Platers/Kingston Diagnostics Site, 167 Schwenck Drive, City of Kingston, Ulster County, New York





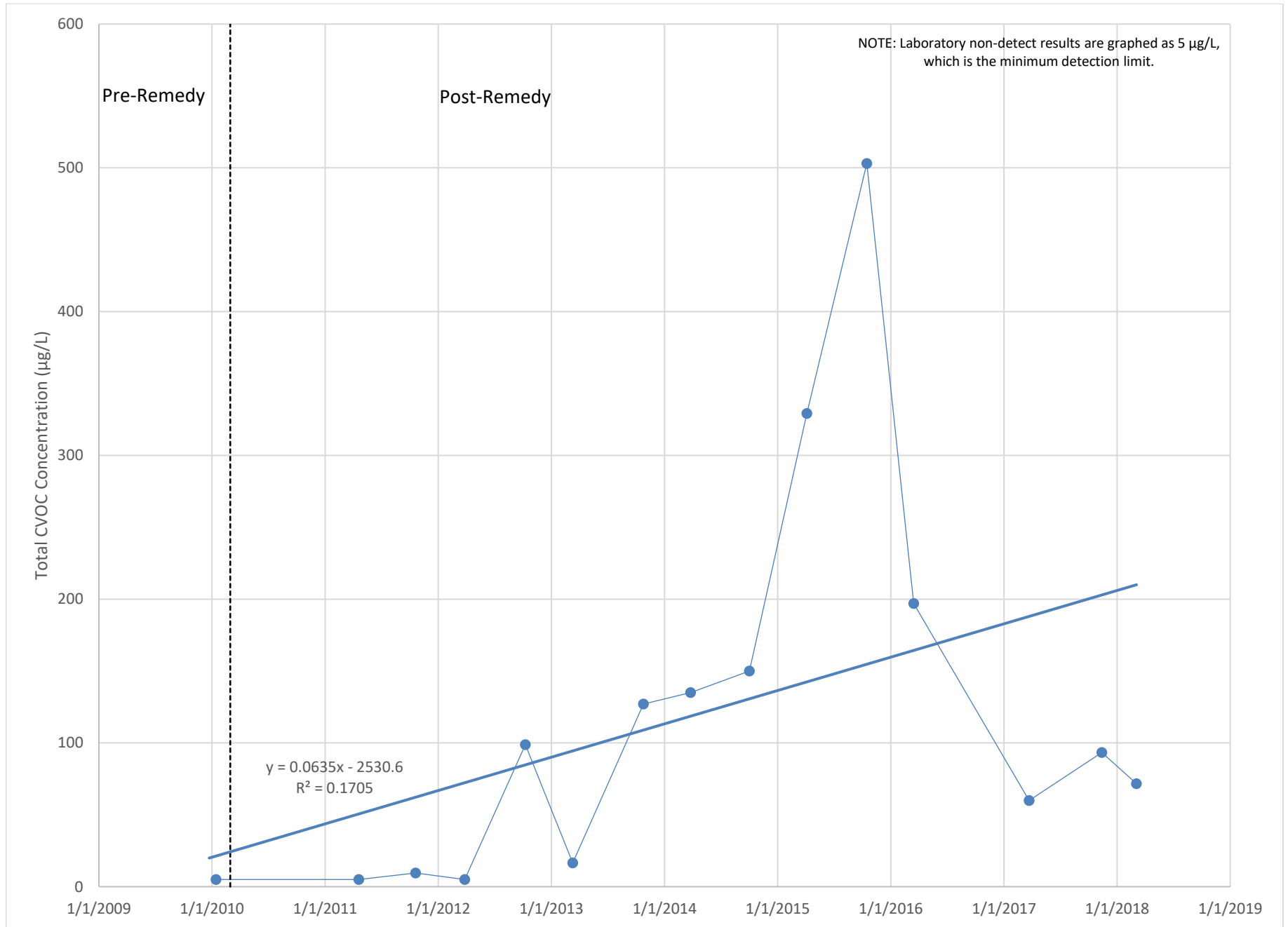
**Graph 2: Linear Regression of Total CVOCs in Monitoring Well MW-2**

Former Utility Platers/Kingston Diagnostics Site, 167 Schwenck Drive, City of Kingston, Ulster County, New York



**Graph 3: Linear Regression of Total CVOCs in Monitoring Well MW-5**

Former Utility Platers/Kingston Diagnostics Site, 167 Schwenck Drive, City of Kingston, Ulster County, New York



**Table 3:** Investigation Soil Sample Results, Compared to NYSDEC Part 375 Soil Cleanup Objectives  
Former Utility Platers/Kingston Diagnostics Site, 167 Schwenck Drive, City of Kingston, Ulster County, New York

Sample ID Sampling Date Sample Matrix	NYSDEC Part 375 Restricted Use Soil Cleanup Objectives- Commercial	NYSDEC Part 375 Unrestricted Use Soil Cleanup Objectives	KC-CB-01 (25-30') 3/1/2018 9:00 Soil		KC-CB-02 (25-30') 3/1/2018 10:00 Soil	
	Compound mg/Kg	mg/Kg	Result mg/Kg	Q	Result mg/Kg	Q
<b>Volatile Organics, 8260 - Comprehensive</b>						
<b>Dilution Factor</b>			1		1	
1,1,1,2-Tetrachloroethane	~	~	0.0049	U	0.005	U
1,1,1-Trichloroethane	500	0.68	0.0049	U	0.005	U
1,1,2,2-Tetrachloroethane	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	~	~	0.0049	U	0.005	U
1,1,2-Trichloroethane	~	~	0.0049	U	0.005	U
1,1-Dichloroethane	240	0.27	0.0049	U	0.005	U
1,1-Dichloroethylene	500	0.33	0.0049	U	0.005	U
1,2,3-Trichlorobenzene	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
1,2,3-Trichloropropane	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
1,2,4-Trichlorobenzene	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
1,2,4-Trimethylbenzene	190	3.6	0.0049	U, IS-LO	0.005	U, IS-LO
1,2-Dibromo-3-chloropropane	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
1,2-Dibromoethane	~	~	0.0049	U	0.005	U
1,2-Dichlorobenzene	500	1.1	0.0049	U, IS-LO	0.005	U, IS-LO
1,2-Dichloroethane	30	0.02	0.0049	U	0.005	U
1,2-Dichloropropane	~	~	0.0049	U	0.005	U
1,3,5-Trimethylbenzene	190	8.4	0.0049	U, IS-LO	0.005	U, IS-LO
1,3-Dichlorobenzene	280	2.4	0.0049	U, IS-LO	0.005	U, IS-LO
1,4-Dichlorobenzene	130	1.8	0.0049	U, IS-LO	0.005	U, IS-LO
1,4-Dioxane	130	0.1	0.099	U, J	0.10	U, J
2-Butanone	500	0.12	0.0049	U	0.005	U
2-Hexanone	~	~	0.0049	U	0.005	U
4-Methyl-2-pentanone	~	~	0.0049	U	0.005	U
Acetone	500	0.05	0.010	U, SCAL-E	0.010	U, J, SCAL-E
Acrolein	~	~	0.0099	U	0.010	U
Acrylonitrile	~	~	0.0049	U	0.005	U
Benzene	44	0.06	0.0049	U	0.005	U
Bromochloromethane	~	~	0.0049	U	0.005	U
Bromodichloromethane	~	~	0.0049	U	0.005	U
Bromoform	~	~	0.0049	U	0.005	U
Bromomethane	~	~	0.0049	U	0.005	U
Carbon disulfide	~	~	0.0049	U	0.005	U
Carbon tetrachloride	22	0.76	0.0049	U	0.005	U
Chlorobenzene	500	1.1	0.0049	U	0.005	U
Chloroethane	~	~	0.0049	U	0.005	U
Chloroform	350	0.37	0.0049	U	0.005	U
Chloromethane	~	~	0.0049	U	0.005	U
cis-1,2-Dichloroethylene	500	0.25	0.0049	U	0.005	U
cis-1,3-Dichloropropylene	~	~	0.0049	U	0.005	U
Cyclohexane	~	~	0.0049	U	0.005	U
Dibromochloromethane	~	~	0.0049	U	0.005	U
Dibromomethane	~	~	0.0049	U	0.005	U
Dichlorodifluoromethane	~	~	0.0049	U	0.005	U
Ethyl Benzene	390	1	0.0049	U	0.005	U
Hexachlorobutadiene	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
Isopropylbenzene	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
Methyl acetate	~	~	0.0049	U	0.005	U
Methyl tert-butyl ether (MTBE)	500	0.93	0.0049	U	0.005	U
Methylcyclohexane	~	~	0.0049	U	0.005	U
Methylene chloride	500	0.05	0.0099	U, J, CCV-E, SCAL-E, B	0.010	U
n-Butylbenzene	500	12	0.0049	U, IS-LO	0.005	U, IS-LO
n-Propylbenzene	500	3.9	0.0049	U, IS-LO	0.005	U, IS-LO
o-Xylene	~	~	0.0049	U	0.005	U
p- & m- Xylenes	~	~	0.0099	U	0.010	U
p-Isopropyltoluene	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
sec-Butylbenzene	500	11	0.0049	U, IS-LO	0.005	U, IS-LO
Styrene	~	~	0.0049	U	0.005	U
tert-Butyl alcohol (TBA)	~	~	0.0099	U, J	0.005	U, J
tert-Butylbenzene	500	5.9	0.0049	U, IS-LO	0.005	U, IS-LO
Tetrachloroethylene	150	1.3	0.0049	U	0.005	U
Toluene	500	0.7	0.0049	U	0.005	U
trans-1,2-Dichloroethylene	500	0.19	0.0049	U	0.005	U
trans-1,3-Dichloropropylene	~	~	0.0049	U	0.005	U
trans-1,4-dichloro-2-butene	~	~	0.0049	U, IS-LO	0.005	U, IS-LO
Trichloroethylene	200	0.47	0.0049	U, J	0.005	U, J
Trichlorofluoromethane	~	~	0.0049	U	0.005	U
Vinyl Chloride	13	0.02	0.0049	U	0.005	U
Xylenes, Total	500	0.26	0.0150	U	0.015	U
<b>TOTAL CVOCS</b>			<b>0.00</b>		<b>0.00</b>	
<b>Total Solids</b>			%		%	
<b>Dilution Factor</b>			1		1	
<b>% Solids</b>	~	~	77.1		75.2	

**NOTES:**

SCO exceedences are highlighted

**Q is the Qualifier Column with definitions as follows:**

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated

U=analyte not detected at or above the level indicated

B=analyte found in the analysis batch blank

SCAL-E=The value reported is estimated due to its behavior during initial calibration (Average Rf>20%).

IS-LO=The internal standard associated with this target compound did not meet acceptance criteria (area <50% CCV) at the stated dilution due to matrix effects. Sample was re-run to confirm matrix effects.

CCV-E=The value reported is estimated due to its behavior during continuing calibration verification (>20% diff. for average Rf or >20% drift for quadratic fit).

~=this indicates that no regulatory limit has been established for this analyte

**Table 4:** Investigation Water Sample Results, Compared to NYSDEC TOGS 1.1.1 Groundwater Quality Objectives  
Former Utility Platers/Kingston Diagnostics Site, 167 Schwenck Drive, City of Kingston, Ulster County, New York

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS 1.1.1 Standard or Guidance Value - Class GA	KC-MW-06 (0318) 18C0104-04 3/5/2018 12:30 Water		KC-MW-07 (0318) 18C0104-05 3/5/2018 18:25 Water		KC-MW-DUP1 (0318) 18C0104-06 3/5/2018 15:00 Water		TRIP BLANK 18C0104-07 3/5/2018 15:00 Water	
		Result	Q	Result	Q	Result	Q	Result	Q
<b>Compound</b>	<b>ug/L</b>	<b>ug/L</b>	<b>Q</b>	<b>ug/L</b>	<b>Q</b>	<b>ug/L</b>	<b>Q</b>	<b>ug/L</b>	<b>Q</b>
<b>Volatile Organics, 8260 - Comprehensive</b>									
<b>Dilution Factor</b>		1		1		1		1	
1,1,1,2-Tetrachloroethane	5	0.50	U	0.50	U	0.50	U	0.50	U
1,1,1-Trichloroethane	5	0.38	J	1.5		0.39	J	0.50	U
1,1,2-Tetrachloroethane	5	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	0.50	U	0.50	U	0.50	U	0.50	U
1,1,2-Trichloroethane	1	0.50	U	0.50	U	0.50	U	0.50	U
1,1-Dichloroethane	5	0.29	J	3.6		0.32	J	0.50	U
1,1-Dichloroethylene	5	0.50	U	0.25	J	0.50	U	0.50	U
1,2,3-Trichlorobenzene	5	0.50	U, J	0.50	U, J	0.50	U, J	0.50	U, J
1,2,3-Trichloropropane	0.04	0.50	U	0.50	U	0.50	U	0.50	U
1,2,4-Trichlorobenzene	5	0.50	U	0.50	U	0.50	U, J	0.50	U, J
1,2,4-Trimethylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromo-3-chloropropane	0.04	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dibromoethane	0.0006	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichlorobenzene	3	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloroethane	0.6	0.50	U	0.50	U	0.50	U	0.50	U
1,2-Dichloropropane	1	0.50	U	0.50	U	0.50	U	0.50	U
1,3,5-Trimethylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
1,3-Dichlorobenzene	3	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dichlorobenzene	3	0.50	U	0.50	U	0.50	U	0.50	U
1,4-Dioxane	~	40	U, J	40	U, J	40	U, J	40	U, J
2-Butanone	50	0.50	U	0.50	U	0.50	U	0.42	J
2-Hexanone	50	0.50	U	0.50	U	0.50	U	0.50	U
4-Methyl-2-pentanone	~	0.50	U	0.50	U	0.50	U	0.50	U
Acetone	50	2.2	U, ICV-E, SCAL-E, CCV-E	2.0	U, ICV-E, SCAL-E, CCV-E	2.0	ICV-E, SCAL-E, J, CCV-E	1.5	ICV-E, SCAL-E, J, CCV-E
Acrolein	~	2.0	U	2.0	U	0.50	U	0.50	U
Acrylonitrile	~	0.50	U	0.50	U	0.50	U	0.50	U
Benzene	1	0.50	U	0.50	U	0.50	U	0.50	U
Bromochloromethane	5	0.50	U	0.50	U	0.50	U	0.50	U
Bromodichloromethane	50	0.50	U	0.50	U	0.50	U	0.50	U
Bromoform	50	0.50	U	0.50	U	0.50	U	0.50	U
Bromomethane	5	0.50	U, J	0.50	U	0.50	U, J	0.50	U, J
Carbon disulfide	~	0.50	U	0.50	U	0.50	U	0.50	U
Carbon tetrachloride	5	0.50	U	0.50	U	0.50	U	0.50	U
Chlorobenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
Chloroethane	5	0.50	U	0.50	U	0.50	U	0.50	U
Chloroform	7	0.50	U	0.32	J	0.50	U	0.50	U
Chloromethane	5	0.50	U	0.50	U	0.50	U	0.50	U
cis-1,2-Dichloroethylene	5	<b>12</b>		<b>11</b>		<b>13</b>		0.50	U
cis-1,3-Dichloropropylene	0.4	0.50	U	0.50	U	0.50	U	0.50	U
Cyclohexane	~	0.50	U	0.50	U	0.50	U	0.50	U
Dibromochloromethane	50	0.50	U	0.50	U	0.50	U	0.50	U
Dibromomethane	~	0.50	U	0.50	U	0.50	U	0.50	U
Dichlorodifluoromethane	5	0.50	U, J	0.50	U, J	0.50	U, J	0.50	U, J
Ethyl Benzene	5	0.50	U	0.50	U	0.50	U	0.50	U
Hexachlorobutadiene	0.5	0.50	U	0.50	U	0.50	U	0.50	U
Isopropylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
Methyl acetate	~	0.50	U	0.50	U	0.50	U	0.50	U
Methyl tert-butyl ether (MTBE)	10	0.50	U	0.50	U	0.50	U	0.50	U
Methylcyclohexane	~	0.50	U	0.50	U	0.50	U	0.50	U
Methylene chloride	5	2.0	U	2.0	U	2.0	U	2.0	U
n-Butylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
n-Propylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
o-Xylene	5	0.50	U	0.50	U	0.50	U	0.50	U
p- & m- Xylenes	5	1.0	U	1.0	U	1.0	U	1.0	U
p-Isopropyltoluene	5	0.50	U	0.50	U	0.50	U	0.50	U
sec-Butylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
Styrene	5	0.50	U	0.50	U	0.50	U	0.50	U
tert-Butyl alcohol (TBA)	~	2.0	U, J, CCV-E	1.3	U, J, CCV-E	2.0	U, J	2.0	CCV-E
tert-Butylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U
Tetrachloroethylene	5	0.50	U	0.50	U	0.50	U	0.50	U
Toluene	5	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,2-Dichloroethylene	5	0.38	J	0.35	J	0.38	J	0.50	U
trans-1,3-Dichloropropylene	0.4	0.50	U	0.50	U	0.50	U	0.50	U
trans-1,4-dichloro-2-butene	~	0.50	U	0.50	U	0.50	U	0.50	U
Trichloroethylene	5	<b>26</b>		<b>39</b>		<b>27</b>		0.50	U
Trichlorofluoromethane	5	0.50	U	0.50	U	0.50	U	0.50	U
Vinyl Chloride	2	0.23	J	<b>2.9</b>		0.33	J	0.50	U
Xylenes, Total	5	1.5	U	1.5	U	1.5	U	1.5	U
<b>TOTAL CVOCs</b>		<b>38.90</b>		<b>58.57</b>		<b>41.03</b>		<b>0.00</b>	

**NOTES:**

Results exceeding the TOGS 1.1.1 Class GA Groundwater Quality Standard are highlighted

**Q is the Qualifier Column with definitions as follows:**

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - result value is therefore estimated

U=analyte not detected at or above the level indicated

SCAL-E=The value reported is estimated due to its behavior during initial calibration (Average Rf>20%).

CCV-E=The value reported is estimated due to its behavior during continuing calibration verification (>20% diff. for average Rf or >20% drift for quadratic fit.

ICV-E=The value reported is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

~this indicates that no regulatory limit has been established for this analyte

**Table 4:** Investigation Water Sample Results, Compared to NYSDEC TOGS 1.1.1 Groundwater Quality Objectives  
Former Utility Platers/Kingston Diagnostics Site, 167 Schwenck Drive, City of Kingston, Ulster County, New York

Sample ID York ID Sampling Date Client Matrix	NYSDEC TOGS 1.1.1 Standard or Guidance Value - Class GA	KC-EB-01 18C0104-03 3/1/2018 10:45 Water	
Compound	ug/L	Result	Q
<b>Volatile Organics, 8260 - Comprehensive</b>			
<b>Dilution Factor</b>		1	
1,1,1,2-Tetrachloroethane	5	0.50	U
1,1,1-Trichloroethane	5	0.50	U
1,1,2,2-Tetrachloroethane	5	0.50	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5	0.50	U
1,1,2-Trichloroethane	1	0.50	U
1,1-Dichloroethane	5	0.50	U
1,1-Dichloroethylene	5	0.50	U
1,2,3-Trichlorobenzene	5	2.0	U, J
1,2,3-Trichloropropane	0.04	0.50	U
1,2,4-Trichlorobenzene	5	0.50	U
1,2,4-Trimethylbenzene	5	0.50	U
1,2-Dibromo-3-chloropropane	0.04	0.50	U
1,2-Dibromoethane	0.0006	0.50	U
1,2-Dichlorobenzene	3	0.50	U
1,2-Dichloroethane	0.6	0.50	U
1,2-Dichloropropane	1	0.50	U
1,3,5-Trimethylbenzene	5	0.50	U
1,3-Dichlorobenzene	3	0.50	U
1,4-Dichlorobenzene	3	0.50	U, J
1,4-Dioxane	~	40	U, J
2-Butanone	50	0.21	J, SCAL-E
2-Hexanone	50	0.50	U
4-Methyl-2-pentanone	~	0.50	U
Acetone	50	8.8	SCAL-E
Acrolein	~	2.0	U, J
Acrylonitrile	~	0.50	U
Benzene	1	0.50	U
Bromochloromethane	5	0.50	U
Bromodichloromethane	50	0.50	U
Bromoform	50	0.50	U
Bromomethane	5	0.50	U
Carbon disulfide	~	0.50	U
Carbon tetrachloride	5	0.50	U
Chlorobenzene	5	0.50	U
Chloroethane	5	0.50	U
Chloroform	7	0.50	U
Chloromethane	5	0.50	U
cis-1,2-Dichloroethylene	5	0.50	U
cis-1,3-Dichloropropylene	0.4	0.50	U
Cyclohexane	~	0.50	U
Dibromochloromethane	50	0.50	U
Dibromomethane	~	0.50	U
Dichlorodifluoromethane	5	0.50	U
Ethyl Benzene	5	0.50	U
Hexachlorobutadiene	0.5	0.50	U
Isopropylbenzene	5	0.50	U
Methyl acetate	~	0.50	U
Methyl tert-butyl ether (MTBE)	10	0.50	U
Methylcyclohexane	~	0.50	U
Methylene chloride	5	2.0	U
n-Butylbenzene	5	0.50	U
n-Propylbenzene	5	0.50	U
o-Xylene	5	0.50	U
p- & m- Xylenes	5	1.0	U
p-Isopropyltoluene	5	0.50	U
sec-Butylbenzene	5	0.50	U
Styrene	5	0.50	U
tert-Butyl alcohol (TBA)	~	1.0	U, J
tert-Butylbenzene	5	0.50	U
Tetrachloroethylene	5	0.50	U
Toluene	5	0.50	U
trans-1,2-Dichloroethylene	5	0.50	U
trans-1,3-Dichloropropylene	0.4	0.50	U
trans-1,4-dichloro-2-butene	~	0.50	U
Trichloroethylene	5	0.50	U, J
Trichlorofluoromethane	5	0.50	U
Vinyl Chloride	2	0.50	U
Xylenes, Total	5	1.5	U
<b>TOTAL CVOCs</b>		<b>0.00</b>	

**NOTES:**

Results exceeding the TOGS 1.1.1 Class GA Groundwater Quality Standard are highlighted

**Q is the Qualifier Column with definitions as follows:**

J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - result value is therefore estimated

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SCAL-E=The value reported is estimated due to its behavior during initial calibration (Average Rf>20%).

CCV-E=The value reported is estimated due to its behavior during continuing calibration verification (>20% diff. for average Rf or >20% drift for quadratic fit).

ICV-E=The value reported is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).

~=-this indicates that no regulatory limit has been established for this analyte

Appendix A:  
Field Sampling Data Sheets, SSDS Monitoring Forms,  
Site-Wide Inspection Forms

## GROUNDWATER SAMPLING FIELD DATA SHEET

<b>SAMPLE INFORMATION:</b>			
Sample ID: <u>KC-MW-01 1117</u>	Sample Time: <u>15:30</u>	Sample Matrix (circle): <u>Groundwater</u>	
Well ID: <u>MW-01</u>	Sample Date: <u>11/13/2017</u>	Surface Water	Soil
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>M. MACDONALD</u>	Drinking Water	Air
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>		Other:
	Project Manager: <u>E. ORLOWSKI</u>		

<b>WELL INFORMATION:</b>	
Well Condition: <u>GOOD</u>	
Lock Type: <u>NONE - FLUSH MOUNT</u>	Key #: <u>NA</u>

<b>PURGE DATA:</b>			
Measuring Point: <u>TOC-PVC</u>	<b>(B)</b>		Purge Method: <u>DEDICATED BAILER</u>
Depth to Bottom: <u>26.20</u>	Pipe Width	Gal/Foot	Start Date: <u>11/13/2017</u>
Depth to Water: <u>15.38</u>	1.0"	0.041	Start Time: <u>10:20:00 AM</u>
Water Column Height: <b>(A)</b> <u>10.82</u>	1.5"	0.092	Stop Time: <u>10:24:00 AM</u>
<i>(depth to bottom - depth to water)</i>	<b>2.0"</b>	<b>0.163</b>	Purge Rate (gpm): <u>0.38</u>
	2.5"	0.255	Elapsed Time (min): <u>4</u>
# of Volumes to be Purged: <b>(C)</b>	3.0"	0.367	Well Vol. Purged (#): <u>0.9</u>
<u>3</u>	4.0"	0.653	Purge Vol. (gal): <u>1.5</u>
Gal. to be Purged: <b>(AxBxC)</b>	6.0"	1.469	Well went dry? <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Yes</b>
<u>5.29</u>	8.0"	2.611	Conditions: <input type="checkbox"/> No Odor <input type="checkbox"/> Odor
			<input type="checkbox"/> Clear <input type="checkbox"/> Slightly-Turbid <input checked="" type="checkbox"/> <b>Turbid</b>

<b>FIELD RESULTS:</b>												
Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV	
START	10:20	15.38	13.0		2619	Turbid		Sl. Septic		6.80		
VOL 1	Well went dry prior to purging one full volume											
VOL 2												
VOL 3												
SAMPLE	15:30	19.24	11.5		2217	Turbid		Sl. Septic		6.88		

<b>SAMPLE INFORMATION:</b>	
Sample Method: <u>DED. BAILER</u> <i>(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)</i>	
Sample Type: <input checked="" type="checkbox"/> <b>Grab</b> Composite	Sample Depth: _____
Weather: <u>OVERCAST</u>	Barometric Pres.: _____
	Air Temp.( <sup>o</sup> F): <u>30s</u>
Notes:	Wind: <u>SLIGHT BREEZE</u>
<u>FIELD DUPLICATE COLLECTED HERE (KC-MW-DUP 1117)</u>	

<b>LAB REQUESTS:</b>		
Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u>	Turn Around Time: <u>STANDARD</u>
	<u>PRIORITY POLLUTANT METALS</u>	

<b>QA/QC:</b> <input checked="" type="checkbox"/> Duplicate	<input type="checkbox"/> Equip. Blank	<input type="checkbox"/> Field Blank	<input type="checkbox"/> Trip Blank
-------------------------------------------------------------	---------------------------------------	--------------------------------------	-------------------------------------

## GROUNDWATER SAMPLING FIELD DATA SHEET

**SAMPLE INFORMATION:**

Sample ID: <u>KC-MW-02 1117</u>	Sample Time: <u>14:00</u>	Sample Matrix (circle): <u>Groundwater</u>
Well ID: <u>MW-02</u>	Sample Date: <u>11/13/2017</u>	Soil
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>M. MACDONALD</u>	Air
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>	Drinking Water
	Project Manager: <u>E. ORLOWSKI</u>	Other:

**WELL INFORMATION:**

Well Condition: GOOD

---

Lock Type: NONE - FLUSH MOUNT Key #: NA

**PURGE DATA:**

Measuring Point: <u>TOC-PVC</u> <span style="float: right;"><b>(B)</b></span> Depth to Bottom: <u>24.50</u> <span style="border: 1px solid black; padding: 2px;">Pipe Width</span> <span style="border: 1px solid black; padding: 2px;">Gal/Foot</span> Depth to Water: <u>17.60</u> Water Column Height: <b>(A)</b> <u>6.90</u> <i>(depth to bottom - depth to water)</i> # of Volumes to be Purged: <b>(C)</b> <u>3</u> Gal. to be Purged: <b>(AxBxC)</b> <u>3.37</u>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr><td>1.0"</td><td>0.041</td></tr> <tr><td>1.5"</td><td>0.092</td></tr> <tr><td><b>2.0"</b></td><td><b>0.163</b></td></tr> <tr><td>2.5"</td><td>0.255</td></tr> <tr><td>3.0"</td><td>0.367</td></tr> <tr><td>4.0"</td><td>0.653</td></tr> <tr><td>6.0"</td><td>1.469</td></tr> <tr><td>8.0"</td><td>2.611</td></tr> </table> Purge Method: <u>DEDICATED BAILER</u> Start Date: <u>11/13/2017</u> Start Time: <u>10:00:00 AM</u> Stop Time: <u>10:05:00 AM</u> Purge Rate (gpm): <u>0.30</u> Elapsed Time (min): <u>5</u> Well Vol. Purged (#): <u>1.3</u> Purge Vol. (gal): <u>1.5</u> Well went dry? <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Yes</b> Conditions: <input type="checkbox"/> No Odor <input type="checkbox"/> <b>Odor</b> <input type="checkbox"/> Clear <input type="checkbox"/> Slightly-Turbid <input checked="" type="checkbox"/> <b>Turbid</b>	1.0"	0.041	1.5"	0.092	<b>2.0"</b>	<b>0.163</b>	2.5"	0.255	3.0"	0.367	4.0"	0.653	6.0"	1.469	8.0"	2.611
1.0"	0.041																
1.5"	0.092																
<b>2.0"</b>	<b>0.163</b>																
2.5"	0.255																
3.0"	0.367																
4.0"	0.653																
6.0"	1.469																
8.0"	2.611																

**FIELD RESULTS:**

Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV
START	10:00	17.60	13.9		2771	Turbid		Septic		6.47	
VOL 1			14.5		2769	Turbid		Septic		6.46	
VOL 2	Well went dry prior to purging two volumes										
VOL 3											
SAMPLE	14:00	22.96	Insufficient water in well to allow for collection/measurement of parameters, only analytical vessels filled.								

**SAMPLE INFORMATION:**

Sample Method: DED. BAILER (Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)

Sample Type:  **Grab**  Composite

Weather: OVERCAST Sample Depth: \_\_\_\_\_ Barometric Pres.: \_\_\_\_\_ Wind: SLIGHT BREEZE

Air Temp.(°F): 30s

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**LAB REQUESTS:**

Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u>	Turn Around Time: <u>STANDARD</u>
_____	<u>PRIORITY POLLUTANT METALS</u>	_____
_____	_____	_____

QA/QC: Duplicate      Equip. Blank      Field Blank      Trip Blank



## GROUNDWATER SAMPLING FIELD DATA SHEET

**SAMPLE INFORMATION:**

Sample ID: <u>KC-MW-05 1117</u>	Sample Time: <u>13:30</u>	Sample Matrix (circle): <u>Groundwater</u>
Well ID: <u>MW-05</u>	Sample Date: <u>11/13/2017</u>	Soil <input type="checkbox"/>
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>M. MACDONALD</u>	Air <input type="checkbox"/>
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>	Drinking Water <input type="checkbox"/>
	Project Manager: <u>E. ORLOWSKI</u>	Other: <input type="checkbox"/>

**WELL INFORMATION:**

Well Condition: GOOD

Lock Type: NONE - FLUSH MOUNT Key #: NA

**PURGE DATA:**

Measuring Point: <u>TOC-PVC</u> <b>(B)</b> Depth to Bottom: <u>24.30</u> Depth to Water: <u>8.57</u> Water Column Height: <b>(A)</b> <u>15.73</u> (depth to bottom - depth to water) # of Volumes to be Purged: <b>(C)</b> <u>3</u> Gal. to be Purged: <b>(AxBxC)</b> <u>7.69</u>	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Pipe Width</th> <th>Gal/Foot</th> </tr> </thead> <tbody> <tr><td>1.0"</td><td>0.041</td></tr> <tr><td>1.5"</td><td>0.092</td></tr> <tr><td><b>2.0"</b></td><td><b>0.163</b></td></tr> <tr><td>2.5"</td><td>0.255</td></tr> <tr><td>3.0"</td><td>0.367</td></tr> <tr><td>4.0"</td><td>0.653</td></tr> <tr><td>6.0"</td><td>1.469</td></tr> <tr><td>8.0"</td><td>2.611</td></tr> </tbody> </table>	Pipe Width	Gal/Foot	1.0"	0.041	1.5"	0.092	<b>2.0"</b>	<b>0.163</b>	2.5"	0.255	3.0"	0.367	4.0"	0.653	6.0"	1.469	8.0"	2.611	Purge Method: <u>DEDICATED BAILER</u> Start Date: <u>11/13/2017</u> Start Time: <u>9:30:00 AM</u> Stop Time: <u>9:45:00 AM</u> Purge Rate (gpm): <u>0.40</u> Elapsed Time (min): <u>15</u> Well Vol. Purged (#): <u>2.3</u> Purge Vol. (gal): <u>6</u> Well went dry? <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Yes</b> Conditions: <input checked="" type="checkbox"/> <b>No Odor</b> <input type="checkbox"/> Odor <input type="checkbox"/> Clear <input checked="" type="checkbox"/> <b>Slightly-Turbid</b> <input type="checkbox"/> Turbid
Pipe Width	Gal/Foot																			
1.0"	0.041																			
1.5"	0.092																			
<b>2.0"</b>	<b>0.163</b>																			
2.5"	0.255																			
3.0"	0.367																			
4.0"	0.653																			
6.0"	1.469																			
8.0"	2.611																			

**FIELD RESULTS:**

Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV
START	9:30	8.57	16.4		2432	Slight		None		7.03	
VOL 1			15.7		2456	Slight		None		6.99	
VOL 2			15.6		2586	Slight		None		6.87	
VOL 3	Well went dry prior to purging three volumes										
SAMPLE	13:30	10.58	15.0		2889	Slight		None		7.04	

**SAMPLE INFORMATION:**

Sample Method: DED. BAILER (Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)

Sample Type:  **Grab**  Composite

Weather: OVERCAST Sample Depth: \_\_\_\_\_

Barometric Pres.: \_\_\_\_\_ Wind: SLIGHT BREEZE

Air Temp.(°F): 30s

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LAB REQUESTS:**

Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u>	Turn Around Time: <u>STANDARD</u>
_____	<u>PRIORITY POLLUTANT METALS</u>	_____
_____	_____	_____

QA/QC: Duplicate  Equip. Blank  Field Blank  Trip Blank

## GROUNDWATER SAMPLING FIELD DATA SHEET

**SAMPLE INFORMATION:**

Sample ID: <u>KC-MW-01 (0318)</u>	Sample Time: <u>19:00</u>	Sample Matrix (circle): <u>Groundwater</u>
Well ID: <u>MW-01</u>	Sample Date: <u>3/5/2018</u>	Soil <input type="checkbox"/>
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>E. ORLOWSKI</u>	Air <input type="checkbox"/>
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>	Drinking Water <input type="checkbox"/>
	Project Manager: <u>E. ORLOWSKI</u>	Other: <input type="checkbox"/>

**WELL INFORMATION:**

Well Condition: GOOD

---

Lock Type: NONE - FLUSH MOUNT Key #: NA

**PURGE DATA:**

Measuring Point: <u>TOC-PVC</u> (B)	Purge Method: <u>DEDICATED BAILER</u>	
Depth to Bottom: <u>26.20</u>	Start Date: <u>3/5/2018</u>	
Depth to Water: <u>14.19</u>	Start Time: <u>3:16:00 PM</u>	
Water Column Height: (A) <u>12.01</u>	Stop Time: <u>3:27:00 PM</u>	
(depth to bottom - depth to water)	Purge Rate (gpm): <u>0.45</u>	
	Elapsed Time (min): <u>11</u>	
# of Volumes to be Purged: (C) <u>3</u>	Well Vol. Purged (#): <u>5</u>	
	Purge Vol. (gal): <u>5</u>	
Gal. to be Purged: (AxBxC) <u>5.87</u>	Well went dry? <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Yes</b>	
	Conditions: <input type="checkbox"/> No Odor <input checked="" type="checkbox"/> <b>Slightly-Turbid</b> <input type="checkbox"/> <b>Odor</b> <input type="checkbox"/> <b>Turbid</b>	

**FIELD RESULTS:**

Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV
START	15:16	14.19	10.1		1220	Slight		None		7.02	
VOL 1	15:20	19.89	10.7		1274	Slight		Sl. Sulfur		6.87	
VOL 2	15:25	24.48	10.9		1463	Moderate		Sl. Sulfur		6.63	
VOL 3	Well went dry prior to purging three volumes										
SAMPLE	19:00	14.20	9.2		1124	Slight		Sl. Sulfur		7.11	

**SAMPLE INFORMATION:**

Sample Method: DED. BAILER (Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)

Sample Type:  **Grab** Composite

Weather: CLOUDY Sample Depth: \_\_\_\_\_ Barometric Pres.: \_\_\_\_\_ Wind: WINDY

Air Temp.(°F): LOW 40s

Notes: FIELD DUPLICATE COLLECTED HERE (KC-MW-DUP2 (0318))

**LAB REQUESTS:**

Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u> <u>PRIORITY POLLUTANT METALS</u>	Turn Around Time: <u>STANDARD</u>

**QA/QC:**  Duplicate  Equip. Blank  Field Blank  Trip Blank

## GROUNDWATER SAMPLING FIELD DATA SHEET

**SAMPLE INFORMATION:**

Sample ID: <u>KC-MW-02 (0318)</u>	Sample Time: <u>18:20</u>	Sample Matrix (circle): <u>Groundwater</u>
Well ID: <u>MW-02</u>	Sample Date: <u>3/5/2018</u>	Soil
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>E. ORLOWSKI</u>	Air
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>	Drinking Water
	Project Manager: <u>E. ORLOWSKI</u>	Other:

**WELL INFORMATION:**

Well Condition: GOOD

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Lock Type: NONE - FLUSH MOUNT Key #: NA

**PURGE DATA:**

Measuring Point: <u>TOC-PVC</u> <b>(B)</b>	Purge Method: <u>DEDICATED BAILER</u>
Depth to Bottom: <u>24.50</u>	Start Date: <u>3/5/2018</u>
Depth to Water: <u>12.84</u>	Start Time: <u>2:57:00 PM</u>
Water Column Height: <b>(A)</b> <u>11.66</u>	Stop Time: <u>3:03:00 PM</u>
<i>(depth to bottom - depth to water)</i>	Purge Rate (gpm): <u>0.32</u>
# of Volumes to be Purged: <b>(C)</b> <u>3</u>	Elapsed Time (min): <u>6</u>
	Well Vol. Purged (#): <u>1.0</u>
	Purge Vol. (gal): <u>1.9</u>
	Well went dry? <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Yes</b>
	Conditions: <input type="checkbox"/> No Odor <input checked="" type="checkbox"/> <b>Slightly-Turbid</b> <input type="checkbox"/> Odor <input type="checkbox"/> Turbid
Gal. to be Purged: <b>(AxBxC)</b> <u>5.70</u>	

**FIELD RESULTS:**

Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV
START	14:57	12.84	9.0		2826	Clear		Sl. Septic		6.97	
VOL 1	15:02	20.03	8.8		2461	Slight		Sl. Septic		6.71	
VOL 2	Well went dry prior to purging two volumes										
VOL 3											
SAMPLE	18:20	16.69	10.2		2480	Slight		None		6.86	

**SAMPLE INFORMATION:**

Sample Method: DED. BAILER *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*

Sample Type:  **Grab** Composite

Weather: CLOUDY

Sample Depth: \_\_\_\_\_

Barometric Pres.: \_\_\_\_\_ Wind: WINDY

Air Temp.(°F): LOW 40s

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LAB REQUESTS:**

Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u>	Turn Around Time: <u>STANDARD</u>
	<u>PRIORITY POLLUTANT METALS</u>	

**QA/QC:** Duplicate      Equip. Blank      Field Blank      Trip Blank

## GROUNDWATER SAMPLING FIELD DATA SHEET

**SAMPLE INFORMATION:**

Sample ID: <u>KC-MW-05 (0318)</u>	Sample Time: <u>17:55</u>	Sample Matrix (circle): <u>Groundwater</u>
Well ID: <u>MW-05</u>	Sample Date: <u>3/5/2018</u>	Soil <input type="checkbox"/>
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>E. ORLOWSKI</u>	Air <input type="checkbox"/>
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>	Drinking Water <input type="checkbox"/>
	Project Manager: <u>E. ORLOWSKI</u>	Other: <input type="checkbox"/>

**WELL INFORMATION:**

Well Condition: GOOD

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Lock Type: NONE - FLUSH MOUNT      Key #: NA

**PURGE DATA:**

Measuring Point: <u>TOC-PVC</u>		<b>(B)</b>	Purge Method: <u>DEDICATED BAILER</u>
Depth to Bottom: <u>24.30</u>	Pipe Width	Gal/Foot	Start Date: <u>3/5/2018</u>
Depth to Water: <u>8.22</u>	1.0"	0.041	Start Time: <u>1:21:00 PM</u>
Water Column Height: <b>(A)</b> <u>16.08</u>	1.5"	0.092	Stop Time: <u>1:36:00 PM</u>
<i>(depth to bottom - depth to water)</i>	<b>2.0"</b>	<b>0.163</b>	Purge Rate (gpm): <u>0.43</u>
	2.5"	0.255	Elapsed Time (min): <u>15</u>
# of Volumes to be Purged: <b>(C)</b>	3.0"	0.367	Well Vol. Purged (#): <u>2.4</u>
<u>3</u>	4.0"	0.653	Purge Vol. (gal): <u>6.4</u>
Gal. to be Purged: <b>(AxBxC)</b>	6.0"	1.469	Well went dry? <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Yes</b>
<u>7.86</u>	8.0"	2.611	Conditions: <input checked="" type="checkbox"/> <b>No Odor</b> <input type="checkbox"/> Odor
			<input type="checkbox"/> Clear <input checked="" type="checkbox"/> <b>Slightly-Turbid</b> <input type="checkbox"/> Turbid

**FIELD RESULTS:**

Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV
START	13:21	8.22	8.7		7757	Clear		None		6.31	
VOL 1	13:27	17.31	10.4		7353	Slight		None		6.53	
VOL 2	13:34	21.86	12.1		7926	Moderate		None		6.55	
VOL 3	Well went dry prior to purging three volumes										
SAMPLE	17:55	11.47	7.6		7267	Slight		None		5.82	

**SAMPLE INFORMATION:**

Sample Method: DED. BAILER *(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)*

Sample Type:  **Grab**  Composite      Sample Depth: \_\_\_\_\_

Weather: OVERCAST      Barometric Pres.: \_\_\_\_\_      Wind: WINDY

Air Temp.(°F): LOW 40s

Notes: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LAB REQUESTS:**

Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u>	Turn Around Time: <u>STANDARD</u>
	<u>PRIORITY POLLUTANT METALS</u>	

**QA/QC:**    Duplicate      Equip. Blank      Field Blank      Trip Blank

## GROUNDWATER SAMPLING FIELD DATA SHEET

<b>SAMPLE INFORMATION:</b>			
Sample ID: <u>KC-MW-06 (0318)</u>	Sample Time: <u>12:30</u>	Sample Matrix (circle): <u>Groundwater</u>	
Well ID: <u>MW-06</u>	Sample Date: <u>3/5/2018</u>	Surface Water	Soil
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>E. ORLOWSKI</u>	Drinking Water	Air
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>		Other:
	Project Manager: <u>E. ORLOWSKI</u>		

<b>WELL INFORMATION:</b>			
Well Condition: <u>GOOD</u>			
Lock Type: <u>NONE - FLUSH MOUNT</u>	Key #: <u>NA</u>		

<b>PURGE DATA:</b>			
Measuring Point: <u>TOC-PVC</u>			Purge Method: <u>DEDICATED BAILER</u>
Depth to Bottom: <u>29.24</u>	Pipe Width: <u>1.0"</u>	Gal/Foot: <u>0.041</u>	Start Date: <u>3/5/2018</u>
Depth to Water: <u>14.37</u>	1.5": <u>0.092</u>	2.0": <u>0.163</u>	Start Time: <u>11:26:00 AM</u>
Water Column Height: (A) <u>14.87</u>	2.5": <u>0.255</u>	3.0": <u>0.367</u>	Stop Time: <u>12:22:00 PM</u>
(depth to bottom - depth to water)	4.0": <u>0.653</u>	6.0": <u>1.469</u>	Purge Rate (gpm): <u>0.11</u>
# of Volumes to be Purged: (C) <u>10</u>	8.0": <u>2.611</u>		Elapsed Time (min): <u>56</u>
Gal. to be Purged: (AxBxC) <u>6.10</u>			Well Vol. Purged (#): <u>10.0</u>
			Purge Vol. (gal): <u>6.1</u>
			Well went dry? <u>No</u>
			Conditions: <u>No Odor</u> <u>Clear</u> <u>Slightly-Turbid</u> <u>Turbid</u>

<b>FIELD RESULTS:</b>												
Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV	
START	11:26	14.57	9.5		1474	Slight		None		5.33		
VOL 1	11:31	14.58	10.6		1785	Turbid		Sl. Sulfur		5.87		
VOL 2	11:37	14.58	10.5		1526	Turbid		Sl. Sulfur		6.31		
VOL 3	11:42	14.58	9.6		1533	Turbid		Sl. Sulfur		6.46		
VOL 4	11:48	14.58	9.6		1518	Moderate		Sl. Sulfur		6.56		
VOL 5	11:53	14.59	10.1		1531	Slight		Sl. Sulfur		6.63		
VOL 6	11:59	14.59	9.7		1505	Slight		Sl. Sulfur		6.67		
VOL 7	12:05	14.59	9.9		1508	Slight		Sl. Sulfur		6.69		
VOL 8	12:11	14.59	9.0		1473	Slight		Sl. Sulfur		6.72		
VOL 9	12:17	14.59	9.7		1503	Slight		Sl. Sulfur		6.71		
VOL 10	12:22	14.59	10.0		1522	Slight		Sl. Sulfur		6.72		
SAMPLE	12:30	14.57	9.4		1484	Slight		Sl. Sulfur		6.72		

<b>SAMPLE INFORMATION:</b>			
Sample Method: <u>DED. BAILER</u>	<i>(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)</i>		
Sample Type: <u>Grab</u> Composite	Sample Depth: _____	Wind: <u>WINDY</u>	
Weather: <u>OVERCAST</u>	Barometric Pres.: _____	Air Temp. (°F): <u>LOW 40s</u>	
Notes:	<u>FIELD DUPLICATE COLLECTED HERE (KC-MW-DUP (0318))</u>		

<b>LAB REQUESTS:</b>		
Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u>	Turn Around Time: <u>STANDARD</u>
_____	_____	_____
_____	_____	_____

<b>QA/QC:</b> <u>Duplicate</u>	<u>Equip. Blank</u>	<u>Field Blank</u>	<u>Trip Blank</u>
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## GROUNDWATER SAMPLING FIELD DATA SHEET

<b>SAMPLE INFORMATION:</b>			
Sample ID: <u>KC-MW-07 (0318)</u>	Sample Time: <u>18:25</u>	Sample Matrix (circle): <u>Groundwater</u>	
Well ID: <u>MW-07</u>	Sample Date: <u>3/5/2018</u>	Surface Water	Soil
Project Name: <u>KINGSTON CVS</u>	Sample Tech(s): <u>E. ORLOWSKI</u>	Drinking Water	Air
Sample Location: <u>KINGSTON, NY</u>	Project and Task #: <u>41103.00</u>		Other:
	Project Manager: <u>E. ORLOWSKI</u>		

<b>WELL INFORMATION:</b>			
Well Condition: <u>GOOD</u>			
Lock Type: <u>NONE - FLUSH MOUNT</u>	Key #: <u>NA</u>		

<b>PURGE DATA:</b>			
Measuring Point: <u>TOC-PVC</u>			Purge Method: <u>PERISTALTIC PUMP</u>
Depth to Bottom: <u>27.60</u>	Pipe Width: <u>1.0"</u>	Gal/Foot: <u>0.041</u>	Start Date: <u>3/5/2018</u>
Depth to Water: <u>9.42</u>	1.5": <u>0.092</u>	2.0": <u>0.163</u>	Start Time: <u>4:58:00 PM</u>
Water Column Height: (A) <u>18.18</u>	2.5": <u>0.255</u>	3.0": <u>0.367</u>	Stop Time: <u>6:18:00 PM</u>
(depth to bottom - depth to water)	4.0": <u>0.653</u>	6.0": <u>1.469</u>	Purge Rate (gpm): <u>0.10</u>
# of Volumes to be Purged: (C) <u>10</u>	8.0": <u>2.611</u>		Elapsed Time (min): <u>80</u>
Gal. to be Purged: (AxBxC) <u>7.45</u>			Well Vol. Purged (#): <u>10.2</u>
			Purge Vol. (gal): <u>7.6</u>
			Well went dry? <input type="checkbox"/> No <input type="checkbox"/> Yes
			Conditions: <input type="checkbox"/> No Odor <input type="checkbox"/> Odor
			<input type="checkbox"/> Clear <input checked="" type="checkbox"/> Slightly-Turbid <input type="checkbox"/> Turbid

<b>FIELD RESULTS:</b>												
Gal purged gal	Date & Time	Depth to Water ft	Temp deg C	SpCond uS/cm <sup>c</sup>	Cond. uS/cm	Turbidity Visual	TDS g/L	Odor	DO mg/L	pH	ORP mV	
START	16:58	9.42	10.6		1731	Slight		None		5.82		
VOL 1	17:01	9.97	10.9		1480	Moderate		None		6.35		
VOL 2	17:13	10.48	10.2		1393	Slight		None		6.47		
VOL 3	17:22	11.08	9.8		1384	Slight		None		6.45		
VOL 4	17:28	11.42	10.0		1367	Slight		None		6.48		
VOL 5	17:36	11.49	9.8		1351	Slight		None		6.43		
VOL 6	17:44	11.56	9.5		1342	Slight		None		6.4		
VOL 7	17:52	11.61	9.3		1338	Slight		None		6.38		
VOL 8	18:00	11.65	9.1		1334	Slight		None		6.37		
VOL 9	18:10	11.74	9.2		1326	Slight		None		6.86		
VOL 10	18:18	11.83	9.2		1321	Slight		None		7.22		
SAMPLE	18:25	9.63	8.8		1338	Slight		None		6.92		

<b>SAMPLE INFORMATION:</b>			
Sample Method: <u>PERISTALTIC PUMP</u>	<i>(Peristaltic, Submersible, Dedicated or Disp. Bailer, Waterra, Dir. Instrument Reading, etc.)</i>		
Sample Type: <u>Grab</u> Composite	Sample Depth: _____		
Weather: <u>CLOUDY</u>	Barometric Pres.: _____	Wind: _____	<u>WINDY</u>
	Air Temp. (°F): <u>LOW 40s</u>		
Notes:	<u>WELL IS SLIGHTLY OUT OF PLUMB SO BAILER WOULDN'T PASS TO BOTTOM OF WELL. USED PERISTALTIC PUMP.</u>		

<b>LAB REQUESTS:</b>		
Laboratory Name: <u>YORK</u>	Analysis/Method: <u>TCL VOCS BY 8260</u>	Turn Around Time: <u>STANDARD</u>
_____	_____	_____
_____	_____	_____

<b>QA/QC:</b> Duplicate	Equip. Blank	Field Blank	Trip Blank
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**SITE INSPECTION REPORT**

Person performing Inspection: Matthew MacDonald Date: 11/13/2017 Weather: Overcast, 30s, slight breeze  
 Signature: *Matthew MacDonald* Page: 1 of 2

**SOIL COVER SYSTEM INSPECTION**

Chestlist Items:	Acceptable	Not Acceptable	Remarks/Locations
There is no evidence of erosion of cover soils/materials from Site surface.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of depressions in cover materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of significant cracks in cover materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of exposed or damaged demarcation barrier.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of vapors or odors emanating from the Site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**VEGETATIVE INSPECTION**

Vegetation is well established over greenspace areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of stressed vegetation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of bare or thin vegetative cover.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of overgrowth or areas that need to be mowed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of recent areas of excavation or disturbed areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**VECTOR INSPECTION**

No vectors or vector activity (e.g. tracks, droppings, dens, etc.) were observed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There was no evidence of damage to the soil cover system due to the vector activity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**DRAINAGE SYSTEM INSPECTION**

There is no evidence of erosion around drainage structures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of settlement of drainage structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Manhole covers present and in good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of siltation, debris, or other restrictions in the manholes.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There are no exposed or damaged weep hole extension along retaining wall.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**SITE INSPECTION REPORT**

Person performing Inspection: Matthew MacDonald Date: 11/13/2017 Weather: Overcast, 30s, slight breeze  
 Signature: *Matthew MacDonald* Page: 2 of 2

**MONITORING WELL INSPECTION**

Chestlist Items:	Acceptable	Not Accpetable	Remarks/Locations
The monitoring wells are in generally good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Well Caps are installed on the wells.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Locks present and secured.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**SITE ACCESSIBILITY INSPECTION**

Site accessible and passable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
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**INSTITUTIONAL CONTROL INSPECTION**

The Site continues to be utilized for commerical or restricted residential uses only.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of groundwater extraction and/or use on Site. drainage structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**ADDITIONAL NOTES & OBSERVATIONS**



**SITE INSPECTION REPORT**

Person performing Inspection: Eric J. Orlowski Date: 3/05/2018 Weather: Cloudy, low 40s, windy  
 Signature: *E. Orlowski* Page: 1 of 2

**SOIL COVER SYSTEM INSPECTION**

Chestlist Items:	Acceptable	Not Acceptable	Remarks/Locations
There is no evidence of erosion of cover soils/materials from Site surface.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of depressions in cover materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of significant cracks in cover materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of exposed or damaged demarcation barrier.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of vapors or odors emanating from the Site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**VEGETATIVE INSPECTION**

Vegetation is well established over greenspace areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of stressed vegetation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of bare or thin vegetative cover.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of overgrowth or areas that need to be mowed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of recent areas of excavation or disturbed areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	


**VECTOR INSPECTION**

No vectors or vector activity (e.g. tracks, droppings, dens, etc.) were observed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There was no evidence of damage to the soil cover system due to the vector activity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**DRAINAGE SYSTEM INSPECTION**

There is no evidence of erosion around drainage structures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of settlement of drainage structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Manhole covers present and in good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of siltation, debris, or other restrictions in the manholes.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There are no exposed or damaged weep hole extension along retaining wall.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**SITE INSPECTION REPORT**

Person performing Inspection: Eric J. Orłowski Date: 3/05/2018 Weather: Cloudy, low 40s, windy  
 Signature:  Page: 2 of 2

**MONITORING WELL INSPECTION**

Chestlist Items:	Acceptable	Not Accpetable	Remarks/Locations
The monitoring wells are in generally good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Well Caps are installed on the wells.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Locks present and secured.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**SITE ACCESSIBILITY INSPECTION**

Site accessible and passable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
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**INSTITUTIONAL CONTROL INSPECTION**

The Site continues to be utilized for commerical or restricted residential uses only.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
There is no evidence of groundwater extraction and/or use on Site. drainage structures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

**ADDITIONAL NOTES & OBSERVATIONS**

*(This section is currently blank for additional notes and observations.)*

## Kingston CVS Site SSDS Inspection Worksheet

<b>Date:</b> 11/13/2017	<b>Inspector:</b> Matthew MacDonald		
	<b>Yes</b>	<b>No</b>	<b>General Comments/Notes</b>
Is the system running normally?	X		
Is the indicator light functioning?	X		
Is the electrical/ control panel secure?	X		
Does the inlet pipe (copper) feel cool/cold to the touch?	X		
Does the outlet pipe (copper) feel warm but not hot?	X		
Is the stack clear and evenly discharging air?	X		
Is there any water being exhausted from the stack?		X	
Does the effluent air have any noticeable odor?		X	
Does the blower feel warm but not hot?	X		
Does the blower sound as if it's running smoothly?	X		

<b><i>System Readings</i></b>		
Time	Pressure (in WC)	PID (ppm)
1215	0.31	0.0


## Kingston CVS Site SSDS Inspection Worksheet

<b>Date:</b> 3/5/2018	<b>Inspector:</b> Eric J. Orłowski		
	<b>Yes</b>	<b>No</b>	<b>General Comments/Notes</b>
Is the system running normally?	X		
Is the indicator light functioning?	X		
Is the electrical/ control panel secure?	X		
Does the inlet pipe (copper) feel cool/cold to the touch?	X		
Does the outlet pipe (copper) feel warm but not hot?	X		
Is the stack clear and evenly discharging air?	X		
Is there any water being exhausted from the stack?		X	
Does the effluent air have any noticeable odor?		X	
Does the blower feel warm but not hot?	X		
Does the blower sound as if it's running smoothly?	X		

<b><i>System Readings</i></b>		
Time	Pressure (in WC)	PID (ppm)
1920	0.21	0.0

Appendix B:  
Limited Investigation Soil Boring Log Forms and  
Photo Log

**TEST BORING AND MONITORING WELL LOG FORM**

		<b>21 Fox Street</b> Poughkeepsie, NY 12601 Phn: (845) 454-3980 Fax: (845) 454-4026		<b>PROJECT:</b> Former Utility Platers / Kingston Diagnostics Site <b>LOCATION:</b> 167 Schwenck Drive, Kingston, New York <b>CLIENT:</b> Woodhaven National Management <b>PROJECT NO.:</b> 41103.00			<b>Test Boring No.:</b> <b>CB-1/MW-6</b>					
		<b>Contractor:</b> Core Down Drilling <b>Drill Rig:</b> Geoprobe 7822 DT <b>Driller:</b> Andrew Bellucci <b>Geologist:</b> Eric Orlovski		<b>Start Date:</b> March 1, 2018 <b>Finish Date:</b> March 1, 2018 <b>El. Datum:</b> NA <b>G.S. Elevation:</b> NA		<b>Northing:</b> NA <b>Easting:</b> NA <b>Longitude:</b> NA <b>Latitude:</b> NA		<b>Total Depth:</b> 30 ft. <b>Borehole Dia.:</b> 2.5 in. <b>Water Depth:</b> 19 ft. <b>Rock Depth:</b> NA ft. <b>Well Depth:</b> 30 ft.				
Depth (Ft)	Elevation (Ft)	Casing Blows	Sample No.	PID (ppm)	Recovery (in)	Groundwater	Group Symbol	Stratum and Field Descriptions:	Well Diagram	Field Notes, Well Notes, Comments:		
1								3" dark brown topsoil		Well finished flush-to-grade with 5" manhole.		
2			1	0.2	26		SM	23" brown to grey-brown silty sand, some brick, concrete and asphalt fragments, dry, loose, NOSOI.		Native cuttings used to fill from Grade to 10 ft bgs.		
3												
4												
5												
6			2	0.4	22		SM	22" SAA, grey-brown, dry, loose, NOSOI.		Solid 1" Schedule 40 PVC riser from Grade to 15 ft bgs.		
7												
8												
9												
10												
11			3	0.1	17		SM	22" SAA, grey-brown, many concrete fragments, dry, loose, NOSOI.		3/8" bentonite chips used to fill from 10 to 13 ft bgs.		
12												
13												
14												
15												
16							SM	10" SAA, grey-brown, dry to moist, loose, NOSOI.		Moire No. 3 sand used to fill from 13 to 30 ft bgs.		
17			4	0.0	21							
18												
19							ML/CL	11" grey-brown to brown silty clay to clayey silt, moist to wet, medium stiff, NOSOI.		0.010" slot size, 1" Schedule 40 PVC screen from 15 to 30 ft bgs.		
20												
<b>METHODS:</b> HSA- Hollow Stem Auger, RWH- Rotary Wash, SSA- Solid Stem Auger, CPT- Cone Penetrometer									<b>DRILLING INFORMATION</b>			
<b>SAMPLE TYPES:</b> AS-Auger, WS-Wash, SS-Split Spoon, RC-Rock Core, GS-Grab, ST-Shelby Tube, PS-Piston												
<b>STANDARD</b> 1. Samples classified in accordance with ASTM D-2488 unless otherwise noted.									Method: Direct Push			
<b>NOTES:</b> 2. Test Boring Log Page 1: 0 - 20 feet. Each subsequent page: Additional 20 feet.									Method:			
3. Refer to the "Interpretation of Subsurface Logs" for additional symbology and abbreviation definitions.									Type:	Casing	Sample	Core
<b>ADDITIONAL NOTES:</b> 1. NOSOI - no obvious signs of impacts									Diam.:			
2. SAA - same as above									Weight:			
3. BGS - below ground surface									Fall:			

**TEST BORING AND MONITORING WELL LOG FORM**

		<b>21 Fox Street</b> Poughkeepsie, NY 12601 Phn: (845) 454-3980 Fax: (845) 454-4026		<b>PROJECT:</b> Former Utility Platers / Kingston Diagnostics Site <b>LOCATION:</b> 167 Schwenck Drive, Kingston, New York <b>CLIENT:</b> Woodhaven National Management <b>PROJECT NO.:</b> 41103.00			<b>Test Boring No.:</b> <b>CB-1/MW-6</b>			
		<b>Contractor:</b> Core Down Drilling <b>Drill Rig:</b> Geoprobe 7822 DT <b>Driller:</b> Andrew Bellucci <b>Geologist:</b> Eric Orlovski		<b>Start Date:</b> March 1, 2018 <b>Finish Date:</b> March 1, 2018 <b>El. Datum:</b> NA <b>G.S. Elevation:</b> NA		<b>Northing:</b> NA <b>Easting:</b> NA <b>Longitude:</b> NA <b>Latitude:</b> NA		<b>Total Depth:</b> 30 ft. <b>Borehole Dia.:</b> 2.5 in. <b>Water Depth:</b> 19 ft. <b>Rock Depth:</b> NA ft. <b>Well Depth:</b> 30 ft.		
Depth (Ft)	Elevation (Ft)	Casing Blows	Sample No.	PID (ppm)	Recovery (in)	Groundwater	Group Symbol	Stratum and Field Descriptions:	Well Diagram	Field Notes, Well Notes, Comments:
21			5	0.0	44		CL	44" grey-brown to grey silty clay to lean clay, wet, medium stiff, slightly thixotropic, NOSOI.		Moire No. 3 sand used to fill from 13 to 30 ft bgs.  Analytical soil sample collected from 25 to 30 ft bgs interval.  0.010" slot size, 1" Schedule 40 PVC screen from 15 to 30 ft bgs.
22										
23										
24										
25			6	0.0	42		CL	42" grey lean clay, wet, slightly thixotropic, NOSOI.		Base of monitoring well 30 ft bgs.
26										
27										
28										
29								End of Boring at 30 feet bgs, refusal not encountered.		
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										

<b>METHODS:</b> HSA- Hollow Stem Auger, RWH- Rotary Wash, SSA- Solid Stem Auger, CPT- Cone Penetrometer				<b>DRILLING INFORMATION</b>					
<b>SAMPLE TYPES:</b> AS-Auger, WS-Wash, SS-Split Spoon, RC-Rock Core, GS-Grab, ST-Shelby Tube, PS-Piston				Method: Direct Push					
<b>STANDARD</b> 1. Samples classified in accordance with ASTM D-2488 unless otherwise noted.				Method:					
<b>NOTES:</b> 2. Test Boring Log Page 1: 0 - 20 feet. Each subsequent page: Additional 20 feet.				Casing		Sample		Core	
3. Refer to the "Interpretation of Subsurface Logs" for additional symbology and abbreviation definitions.				Type:		Diam.:		Weight:	
<b>ADDITIONAL NOTES:</b> 1. NOSOI - no obvious signs of impacts				Fall:					
2. SAA - same as above									
3. BGS - below ground surface									

**TEST BORING AND MONITORING WELL LOG FORM**

<b>21 Fox Street</b> Poughkeepsie, NY 12601 Phn: (845) 454-3980 Fax: (845) 454-4026		<b>PROJECT:</b> Former Utility Platers / Kingston Diagnostics Site <b>LOCATION:</b> 167 Schwenck Drive, Kingston, New York <b>CLIENT:</b> Woodhaven National Management <b>PROJECT NO.:</b> 41103.00			<b>Test Boring No.:</b> <b>CB-2/MW-7</b>						
		<b>Contractor:</b> Core Down Drilling <b>Drill Rig:</b> Geoprobe 7822 DT <b>Driller:</b> Andrew Bellucci <b>Geologist:</b> Eric Orlovski		<b>Start Date:</b> March 1, 2018 <b>Finish Date:</b> March 1, 2018 <b>El. Datum:</b> NA <b>G.S. Elevation:</b> NA		<b>Northing:</b> NA <b>Easting:</b> NA <b>Longitude:</b> NA <b>Latitude:</b> NA					
		<b>Total Depth:</b> 30 ft.		<b>Borehole Dia.:</b> 2.5 in.		<b>Water Depth:</b> 11 ft.					
		<b>Rock Depth:</b> NA ft.		<b>Well Depth:</b> 30 ft.							
Depth (Ft)	Elevation (Ft)	Casing Blows	Sample No.	PID (ppm)	Recovery (in)	Groundwater	Group Symbol	Stratum and Field Descriptions:	Well Diagram	Field Notes, Well Notes, Comments:	
1								3" dark brown topsoil 2" grey shale fragments		Well finished flush-to-grade with 5" manhole.	
2			1	0.0	20		ML	15" brown fine sandy silt, some angular shale fragments fragments, dry to moist, medium stiff, NOSOI.		Native cuttings used to fill from Grade to 10 ft bgs.	
3											
4											
5											
6							ML	2" SAA, brown, dry to moist, medium stiff, NOSOI.			
7											
8			2	0.0	13		SP	11" brown fine to medium sand, dry to moist, loose, NOSOI.		Solid 1" Schedule 40 PVC riser from Grade to 15 ft bgs.	
9											
10											
11							SP	10" SAA, brown to grey, moist to wet, loose, NOSOI.		3/8" bentonite chips used to fill from 10 to 13 ft bgs.	
12											
13			3	0.0	23		CL	13" grey silty clay, wet, medium stiff, slightly thixotropic, NOSOI. Lenses of fine grey sand each one inch thick noted at 14, 14.4 feet bgs.		Moire No. 3 sand used to fill from 13 to 30 ft bgs.	
14											
15											
16											
17											
18			4	0.0	47		CL	47" brown to grey silty clay to clay, wet, medium stiff, slightly thixotropic, NOSOI.		0.010" slot size, 1" Schedule 40 PVC screen from 15 to 30 ft bgs.	
19											
20											
<b>METHODS:</b> HSA- Hollow Stem Auger, RWH- Rotary Wash, SSA- Solid Stem Auger, CPT- Cone Penetrometer									<b>DRILLING INFORMATION</b> Method: Direct Push Method:		
<b>SAMPLE TYPES:</b> AS-Auger, WS-Wash, SS-Split Spoon, RC-Rock Core, GS-Grab, ST-Shelby Tube, PS-Piston											
<b>STANDARD</b> 1. Samples classified in accordance with ASTM D-2488 unless otherwise noted.									Type:		
<b>NOTES:</b> 2. Test Boring Log Page 1: 0 - 20 feet. Each subsequent page: Additional 20 feet.									Diam.:		
3. Refer to the "Interpretation of Subsurface Logs" for additional symbology and abbreviation definitions.									Weight:		
<b>ADDITIONAL</b> 1. NOSOI - no obvious signs of impacts									Fall:		
<b>NOTES:</b> 2. SAA - same as above											
3. BGS - below ground surface											



**TEST BORING AND MONITORING WELL LOG FORM**

		<b>21 Fox Street</b> Poughkeepsie, NY 12601 Phn: (845) 454-3980 Fax: (845) 454-4026		<b>PROJECT:</b> Former Utility Platers / Kingston Diagnostics Site <b>LOCATION:</b> 167 Schwenck Drive, Kingston, New York <b>CLIENT:</b> Woodhaven National Management <b>PROJECT NO.:</b> 41103.00			<b>Test Boring No.:</b> <b>CB-2/MW-7</b>				
		<b>Contractor:</b> Core Down Drilling <b>Drill Rig:</b> Geoprobe 7822 DT <b>Driller:</b> Andrew Bellucci <b>Geologist:</b> Eric Orłowski		<b>Start Date:</b> March 1, 2018 <b>Finish Date:</b> March 1, 2018 <b>El. Datum:</b> NA <b>G.S. Elevation:</b> NA		<b>Northing:</b> NA <b>Easting:</b> NA <b>Longitude:</b> NA <b>Latitude:</b> NA		<b>Total Depth:</b> 30 ft. <b>Borehole Dia.:</b> 2.5 in. <b>Water Depth:</b> 11 ft. <b>Rock Depth:</b> NA ft. <b>Well Depth:</b> 30 ft.			
Depth (Ft)	Elevation (Ft)	Casing Blows	Sample No.	PID (ppm)	Recovery (in)	Groundwater	Group Symbol	Stratum and Field Descriptions:	Well Diagram	Field Notes, Well Notes, Comments:	
21								45" grey lean clay, wet, plastic, somewhat thixotropic, NOSOI.		Moire No. 3 sand used to fill from 13 to 30 ft bgs.  Analytical soil sample collected from 25 to 30 ft bgs interval.  0.010" slot size, 1" Schedule 40 PVC screen from 15 to 30 ft bgs.	
22			5	0.0	45		CL				
23											
24											
25											
26								53" SAA, grey, wet, NOSOI.		Base of monitoring well 30 ft bgs.	
27			6	0.0	53		CL				
28											
29											
30											
31								End of Boring at 30 feet bgs, refusal not encountered.			
32											
33											
34											
35											
36											
37											
38											
39											
40											
<b>METHODS:</b> HSA- Hollow Stem Auger, RWH- Rotary Wash, SSA- Solid Stem Auger, CPT- Cone Penetrometer									<b>DRILLING INFORMATION</b>		
<b>SAMPLE TYPES:</b> AS-Auger, WS-Wash, SS-Split Spoon, RC-Rock Core, GS-Grab, ST-Shelby Tube, PS-Piston									Method: Direct Push		
<b>STANDARD</b> 1. Samples classified in accordance with ASTM D-2488 unless otherwise noted.									Method:		
<b>NOTES:</b> 2. Test Boring Log Page 1: 0 - 20 feet. Each subsequent page: Additional 20 feet. 3. Refer to the "Interpretation of Subsurface Logs" for additional symbology and abbreviation definitions.											
<b>ADDITIONAL NOTES:</b> 1. NOSOI - no obvious signs of impacts 2. SAA - same as above 3. BGS - below ground surface											
									Type:		
									Diam.:		
									Weight:		
									Fall:		



Photo #1

Description: Representative view of GeoProbe drilling rig advancing a soil boring.  
Location CB-1/MW-6, view looking northwest.



Photo #2

Description: Representative view of soil sample as recovered from Geoprobe drilling rig using dual-tube drilling method.



Photo #3

Description: Representative view of monitoring well piping being installed into borehole. Location CB-1/MW-6, view looking northwest.



Photo #4

Description: Representative view of completed monitoring well (MW-6).

Appendix C:  
Engineering Control/ Institutional Control  
Certification Forms





Enclosure 2  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
 Site Management Periodic Review Report Notice  
 Institutional and Engineering Controls Certification Form



	Site Details	Box 1
Site No. <b>C356035</b>		
<b>Site Name Utility Platers, Inc./Kingston Diagnostics</b>		
Site Address: 416 Washington Avenue/167 Schwenck Drive	Zip Code: 12401	
City/Town: Kingston		
County: Ulster		
Site Acreage: 1.7		
Reporting Period: April 19, 2017 to April 26, 2018		
		YES    NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>		
5. Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<b>Box 2</b>
		YES    NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date

		Box 2A	
		YES	NO
8.	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.</b></p>			
9.	Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.</b></p>			

SITE NO. C356035		Box 3
<b>Description of Institutional Controls</b>		
<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
48.314-1-11.1	Woodhaven National Management LLC	Soil Management Plan Monitoring Plan O&M Plan IC/EC Plan
		Landuse Restriction Site Management Plan Ground Water Use Restriction
<p>(1) The Controlled Property may be used for: "Restricted-residential use," "Commercial use" and/or "Industrial use", as described within 6 NYCRR Part 375-1.8(g)(2) (ii), (iii) and (iv).</p> <p>(2) All Engineering Controls must be operated and maintained as specified in the Site Management Plan (SMP);</p> <p>(3) All Engineering Controls must be inspected at a frequency and in a manner defined in the SMP.</p> <p>(4) Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;</p> <p>(5) Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP;</p> <p>(6) All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;</p> <p>(7) Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP.</p> <p>(8) Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy shall be performed as defined in the SMP.</p> <p>(9) Access to the site must be provided to agents, employees or other representatives of the state of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by this Environmental Easement.</p>		

		Box 4
<b>Description of Engineering Controls</b>		
<u>Parcel</u>	<u>Engineering Control</u>	
48.314-1-11.1	Cover System Vapor Mitigation	

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

X

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

X

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. C356035

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

The Chazen Companies

21 Fox Street

Poughkeepsie, NY 12601

RUSSELL URBAN-MEAD

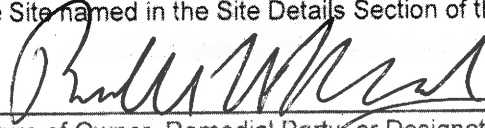
at

print name

print business address

am certifying as OWNER'S REPRESENTATIVE (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.



Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

6/5/2017

Date



IC/EC CERTIFICATIONS

Box 7

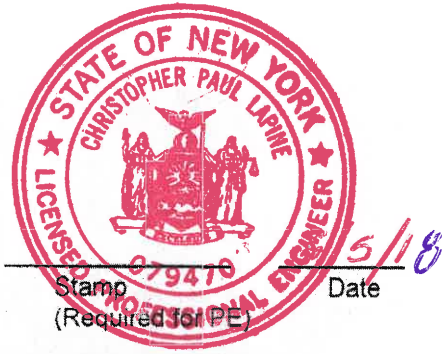
Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I CHRISTOPHER LAPINE at THE CHAZEN COMPANIES  
21 FOX ST, SUITE 201  
POUGHKEEPSIE, NY 12601  
print name print business address

am certifying as a Qualified Environmental Professional for the OWNER  
(Owner or Remedial Party)

Christopher Lapine  
Signature of Qualified Environmental Professional, for  
the Owner or Remedial Party, Rendering Certification



Stamp (Required for PE) Date

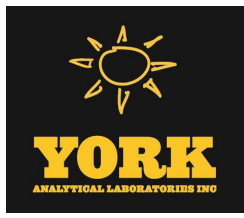
Appendix D:  
Laboratory Data Reports (Digital File)

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# Technical Report

prepared for:

**Chazen Environmental Services (Poughkeepsie)**

21 Fox Street

Poughkeepsie NY, 12601

**Attention: Eric Orlowski**

Report Date: 04/17/2018

**Client Project ID: 41103.00 Task 0900-Kingston CVS Investigation**

York Project (SDG) No.: 18C0104

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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**Chazen Environmental Services (Poughkeepsie)**

21 Fox Street  
Poughkeepsie NY, 12601  
Attention: Eric Orłowski

---

**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 05, 2018 and listed below. The project was identified as your project: **41103.00 Task 0900-Kingston CVS Investigation**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18C0104-01	KC-CB-01 (25-30')	Soil	03/01/2018	03/05/2018
18C0104-02	KC-CB-02 (25-30')	Soil	03/01/2018	03/05/2018
18C0104-03	KC-EB-01	Water	03/01/2018	03/05/2018
18C0104-04	KC-MW-06 (0318)	Water	03/05/2018	03/05/2018
18C0104-05	KC-MW-07 (0318)	Water	03/05/2018	03/05/2018
18C0104-06	KC-MW-DUP1 (0318)	Water	03/05/2018	03/05/2018
18C0104-07	TRIP BLANK	Water	03/05/2018	03/05/2018

## **General Notes for York Project (SDG) No.: 18C0104**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**

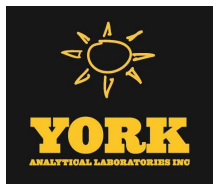


**Benjamin Gulizia**  
Laboratory Director

**Date:** 04/17/2018







### Sample Information

**Client Sample ID:** KC-CB-01 (25-30')

**York Sample ID:** 18C0104-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Soil

March 1, 2018 9:00 am

03/05/2018

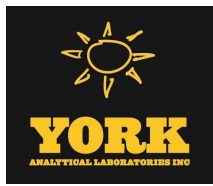
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP		
120-82-1	1,2,4-Trichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-63-6	1,2,4-Trimethylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-12-8	1,2-Dibromo-3-chloropropane	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.049	0.099	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



### Sample Information

**Client Sample ID:** KC-CB-01 (25-30')

**York Sample ID:** 18C0104-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Soil

March 1, 2018 9:00 am

03/05/2018

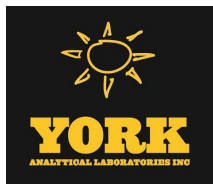
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	0.010	SCAL-E	mg/kg dry	0.0049	0.0099	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0049	0.0099	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



### Sample Information

**Client Sample ID:** KC-CB-01 (25-30')

**York Sample ID:** 18C0104-01

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Soil	<u>Collection Date/Time</u> March 1, 2018 9:00 am	<u>Date Received</u> 03/05/2018
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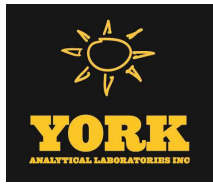
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst									
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
75-09-2	<b>Methylene chloride</b>	<b>0.0073</b>	J, CCV-E, SCAL- E, B	mg/kg dry	0.0049	0.0099	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
104-51-8	n-Butylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
103-65-1	n-Propylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
95-47-6	o-Xylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0049	0.0099	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
99-87-6	p-Isopropyltoluene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
135-98-8	sec-Butylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
100-42-5	Styrene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0025	0.0099	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
98-06-6	tert-Butylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
108-88-3	Toluene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
110-57-6	* trans-1,4-dichloro-2-butene	ND	IS-LO	mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0025	0.0049	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0074	0.015	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:17	SS									
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"><b>Surrogate Recoveries</b></td> <td style="width: 20%;"><b>Result</b></td> <td style="width: 20%;"><b>Acceptance Range</b></td> </tr> <tr> <td>17060-07-0 <i>Surrogate: 1,2-Dichloroethane-d4</i></td> <td>91.7 %</td> <td>77-125</td> </tr> <tr> <td>2037-26-5 <i>Surrogate: Toluene-d8</i></td> <td>125 %</td> <td>S-08 85-120</td> </tr> </table>												<b>Surrogate Recoveries</b>	<b>Result</b>	<b>Acceptance Range</b>	17060-07-0 <i>Surrogate: 1,2-Dichloroethane-d4</i>	91.7 %	77-125	2037-26-5 <i>Surrogate: Toluene-d8</i>	125 %	S-08 85-120
<b>Surrogate Recoveries</b>	<b>Result</b>	<b>Acceptance Range</b>																		
17060-07-0 <i>Surrogate: 1,2-Dichloroethane-d4</i>	91.7 %	77-125																		
2037-26-5 <i>Surrogate: Toluene-d8</i>	125 %	S-08 85-120																		



### Sample Information

**Client Sample ID:** KC-CB-01 (25-30')

**York Sample ID:** 18C0104-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18C0104	41103.00 Task 0900-Kingston CVS Investigation	Soil	March 1, 2018 9:00 am	03/05/2018

#### Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: p-Bromofluorobenzene	131 %	S-08		76-130						

#### Total Solids

Log-in Notes:

Sample Notes:

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	77.1		%	0.100	1	SM 2540G Certifications: CTDOH	03/08/2018 19:26	03/09/2018 16:35	TAJ

### Sample Information

**Client Sample ID:** KC-CB-02 (25-30')

**York Sample ID:** 18C0104-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
18C0104	41103.00 Task 0900-Kingston CVS Investigation	Soil	March 1, 2018 10:00 am	03/05/2018

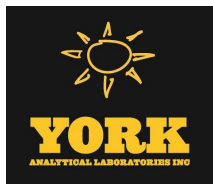
#### Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
71-55-6	1,1,1-Trichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/12/2018 07:30	03/12/2018 14:49	SS
79-00-5	1,1,2-Trichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
75-34-3	1,1-Dichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
75-35-4	1,1-Dichloroethylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
87-61-6	1,2,3-Trichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
96-18-4	1,2,3-Trichloropropane	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	03/12/2018 07:30	03/12/2018 14:49	SS
120-82-1	1,2,4-Trichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
95-63-6	1,2,4-Trimethylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS



### Sample Information

**Client Sample ID:** KC-CB-02 (25-30')

**York Sample ID:** 18C0104-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Soil

March 1, 2018 10:00 am

03/05/2018

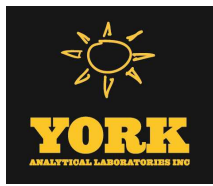
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-93-4	1,2-Dibromoethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-50-1	1,2-Dichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-06-2	1,2-Dichloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-87-5	1,2-Dichloropropane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-67-8	1,3,5-Trimethylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
541-73-1	1,3-Dichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
106-46-7	1,4-Dichlorobenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
123-91-1	1,4-Dioxane	ND		mg/kg dry	0.050	0.10	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
78-93-3	2-Butanone	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
591-78-6	2-Hexanone	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-10-1	4-Methyl-2-pentanone	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-64-1	<b>Acetone</b>	<b>0.0061</b>	J, SCAL- E	mg/kg dry	0.0050	0.010	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		mg/kg dry	0.0050	0.010	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



### Sample Information

**Client Sample ID:** KC-CB-02 (25-30')

**York Sample ID:** 18C0104-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Soil

March 1, 2018 10:00 am

03/05/2018

**Volatile Organics, 8260 - Comprehensive**

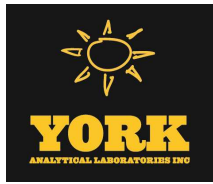
**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-66-3	Chloroform	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	cis-1,2-Dichloroethylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-87-2	Methylcyclohexane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-09-2	Methylene chloride	ND		mg/kg dry	0.0050	0.010	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
104-51-8	n-Butylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
103-65-1	n-Propylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
95-47-6	o-Xylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
179601-23-1	p- & m- Xylenes	ND		mg/kg dry	0.0050	0.010	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP		
99-87-6	p-Isopropyltoluene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
135-98-8	sec-Butylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-42-5	Styrene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-65-0	tert-Butyl alcohol (TBA)	ND		mg/kg dry	0.0025	0.010	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-06-6	tert-Butylbenzene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C	03/12/2018 07:30	03/12/2018 14:49	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		





**Sample Information**

**Client Sample ID:** KC-CB-02 (25-30')

**York Sample ID:** 18C0104-02

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Soil	<u>Collection Date/Time</u> March 1, 2018 10:00 am	<u>Date Received</u> 03/05/2018
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**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
108-88-3	Toluene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
156-60-5	trans-1,2-Dichloroethylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
110-57-6	* trans-1,4-dichloro-2-butene	ND	IS-LO	mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH	03/12/2018 07:30	03/12/2018 14:49	SS
79-01-6	Trichloroethylene	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
75-69-4	Trichlorofluoromethane	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
75-01-4	Vinyl Chloride	ND		mg/kg dry	0.0025	0.0050	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 07:30	03/12/2018 14:49	SS
1330-20-7	Xylenes, Total	ND		mg/kg dry	0.0075	0.015	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/12/2018 07:30	03/12/2018 14:49	SS
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	90.7 %			77-125						
2037-26-5	Surrogate: Toluene-d8	138 %	S-08		85-120						
460-00-4	Surrogate: p-Bromofluorobenzene	147 %	S-08		76-130						

**Total Solids**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	75.2		%	0.100	1	SM 2540G Certifications: CTDOH	03/08/2018 19:26	03/09/2018 16:35	TAJ

**Sample Information**

**Client Sample ID:** KC-EB-01

**York Sample ID:** 18C0104-03

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 1, 2018 10:45 am	<u>Date Received</u> 03/05/2018
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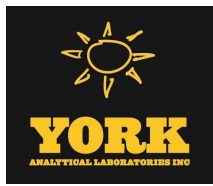
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:30	03/09/2018 13:05	RDS



### Sample Information

**Client Sample ID:** KC-EB-01

**York Sample ID:** 18C0104-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 1, 2018 10:45 am

03/05/2018

**Volatile Organics, 8260 - Comprehensive**

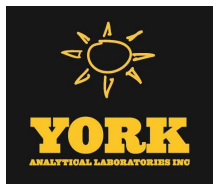
**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	2.0	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
78-93-3	<b>2-Butanone</b>	<b>0.21</b>	J, SCAL- E	ug/L	0.20	2.0	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
67-64-1	<b>Acetone</b>	<b>8.8</b>	SCAL- E	ug/L	1.0	2.0	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				





### Sample Information

**Client Sample ID:** KC-EB-01

**York Sample ID:** 18C0104-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 1, 2018 10:45 am

03/05/2018

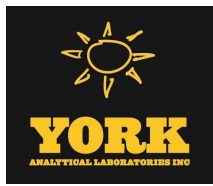
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			



### Sample Information

**Client Sample ID:** KC-EB-01

**York Sample ID:** 18C0104-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 1, 2018 10:45 am

03/05/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

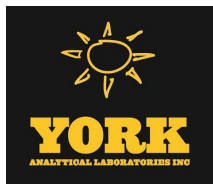
CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP			
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP			
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	03/09/2018 07:30	03/09/2018 13:05	RDS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			

**Surrogate Recoveries**

**Result**

**Acceptance Range**

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	94.5 %	69-130
2037-26-5	Surrogate: Toluene-d8	100 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	114 %	79-122



### Sample Information

**Client Sample ID:** KC-MW-06 (0318)

**York Sample ID:** 18C0104-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 5, 2018 12:30 pm

03/05/2018

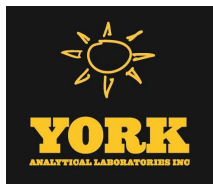
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>0.38</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
75-34-3	<b>1,1-Dichloroethane</b>	<b>0.29</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:15	SS



### Sample Information

**Client Sample ID:** KC-MW-06 (0318)

**York Sample ID:** 18C0104-04

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 12:30 pm	<u>Date Received</u> 03/05/2018
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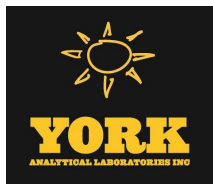
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	2.2	CCV-E, ICV-E, SCAL- E	ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
156-59-2	cis-1,2-Dichloroethylene	12		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS



### Sample Information

**Client Sample ID:** KC-MW-06 (0318)

**York Sample ID:** 18C0104-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 5, 2018 12:30 pm

03/05/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-65-0	<b>tert-Butyl alcohol (TBA)</b>	<b>1.8</b>	J, CCV-E	ug/L	0.50	2.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>0.38</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/09/2018 07:17	03/09/2018 23:15	SS
79-01-6	<b>Trichloroethylene</b>	<b>26</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
75-01-4	<b>Vinyl Chloride</b>	<b>0.23</b>	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/09/2018 07:17	03/09/2018 23:15	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	03/09/2018 07:17	03/09/2018 23:15	SS

**Surrogate Recoveries**

**Result**

**Acceptance Range**

17060-07-0 *Surrogate: 1,2-Dichloroethane-d4*

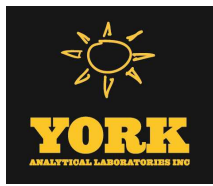
96.1 %

69-130

2037-26-5 *Surrogate: Toluene-d8*

105 %

81-117



Sample Information

Client Sample ID: KC-MW-06 (0318)

York Sample ID: 18C0104-04

Table with 5 columns: York Project (SDG) No., Client Project ID, Matrix, Collection Date/Time, Date Received. Values: 18C0104, 41103.00 Task 0900-Kingston CVS Investigation, Water, March 5, 2018 12:30 pm, 03/05/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

Table with 12 columns: CAS No., Parameter, Result, Flag, Units, Reported to LOD/MDL, LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst. Row 1: 460-00-4, Surrogate: p-Bromofluorobenzene, 99.8 %, 79-122

Sample Information

Client Sample ID: KC-MW-07 (0318)

York Sample ID: 18C0104-05

Table with 5 columns: York Project (SDG) No., Client Project ID, Matrix, Collection Date/Time, Date Received. Values: 18C0104, 41103.00 Task 0900-Kingston CVS Investigation, Water, March 5, 2018 6:25 pm, 03/05/2018

Volatile Organics, 8260 - Comprehensive

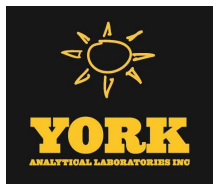
Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

Table with 12 columns: CAS No., Parameter, Result, Flag, Units, Reported to LOD/MDL, LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst. Multiple rows listing various organic compounds and their results.





### Sample Information

**Client Sample ID:** KC-MW-07 (0318)

**York Sample ID:** 18C0104-05

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 6:25 pm	<u>Date Received</u> 03/05/2018
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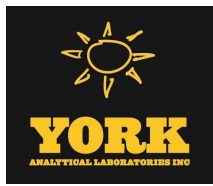
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
67-66-3	<b>Chloroform</b>	<b>0.32</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>11</b>		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				



### Sample Information

**Client Sample ID:** KC-MW-07 (0318)

**York Sample ID:** 18C0104-05

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 6:25 pm	<u>Date Received</u> 03/05/2018
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**Volatile Organics, 8260 - Comprehensive**

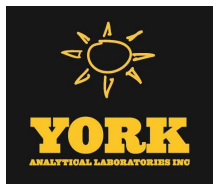
**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
75-65-0	<b>tert-Butyl alcohol (TBA)</b>	<b>1.3</b>	J, CCV-E	ug/L	0.50	2.0	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>0.35</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS





### Sample Information

**Client Sample ID:** KC-MW-07 (0318)

**York Sample ID:** 18C0104-05

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 6:25 pm	<u>Date Received</u> 03/05/2018
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**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-01-6	Trichloroethylene	39		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-01-4	Vinyl Chloride	2.9		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	03/09/2018 07:17	03/09/2018 23:47	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP		
<b>Surrogate Recoveries</b>		<b>Result</b>			<b>Acceptance Range</b>						
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	95.8 %			69-130						
2037-26-5	Surrogate: Toluene-d8	104 %			81-117						
460-00-4	Surrogate: p-Bromofluorobenzene	100 %			79-122						

### Sample Information

**Client Sample ID:** KC-MW-DUP1 (0318)

**York Sample ID:** 18C0104-06

<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 3:00 pm	<u>Date Received</u> 03/05/2018
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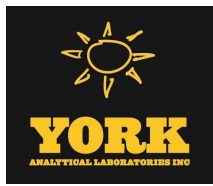
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-55-6	1,1,1-Trichloroethane	0.39	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-34-3	1,1-Dichloroethane	0.32	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



### Sample Information

**Client Sample ID:** KC-MW-DUP1 (0318)

**York Sample ID:** 18C0104-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/05/2018

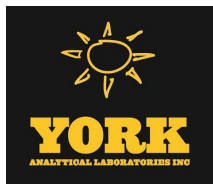
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
67-64-1	Acetone	1.6		ug/L	1.0	2.0	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS



### Sample Information

<b>Client Sample ID:</b> KC-MW-DUP1 (0318)		<b>York Sample ID:</b> 18C0104-06	
<u>York Project (SDG) No.</u> 18C0104	<u>Client Project ID</u> 41103.00 Task 0900-Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 3:00 pm
		<u>Date Received</u> 03/05/2018	

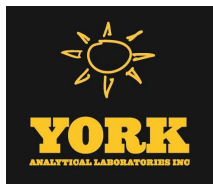
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>13</b>		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
							Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP				



### Sample Information

**Client Sample ID:** KC-MW-DUP1 (0318) **York Sample ID:** 18C0104-06  
**York Project (SDG) No.:** 18C0104 **Client Project ID:** 41103.00 Task 0900-Kingston CVS Investigation **Matrix:** Water **Collection Date/Time:** March 5, 2018 3:00 pm **Date Received:** 03/05/2018

#### Volatile Organics, 8260 - Comprehensive

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	2.0	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>0.38</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
79-01-6	<b>Trichloroethylene</b>	<b>27</b>		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
75-01-4	<b>Vinyl Chloride</b>	<b>0.33</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:19	SS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	94.6 %	69-130								
2037-26-5	Surrogate: Toluene-d8	105 %	81-117								
460-00-4	Surrogate: p-Bromofluorobenzene	99.7 %	79-122								

### Sample Information

**Client Sample ID:** TRIP BLANK **York Sample ID:** 18C0104-07  
**York Project (SDG) No.:** 18C0104 **Client Project ID:** 41103.00 Task 0900-Kingston CVS Investigation **Matrix:** Water **Collection Date/Time:** March 5, 2018 3:00 pm **Date Received:** 03/05/2018

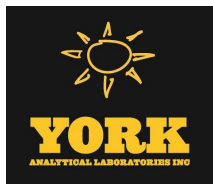
#### Volatile Organics, 8260 - Comprehensive

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS



### Sample Information

**Client Sample ID:** TRIP BLANK

**York Sample ID:** 18C0104-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/05/2018

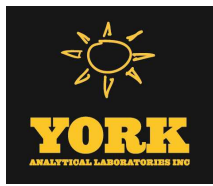
**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
78-93-3	<b>2-Butanone</b>	<b>0.42</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
67-64-1	<b>Acetone</b>	<b>1.5</b>	CCV-E, ICV-E, SCAL- E, J	ug/L	1.0	2.0	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
107-02-8	Acrolein	ND		ug/L	0.20	2.0	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS



### Sample Information

**Client Sample ID:** TRIP BLANK

**York Sample ID:** 18C0104-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0104

41103.00 Task 0900-Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/05/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

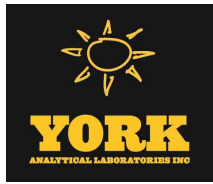
**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/09/2018 07:17	03/10/2018 00:51	SS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			







**Case Narrative**

Client: Chazen Environmental Services (Poughkeepsie)  
 Client Project ID: 41103.00 Task 0900-Kingston CVS Investigation  
 Prepared for: Eric Orłowski

**Introduction**

This Case Narrative applies only to the samples submitted to our laboratory on **03/05/2018 15:15** as detailed on the chain-of-custody form.

The 7 sample(s) were received intact in a custody-sealed cooler unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable ( $\leq 6^{\circ}\text{C}$ ) and documented as:

<b><u>Cooler</u></b>	<b><u>Temp C°</u></b>
<b>Default Cooler</b>	<b>1.1</b>

Chain-of-custody was maintained from receipt through analysis in the laboratory.

**Methodology**

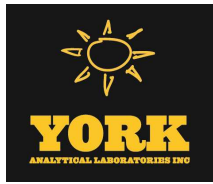
All preparation and analyses were conducted according to the appropriate EPA methods detailed in the report.

**Sample and Analysis Qualifiers**

<u>Sample Name</u>	<u>Matrix</u>
KC-CB-01 (25-30')	Soil
KC-CB-02 (25-30')	Soil
KC-EB-01	Water
KC-MW-06 (0318)	Water
KC-MW-07 (0318)	Water
KC-MW-DUP1 (0318)	Water
TRIP BLANK	Water

<u>Sample Name</u>	<u>Analysis</u>	<u>Analyte</u>	<u>Qualifier</u>	<u>Description</u>
KC-CB-01 (25-30')	Volatile Organics, 8260	1,2-Dichlorobenzene-d4		IS-01 This internal standard did not meet acceptance criteria. The sample was reanalyzed to confirm matrix interference. The associated compounds are flagged IS-LO accordingly.
KC-CB-01 (25-30') outside of QC limits.	Volatile Organics, 8260	p-Bromofluorobenzene	S-08	The recovery of this surrogate was
KC-CB-01 (25-30') outside of QC limits.	Volatile Organics, 8260	Toluene-d8	S-08	The recovery of this surrogate was
KC-CB-02 (25-30')	Volatile Organics, 8260	1,2-Dichlorobenzene-d4		IS-01 This internal standard did not meet





acceptance criteria. The sample was reanalyzed to confirm matrix interference. The associated compounds are flagged IS-LO accordingly.

KC-CB-02 (25-30') outside of QC limits.	Volatile Organics, 8260	p-Bromofluorobenzene	S-08	The recovery of this surrogate was
KC-CB-02 (25-30') outside of QC limits.	Volatile Organics, 8260	Toluene-d8	S-08	The recovery of this surrogate was

**QC Sample Non-Conformances**

Any QC sample non-conformances (CCV, LCS, DUP, MS) are detailed in the data package and in the attached tables.

No other problems were encountered during analysis.

**York Project/SDG no.: 18C0104 Statement**

We certify that these data are in compliance with SOP requirements both technically and for completeness for other than the conditions stated above. Release of the data contained in the hard copy report and any electronic deliverables has been authorized by the Laboratory Manager as verified by the signature on this laboratory report.

Approved by: Ben Gulizia  
Laboratory Director

Date: 04/17/2018

York Analytical Laboratories, Inc.

**Formulae Used for Sample Calculations**

**VOLATILE ORGANICS**

**1. Volatiles in Air-ppbv**

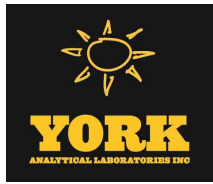
Cx (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$C_x = \frac{(A_x)(C_{is})(DF)}{(A_{is})(RRF)}$$

**2. Volatiles in Air-ug/m³**

Cx (ug/m³)= Compound concentration in ug/m³

$$C_x (\text{ug/m}^3) = \frac{(\text{ppbv} \times \text{Molecular wt.})}{(24.040)}$$



**3. Volatile Organics (water and soil), ug/L or ug/kg**

**Soils/Waters**

**Medium Level Soils**

$$C_x = \frac{(A_x)(IS)(DF)}{(A_{is})(RRF)(V)(\% \text{ solids})}$$

$$C_x = \frac{(A_x)(IS)(VT)(1000)(DF)}{(A_{is})(RRF)(VA)(V)(\% \text{ solids})}$$

**4. Semi-Volatiles (waters and soils)**

$$C_x = \frac{(A_x)(IS)(VE)(DF)}{(A_{is})(RRF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

**5. Pesticides/PCB (waters and soils), DRO, CTETPH**

$$C_x = \frac{(A_x)(VE)(DF)}{(CF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

WHERE:

- C<sub>x</sub> = concentration of analyte as ug/L or ug/kg
- A<sub>x</sub> = Area of the characteristic ion for the compound to be measured, counts.
- A<sub>is</sub> = Area of the characteristic ion for the specific internal standard, counts.
- IS = Concentration of the internal standard spiking mixture, ng
- RRF = Mean relative response factor from the initial calibration.
- DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1
- V = Volume for liquids in mL, weight for soils/solids in grams.
- VA = volume of MeOH aliquot for medium level soils
- VE = final volume of concentrated extract
- VT = volume of MeOH for volatiles medium level soils
- CF = calibration factor for external calibration used in GC pest/pcb
- C<sub>is</sub> = Concentration of the internal standard spiking mixture, ppbv



### Case Narrative Non-Conformance Summary

Laboratory: York Analytical Laboratories, Inc. Client: Chazen Environmental Services (Poughkeepsie)  
 Project: 41103.00 Task 0900-Kingston CVS Investigation Lab Project No: 18C0104  
 Laboratory Sample ID(s): 18C0104-01 - 18C0104-07 Sampling Date(s): 03/01/2018 - 03/05/2018  
 Review Date(s): 04/17/2018 - 04/17/2018 Laboratory Reviewer(s): JD

### QC Sample Nonconformances

**Batch ID:** BC80386 **Affected Samples:** See Batch Summary

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
BC80386-BS1	1,2,3-Trichlorobenzene - 87-61-6	18 ug/L	LCS	179	76-136	High Bias				
BC80386-BS1	Chlorobenzene - 108-90-7	12 ug/L	LCS	122	88-120	High Bias				
BC80386-BS1	Dichlorodifluoromethane - 75-71-8	16 ug/L	LCS	160	44-144	High Bias				
BC80386-BSD1	1,2,3-Trichlorobenzene - 87-61-6	18 ug/L	LCS Dup	177	76-136	High Bias	1.12	30		

**Batch ID:** Y8B1409 **Affected Samples:** See Batch Summary

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
Y8B1409-SCV1	1,2,3-Trichlorobenzene - 87-61-6	13.9 ug/L	Secondary Cal Check	139	70-130	High Bias				
Y8B1409-SCV1	Acetone - 67-64-1	14.0 ug/L	Secondary Cal Check	140	70-130	High Bias				

**Batch ID:** Y8C1201 **Affected Samples:** See Batch Summary

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
Y8C1201-CCV1	Acrolein - 107-02-8	4.13 ug/L	Calibration Check	41.3	80-120	Low Bias				
Y8C1201-CCV1	tert-Butyl alcohol (TBA) - 75-65-0	10.8 ug/L	Calibration Check	21.5	80-120	Low Bias				
Y8C1201-CCV1	Tetrachloroethylene - 127-18-4	16.5 ug/L	Calibration Check	165	80-120	High Bias				

**Batch ID:** Y8C1221 **Affected Samples:** See Batch Summary

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
Y8C1221-CCV1	1,2,3-Trichlorobenzene - 87-61-6	17.4 ug/L	Calibration Check	174	80-120	High Bias				
Y8C1221-CCV1	1,2,4-Trichlorobenzene - 120-82-1	13.0 ug/L	Calibration Check	130	80-120	High Bias				
Y8C1221-CCV1	1,4-Dioxane - 123-91-1	126 ug/L	Calibration Check	59.9	80-120	Low Bias				
Y8C1221-CCV1	Acetone - 67-64-1	7.79 ug/L	Calibration Check	77.9	80-120	Low Bias				
Y8C1221-CCV1	Bromomethane - 74-83-9	3.97 ug/L	Calibration Check	39.7	80-120	Low Bias				
Y8C1221-CCV1	Dichlorodifluoromethane - 75-71-8	13.4 ug/L	Calibration Check	134	80-120	High Bias				
Y8C1221-CCV1	tert-Butyl alcohol (TBA) - 75-65-0	16.7 ug/L	Calibration Check	33.4	80-120	Low Bias				



**Batch ID:** Y8C1237      **Affected Samples:**      **See Batch Summary**

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
Y8C1237-CCV1	Methylene chloride - 75-09-2	39.7 ug/L	Calibration Check	79.3	80-120	Low Bias				
Y8C1237-CCV1	tert-Butyl alcohol (TBA) - 75-65-0	49.9 ug/L	Calibration Check	20.0	80-120	Low Bias				

**Batch ID:** BC80386      **General Method:** Volatile Organic Compounds by GC/MS

YORK Sample ID      Client Sample ID

18C0104-04	KC-MW-06 (0318)
18C0104-05	KC-MW-07 (0318)
18C0104-06	KC-MW-DUP1 (0318)
18C0104-07	TRIP BLANK
BC80386-BLK1	Blank
BC80386-BS1	LCS
BC80386-BSD1	LCS Dup

Laboratory: York Analytical Laboratories, Inc.      Client: Chazen Environmental Services (Poughkeepsie)  
 Project: 41103.00 Task 0900-Kingston CVS Investigation      Lab Project No: 18C0104  
 Laboratory Sample ID(s): 18C0104-01 - 18C0104-07      Sampling Date(s): 03/01/2018 - 03/05/2018  
 Review Date(s): 04/17/2018 - 04/17/2018      Laboratory Reviewer(s): JD

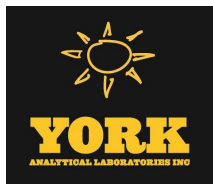
### Sample Nonconformances      Volatile Organic Compounds by GC/MS

Sample ID	Analyte	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Comments
18C0104-01 (KC-CB-01 (25-30'))	Surrogate: Toluene-d8	62.4 ug/L	Surrogate	125	85-120	High Bias				The recovery of this surrogate was outside of QC limits.
18C0104-01 (KC-CB-01 (25-30'))	Surrogate: p-Bromofluorobenzene	65.6 ug/L	Surrogate	131	76-130	High Bias				The recovery of this surrogate was outside of QC limits.
18C0104-02 (KC-CB-02 (25-30'))	Surrogate: Toluene-d8	68.8 ug/L	Surrogate	138	85-120	High Bias				The recovery of this surrogate was outside of QC limits.
18C0104-02 (KC-CB-02 (25-30'))	Surrogate: p-Bromofluorobenzene	73.4 ug/L	Surrogate	147	76-130	High Bias				The recovery of this surrogate was outside of QC limits.

Notes: Other nonconformances, if any, are detailed in the Data Quality Assessment worksheets.

For multiple surrogate analyses such as semi-volatiles, volatiles, etc, single surrogate excursions do not necessarily indicate a bias in the sample. Samples with multiple surrogate excursions may exhibit a bias in the results.

Definitions: LCS - Laboratory Control Sample  
 LCS dup - Laboratory Control Sample Duplicate  
 MS - Matrix Spike  
 MSD - Matrix Spike Duplicate  
 BS - Blank Spike also called LCS  
 BSD - Blank Spike Duplicate also called LCS dup  
 SRM - Standard Reference Material  
 DUP - Duplicate



## Analytical Batch Summary

**Batch ID:** BC80373      **Preparation Method:** % Solids Prep      **Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
18C0104-01	KC-CB-01 (25-30')	03/08/18
18C0104-02	KC-CB-02 (25-30')	03/08/18

**Batch ID:** BC80386      **Preparation Method:** EPA 5030B      **Prepared By:** TAB

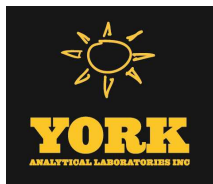
YORK Sample ID	Client Sample ID	Preparation Date
18C0104-04	KC-MW-06 (0318)	03/09/18
18C0104-05	KC-MW-07 (0318)	03/09/18
18C0104-06	KC-MW-DUP1 (0318)	03/09/18
18C0104-07	TRIP BLANK	03/09/18
BC80386-BLK1	Blank	03/09/18
BC80386-BS1	LCS	03/09/18
BC80386-BSD1	LCS Dup	03/09/18

**Batch ID:** BC80387      **Preparation Method:** EPA 5030B      **Prepared By:** RDS

YORK Sample ID	Client Sample ID	Preparation Date
18C0104-03	KC-EB-01	03/09/18
BC80387-BLK1	Blank	03/09/18
BC80387-BS1	LCS	03/09/18
BC80387-BSD1	LCS Dup	03/09/18

**Batch ID:** BC80462      **Preparation Method:** EPA 5035A      **Prepared By:** TAB

YORK Sample ID	Client Sample ID	Preparation Date
18C0104-01	KC-CB-01 (25-30')	03/12/18
18C0104-02	KC-CB-02 (25-30')	03/12/18
BC80462-BLK1	Blank	03/12/18
BC80462-BLK2	Blank	03/12/18
BC80462-BS1	LCS	03/12/18
BC80462-BSD1	LCS Dup	03/12/18



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

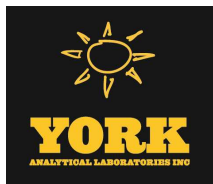
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC80386 - EPA 5030B

Blank (BC80386-BLK1)

Prepared & Analyzed: 03/09/2018

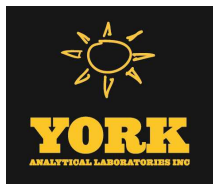
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L
1,1,1-Trichloroethane	ND	0.50	"
1,1,2,2-Tetrachloroethane	ND	0.50	"
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"
1,1,2-Trichloroethane	ND	0.50	"
1,1-Dichloroethane	ND	0.50	"
1,1-Dichloroethylene	ND	0.50	"
1,2,3-Trichlorobenzene	ND	0.50	"
1,2,3-Trichloropropane	ND	0.50	"
1,2,4-Trichlorobenzene	ND	0.50	"
1,2,4-Trimethylbenzene	ND	0.50	"
1,2-Dibromo-3-chloropropane	ND	0.50	"
1,2-Dibromoethane	ND	0.50	"
1,2-Dichlorobenzene	ND	0.50	"
1,2-Dichloroethane	ND	0.50	"
1,2-Dichloropropane	ND	0.50	"
1,3,5-Trimethylbenzene	ND	0.50	"
1,3-Dichlorobenzene	ND	0.50	"
1,4-Dichlorobenzene	ND	0.50	"
1,4-Dioxane	ND	40	"
2-Butanone	ND	0.50	"
2-Hexanone	ND	0.50	"
4-Methyl-2-pentanone	ND	0.50	"
Acetone	ND	2.0	"
Acrolein	ND	0.50	"
Acrylonitrile	ND	0.50	"
Benzene	ND	0.50	"
Bromochloromethane	ND	0.50	"
Bromodichloromethane	ND	0.50	"
Bromoform	ND	0.50	"
Bromomethane	ND	0.50	"
Carbon disulfide	ND	0.50	"
Carbon tetrachloride	ND	0.50	"
Chlorobenzene	ND	0.50	"
Chloroethane	ND	0.50	"
Chloroform	ND	0.50	"
Chloromethane	ND	0.50	"
cis-1,2-Dichloroethylene	ND	0.50	"
cis-1,3-Dichloropropylene	ND	0.50	"
Cyclohexane	ND	0.50	"
Dibromochloromethane	ND	0.50	"
Dibromomethane	ND	0.50	"
Dichlorodifluoromethane	ND	0.50	"
Ethyl Benzene	ND	0.50	"
Hexachlorobutadiene	ND	0.50	"
Isopropylbenzene	ND	0.50	"
Methyl acetate	ND	0.50	"
Methyl tert-butyl ether (MTBE)	ND	0.50	"
Methylcyclohexane	ND	0.50	"
Methylene chloride	ND	2.0	"



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC80386 - EPA 5030B</b>											
<b>Blank (BC80386-BLK1)</b>										Prepared & Analyzed: 03/09/2018	
n-Butylbenzene	ND	0.50	ug/L								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.63		"	10.0		96.3	69-130				
<i>Surrogate: Toluene-d8</i>	10.5		"	10.0		105	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	10.2		"	10.0		102	79-122				
<b>LCS (BC80386-BS1)</b>										Prepared & Analyzed: 03/09/2018	
1,1,1,2-Tetrachloroethane	12		ug/L	10.0		120	82-126				
1,1,1-Trichloroethane	12		"	10.0		123	78-136				
1,1,2,2-Tetrachloroethane	11		"	10.0		114	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12		"	10.0		118	54-165				
1,1,2-Trichloroethane	11		"	10.0		115	82-123				
1,1-Dichloroethane	11		"	10.0		110	82-129				
1,1-Dichloroethylene	11		"	10.0		110	68-138				
1,2,3-Trichlorobenzene	18		"	10.0		179	76-136	High Bias			
1,2,3-Trichloropropane	11		"	10.0		111	77-128				
1,2,4-Trichlorobenzene	13		"	10.0		131	76-137				
1,2,4-Trimethylbenzene	11		"	10.0		112	82-132				
1,2-Dibromo-3-chloropropane	9.5		"	10.0		95.0	45-147				
1,2-Dibromoethane	12		"	10.0		116	83-124				
1,2-Dichlorobenzene	11		"	10.0		113	79-123				
1,2-Dichloroethane	11		"	10.0		108	73-132				
1,2-Dichloropropane	11		"	10.0		109	78-126				
1,3,5-Trimethylbenzene	11		"	10.0		113	80-131				
1,3-Dichlorobenzene	11		"	10.0		115	86-122				
1,4-Dichlorobenzene	11		"	10.0		113	85-124				
1,4-Dioxane	250		"	210		119	10-349				
2-Butanone	10		"	10.0		104	49-152				
2-Hexanone	8.2		"	10.0		82.4	51-146				
4-Methyl-2-pentanone	8.4		"	10.0		83.8	57-145				
Acetone	7.3		"	10.0		73.0	14-150				
Acrolein	6.5		"	10.0		65.1	10-153				
Acrylonitrile	8.3		"	10.0		83.2	51-150				
Benzene	12		"	10.0		120	85-126				
Bromochloromethane	9.4		"	10.0		94.5	77-128				

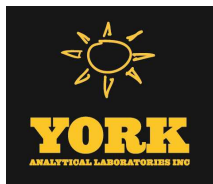


Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC80386 - EPA 5030B</b>											
<b>LCS (BC80386-BS1)</b>											
Prepared & Analyzed: 03/09/2018											
Bromodichloromethane	12		ug/L	10.0		119	79-128				
Bromoform	11		"	10.0		113	78-133				
Bromomethane	5.5		"	10.0		55.1	43-168				
Carbon disulfide	13		"	10.0		127	68-146				
Carbon tetrachloride	12		"	10.0		122	77-141				
Chlorobenzene	12		"	10.0		122	88-120	High Bias			
Chloroethane	11		"	10.0		112	65-136				
Chloroform	12		"	10.0		120	82-128				
Chloromethane	9.1		"	10.0		91.0	43-155				
cis-1,2-Dichloroethylene	11		"	10.0		106	83-129				
cis-1,3-Dichloropropylene	11		"	10.0		111	80-131				
Cyclohexane	10		"	10.0		104	63-149				
Dibromochloromethane	11		"	10.0		115	80-130				
Dibromomethane	11		"	10.0		109	72-134				
Dichlorodifluoromethane	16		"	10.0		160	44-144	High Bias			
Ethyl Benzene	12		"	10.0		123	80-131				
Hexachlorobutadiene	12		"	10.0		124	67-146				
Isopropylbenzene	11		"	10.0		114	76-140				
Methyl acetate	8.1		"	10.0		80.6	51-139				
Methyl tert-butyl ether (MTBE)	11		"	10.0		105	76-135				
Methylcyclohexane	12		"	10.0		120	72-143				
Methylene chloride	8.6		"	10.0		86.0	55-137				
n-Butylbenzene	11		"	10.0		111	79-132				
n-Propylbenzene	12		"	10.0		116	78-133				
o-Xylene	12		"	10.0		121	78-130				
p- & m- Xylenes	25		"	20.0		124	77-133				
p-Isopropyltoluene	12		"	10.0		118	81-136				
sec-Butylbenzene	12		"	10.0		117	79-137				
Styrene	12		"	10.0		116	67-132				
tert-Butyl alcohol (TBA)	54		"	50.0		109	25-162				
tert-Butylbenzene	12		"	10.0		117	77-138				
Tetrachloroethylene	11		"	10.0		106	82-131				
Toluene	12		"	10.0		120	80-127				
trans-1,2-Dichloroethylene	11		"	10.0		106	80-132				
trans-1,3-Dichloropropylene	11		"	10.0		107	78-131				
trans-1,4-dichloro-2-butene	10		"	10.0		99.7	63-141				
Trichloroethylene	12		"	10.0		122	82-128				
Trichlorofluoromethane	13		"	10.0		126	67-139				
Vinyl Chloride	11		"	10.0		115	58-145				
Surrogate: 1,2-Dichloroethane-d4	9.53		"	10.0		95.3	69-130				
Surrogate: Toluene-d8	10.5		"	10.0		105	81-117				
Surrogate: p-Bromofluorobenzene	9.87		"	10.0		98.7	79-122				

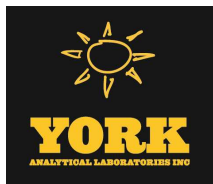




Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC80386 - EPA 5030B</b>											
<b>LCS Dup (BC80386-BSD1)</b>											
Prepared & Analyzed: 03/09/2018											
1,1,1,2-Tetrachloroethane	12		ug/L	10.0		116	82-126		2.80	30	
1,1,1-Trichloroethane	11		"	10.0		114	78-136		7.26	30	
1,1,2,2-Tetrachloroethane	11		"	10.0		110	76-129		2.95	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.8		"	10.0		97.5	54-165		19.4	30	
1,1,2-Trichloroethane	11		"	10.0		112	82-123		2.47	30	
1,1-Dichloroethane	10		"	10.0		105	82-129		4.94	30	
1,1-Dichloroethylene	10		"	10.0		102	68-138		7.71	30	
1,2,3-Trichlorobenzene	18		"	10.0		177	76-136	High Bias	1.12	30	
1,2,3-Trichloropropane	11		"	10.0		109	77-128		1.18	30	
1,2,4-Trichlorobenzene	13		"	10.0		128	76-137		2.16	30	
1,2,4-Trimethylbenzene	11		"	10.0		107	82-132		4.40	30	
1,2-Dibromo-3-chloropropane	9.3		"	10.0		92.9	45-147		2.24	30	
1,2-Dibromoethane	11		"	10.0		113	83-124		2.88	30	
1,2-Dichlorobenzene	11		"	10.0		109	79-123		3.96	30	
1,2-Dichloroethane	10		"	10.0		102	73-132		4.85	30	
1,2-Dichloropropane	11		"	10.0		106	78-126		3.07	30	
1,3,5-Trimethylbenzene	11		"	10.0		108	80-131		4.44	30	
1,3-Dichlorobenzene	11		"	10.0		111	86-122		3.10	30	
1,4-Dichlorobenzene	11		"	10.0		110	85-124		3.05	30	
1,4-Dioxane	280		"	210		133	10-349		11.1	30	
2-Butanone	10		"	10.0		101	49-152		2.53	30	
2-Hexanone	8.0		"	10.0		79.6	51-146		3.46	30	
4-Methyl-2-pentanone	8.2		"	10.0		81.9	57-145		2.29	30	
Acetone	7.2		"	10.0		71.9	14-150		1.52	30	
Acrolein	6.3		"	10.0		62.6	10-153		3.92	30	
Acrylonitrile	7.6		"	10.0		76.5	51-150		8.39	30	
Benzene	11		"	10.0		113	85-126		5.86	30	
Bromochloromethane	9.0		"	10.0		90.3	77-128		4.55	30	
Bromodichloromethane	12		"	10.0		116	79-128		2.98	30	
Bromoform	11		"	10.0		108	78-133		3.80	30	
Bromomethane	5.8		"	10.0		57.9	43-168		4.96	30	
Carbon disulfide	12		"	10.0		118	68-146		7.61	30	
Carbon tetrachloride	11		"	10.0		113	77-141		7.65	30	
Chlorobenzene	12		"	10.0		117	88-120		4.18	30	
Chloroethane	10		"	10.0		104	65-136		7.03	30	
Chloroform	11		"	10.0		115	82-128		4.43	30	
Chloromethane	8.4		"	10.0		84.5	43-155		7.41	30	
cis-1,2-Dichloroethylene	9.8		"	10.0		98.5	83-129		6.96	30	
cis-1,3-Dichloropropylene	11		"	10.0		107	80-131		3.12	30	
Cyclohexane	8.9		"	10.0		88.6	63-149		16.0	30	
Dibromochloromethane	11		"	10.0		112	80-130		2.47	30	
Dibromomethane	11		"	10.0		106	72-134		2.98	30	
Dichlorodifluoromethane	13		"	10.0		132	44-144		19.1	30	
Ethyl Benzene	12		"	10.0		118	80-131		4.31	30	
Hexachlorobutadiene	12		"	10.0		118	67-146		4.22	30	
Isopropylbenzene	11		"	10.0		109	76-140		5.11	30	
Methyl acetate	7.7		"	10.0		77.1	51-139		4.44	30	
Methyl tert-butyl ether (MTBE)	10		"	10.0		102	76-135		2.89	30	
Methylcyclohexane	10		"	10.0		102	72-143		16.0	30	
Methylene chloride	8.2		"	10.0		81.9	55-137		4.88	30	
n-Butylbenzene	11		"	10.0		105	79-132		5.36	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BC80386 - EPA 5030B**

**LCS Dup (BC80386-BSD1)**

Prepared & Analyzed: 03/09/2018

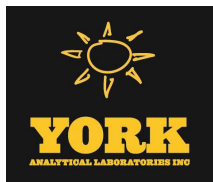
n-Propylbenzene	11		ug/L	10.0		111	78-133		4.22	30	
o-Xylene	12		"	10.0		117	78-130		3.53	30	
p- & m- Xylenes	24		"	20.0		119	77-133		4.19	30	
p-Isopropyltoluene	11		"	10.0		112	81-136		4.79	30	
sec-Butylbenzene	11		"	10.0		112	79-137		4.63	30	
Styrene	11		"	10.0		112	67-132		3.25	30	
tert-Butyl alcohol (TBA)	56		"	50.0		113	25-162		3.77	30	
tert-Butylbenzene	11		"	10.0		111	77-138		5.62	30	
Tetrachloroethylene	9.9		"	10.0		99.2	82-131		6.16	30	
Toluene	12		"	10.0		116	80-127		3.82	30	
trans-1,2-Dichloroethylene	10		"	10.0		100	80-132		5.44	30	
trans-1,3-Dichloropropylene	10		"	10.0		104	78-131		2.57	30	
trans-1,4-dichloro-2-butene	9.7		"	10.0		96.6	63-141		3.16	30	
Trichloroethylene	12		"	10.0		117	82-128		3.60	30	
Trichlorofluoromethane	11		"	10.0		110	67-139		13.0	30	
Vinyl Chloride	11		"	10.0		106	58-145		7.98	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>9.29</i>		<i>"</i>	<i>10.0</i>		<i>92.9</i>	<i>69-130</i>				
<i>Surrogate: Toluene-d8</i>	<i>10.6</i>		<i>"</i>	<i>10.0</i>		<i>106</i>	<i>81-117</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>9.89</i>		<i>"</i>	<i>10.0</i>		<i>98.9</i>	<i>79-122</i>				

**Batch BC80387 - EPA 5030B**

**Blank (BC80387-BLK1)**

Prepared & Analyzed: 03/09/2018

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
1,2,3-Trichlorobenzene	ND	2.0	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,2,4-Trichlorobenzene	ND	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
1,2-Dibromo-3-chloropropane	ND	0.50	"								
1,2-Dibromoethane	ND	0.50	"								
1,2-Dichlorobenzene	ND	0.50	"								
1,2-Dichloroethane	ND	0.50	"								
1,2-Dichloropropane	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
1,3-Dichlorobenzene	ND	0.50	"								
1,4-Dichlorobenzene	ND	0.50	"								
1,4-Dioxane	ND	40	"								
2-Butanone	ND	2.0	"								
2-Hexanone	ND	0.50	"								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	ND	2.0	"								
Acrolein	ND	2.0	"								
Acrylonitrile	ND	0.50	"								
Benzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								



**Volatile Organic Compounds by GC/MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

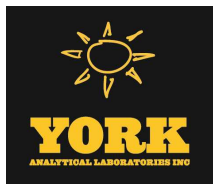
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BC80387 - EPA 5030B**

**Blank (BC80387-BLK1)**

Prepared & Analyzed: 03/09/2018

Bromodichloromethane	ND	0.50	ug/L								
Bromoform	ND	0.50	"								
Bromomethane	ND	0.50	"								
Carbon disulfide	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Cyclohexane	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl acetate	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylcyclohexane	ND	0.50	"								
Methylene chloride	ND	2.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>9.17</i>		<i>"</i>	<i>10.0</i>		<i>91.7</i>	<i>69-130</i>				
<i>Surrogate: Toluene-d8</i>	<i>10.3</i>		<i>"</i>	<i>10.0</i>		<i>103</i>	<i>81-117</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>11.3</i>		<i>"</i>	<i>10.0</i>		<i>113</i>	<i>79-122</i>				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC80387 - EPA 5030B</b>											
<b>LCS (BC80387-BS1)</b>											
Prepared & Analyzed: 03/09/2018											
1,1,1,2-Tetrachloroethane	9.5		ug/L	10.0		95.4	82-126				
1,1,1-Trichloroethane	10		"	10.0		99.8	78-136				
1,1,2,2-Tetrachloroethane	8.9		"	10.0		89.4	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.8		"	10.0		98.4	54-165				
1,1,2-Trichloroethane	9.6		"	10.0		96.5	82-123				
1,1-Dichloroethane	10		"	10.0		100	82-129				
1,1-Dichloroethylene	9.9		"	10.0		99.2	68-138				
1,2,3-Trichlorobenzene	9.8		"	10.0		97.6	76-136				
1,2,3-Trichloropropane	9.7		"	10.0		97.4	77-128				
1,2,4-Trichlorobenzene	9.8		"	10.0		98.2	76-137				
1,2,4-Trimethylbenzene	9.9		"	10.0		99.2	82-132				
1,2-Dibromo-3-chloropropane	10		"	10.0		102	45-147				
1,2-Dibromoethane	10		"	10.0		103	83-124				
1,2-Dichlorobenzene	9.8		"	10.0		98.1	79-123				
1,2-Dichloroethane	9.3		"	10.0		93.4	73-132				
1,2-Dichloropropane	11		"	10.0		107	78-126				
1,3,5-Trimethylbenzene	10		"	10.0		103	80-131				
1,3-Dichlorobenzene	9.4		"	10.0		94.4	86-122				
1,4-Dichlorobenzene	9.8		"	10.0		97.6	85-124				
1,4-Dioxane	150		"	210		70.5	10-349				
2-Butanone	10		"	10.0		103	49-152				
2-Hexanone	9.7		"	10.0		96.8	51-146				
4-Methyl-2-pentanone	9.5		"	10.0		95.4	57-145				
Acetone	9.5		"	10.0		94.6	14-150				
Acrolein	3.2		"	10.0		31.5	10-153				
Acrylonitrile	11		"	10.0		108	51-150				
Benzene	10		"	10.0		103	85-126				
Bromochloromethane	10		"	10.0		100	77-128				
Bromodichloromethane	11		"	10.0		106	79-128				
Bromoform	9.4		"	10.0		94.4	78-133				
Bromomethane	12		"	10.0		116	43-168				
Carbon disulfide	11		"	10.0		114	68-146				
Carbon tetrachloride	10		"	10.0		102	77-141				
Chlorobenzene	10		"	10.0		101	88-120				
Chloroethane	10		"	10.0		103	65-136				
Chloroform	10		"	10.0		100	82-128				
Chloromethane	11		"	10.0		108	43-155				
cis-1,2-Dichloroethylene	9.7		"	10.0		97.1	83-129				
cis-1,3-Dichloropropylene	9.5		"	10.0		94.6	80-131				
Cyclohexane	11		"	10.0		108	63-149				
Dibromochloromethane	10		"	10.0		99.9	80-130				
Dibromomethane	9.6		"	10.0		96.1	72-134				
Dichlorodifluoromethane	12		"	10.0		119	44-144				
Ethyl Benzene	10		"	10.0		103	80-131				
Hexachlorobutadiene	11		"	10.0		108	67-146				
Isopropylbenzene	11		"	10.0		109	76-140				
Methyl acetate	10		"	10.0		104	51-139				
Methyl tert-butyl ether (MTBE)	9.0		"	10.0		89.8	76-135				
Methylcyclohexane	11		"	10.0		112	72-143				
Methylene chloride	9.7		"	10.0		96.6	55-137				
n-Butylbenzene	10		"	10.0		102	79-132				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC80387 - EPA 5030B

LCS (BC80387-BS1)

Prepared & Analyzed: 03/09/2018

n-Propylbenzene	11		ug/L	10.0		106	78-133				
o-Xylene	11		"	10.0		105	78-130				
p- & m- Xylenes	20		"	20.0		99.2	77-133				
p-Isopropyltoluene	10		"	10.0		101	81-136				
sec-Butylbenzene	11		"	10.0		115	79-137				
Styrene	10		"	10.0		99.5	67-132				
tert-Butyl alcohol (TBA)	40		"	50.0		79.9	25-162				
tert-Butylbenzene	11		"	10.0		109	77-138				
Tetrachloroethylene	10		"	10.0		102	82-131				
Toluene	10		"	10.0		105	80-127				
trans-1,2-Dichloroethylene	10		"	10.0		101	80-132				
trans-1,3-Dichloropropylene	9.2		"	10.0		91.9	78-131				
trans-1,4-dichloro-2-butene	10		"	10.0		101	63-141				
Trichloroethylene	11		"	10.0		115	82-128				
Trichlorofluoromethane	10		"	10.0		103	67-139				
Vinyl Chloride	11		"	10.0		106	58-145				

Surrogate: 1,2-Dichloroethane-d4

8.99

"

10.0

89.9

69-130

Surrogate: Toluene-d8

10.4

"

10.0

104

81-117

Surrogate: p-Bromofluorobenzene

10.5

"

10.0

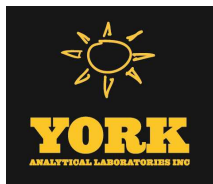
105

79-122

LCS Dup (BC80387-BSD1)

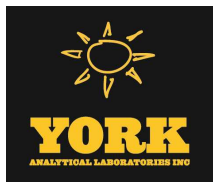
Prepared & Analyzed: 03/09/2018

1,1,1,2-Tetrachloroethane	8.9		ug/L	10.0		89.0	82-126		6.94	30	
1,1,1-Trichloroethane	9.3		"	10.0		92.8	78-136		7.27	30	
1,1,2,2-Tetrachloroethane	9.2		"	10.0		91.5	76-129		2.32	30	
1,1,2-Trichloro-1,1,2,2-trifluoroethane (Freon 113)	9.4		"	10.0		94.2	54-165		4.36	30	
1,1,2-Trichloroethane	9.2		"	10.0		91.8	82-123		4.99	30	
1,1-Dichloroethane	9.3		"	10.0		92.8	82-129		7.87	30	
1,1-Dichloroethylene	9.1		"	10.0		91.1	68-138		8.51	30	
1,2,3-Trichlorobenzene	10		"	10.0		104	76-136		6.25	30	
1,2,3-Trichloropropane	10		"	10.0		104	77-128		6.46	30	
1,2,4-Trichlorobenzene	10		"	10.0		101	76-137		2.81	30	
1,2,4-Trimethylbenzene	9.6		"	10.0		96.0	82-132		3.28	30	
1,2-Dibromo-3-chloropropane	10		"	10.0		103	45-147		0.488	30	
1,2-Dibromoethane	9.8		"	10.0		98.5	83-124		4.56	30	
1,2-Dichlorobenzene	9.7		"	10.0		97.4	79-123		0.716	30	
1,2-Dichloroethane	9.0		"	10.0		90.0	73-132		3.71	30	
1,2-Dichloropropane	10		"	10.0		101	78-126		5.95	30	
1,3,5-Trimethylbenzene	9.9		"	10.0		99.1	80-131		4.15	30	
1,3-Dichlorobenzene	9.1		"	10.0		91.3	86-122		3.34	30	
1,4-Dichlorobenzene	9.9		"	10.0		98.9	85-124		1.32	30	
1,4-Dioxane	110		"	210		53.5	10-349		27.4	30	
2-Butanone	11		"	10.0		112	49-152		8.67	30	
2-Hexanone	9.4		"	10.0		94.4	51-146		2.51	30	
4-Methyl-2-pentanone	9.3		"	10.0		93.2	57-145		2.33	30	
Acetone	8.9		"	10.0		88.8	14-150		6.32	30	
Acrolein	3.2		"	10.0		32.0	10-153		1.57	30	
Acrylonitrile	11		"	10.0		106	51-150		1.87	30	
Benzene	9.5		"	10.0		94.9	85-126		7.99	30	
Bromochloromethane	9.6		"	10.0		96.2	77-128		4.07	30	
Bromodichloromethane	9.8		"	10.0		98.5	79-128		7.15	30	
Bromoform	9.4		"	10.0		93.9	78-133		0.531	30	



**Volatile Organic Compounds by GC/MS - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting	Spike	Source*	%REC	%REC	Limits	Flag	RPD	
		Limit							Units	Level
<b>Batch BC80387 - EPA 5030B</b>										
<b>LCS Dup (BC80387-BSD1)</b>										
Prepared & Analyzed: 03/09/2018										
Bromomethane	11		ug/L	10.0	111	43-168			4.33	30
Carbon disulfide	11		"	10.0	106	68-146			7.43	30
Carbon tetrachloride	9.4		"	10.0	94.3	77-141			8.04	30
Chlorobenzene	9.4		"	10.0	94.1	88-120			7.47	30
Chloroethane	9.5		"	10.0	95.0	65-136			8.18	30
Chloroform	9.4		"	10.0	94.1	82-128			6.08	30
Chloromethane	9.9		"	10.0	98.9	43-155			8.52	30
cis-1,2-Dichloroethylene	9.0		"	10.0	90.5	83-129			7.04	30
cis-1,3-Dichloropropylene	8.8		"	10.0	88.4	80-131			6.78	30
Cyclohexane	10		"	10.0	101	63-149			6.59	30
Dibromochloromethane	9.5		"	10.0	95.2	80-130			4.82	30
Dibromomethane	9.4		"	10.0	93.5	72-134			2.74	30
Dichlorodifluoromethane	11		"	10.0	108	44-144			9.26	30
Ethyl Benzene	9.4		"	10.0	93.6	80-131			9.37	30
Hexachlorobutadiene	10		"	10.0	103	67-146			4.56	30
Isopropylbenzene	10		"	10.0	104	76-140			4.51	30
Methyl acetate	10		"	10.0	102	51-139			2.62	30
Methyl tert-butyl ether (MTBE)	9.2		"	10.0	92.2	76-135			2.64	30
Methylcyclohexane	10		"	10.0	102	72-143			9.48	30
Methylene chloride	9.1		"	10.0	91.2	55-137			5.75	30
n-Butylbenzene	9.7		"	10.0	96.8	79-132			4.74	30
n-Propylbenzene	10		"	10.0	100	78-133			4.95	30
o-Xylene	9.6		"	10.0	96.4	78-130			8.73	30
p- & m- Xylenes	18		"	20.0	90.0	77-133			9.72	30
p-Isopropyltoluene	9.7		"	10.0	97.0	81-136			3.84	30
sec-Butylbenzene	11		"	10.0	108	79-137			5.56	30
Styrene	9.0		"	10.0	90.4	67-132			9.58	30
tert-Butyl alcohol (TBA)	50		"	50.0	101	25-162			23.1	30
tert-Butylbenzene	10		"	10.0	104	77-138			5.18	30
Tetrachloroethylene	9.2		"	10.0	92.1	82-131			9.91	30
Toluene	9.6		"	10.0	95.5	80-127			9.19	30
trans-1,2-Dichloroethylene	9.5		"	10.0	95.3	80-132			6.01	30
trans-1,3-Dichloropropylene	8.6		"	10.0	86.2	78-131			6.40	30
trans-1,4-dichloro-2-butene	9.7		"	10.0	96.7	63-141			3.95	30
Trichloroethylene	10		"	10.0	103	82-128			11.0	30
Trichlorofluoromethane	9.4		"	10.0	94.1	67-139			9.03	30
Vinyl Chloride	9.8		"	10.0	98.5	58-145			7.52	30
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>8.92</i>		<i>"</i>	<i>10.0</i>	<i>89.2</i>	<i>69-130</i>				
<i>Surrogate: Toluene-d8</i>	<i>10.1</i>		<i>"</i>	<i>10.0</i>	<i>101</i>	<i>81-117</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>11.0</i>		<i>"</i>	<i>10.0</i>	<i>110</i>	<i>79-122</i>				



**Volatile Organic Compounds by GC/MS - Quality Control Data**

**York Analytical Laboratories, Inc.**

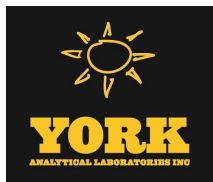
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BC80462 - EPA 5035A**

**Blank (BC80462-BLK1)**

Prepared & Analyzed: 03/12/2018

1,1,1,2-Tetrachloroethane	ND	0.0050	mg/kg wet								
1,1,1-Trichloroethane	ND	0.0050	"								
1,1,2,2-Tetrachloroethane	ND	0.0050	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0050	"								
1,1,2-Trichloroethane	ND	0.0050	"								
1,1-Dichloroethane	ND	0.0050	"								
1,1-Dichloroethylene	ND	0.0050	"								
1,2,3-Trichlorobenzene	ND	0.0050	"								
1,2,3-Trichloropropane	ND	0.0050	"								
1,2,4-Trichlorobenzene	ND	0.0050	"								
1,2,4-Trimethylbenzene	ND	0.0050	"								
1,2-Dibromo-3-chloropropane	ND	0.0050	"								
1,2-Dibromoethane	ND	0.0050	"								
1,2-Dichlorobenzene	ND	0.0050	"								
1,2-Dichloroethane	ND	0.0050	"								
1,2-Dichloropropane	ND	0.0050	"								
1,3,5-Trimethylbenzene	ND	0.0050	"								
1,3-Dichlorobenzene	ND	0.0050	"								
1,4-Dichlorobenzene	ND	0.0050	"								
1,4-Dioxane	ND	0.10	"								
2-Butanone	ND	0.0050	"								
2-Hexanone	ND	0.0050	"								
4-Methyl-2-pentanone	ND	0.0050	"								
Acetone	ND	0.010	"								
Acrolein	ND	0.010	"								
Acrylonitrile	ND	0.0050	"								
Benzene	ND	0.0050	"								
Bromochloromethane	ND	0.0050	"								
Bromodichloromethane	ND	0.0050	"								
Bromoform	ND	0.0050	"								
Bromomethane	ND	0.0050	"								
Carbon disulfide	ND	0.0050	"								
Carbon tetrachloride	ND	0.0050	"								
Chlorobenzene	ND	0.0050	"								
Chloroethane	ND	0.0050	"								
Chloroform	ND	0.0050	"								
Chloromethane	ND	0.0050	"								
cis-1,2-Dichloroethylene	ND	0.0050	"								
cis-1,3-Dichloropropylene	ND	0.0050	"								
Cyclohexane	ND	0.0050	"								
Dibromochloromethane	ND	0.0050	"								
Dibromomethane	ND	0.0050	"								
Dichlorodifluoromethane	ND	0.0050	"								
Ethyl Benzene	ND	0.0050	"								
Hexachlorobutadiene	ND	0.0050	"								
Isopropylbenzene	ND	0.0050	"								
Methyl acetate	ND	0.0050	"								
Methyl tert-butyl ether (MTBE)	ND	0.0050	"								
Methylcyclohexane	ND	0.0050	"								
Methylene chloride	ND	0.010	"								
n-Butylbenzene	ND	0.0050	"								



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC80462 - EPA 5035A

Blank (BC80462-BLK1)

Prepared & Analyzed: 03/12/2018

n-Propylbenzene	ND	0.0050	mg/kg wet								
o-Xylene	ND	0.0050	"								
p- & m- Xylenes	ND	0.010	"								
p-Isopropyltoluene	ND	0.0050	"								
sec-Butylbenzene	ND	0.0050	"								
Styrene	ND	0.0050	"								
tert-Butyl alcohol (TBA)	ND	0.010	"								
tert-Butylbenzene	ND	0.0050	"								
Tetrachloroethylene	ND	0.0050	"								
Toluene	ND	0.0050	"								
trans-1,2-Dichloroethylene	ND	0.0050	"								
trans-1,3-Dichloropropylene	ND	0.0050	"								
trans-1,4-dichloro-2-butene	ND	0.0050	"								
Trichloroethylene	ND	0.0050	"								
Trichlorofluoromethane	ND	0.0050	"								
Vinyl Chloride	ND	0.0050	"								
Xylenes, Total	ND	0.015	"								

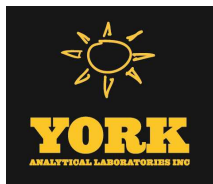
Surrogate: 1,2-Dichloroethane-d4	44.6		ug/L	50.0		89.2	77-125				
Surrogate: Toluene-d8	49.4		"	50.0		98.8	85-120				
Surrogate: p-Bromofluorobenzene	49.2		"	50.0		98.3	76-130				

Blank (BC80462-BLK2)

Prepared & Analyzed: 03/12/2018

1,1,1,2-Tetrachloroethane	ND	0.50	mg/kg wet								
1,1,1-Trichloroethane	ND	0.50	"								
1,1,2,2-Tetrachloroethane	ND	0.50	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"								
1,1,2-Trichloroethane	ND	0.50	"								
1,1-Dichloroethane	ND	0.50	"								
1,1-Dichloroethylene	ND	0.50	"								
1,2,3-Trichlorobenzene	ND	0.50	"								
1,2,3-Trichloropropane	ND	0.50	"								
1,2,4-Trichlorobenzene	ND	0.50	"								
1,2,4-Trimethylbenzene	ND	0.50	"								
1,2-Dibromo-3-chloropropane	ND	0.50	"								
1,2-Dibromoethane	ND	0.50	"								
1,2-Dichlorobenzene	ND	0.50	"								
1,2-Dichloroethane	ND	0.50	"								
1,2-Dichloropropane	ND	0.50	"								
1,3,5-Trimethylbenzene	ND	0.50	"								
1,3-Dichlorobenzene	ND	0.50	"								
1,4-Dichlorobenzene	ND	0.50	"								
1,4-Dioxane	ND	10	"								
2-Butanone	ND	0.50	"								
2-Hexanone	ND	0.50	"								
4-Methyl-2-pentanone	ND	0.50	"								
Acetone	ND	1.0	"								
Acrolein	ND	1.0	"								
Acrylonitrile	ND	0.50	"								
Benzene	ND	0.50	"								
Bromochloromethane	ND	0.50	"								
Bromodichloromethane	ND	0.50	"								





Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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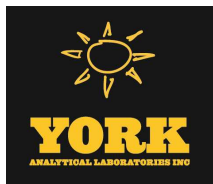
Batch BC80462 - EPA 5035A

Blank (BC80462-BLK2)

Prepared & Analyzed: 03/12/2018

Bromoform	ND	0.50	mg/kg wet								
Bromomethane	ND	0.50	"								
Carbon disulfide	ND	0.50	"								
Carbon tetrachloride	ND	0.50	"								
Chlorobenzene	ND	0.50	"								
Chloroethane	ND	0.50	"								
Chloroform	ND	0.50	"								
Chloromethane	ND	0.50	"								
cis-1,2-Dichloroethylene	ND	0.50	"								
cis-1,3-Dichloropropylene	ND	0.50	"								
Cyclohexane	ND	0.50	"								
Dibromochloromethane	ND	0.50	"								
Dibromomethane	ND	0.50	"								
Dichlorodifluoromethane	ND	0.50	"								
Ethyl Benzene	ND	0.50	"								
Hexachlorobutadiene	ND	0.50	"								
Isopropylbenzene	ND	0.50	"								
Methyl acetate	ND	0.50	"								
Methyl tert-butyl ether (MTBE)	ND	0.50	"								
Methylcyclohexane	ND	0.50	"								
Methylene chloride	0.97	1.0	"								
n-Butylbenzene	ND	0.50	"								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								

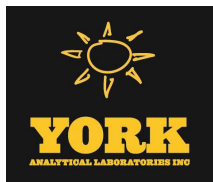
Surrogate: 1,2-Dichloroethane-d4	47.2		ug/L	50.0		94.4	77-125				
Surrogate: Toluene-d8	49.0		"	50.0		98.1	85-120				
Surrogate: p-Bromofluorobenzene	48.1		"	50.0		96.3	76-130				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting		Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	
		Limit	Units						RPD	Limit
<b>Batch BC80462 - EPA 5035A</b>										
<b>LCS (BC80462-BS1)</b>										
Prepared & Analyzed: 03/12/2018										
1,1,1,2-Tetrachloroethane	51		ug/L	50.0		103	75-129			
1,1,1-Trichloroethane	52		"	50.0		104	71-137			
1,1,2,2-Tetrachloroethane	53		"	50.0		107	79-129			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	56		"	50.0		113	58-146			
1,1,2-Trichloroethane	54		"	50.0		108	83-123			
1,1-Dichloroethane	55		"	50.0		110	75-130			
1,1-Dichloroethylene	55		"	50.0		111	64-137			
1,2,3-Trichlorobenzene	53		"	50.0		105	81-140			
1,2,3-Trichloropropane	50		"	50.0		100	81-126			
1,2,4-Trichlorobenzene	52		"	50.0		104	80-141			
1,2,4-Trimethylbenzene	51		"	50.0		103	84-125			
1,2-Dibromo-3-chloropropane	52		"	50.0		104	74-142			
1,2-Dibromoethane	53		"	50.0		106	86-123			
1,2-Dichlorobenzene	49		"	50.0		98.6	85-122			
1,2-Dichloroethane	53		"	50.0		106	71-133			
1,2-Dichloropropane	56		"	50.0		112	81-122			
1,3,5-Trimethylbenzene	51		"	50.0		102	82-126			
1,3-Dichlorobenzene	50		"	50.0		100	84-124			
1,4-Dichlorobenzene	49		"	50.0		98.8	84-124			
1,4-Dioxane	1300		"	1050		127	10-228			
2-Butanone	52		"	50.0		104	58-147			
2-Hexanone	51		"	50.0		103	70-139			
4-Methyl-2-pentanone	52		"	50.0		104	72-132			
Acetone	39		"	50.0		78.9	36-155			
Acrolein	49		"	50.0		97.9	10-238			
Acrylonitrile	58		"	50.0		116	66-141			
Benzene	55		"	50.0		110	77-127			
Bromochloromethane	55		"	50.0		109	74-129			
Bromodichloromethane	55		"	50.0		111	81-124			
Bromoform	52		"	50.0		104	80-136			
Bromomethane	59		"	50.0		118	32-177			
Carbon disulfide	58		"	50.0		115	10-136			
Carbon tetrachloride	54		"	50.0		109	66-143			
Chlorobenzene	52		"	50.0		105	86-120			
Chloroethane	58		"	50.0		117	51-142			
Chloroform	55		"	50.0		109	76-131			
Chloromethane	60		"	50.0		121	49-132			
cis-1,2-Dichloroethylene	54		"	50.0		107	74-132			
cis-1,3-Dichloropropylene	54		"	50.0		107	81-129			
Cyclohexane	53		"	50.0		106	70-130			
Dibromochloromethane	54		"	50.0		109	10-200			
Dibromomethane	52		"	50.0		105	83-124			
Dichlorodifluoromethane	60		"	50.0		121	28-158			
Ethyl Benzene	55		"	50.0		110	84-125			
Hexachlorobutadiene	55		"	50.0		109	83-133			
Isopropylbenzene	50		"	50.0		100	81-127			
Methyl acetate	49		"	50.0		97.3	41-143			
Methyl tert-butyl ether (MTBE)	52		"	50.0		104	74-131			
Methylcyclohexane	53		"	50.0		106	70-130			
Methylene chloride	45		"	50.0		90.1	57-141			
n-Butylbenzene	53		"	50.0		105	80-130			



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC80462 - EPA 5035A

LCS (BC80462-BS1)

Prepared & Analyzed: 03/12/2018

n-Propylbenzene	52		ug/L	50.0		104	74-136				
o-Xylene	55		"	50.0		110	83-123				
p- & m- Xylenes	110		"	100		109	82-128				
p-Isopropyltoluene	52		"	50.0		103	85-125				
sec-Butylbenzene	54		"	50.0		108	83-125				
Styrene	53		"	50.0		105	86-126				
tert-Butyl alcohol (TBA)	270		"	250		109	70-130				
tert-Butylbenzene	50		"	50.0		101	80-127				
Tetrachloroethylene	50		"	50.0		100	80-129				
Toluene	54		"	50.0		108	85-121				
trans-1,2-Dichloroethylene	55		"	50.0		110	72-132				
trans-1,3-Dichloropropylene	53		"	50.0		106	78-132				
trans-1,4-dichloro-2-butene	54		"	50.0		107	75-135				
Trichloroethylene	54		"	50.0		108	84-123				
Trichlorofluoromethane	54		"	50.0		108	62-140				
Vinyl Chloride	59		"	50.0		117	52-130				

Surrogate: 1,2-Dichloroethane-d4

47.4

"

50.0

94.8

77-125

Surrogate: Toluene-d8

49.0

"

50.0

98.0

85-120

Surrogate: p-Bromofluorobenzene

48.7

"

50.0

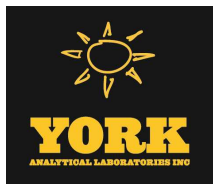
97.4

76-130

LCS Dup (BC80462-BSD1)

Prepared & Analyzed: 03/12/2018

1,1,1,2-Tetrachloroethane	51		ug/L	50.0		102	75-129		1.33	30	
1,1,1-Trichloroethane	51		"	50.0		103	71-137		1.58	30	
1,1,2,2-Tetrachloroethane	52		"	50.0		104	79-129		2.98	30	
1,1,2-Trichloro-1,1,2,2-trifluoroethane (Freon 113)	53		"	50.0		107	58-146		5.76	30	
1,1,2-Trichloroethane	52		"	50.0		104	83-123		3.79	30	
1,1-Dichloroethane	53		"	50.0		107	75-130		2.72	30	
1,1-Dichloroethylene	53		"	50.0		106	64-137		4.10	30	
1,2,3-Trichlorobenzene	50		"	50.0		99.1	81-140		5.86	30	
1,2,3-Trichloropropane	49		"	50.0		97.2	81-126		3.04	30	
1,2,4-Trichlorobenzene	49		"	50.0		98.6	80-141		5.70	30	
1,2,4-Trimethylbenzene	50		"	50.0		100	84-125		2.59	30	
1,2-Dibromo-3-chloropropane	51		"	50.0		102	74-142		1.91	30	
1,2-Dibromoethane	51		"	50.0		102	86-123		3.80	30	
1,2-Dichlorobenzene	48		"	50.0		96.8	85-122		1.84	30	
1,2-Dichloroethane	51		"	50.0		102	71-133		4.16	30	
1,2-Dichloropropane	55		"	50.0		110	81-122		1.88	30	
1,3,5-Trimethylbenzene	49		"	50.0		98.6	82-126		3.59	30	
1,3-Dichlorobenzene	48		"	50.0		95.5	84-124		4.56	30	
1,4-Dichlorobenzene	48		"	50.0		95.6	84-124		3.33	30	
1,4-Dioxane	1200		"	1050		115	10-228		9.65	30	
2-Butanone	49		"	50.0		98.0	58-147		6.00	30	
2-Hexanone	50		"	50.0		99.1	70-139		3.43	30	
4-Methyl-2-pentanone	50		"	50.0		99.2	72-132		4.47	30	
Acetone	38		"	50.0		75.6	36-155		4.27	30	
Acrolein	45		"	50.0		90.7	10-238		7.61	30	
Acrylonitrile	55		"	50.0		110	66-141		4.76	30	
Benzene	53		"	50.0		106	77-127		3.13	30	
Bromochloromethane	53		"	50.0		107	74-129		2.37	30	
Bromodichloromethane	53		"	50.0		106	81-124		4.25	30	
Bromoform	51		"	50.0		102	80-136		2.31	30	



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

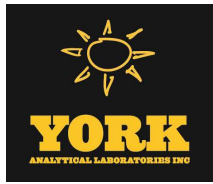
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC80462 - EPA 5035A

LCS Dup (BC80462-BSD1)

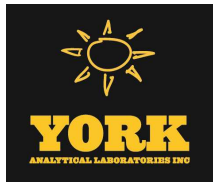
Prepared & Analyzed: 03/12/2018

Bromomethane	54		ug/L	50.0		107	32-177		9.65	30	
Carbon disulfide	58		"	50.0		115	10-136		0.104	30	
Carbon tetrachloride	52		"	50.0		105	66-143		3.49	30	
Chlorobenzene	50		"	50.0		99.0	86-120		5.71	30	
Chloroethane	56		"	50.0		112	51-142		3.70	30	
Chloroform	52		"	50.0		104	76-131		5.07	30	
Chloromethane	56		"	50.0		112	49-132		7.67	30	
cis-1,2-Dichloroethylene	52		"	50.0		104	74-132		3.50	30	
cis-1,3-Dichloropropylene	52		"	50.0		104	81-129		3.02	30	
Cyclohexane	52		"	50.0		104	70-130		1.64	30	
Dibromochloromethane	51		"	50.0		102	10-200		6.34	30	
Dibromomethane	51		"	50.0		102	83-124		2.80	30	
Dichlorodifluoromethane	56		"	50.0		113	28-158		6.77	30	
Ethyl Benzene	53		"	50.0		106	84-125		3.85	30	
Hexachlorobutadiene	51		"	50.0		101	83-133		7.37	30	
Isopropylbenzene	49		"	50.0		97.9	81-127		2.38	30	
Methyl acetate	44		"	50.0		87.5	41-143		10.5	30	
Methyl tert-butyl ether (MTBE)	51		"	50.0		101	74-131		2.46	30	
Methylcyclohexane	51		"	50.0		102	70-130		2.94	30	
Methylene chloride	42		"	50.0		84.0	57-141		7.03	30	
n-Butylbenzene	50		"	50.0		101	80-130		4.29	30	
n-Propylbenzene	51		"	50.0		101	74-136		2.63	30	
o-Xylene	53		"	50.0		106	83-123		3.60	30	
p- & m- Xylenes	100		"	100		105	82-128		4.04	30	
p-Isopropyltoluene	50		"	50.0		99.3	85-125		3.73	30	
sec-Butylbenzene	51		"	50.0		102	83-125		5.65	30	
Styrene	51		"	50.0		102	86-126		3.04	30	
tert-Butyl alcohol (TBA)	260		"	250		103	70-130		6.15	30	
tert-Butylbenzene	49		"	50.0		97.7	80-127		2.91	30	
Tetrachloroethylene	49		"	50.0		97.9	80-129		2.34	30	
Toluene	52		"	50.0		105	85-121		2.90	30	
trans-1,2-Dichloroethylene	53		"	50.0		106	72-132		3.44	30	
trans-1,3-Dichloropropylene	51		"	50.0		103	78-132		3.67	30	
trans-1,4-dichloro-2-butene	52		"	50.0		104	75-135		3.43	30	
Trichloroethylene	53		"	50.0		106	84-123		1.87	30	
Trichlorofluoromethane	52		"	50.0		104	62-140		4.07	30	
Vinyl Chloride	56		"	50.0		111	52-130		5.50	30	
Surrogate: 1,2-Dichloroethane-d4	47.7		"	50.0		95.5	77-125				
Surrogate: Toluene-d8	49.8		"	50.0		99.7	85-120				
Surrogate: p-Bromofluorobenzene	48.3		"	50.0		96.7	76-130				



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18C0104-01	KC-CB-01 (25-30')	40mL Vial with Stir Bar-Cool 4° C
18C0104-02	KC-CB-02 (25-30')	40mL Vial with Stir Bar-Cool 4° C
18C0104-03	KC-EB-01	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0104-04	KC-MW-06 (0318)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0104-05	KC-MW-07 (0318)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0104-06	KC-MW-DUP1 (0318)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0104-07	TRIP BLANK	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C

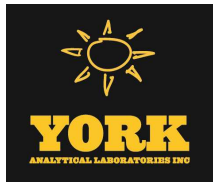


### Sample and Data Qualifiers Relating to This Work Order

- SCAL-E The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration (average Rf>20%).
- S-08 The recovery of this surrogate was outside of QC limits.
- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- J Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
- IS-LO The internal std associated with this target compound did not meet acceptance criteria (area <50% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
- ICV-E The value reported is ESTIMATED. The value is estimated due to its behavior during initial calibration verification (recovery exceeded 30% of expected value).
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
- B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

### Definitions and Other Explanations

- \* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
- ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
- RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
- LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
- LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW -846.
- MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
- Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
- NR Not reported
- RPD Relative Percent Difference
- Wet The data has been reported on an as-received (wet weight) basis
- Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- Non-Dir. Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.



If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

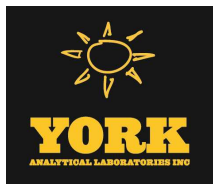
2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

---



# Laboratory Chain-of-Custody Record

York Project (SDG) No.: 18C0104

Samples Received: 03/05/2018 15:15 By: Paul Grace      Logged In: 03/05/2018 9:52 By: Paul Grace

**Sample Conditions:**

- |                                                                  |                                                                             |
|------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Custody Seals                | <input checked="" type="checkbox"/> Chain of Custody Form Received          |
| <input checked="" type="checkbox"/> Containers Intact            | <input checked="" type="checkbox"/> Appropriate Sample Volumes Received     |
| <input checked="" type="checkbox"/> COC/Labels Agree             | <input checked="" type="checkbox"/> Appropriate Sample Containers Submitted |
| <input checked="" type="checkbox"/> Preservation Confirmed       | <input checked="" type="checkbox"/> Samples Submitted within Holding Times  |
| <input checked="" type="checkbox"/> Cooler Temperature Confirmed | <input type="checkbox"/> Corrective Action Form Required                    |
| <input checked="" type="checkbox"/> COC Complete                 |                                                                             |

## Preparation Chain-of-Custody

Sample ID	Reason Prep	Prep Start Date	Prep End Date	Prep Analyst
18C0104-01	% Solids Prep	03/08/2018 19:26	03/08/2018 19:26	Tom Jenkins
18C0104-02	% Solids Prep	03/08/2018 19:26	03/08/2018 19:26	Tom Jenkins
18C0104-03	EPA 5030B	03/09/2018 7:30	03/09/2018 7:30	Ryan D. Soracco
18C0104-04	EPA 5030B	03/09/2018 7:17	03/09/2018 7:17	Tara A. Burns
18C0104-05	EPA 5030B	03/09/2018 7:17	03/09/2018 7:17	Tara A. Burns
18C0104-06	EPA 5030B	03/09/2018 7:17	03/09/2018 7:17	Tara A. Burns
18C0104-07	EPA 5030B	03/09/2018 7:17	03/09/2018 7:17	Tara A. Burns
18C0104-01	EPA 5035A	03/12/2018 7:30	03/12/2018 7:30	Tara A. Burns
18C0104-02	EPA 5035A	03/12/2018 7:30	03/12/2018 7:30	Tara A. Burns

## Analysis Chain-of-Custody

Sample ID	Reason Analysis	Analysis Start Date	Analysis End Date	Analyst
18C0104-01	Total Solids	03/08/2018 19:26	03/09/2018 16:35	Tom Jenkins
18C0104-02	Total Solids	03/08/2018 19:26	03/09/2018 16:35	Tom Jenkins
18C0104-01	Volatile Organics, 8260 - Comprehens	03/12/2018 7:30	03/12/2018 14:17	Steve Swift
18C0104-02	Volatile Organics, 8260 - Comprehens	03/12/2018 7:30	03/12/2018 14:49	Steve Swift
18C0104-03	Volatile Organics, 8260 - Comprehens	03/09/2018 7:30	03/09/2018 13:05	Ryan D. Soracco
18C0104-04	Volatile Organics, 8260 - Comprehens	03/09/2018 7:17	03/09/2018 23:15	Steve Swift
18C0104-05	Volatile Organics, 8260 - Comprehens	03/09/2018 7:17	03/09/2018 23:47	Steve Swift
18C0104-06	Volatile Organics, 8260 - Comprehens	03/09/2018 7:17	03/10/2018 0:19	Steve Swift
18C0104-07	Volatile Organics, 8260 - Comprehens	03/09/2018 7:17	03/10/2018 0:51	Steve Swift





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

YORK Project No. 18C0104

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

YOUR Information		Report To:		Invoice To:		YOUR Project ID		Turn-Around Time		Report Type				
Company: Chazen Environmental Address: 21 Fox Street Poughkeepsie, NY 12601 Phone No. 845-486-1520 Contact Person: Eric Orłowski E-Mail Address: eorowski@chazencompanies.com		Company: Chazen Environmental Address: Phone No. Attention: E-Mail Address:		Company: Chazen Environmental Address: Phone No. Attention: E-Mail Address:		41103.00 Task 0900 - Kingston CVS Investigation Purchase Order No. 01863 Samples from: CT, NY, NJ		RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard (5-7 Days) <input checked="" type="checkbox"/>		Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input checked="" type="checkbox"/> NJDEP Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) <input checked="" type="checkbox"/> Simple Exec <input checked="" type="checkbox"/> NYSDEC EQUIS <input type="checkbox"/> EQUIS (std) <input type="checkbox"/> EZ-EDD (EQUIS) <input type="checkbox"/> NJDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <input type="checkbox"/> York Regulatory Comparison <input type="checkbox"/> Excel Spreadsheet <input type="checkbox"/> Compare to the following Regs. (please fill in): Part 375 Commercial Part 703.5 GW				
<p><b>Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.</b></p> <p>Matrix Codes: S - soil; Other - specify (oil, etc); WW - wastewater; GW - groundwater; DW - drinking water; Air-A - ambient air; Air-SV - soil vapor</p> <p>Samples Collected/Authorized By (Signature): <u>Eric J. Orłowski</u>            Name (printed): <u>Eric J. Orłowski</u></p>														
Volatiles: 8260 full; TICs; Site Spec.; STARS list; Nassau Co.; Suffolk Co.; BTEX; MTBE; TCL list; Oxygens; TAGM list; CT RCP list; Atom. only; Halog. only; App. IX list; 8021B list			Semi-Volatiles: 8270 or 625; STARS list; BN Only; Acids Only; PAH list; TAGM list; CT RCP list; NDEP list; Halog. only; App. IX list; 8021B list			Metals: RCR8; PPI13 list; TAL; CT15 list; TAGM list; NDEP list; Dissolved; SP/ or TCLP; Chloride; BNA; 608 Pest; SP/ or TCLP; 608 PCB			Misc. Org.: TPH GRO; TPH DRO; CT/TPH; NY 310-13; TPH 1664; Air TO14A; Air TO15; Air STARS; Air VPH; Air TICs; Medicine; Helium			Full Lists: Pri. Poll.; TCL Organics; TAL MeCN; Full TCLP; Full App. IX; Part 360-Residue; Part 360-Biochem; Part 360-Residue; Part 360-Residue; NYDEC Sewer; NYDEC Sewer; TAGM; Sludge		
<p><b>Choose Analyses Needed from the Menu Above and Enter Below</b></p>														
Sample Identification	Date/Time Sampled	Sample Matrix	1 X 5035 VOA SET 1 X 5035 VOA SET 3 X 40 ML VOAS SAMPLES RELINQUISHED TO SECURE REFRIGERATOR AT CHAZEN OFFICE ON 3/1/18 @ 1700.											
KC-CB-01 (25-30')	03/01/2018 0900	S	TCL VOCS											
KC-CB-02 (25-30')	03/01/2018 1000	S	TCL VOCS											
KC-EB-01	03/01/2018 1045	DI WATER	TCL VOCS											
Comments: PLEASE KEEP SDG OPEN, MORE SAMPLES WILL BE SUBMITTED NEXT WEEK TO BE INCLUDED IN SAME REPORT. THANK YOU!														
Preservation: Check those Applicable: 4°C <input checked="" type="checkbox"/> Frozen <input type="checkbox"/> HCl <input type="checkbox"/> ZnAc <input type="checkbox"/> MeOH <input checked="" type="checkbox"/> Ascorbic Acid <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> O <sub>2</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> Other <input type="checkbox"/>														
Special Instructions: Field Filtered <input type="checkbox"/> Lab to Filter <input type="checkbox"/>														
Samples Relinquished By: <u>gohlin</u> Date/Time: <u>3/1/18 1700</u> Samples Received By: <u>Chazen</u> Date/Time: <u>3-5-18 8:50</u> Samples Relinquished By: <u>gohlin</u> Date/Time: <u>3-5-18 1515</u> Samples Received in LAB by: <u>gohlin</u> Date/Time: <u>3-5-18 1515</u>														
Temperature on Receipt: <u>1.1</u> °C														





YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRAITFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

# Field Chain-of-Custody Record

Page 1 of 1  
1800104  
4800220  
RA

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

York Project No. 4800220

<b>YOUR Information</b> Company: Chazen Environmental Address: 21 Fox Street Poughkeepsie, NY 12601 Phone No. 845-486-1520 Contact Person: Eric Orlowski E-Mail Address: eorlowski@chazencompanies.com		<b>Report To:</b> Company: Chazen Environmental Address: Phone No. Attention: E-Mail Address:		<b>Invoice To:</b> Company: Chazen Environmental Address: Phone No. Attention: E-Mail Address:		<b>YOUR Project ID</b> 41103.00 Task 0900 - Kingston CVS Investigation <b>Purchase Order No.</b> 01863 Samples from: CT NY NJ		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard(5-7 Days) <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> CTRCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input checked="" type="checkbox"/> NIDEP Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) <input type="checkbox"/> Simple Excel <input checked="" type="checkbox"/> NYSDEC EQUIS <input type="checkbox"/> EQUIS (std) <input type="checkbox"/> EZ-EDD (EQUIS) <input type="checkbox"/> NIDEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <input type="checkbox"/> York Regulatory Comparison <input type="checkbox"/> Excel Spreadsheet <input type="checkbox"/> Compare to the following Regs. (please fill in): Part 375 Commercial Part 703.5 GW	
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**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

Matrix Codes  
 S - soil  
 Other - specify (oil, etc.)  
 WW - wastewater  
 GW - groundwater  
 DW - drinking water  
 Air-A - ambient air  
 Air-SV - soil vapor

Samples Collected/Authorized By (Signature)  
  
 Eric J. Orlowski  
 Name (printed)

Volatiles	Semi-Vols.	PCBs/PCBs	Metals	Misc. Org.	Full Lists	Misc.
8260 full TICs Site Spec. STARS list BTEX MTBE TCL list TAGM list CT RCP list Atom. only Halog. only App. IX list 8021B list	\$270 or 625 STARS list BN Only Acids Only PAH list TAGM list CT RCP list TCL list NIDEP list App. IX list SPL or TCLP	8082PCB 8081Pest 8151Herb CT RCP App. IX Site Spec. SPL or TCLP TCLP Pest TCLP Herb Chlordane 608 Pest SPL or TCLP 608 PCB	RCRA8 PP13 list TAL CT15 list TAGM list NIDEP list Total Dissolved SPL or TCLP Ink, Metals LIST Below	TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TICs Methane Helium	Pr. Poll. TCL Organics TAL MetCN Full TCLP Full App. IX Part 360-Residue Part 360-Residue Part 360-Residue Part 360-Residue NYDEC Power NYDEC Power TAGM	Corrosivity Reactivity Ignitability Flash Point Sieve Anal. Heteroatoms TOX BTU/lt. Aquatic Tox. NYDEC Power TOC Asbestos Silica

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
KC-MW-06 (0318)	3/5/2018 1230	GW	TCL VOCS	3 X 40 ML VOAS
KC-MW-07 (0318)	3/5/2018 1825	GW	TCL VOCS	3 X 40 ML VOAS
KC-MW-DUP1 (0318)	3/5/2018	GW	TCL VOCS	3 X 40 ML VOAS
TRIP BLANK		DI	TCL VOCS	2 X 40 ML VOAS

Comments

PLEASE ADD TO SDG WITH 3/1/18 SOIL SAMPLES AND CLOSE SDG. THANK YOU. SAMPLES RELINQUISHED TO SECURE REFRIGERATOR AT CHAZEN HQ 3/6/2018 AT 0900.

Preservation: 4°C  Frozen  HCl  HNO<sub>3</sub>  H<sub>2</sub>O<sub>2</sub>  NaOH   
 ZnAc  MeOH  Ascorbic Acid  Other

Special Instructions: Field Filtered  Lab to Filter

Samples Relinquished By: Date/Time: 3/6/2018 0900  
 Samples Received By: Date/Time: 3/6/18 12:50  
 Samples Relinquished in LAB by: Date/Time: 3/6/18 1540

Temperature on Receipt: 3.6 °C

York Analytical Laboratories, Inc.

SDG: 18C0104

CLASS: VOA

METHOD: EPA 8260C

# DATA PACKAGE COVER PAGE

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

---

**Client Sample Id:**

KC-EB-01

KC-MW-06 (0318)

KC-MW-07 (0318)

KC-MW-DUP1 (0318)

TRIP BLANK

**Lab Sample Id:**

18C0104-03

18C0104-04

18C0104-05

18C0104-06

18C0104-07

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the project narrative. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the

Signature:



Name:

Benjamin Gulizia

Date:

4/17/2018

Title:

Laboratory Director







## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80386Laboratory ID: BC80386-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	12	120	82 - 126
1,1,1-Trichloroethane	10.0	12	123	78 - 136
1,1,2,2-Tetrachloroethane	10.0	11	114	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	12	118	54 - 165
1,1,2-Trichloroethane	10.0	11	115	82 - 123
1,1-Dichloroethane	10.0	11	110	82 - 129
1,1-Dichloroethylene	10.0	11	110	68 - 138
1,2,3-Trichlorobenzene	10.0	18	179 *	76 - 136
1,2,3-Trichloropropane	10.0	11	111	77 - 128
1,2,4-Trichlorobenzene	10.0	13	131	76 - 137
1,2,4-Trimethylbenzene	10.0	11	112	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.5	95.0	45 - 147
1,2-Dibromoethane	10.0	12	116	83 - 124
1,2-Dichlorobenzene	10.0	11	113	79 - 123
1,2-Dichloroethane	10.0	11	108	73 - 132
1,2-Dichloropropane	10.0	11	109	78 - 126
1,3,5-Trimethylbenzene	10.0	11	113	80 - 131
1,3-Dichlorobenzene	10.0	11	115	86 - 122
1,4-Dichlorobenzene	10.0	11	113	85 - 124
1,4-Dioxane	210	250	119	10 - 349
2-Butanone	10.0	10	104	49 - 152
2-Hexanone	10.0	8.2	82.4	51 - 146
4-Methyl-2-pentanone	10.0	8.4	83.8	57 - 145
Acetone	10.0	7.3	73.0	14 - 150
Acrolein	10.0	6.5	65.1	10 - 153
Acrylonitrile	10.0	8.3	83.2	51 - 150
Benzene	10.0	12	120	85 - 126
Bromochloromethane	10.0	9.4	94.5	77 - 128
Bromodichloromethane	10.0	12	119	79 - 128
Bromoform	10.0	11	113	78 - 133



## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80386 Laboratory ID: BC80386-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Bromomethane	10.0	5.5	55.1	43 - 168
Carbon disulfide	10.0	13	127	68 - 146
Carbon tetrachloride	10.0	12	122	77 - 141
Chlorobenzene	10.0	12	122 *	88 - 120
Chloroethane	10.0	11	112	65 - 136
Chloroform	10.0	12	120	82 - 128
Chloromethane	10.0	9.1	91.0	43 - 155
cis-1,2-Dichloroethylene	10.0	11	106	83 - 129
cis-1,3-Dichloropropylene	10.0	11	111	80 - 131
Cyclohexane	10.0	10	104	63 - 149
Dibromochloromethane	10.0	11	115	80 - 130
Dibromomethane	10.0	11	109	72 - 134
Dichlorodifluoromethane	10.0	16	160 *	44 - 144
Ethyl Benzene	10.0	12	123	80 - 131
Hexachlorobutadiene	10.0	12	124	67 - 146
Isopropylbenzene	10.0	11	114	76 - 140
Methyl acetate	10.0	8.1	80.6	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	11	105	76 - 135
Methylcyclohexane	10.0	12	120	72 - 143
Methylene chloride	10.0	8.6	86.0	55 - 137
n-Butylbenzene	10.0	11	111	79 - 132
n-Propylbenzene	10.0	12	116	78 - 133
o-Xylene	10.0	12	121	78 - 130
p- & m- Xylenes	20.0	25	124	77 - 133
p-Isopropyltoluene	10.0	12	118	81 - 136
sec-Butylbenzene	10.0	12	117	79 - 137
Styrene	10.0	12	116	67 - 132
tert-Butyl alcohol (TBA)	50.0	54	109	25 - 162
tert-Butylbenzene	10.0	12	117	77 - 138
Tetrachloroethylene	10.0	11	106	82 - 131

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80386 Laboratory ID: BC80386-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Toluene	10.0	12	120	80 - 127
trans-1,2-Dichloroethylene	10.0	11	106	80 - 132
trans-1,3-Dichloropropylene	10.0	11	107	78 - 131
trans-1,4-dichloro-2-butene	10.0	10	99.7	63 - 141
Trichloroethylene	10.0	12	122	82 - 128
Trichlorofluoromethane	10.0	13	126	67 - 139
Vinyl Chloride	10.0	11	115	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80386Laboratory ID: BC80386-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	12	116	2.80	30	82 - 126
1,1,1-Trichloroethane	10.0	11	114	7.26	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	11	110	2.95	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.8	97.5	19.4	30	54 - 165
1,1,2-Trichloroethane	10.0	11	112	2.47	30	82 - 123
1,1-Dichloroethane	10.0	10	105	4.94	30	82 - 129
1,1-Dichloroethylene	10.0	10	102	7.71	30	68 - 138
1,2,3-Trichlorobenzene	10.0	18	177 *	1.12	30	76 - 136
1,2,3-Trichloropropane	10.0	11	109	1.18	30	77 - 128
1,2,4-Trichlorobenzene	10.0	13	128	2.16	30	76 - 137
1,2,4-Trimethylbenzene	10.0	11	107	4.40	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.3	92.9	2.24	30	45 - 147
1,2-Dibromoethane	10.0	11	113	2.88	30	83 - 124
1,2-Dichlorobenzene	10.0	11	109	3.96	30	79 - 123
1,2-Dichloroethane	10.0	10	102	4.85	30	73 - 132
1,2-Dichloropropane	10.0	11	106	3.07	30	78 - 126
1,3,5-Trimethylbenzene	10.0	11	108	4.44	30	80 - 131
1,3-Dichlorobenzene	10.0	11	111	3.10	30	86 - 122
1,4-Dichlorobenzene	10.0	11	110	3.05	30	85 - 124
1,4-Dioxane	210	280	133	11.1	30	10 - 349
2-Butanone	10.0	10	101	2.53	30	49 - 152
2-Hexanone	10.0	8.0	79.6	3.46	30	51 - 146
4-Methyl-2-pentanone	10.0	8.2	81.9	2.29	30	57 - 145
Acetone	10.0	7.2	71.9	1.52	30	14 - 150
Acrolein	10.0	6.3	62.6	3.92	30	10 - 153
Acrylonitrile	10.0	7.6	76.5	8.39	30	51 - 150
Benzene	10.0	11	113	5.86	30	85 - 126
Bromochloromethane	10.0	9.0	90.3	4.55	30	77 - 128
Bromodichloromethane	10.0	12	116	2.98	30	79 - 128
Bromoform	10.0	11	108	3.80	30	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80386Laboratory ID: BC80386-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	10.0	5.8	57.9	4.96	30	43 - 168
Carbon disulfide	10.0	12	118	7.61	30	68 - 146
Carbon tetrachloride	10.0	11	113	7.65	30	77 - 141
Chlorobenzene	10.0	12	117	4.18	30	88 - 120
Chloroethane	10.0	10	104	7.03	30	65 - 136
Chloroform	10.0	11	115	4.43	30	82 - 128
Chloromethane	10.0	8.4	84.5	7.41	30	43 - 155
cis-1,2-Dichloroethylene	10.0	9.8	98.5	6.96	30	83 - 129
cis-1,3-Dichloropropylene	10.0	11	107	3.12	30	80 - 131
Cyclohexane	10.0	8.9	88.6	16.0	30	63 - 149
Dibromochloromethane	10.0	11	112	2.47	30	80 - 130
Dibromomethane	10.0	11	106	2.98	30	72 - 134
Dichlorodifluoromethane	10.0	13	132	19.1	30	44 - 144
Ethyl Benzene	10.0	12	118	4.31	30	80 - 131
Hexachlorobutadiene	10.0	12	118	4.22	30	67 - 146
Isopropylbenzene	10.0	11	109	5.11	30	76 - 140
Methyl acetate	10.0	7.7	77.1	4.44	30	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	10	102	2.89	30	76 - 135
Methylcyclohexane	10.0	10	102	16.0	30	72 - 143
Methylene chloride	10.0	8.2	81.9	4.88	30	55 - 137
n-Butylbenzene	10.0	11	105	5.36	30	79 - 132
n-Propylbenzene	10.0	11	111	4.22	30	78 - 133
o-Xylene	10.0	12	117	3.53	30	78 - 130
p- & m- Xylenes	20.0	24	119	4.19	30	77 - 133
p-Isopropyltoluene	10.0	11	112	4.79	30	81 - 136
sec-Butylbenzene	10.0	11	112	4.63	30	79 - 137
Styrene	10.0	11	112	3.25	30	67 - 132
tert-Butyl alcohol (TBA)	50.0	56	113	3.77	30	25 - 162
tert-Butylbenzene	10.0	11	111	5.62	30	77 - 138
Tetrachloroethylene	10.0	9.9	99.2	6.16	30	82 - 131

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80386 Laboratory ID: BC80386-BSD1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	10.0	12	116	3.82	30	80 - 127
trans-1,2-Dichloroethylene	10.0	10	100	5.44	30	80 - 132
trans-1,3-Dichloropropylene	10.0	10	104	2.57	30	78 - 131
trans-1,4-dichloro-2-butene	10.0	9.7	96.6	3.16	30	63 - 141
Trichloroethylene	10.0	12	117	3.60	30	82 - 128
Trichlorofluoromethane	10.0	11	110	13.0	30	67 - 139
Vinyl Chloride	10.0	11	106	7.98	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80387Laboratory ID: BC80387-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	9.5	95.4	82 - 126
1,1,1-Trichloroethane	10.0	10	99.8	78 - 136
1,1,2,2-Tetrachloroethane	10.0	8.9	89.4	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.8	98.4	54 - 165
1,1,2-Trichloroethane	10.0	9.6	96.5	82 - 123
1,1-Dichloroethane	10.0	10	100	82 - 129
1,1-Dichloroethylene	10.0	9.9	99.2	68 - 138
1,2,3-Trichlorobenzene	10.0	9.8	97.6	76 - 136
1,2,3-Trichloropropane	10.0	9.7	97.4	77 - 128
1,2,4-Trichlorobenzene	10.0	9.8	98.2	76 - 137
1,2,4-Trimethylbenzene	10.0	9.9	99.2	82 - 132
1,2-Dibromo-3-chloropropane	10.0	10	102	45 - 147
1,2-Dibromoethane	10.0	10	103	83 - 124
1,2-Dichlorobenzene	10.0	9.8	98.1	79 - 123
1,2-Dichloroethane	10.0	9.3	93.4	73 - 132
1,2-Dichloropropane	10.0	11	107	78 - 126
1,3,5-Trimethylbenzene	10.0	10	103	80 - 131
1,3-Dichlorobenzene	10.0	9.4	94.4	86 - 122
1,4-Dichlorobenzene	10.0	9.8	97.6	85 - 124
1,4-Dioxane	210	150	70.5	10 - 349
2-Butanone	10.0	10	103	49 - 152
2-Hexanone	10.0	9.7	96.8	51 - 146
4-Methyl-2-pentanone	10.0	9.5	95.4	57 - 145
Acetone	10.0	9.5	94.6	14 - 150
Acrolein	10.0	3.2	31.5	10 - 153
Acrylonitrile	10.0	11	108	51 - 150
Benzene	10.0	10	103	85 - 126
Bromochloromethane	10.0	10	100	77 - 128
Bromodichloromethane	10.0	11	106	79 - 128
Bromoform	10.0	9.4	94.4	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80387 Laboratory ID: BC80387-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Bromomethane	10.0	12	116	43 - 168
Carbon disulfide	10.0	11	114	68 - 146
Carbon tetrachloride	10.0	10	102	77 - 141
Chlorobenzene	10.0	10	101	88 - 120
Chloroethane	10.0	10	103	65 - 136
Chloroform	10.0	10	100	82 - 128
Chloromethane	10.0	11	108	43 - 155
cis-1,2-Dichloroethylene	10.0	9.7	97.1	83 - 129
cis-1,3-Dichloropropylene	10.0	9.5	94.6	80 - 131
Cyclohexane	10.0	11	108	63 - 149
Dibromochloromethane	10.0	10	99.9	80 - 130
Dibromomethane	10.0	9.6	96.1	72 - 134
Dichlorodifluoromethane	10.0	12	119	44 - 144
Ethyl Benzene	10.0	10	103	80 - 131
Hexachlorobutadiene	10.0	11	108	67 - 146
Isopropylbenzene	10.0	11	109	76 - 140
Methyl acetate	10.0	10	104	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.0	89.8	76 - 135
Methylcyclohexane	10.0	11	112	72 - 143
Methylene chloride	10.0	9.7	96.6	55 - 137
n-Butylbenzene	10.0	10	102	79 - 132
n-Propylbenzene	10.0	11	106	78 - 133
o-Xylene	10.0	11	105	78 - 130
p- & m- Xylenes	20.0	20	99.2	77 - 133
p-Isopropyltoluene	10.0	10	101	81 - 136
sec-Butylbenzene	10.0	11	115	79 - 137
Styrene	10.0	10	99.5	67 - 132
tert-Butyl alcohol (TBA)	50.0	40	79.9	25 - 162
tert-Butylbenzene	10.0	11	109	77 - 138
Tetrachloroethylene	10.0	10	102	82 - 131

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80387 Laboratory ID: BC80387-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Toluene	10.0	10	105	80 - 127
trans-1,2-Dichloroethylene	10.0	10	101	80 - 132
trans-1,3-Dichloropropylene	10.0	9.2	91.9	78 - 131
trans-1,4-dichloro-2-butene	10.0	10	101	63 - 141
Trichloroethylene	10.0	11	115	82 - 128
Trichlorofluoromethane	10.0	10	103	67 - 139
Vinyl Chloride	10.0	11	106	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80387Laboratory ID: BC80387-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	8.9	89.0	6.94	30	82 - 126
1,1,1-Trichloroethane	10.0	9.3	92.8	7.27	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.2	91.5	2.32	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.4	94.2	4.36	30	54 - 165
1,1,2-Trichloroethane	10.0	9.2	91.8	4.99	30	82 - 123
1,1-Dichloroethane	10.0	9.3	92.8	7.87	30	82 - 129
1,1-Dichloroethylene	10.0	9.1	91.1	8.51	30	68 - 138
1,2,3-Trichlorobenzene	10.0	10	104	6.25	30	76 - 136
1,2,3-Trichloropropane	10.0	10	104	6.46	30	77 - 128
1,2,4-Trichlorobenzene	10.0	10	101	2.81	30	76 - 137
1,2,4-Trimethylbenzene	10.0	9.6	96.0	3.28	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	10	103	0.488	30	45 - 147
1,2-Dibromoethane	10.0	9.8	98.5	4.56	30	83 - 124
1,2-Dichlorobenzene	10.0	9.7	97.4	0.716	30	79 - 123
1,2-Dichloroethane	10.0	9.0	90.0	3.71	30	73 - 132
1,2-Dichloropropane	10.0	10	101	5.95	30	78 - 126
1,3,5-Trimethylbenzene	10.0	9.9	99.1	4.15	30	80 - 131
1,3-Dichlorobenzene	10.0	9.1	91.3	3.34	30	86 - 122
1,4-Dichlorobenzene	10.0	9.9	98.9	1.32	30	85 - 124
1,4-Dioxane	210	110	53.5	27.4	30	10 - 349
2-Butanone	10.0	11	112	8.67	30	49 - 152
2-Hexanone	10.0	9.4	94.4	2.51	30	51 - 146
4-Methyl-2-pentanone	10.0	9.3	93.2	2.33	30	57 - 145
Acetone	10.0	8.9	88.8	6.32	30	14 - 150
Acrolein	10.0	3.2	32.0	1.57	30	10 - 153
Acrylonitrile	10.0	11	106	1.87	30	51 - 150
Benzene	10.0	9.5	94.9	7.99	30	85 - 126
Bromochloromethane	10.0	9.6	96.2	4.07	30	77 - 128
Bromodichloromethane	10.0	9.8	98.5	7.15	30	79 - 128
Bromoform	10.0	9.4	93.9	0.531	30	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80387Laboratory ID: BC80387-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	10.0	11	111	4.33	30	43 - 168
Carbon disulfide	10.0	11	106	7.43	30	68 - 146
Carbon tetrachloride	10.0	9.4	94.3	8.04	30	77 - 141
Chlorobenzene	10.0	9.4	94.1	7.47	30	88 - 120
Chloroethane	10.0	9.5	95.0	8.18	30	65 - 136
Chloroform	10.0	9.4	94.1	6.08	30	82 - 128
Chloromethane	10.0	9.9	98.9	8.52	30	43 - 155
cis-1,2-Dichloroethylene	10.0	9.0	90.5	7.04	30	83 - 129
cis-1,3-Dichloropropylene	10.0	8.8	88.4	6.78	30	80 - 131
Cyclohexane	10.0	10	101	6.59	30	63 - 149
Dibromochloromethane	10.0	9.5	95.2	4.82	30	80 - 130
Dibromomethane	10.0	9.4	93.5	2.74	30	72 - 134
Dichlorodifluoromethane	10.0	11	108	9.26	30	44 - 144
Ethyl Benzene	10.0	9.4	93.6	9.37	30	80 - 131
Hexachlorobutadiene	10.0	10	103	4.56	30	67 - 146
Isopropylbenzene	10.0	10	104	4.51	30	76 - 140
Methyl acetate	10.0	10	102	2.62	30	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.2	92.2	2.64	30	76 - 135
Methylcyclohexane	10.0	10	102	9.48	30	72 - 143
Methylene chloride	10.0	9.1	91.2	5.75	30	55 - 137
n-Butylbenzene	10.0	9.7	96.8	4.74	30	79 - 132
n-Propylbenzene	10.0	10	100	4.95	30	78 - 133
o-Xylene	10.0	9.6	96.4	8.73	30	78 - 130
p- & m- Xylenes	20.0	18	90.0	9.72	30	77 - 133
p-Isopropyltoluene	10.0	9.7	97.0	3.84	30	81 - 136
sec-Butylbenzene	10.0	11	108	5.56	30	79 - 137
Styrene	10.0	9.0	90.4	9.58	30	67 - 132
tert-Butyl alcohol (TBA)	50.0	50	101	23.1	30	25 - 162
tert-Butylbenzene	10.0	10	104	5.18	30	77 - 138
Tetrachloroethylene	10.0	9.2	92.1	9.91	30	82 - 131

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80387 Laboratory ID: BC80387-BSD1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	10.0	9.6	95.5	9.19	30	80 - 127
trans-1,2-Dichloroethylene	10.0	9.5	95.3	6.01	30	80 - 132
trans-1,3-Dichloropropylene	10.0	8.6	86.2	6.40	30	78 - 131
trans-1,4-dichloro-2-butene	10.0	9.7	96.7	3.95	30	63 - 141
Trichloroethylene	10.0	10	103	11.0	30	82 - 128
Trichlorofluoromethane	10.0	9.4	94.1	9.03	30	67 - 139
Vinyl Chloride	10.0	9.8	98.5	7.52	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Batch: BC80386 Batch Matrix: Water Preparation: EPA 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-MW-06 (0318)	18C0104-04	V724464.D	03/09/18 07:17	
KC-MW-07 (0318)	18C0104-05	V724465.D	03/09/18 07:17	
KC-MW-DUP1 (0318)	18C0104-06	V724466.D	03/09/18 07:17	
TRIP BLANK	18C0104-07	V724467.D	03/09/18 07:17	
Blank	BC80386-BLK1	V724451.D	03/09/18 07:17	
LCS	BC80386-BS1	V724447.D	03/09/18 07:17	
LCS	BC80386-BS2	V724449.D	03/09/18 07:17	
LCS Dup	BC80386-BSD1	V724448.D	03/09/18 07:17	
LCS Dup	BC80386-BSD2	V724450.D	03/09/18 07:17	



## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80386-BLK1 File ID: V724451.D  
 Prepared: 03/09/18 07:17 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 16:21 Instrument: MSVOA7  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	0.50	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80386-BLK1 File ID: V724451.D  
 Prepared: 03/09/18 07:17 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 16:21 Instrument: MSVOA7  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U





## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	2.0	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	2.0	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U

**FORM I**

**METHOD BLANK DATA SHEET  
EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.17	91.7	69 - 130	
p-Bromofluorobenzene	10.0	11.3	113	79 - 122	
Toluene-d8	10.0	10.3	103	81 - 117	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,2-Dichlorobenzene-d4	26377	10.831	31465	10.831	
Chlorobenzene-d5	90737	7.876	95832	7.876	
Fluorobenzene	26513	4.916	27896	4.918	

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationLab File ID: V723798.DInjection Date: 02/14/18Instrument ID: MSVOA7Injection Time: 00:04Sequence: Y8B1409Lab Sample ID: Y8B1409-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	26.8	PASS
75	30 - 60% of 95	47.4	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.62	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	76.6	PASS
175	5 - 9% of 174	8.07	PASS
176	95 - 101% of 174	96.4	PASS
177	5 - 9% of 176	6.57	PASS

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationLab File ID: V804202.DInjection Date: 03/08/18Instrument ID: VOA No. 8Injection Time: 14:07Sequence: Y8C0903Lab Sample ID: Y8C0903-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	23.7	PASS
75	30 - 60% of 95	50.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.03	PASS
173	Less than 2% of 174	0.702	PASS
174	50 - 100% of 95	87.4	PASS
175	5 - 9% of 174	7.75	PASS
176	95 - 101% of 174	95.8	PASS
177	5 - 9% of 176	6.85	PASS

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationLab File ID: V804219.DInjection Date: 03/09/18Instrument ID: VOA No. 8Injection Time: 10:10Sequence: Y8C1201Lab Sample ID: Y8C1201-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	23.1	PASS
75	30 - 60% of 95	51.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.92	PASS
173	Less than 2% of 174	1.11	PASS
174	50 - 100% of 95	89.7	PASS
175	5 - 9% of 174	8.13	PASS
176	95 - 101% of 174	95.2	PASS
177	5 - 9% of 176	6.55	PASS

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationLab File ID: V724445.DInjection Date: 03/09/18Instrument ID: MSVOA7Injection Time: 12:57Sequence: Y8C1221Lab Sample ID: Y8C1221-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.4	PASS
75	30 - 60% of 95	46.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.69	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	77.3	PASS
175	5 - 9% of 174	7.94	PASS
176	95 - 101% of 174	98.1	PASS
177	5 - 9% of 176	6.44	PASS

**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8B1409 Instrument: MSVOA7  
Matrix: Water Calibration: YB80017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8B1409-TUN1	V723798.D	02/14/18 00:04
Cal Standard	Y8B1409-CAL1	V723799.D	02/14/18 00:35
Cal Standard	Y8B1409-CAL2	V723800.D	02/14/18 01:07
Cal Standard	Y8B1409-CAL3	V723801.D	02/14/18 01:38
Cal Standard	Y8B1409-CAL4	V723802.D	02/14/18 02:10
Cal Standard	Y8B1409-CAL5	V723803.D	02/14/18 02:41
Cal Standard	Y8B1409-CAL6	V723804.D	02/14/18 03:13
Cal Standard	Y8B1409-CAL7	V723805.D	02/14/18 03:44
Cal Standard	Y8B1409-CAL8	V723806.D	02/14/18 04:16
Cal Standard	Y8B1409-CAL9	V723807.D	02/14/18 04:47
Secondary Cal Check	Y8B1409-SCV1	V723811.D	02/14/18 06:53
Secondary Cal Check	Y8B1409-SCV2	V723812.D	02/14/18 07:25



**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C0903 Instrument: VOA No. 8  
Matrix: Water Calibration: YC80010

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C0903-TUN1	V804202.D	03/08/18 14:07
Cal Standard	Y8C0903-CAL1	V804204.D	03/08/18 15:04
Cal Standard	Y8C0903-CAL2	V804205.D	03/08/18 15:31
Cal Standard	Y8C0903-CAL3	V804206.D	03/08/18 15:58
Cal Standard	Y8C0903-CAL4	V804207.D	03/08/18 16:25
Cal Standard	Y8C0903-CAL5	V804208.D	03/08/18 16:52
Cal Standard	Y8C0903-CAL6	V804209.D	03/08/18 17:19
Cal Standard	Y8C0903-CAL7	V804210.D	03/08/18 17:46
Cal Standard	Y8C0903-CAL8	V804211.D	03/08/18 18:13
Cal Standard	Y8C0903-CAL9	V804212.D	03/08/18 18:40
Secondary Cal Check	Y8C0903-SCV1	V804216.D	03/08/18 20:28

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C1201 Instrument: VOA No. 8  
Matrix: Water Calibration: YC80010

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1201-TUN1	V804219.D	03/09/18 10:10
Calibration Check	Y8C1201-CCV1	V804220.D	03/09/18 10:37
LCS	BC80387-BS1	V804221.D	03/09/18 11:16
LCS Dup	BC80387-BSD1	V804222.D	03/09/18 11:43
Blank	BC80387-BLK1	V804224.D	03/09/18 12:37
KC-EB-01	18C0104-03	V804225.D	03/09/18 13:05

**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C1221 Instrument: MSVOA7  
Matrix: Water Calibration: YB80017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1221-TUN1	V724445.D	03/09/18 12:57
Calibration Check	Y8C1221-CCV1	V724446.D	03/09/18 13:41
LCS	BC80386-BS1	V724447.D	03/09/18 14:13
LCS Dup	BC80386-BSD1	V724448.D	03/09/18 14:45
LCS	BC80386-BS2	V724449.D	03/09/18 15:17
LCS Dup	BC80386-BSD2	V724450.D	03/09/18 15:49
Blank	BC80386-BLK1	V724451.D	03/09/18 16:21
KC-MW-06 (0318)	18C0104-04	V724464.D	03/09/18 23:15
KC-MW-07 (0318)	18C0104-05	V724465.D	03/09/18 23:47
KC-MW-DUP1 (0318)	18C0104-06	V724466.D	03/10/18 00:19
TRIP BLANK	18C0104-07	V724467.D	03/10/18 00:51

FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8B1409 Instrument: MSVOA7  
 Matrix: Water Calibration: YB80017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8B1409-CAL1)</b>		Lab File ID: V723799.D			Analyzed: 02/14/18 00:35				
Fluorobenzene	195745	5.825	208923	5.825	94	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	734332	8.855	776850	8.855	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	277007	11.841	301800	11.841	92	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B1409-CAL2)</b>		Lab File ID: V723800.D			Analyzed: 02/14/18 01:07				
Fluorobenzene	199185	5.825	208923	5.825	95	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	742138	8.855	776850	8.855	96	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	281818	11.84	301800	11.841	93	50 - 200	-0.0010	+/-0.17	
<b>Cal Standard (Y8B1409-CAL3)</b>		Lab File ID: V723801.D			Analyzed: 02/14/18 01:38				
Fluorobenzene	203653	5.825	208923	5.825	97	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	761129	8.855	776850	8.855	98	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	287347	11.838	301800	11.841	95	50 - 200	-0.0030	+/-0.17	
<b>Cal Standard (Y8B1409-CAL4)</b>		Lab File ID: V723802.D			Analyzed: 02/14/18 02:10				
Fluorobenzene	208923	5.825	208923	5.825	100	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	776850	8.855	776850	8.855	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	301800	11.841	301800	11.841	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B1409-CAL5)</b>		Lab File ID: V723803.D			Analyzed: 02/14/18 02:41				
Fluorobenzene	202801	5.825	208923	5.825	97	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	745663	8.855	776850	8.855	96	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	294490	11.838	301800	11.841	98	50 - 200	-0.0030	+/-0.17	
<b>Cal Standard (Y8B1409-CAL6)</b>		Lab File ID: V723804.D			Analyzed: 02/14/18 03:13				
Fluorobenzene	202979	5.825	208923	5.825	97	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	739271	8.855	776850	8.855	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	284394	11.841	301800	11.841	94	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B1409-CAL7)</b>		Lab File ID: V723805.D			Analyzed: 02/14/18 03:44				
Fluorobenzene	208239	5.828	208923	5.825	100	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	762765	8.858	776850	8.855	98	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	293353	11.843	301800	11.841	97	50 - 200	0.0020	+/-0.17	
<b>Cal Standard (Y8B1409-CAL8)</b>		Lab File ID: V723806.D			Analyzed: 02/14/18 04:16				
Fluorobenzene	208450	5.828	208923	5.825	100	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	767042	8.858	776850	8.855	99	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	291582	11.843	301800	11.841	97	50 - 200	0.0020	+/-0.17	
<b>Cal Standard (Y8B1409-CAL9)</b>		Lab File ID: V723807.D			Analyzed: 02/14/18 04:47				
Fluorobenzene	210682	5.828	208923	5.825	101	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	779424	8.861	776850	8.855	100	50 - 200	0.0060	+/-0.17	
1,2-Dichlorobenzene-d4	289421	11.843	301800	11.841	96	50 - 200	0.0020	+/-0.17	

**FORM VIII**

**INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>18C0104</u>
Client:	<u>Chazen Environmental Services (Poughkeepsie)</u>	Project:	<u>41103.00 Task 0900-Kingston CVS Investigation</u>
Sequence:	<u>Y8B1409</u>	Instrument:	<u>MSVOA7</u>
Matrix:	<u>Water</u>	Calibration:	<u>YB80017</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Secondary Cal Check (Y8B1409-SCV1)</b>			Lab File ID: V723811.D			Analyzed: 02/14/18 06:53			
Fluorobenzene	213140	5.825	208923	5.825	102	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	790163	8.855	776850	8.855	102	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	304628	11.84	301800	11.841	101	50 - 200	-0.0010	+/-0.17	
<b>Secondary Cal Check (Y8B1409-SCV2)</b>			Lab File ID: V723812.D			Analyzed: 02/14/18 07:25			
Fluorobenzene	206849	5.825	208923	5.825	99	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	764124	8.855	776850	8.855	98	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	279573	11.84	301800	11.841	93	50 - 200	-0.0010	+/-0.17	

FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C0903 Instrument: VOA No. 8  
 Matrix: Water Calibration: YC80010

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8C0903-CAL1)</b> Lab File ID: V804204.D Analyzed: 03/08/18 15:04									
Fluorobenzene	20085	4.919	20440	4.919	98	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	69864	7.879	70901	7.876	99	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	22668	10.831	23905	10.831	95	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL2)</b> Lab File ID: V804205.D Analyzed: 03/08/18 15:31									
Fluorobenzene	20128	4.916	20440	4.919	98	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	70007	7.876	70901	7.876	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	23068	10.828	23905	10.831	96	50 - 200	-0.0030	+/-0.17	
<b>Cal Standard (Y8C0903-CAL3)</b> Lab File ID: V804206.D Analyzed: 03/08/18 15:58									
Fluorobenzene	19359	4.916	20440	4.919	95	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	67034	7.876	70901	7.876	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	22233	10.831	23905	10.831	93	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL4)</b> Lab File ID: V804207.D Analyzed: 03/08/18 16:25									
Fluorobenzene	20440	4.919	20440	4.919	100	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	70901	7.876	70901	7.876	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	23905	10.831	23905	10.831	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL5)</b> Lab File ID: V804208.D Analyzed: 03/08/18 16:52									
Fluorobenzene	20545	4.916	20440	4.919	101	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	73752	7.876	70901	7.876	104	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	25650	10.831	23905	10.831	107	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL6)</b> Lab File ID: V804209.D Analyzed: 03/08/18 17:19									
Fluorobenzene	22627	4.913	20440	4.919	111	50 - 200	-0.0060	+/-0.17	
Chlorobenzene-d5	82165	7.876	70901	7.876	116	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	29375	10.831	23905	10.831	123	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL7)</b> Lab File ID: V804210.D Analyzed: 03/08/18 17:46									
Fluorobenzene	23922	4.916	20440	4.919	117	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	88928	7.879	70901	7.876	125	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	35044	10.834	23905	10.831	147	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8C0903-CAL8)</b> Lab File ID: V804211.D Analyzed: 03/08/18 18:13									
Fluorobenzene	25909	4.916	20440	4.919	127	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	97264	7.879	70901	7.876	137	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	40678	10.836	23905	10.831	170	50 - 200	0.0050	+/-0.17	
<b>Cal Standard (Y8C0903-CAL9)</b> Lab File ID: V804212.D Analyzed: 03/08/18 18:40									
Fluorobenzene	28927	4.918	20440	4.919	142	50 - 200	-0.0010	+/-0.17	
Chlorobenzene-d5	108176	7.879	70901	7.876	153	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	42354	10.839	23905	10.831	177	50 - 200	0.0080	+/-0.17	



**FORM VIII**

**INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>18C0104</u>
Client:	<u>Chazen Environmental Services (Poughkeepsie)</u>	Project:	<u>41103.00 Task 0900-Kingston CVS Investigation</u>
Sequence:	<u>Y8C1201</u>	Instrument:	<u>VOA No. 8</u>
Matrix:	<u>Water</u>	Calibration:	<u>YC80010</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1201-CCV1)</b>									
Lab File ID: V804220.D					Analyzed: 03/09/18 10:37				
Fluorobenzene	27896	4.918				50 - 200		+/-0.17	
Chlorobenzene-d5	95832	7.876				50 - 200		+/-0.17	
1,2-Dichlorobenzene-d4	31465	10.831				50 - 200		+/-0.17	
<b>LCS (BC80387-BS1)</b>									
Lab File ID: V804221.D					Analyzed: 03/09/18 11:16				
Fluorobenzene	26692	4.913	27896	4.918	96	50 - 200	-0.0050	+/-0.17	
Chlorobenzene-d5	89831	7.876	95832	7.876	94	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	30706	10.831	31465	10.831	98	50 - 200	0.0000	+/-0.17	
<b>LCS Dup (BC80387-BSD1)</b>									
Lab File ID: V804222.D					Analyzed: 03/09/18 11:43				
Fluorobenzene	28321	4.913	27896	4.918	102	50 - 200	-0.0050	+/-0.17	
Chlorobenzene-d5	97892	7.876	95832	7.876	102	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	31860	10.828	31465	10.831	101	50 - 200	-0.0030	+/-0.17	
<b>Blank (BC80387-BLK1)</b>									
Lab File ID: V804224.D					Analyzed: 03/09/18 12:37				
Fluorobenzene	26513	4.916	27896	4.918	95	50 - 200	-0.0020	+/-0.17	
Chlorobenzene-d5	90737	7.876	95832	7.876	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	26377	10.831	31465	10.831	84	50 - 200	0.0000	+/-0.17	
<b>KC-EB-01 (18C0104-03)</b>									
Lab File ID: V804225.D					Analyzed: 03/09/18 13:05				
Fluorobenzene	25805	4.916	27896	4.918	93	50 - 200	-0.0020	+/-0.17	
Chlorobenzene-d5	90257	7.876	95832	7.876	94	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	26617	10.828	31465	10.831	85	50 - 200	-0.0030	+/-0.17	



FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C1221 Instrument: MSVOA7  
 Matrix: Water Calibration: YB80017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1221-CCV1)</b> Lab File ID: V724446.D Analyzed: 03/09/18 13:41									
Fluorobenzene	248308	5.828				50 - 200		+/-0.17	
Chlorobenzene-d5	917162	8.858				50 - 200		+/-0.17	
1,2-Dichlorobenzene-d4	370257	11.84				50 - 200		+/-0.17	
<b>LCS (BC80386-BS1)</b> Lab File ID: V724447.D Analyzed: 03/09/18 14:13									
Fluorobenzene	249742	5.828	248308	5.828	101	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	910116	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	368098	11.84	370257	11.84	99	50 - 200	0.0000	+/-0.17	
<b>LCS Dup (BC80386-BSD1)</b> Lab File ID: V724448.D Analyzed: 03/09/18 14:45									
Fluorobenzene	252785	5.828	248308	5.828	102	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	909122	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	369119	11.841	370257	11.84	100	50 - 200	0.0010	+/-0.17	
<b>LCS (BC80386-BS2)</b> Lab File ID: V724449.D Analyzed: 03/09/18 15:17									
Fluorobenzene	246050	5.828	248308	5.828	99	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	909153	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	350355	11.84	370257	11.84	95	50 - 200	0.0000	+/-0.17	
<b>LCS Dup (BC80386-BSD2)</b> Lab File ID: V724450.D Analyzed: 03/09/18 15:49									
Fluorobenzene	247424	5.828	248308	5.828	100	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	907592	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	355509	11.84	370257	11.84	96	50 - 200	0.0000	+/-0.17	
<b>Blank (BC80386-BLK1)</b> Lab File ID: V724451.D Analyzed: 03/09/18 16:21									
Fluorobenzene	249881	5.828	248308	5.828	101	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	904244	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	348060	11.841	370257	11.84	94	50 - 200	0.0010	+/-0.17	
<b>KC-MW-06 (0318) (18C0104-04)</b> Lab File ID: V724464.D Analyzed: 03/09/18 23:15									
Fluorobenzene	258661	5.828	248308	5.828	104	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	944138	8.858	917162	8.858	103	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	368825	11.843	370257	11.84	100	50 - 200	0.0030	+/-0.17	
<b>KC-MW-07 (0318) (18C0104-05)</b> Lab File ID: V724465.D Analyzed: 03/09/18 23:47									
Fluorobenzene	246616	5.828	248308	5.828	99	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	907734	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	353263	11.84	370257	11.84	95	50 - 200	0.0000	+/-0.17	
<b>KC-MW-DUP1 (0318) (18C0104-06)</b> Lab File ID: V724466.D Analyzed: 03/10/18 00:19									
Fluorobenzene	251844	5.828	248308	5.828	101	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	915028	8.858	917162	8.858	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	358588	11.841	370257	11.84	97	50 - 200	0.0010	+/-0.17	



# HOLDING TIME SUMMARY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KC-EB-01	03/01/18 10:45	03/05/18 15:15	03/09/18 07:30	7.86	14.00	03/09/18 13:05	8.10	14.00	
KC-MW-06 (0318)	03/05/18 12:30	03/05/18 15:15	03/09/18 07:17	3.78	14.00	03/09/18 23:15	4.45	14.00	
KC-MW-07 (0318)	03/05/18 18:25	03/05/18 15:15	03/09/18 07:17	3.54	14.00	03/09/18 23:47	4.22	14.00	
KC-MW-DUP1 (0318)	03/05/18 15:00	03/05/18 15:15	03/09/18 07:17	3.68	14.00	03/10/18 00:19	4.39	14.00	
TRIP BLANK	03/05/18 15:00	03/05/18 15:15	03/09/18 07:17	3.68	14.00	03/10/18 00:51	4.41	14.00	

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investis

Matrix: Water

Instrument: MSVOA7

Analyte	LOD	LOQ	Units
1,1,1,2-Tetrachloroethane	0.20	0.50	ug/L
1,1,1-Trichloroethane	0.20	0.50	ug/L
1,1,2,2-Tetrachloroethane	0.20	0.50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Fr	0.20	0.50	ug/L
1,1,2-Trichloroethane	0.20	0.50	ug/L
1,1-Dichloroethane	0.20	0.50	ug/L
1,1-Dichloroethylene	0.20	0.50	ug/L
1,2,3-Trichlorobenzene	0.20	0.50	ug/L
1,2,3-Trichloropropane	0.20	0.50	ug/L
1,2,4-Trichlorobenzene	0.20	0.50	ug/L
1,2,4-Trimethylbenzene	0.20	0.50	ug/L
1,2-Dibromo-3-chloropropane	0.20	0.50	ug/L
1,2-Dibromoethane	0.20	0.50	ug/L
1,2-Dichlorobenzene	0.20	0.50	ug/L
1,2-Dichloroethane	0.20	0.50	ug/L
1,2-Dichloropropane	0.20	0.50	ug/L
1,3,5-Trimethylbenzene	0.20	0.50	ug/L
1,3-Dichlorobenzene	0.20	0.50	ug/L
1,4-Dichlorobenzene	0.20	0.50	ug/L
1,4-Dioxane	40	40	ug/L
2-Butanone	0.20	0.50	ug/L
2-Hexanone	0.20	0.50	ug/L
4-Methyl-2-pentanone	0.20	0.50	ug/L
Acetone	1.0	2.0	ug/L
Acrolein	0.20	0.50	ug/L
Acrylonitrile	0.20	0.50	ug/L
Benzene	0.20	0.50	ug/L
Bromochloromethane	0.20	0.50	ug/L
Bromodichloromethane	0.20	0.50	ug/L
Bromoform	0.20	0.50	ug/L
Bromomethane	0.20	0.50	ug/L
Carbon disulfide	0.20	0.50	ug/L
Carbon tetrachloride	0.20	0.50	ug/L
Chlorobenzene	0.20	0.50	ug/L
Chloroethane	0.20	0.50	ug/L
Chloroform	0.20	0.50	ug/L
Chloromethane	0.20	0.50	ug/L

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investis

Matrix: Water

Instrument: MSVOA7

Analyte	LOD	LOQ	Units
cis-1,2-Dichloroethylene	0.20	0.50	ug/L
cis-1,3-Dichloropropylene	0.20	0.50	ug/L
Cyclohexane	0.20	0.50	ug/L
Dibromochloromethane	0.20	0.50	ug/L
Dibromomethane	0.20	0.50	ug/L
Dichlorodifluoromethane	0.20	0.50	ug/L
Ethyl Benzene	0.20	0.50	ug/L
Hexachlorobutadiene	0.20	0.50	ug/L
Isopropylbenzene	0.20	0.50	ug/L
Methyl acetate	0.20	0.50	ug/L
Methyl tert-butyl ether (MTBE)	0.20	0.50	ug/L
Methylcyclohexane	0.20	0.50	ug/L
Methylene chloride	1.0	2.0	ug/L
n-Butylbenzene	0.20	0.50	ug/L
n-Propylbenzene	0.20	0.50	ug/L
o-Xylene	0.20	0.50	ug/L
p- & m- Xylenes	0.50	1.0	ug/L
p-Isopropyltoluene	0.20	0.50	ug/L
sec-Butylbenzene	0.20	0.50	ug/L
Styrene	0.20	0.50	ug/L
tert-Butyl alcohol (TBA)	0.50	1.0	ug/L
tert-Butylbenzene	0.20	0.50	ug/L
Tetrachloroethylene	0.20	0.50	ug/L
Toluene	0.20	0.50	ug/L
trans-1,2-Dichloroethylene	0.20	0.50	ug/L
trans-1,3-Dichloropropylene	0.20	0.50	ug/L
trans-1,4-dichloro-2-butene	0.20	0.50	ug/L
Trichloroethylene	0.20	0.50	ug/L
Trichlorofluoromethane	0.20	0.50	ug/L
Vinyl Chloride	0.20	0.50	ug/L
Xylenes, Total	0.60	1.5	ug/L

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investis

Matrix: Water

Instrument: VOA No. 8

Analyte	LOD	LOQ	Units
1,1,1,2-Tetrachloroethane	0.20	0.50	ug/L
1,1,1-Trichloroethane	0.20	0.50	ug/L
1,1,2,2-Tetrachloroethane	0.20	0.50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Fr	0.20	0.50	ug/L
1,1,2-Trichloroethane	0.20	0.50	ug/L
1,1-Dichloroethane	0.20	0.50	ug/L
1,1-Dichloroethylene	0.20	0.50	ug/L
1,2,3-Trichlorobenzene	0.20	0.50	ug/L
1,2,3-Trichloropropane	0.20	0.50	ug/L
1,2,4-Trichlorobenzene	0.20	0.50	ug/L
1,2,4-Trimethylbenzene	0.20	0.50	ug/L
1,2-Dibromo-3-chloropropane	0.20	0.50	ug/L
1,2-Dibromoethane	0.20	0.50	ug/L
1,2-Dichlorobenzene	0.20	0.50	ug/L
1,2-Dichloroethane	0.20	0.50	ug/L
1,2-Dichloropropane	0.20	0.50	ug/L
1,3,5-Trimethylbenzene	0.20	0.50	ug/L
1,3-Dichlorobenzene	0.20	0.50	ug/L
1,4-Dichlorobenzene	0.20	0.50	ug/L
1,4-Dioxane	40	40	ug/L
2-Butanone	0.20	0.50	ug/L
2-Hexanone	0.20	0.50	ug/L
4-Methyl-2-pentanone	0.20	0.50	ug/L
Acetone	1.0	2.0	ug/L
Acrolein	0.20	0.50	ug/L
Acrylonitrile	0.20	0.50	ug/L
Benzene	0.20	0.50	ug/L
Bromochloromethane	0.20	0.50	ug/L
Bromodichloromethane	0.20	0.50	ug/L
Bromoform	0.20	0.50	ug/L
Bromomethane	0.20	0.50	ug/L
Carbon disulfide	0.20	0.50	ug/L
Carbon tetrachloride	0.20	0.50	ug/L
Chlorobenzene	0.20	0.50	ug/L
Chloroethane	0.20	0.50	ug/L
Chloroform	0.20	0.50	ug/L
Chloromethane	0.20	0.50	ug/L

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investis

Matrix: Water

Instrument: VOA No. 8

Analyte	LOD	LOQ	Units
cis-1,2-Dichloroethylene	0.20	0.50	ug/L
cis-1,3-Dichloropropylene	0.20	0.50	ug/L
Cyclohexane	0.20	0.50	ug/L
Dibromochloromethane	0.20	0.50	ug/L
Dibromomethane	0.20	0.50	ug/L
Dichlorodifluoromethane	0.20	0.50	ug/L
Ethyl Benzene	0.20	0.50	ug/L
Hexachlorobutadiene	0.20	0.50	ug/L
Isopropylbenzene	0.20	0.50	ug/L
Methyl acetate	0.20	0.50	ug/L
Methyl tert-butyl ether (MTBE)	0.20	0.50	ug/L
Methylcyclohexane	0.20	0.50	ug/L
Methylene chloride	1.0	2.0	ug/L
n-Butylbenzene	0.20	0.50	ug/L
n-Propylbenzene	0.20	0.50	ug/L
o-Xylene	0.20	0.50	ug/L
p- & m- Xylenes	0.50	1.0	ug/L
p-Isopropyltoluene	0.20	0.50	ug/L
sec-Butylbenzene	0.20	0.50	ug/L
Styrene	0.20	0.50	ug/L
tert-Butyl alcohol (TBA)	0.50	1.0	ug/L
tert-Butylbenzene	0.20	0.50	ug/L
Tetrachloroethylene	0.20	0.50	ug/L
Toluene	0.20	0.50	ug/L
trans-1,2-Dichloroethylene	0.20	0.50	ug/L
trans-1,3-Dichloropropylene	0.20	0.50	ug/L
trans-1,4-dichloro-2-butene	0.20	0.50	ug/L
Trichloroethylene	0.20	0.50	ug/L
Trichlorofluoromethane	0.20	0.50	ug/L
Vinyl Chloride	0.20	0.50	ug/L
Xylenes, Total	0.60	1.5	ug/L

# VOA Sample Data



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-03 File ID: V804225.D  
 Sampled: 03/01/18 10:45 Prepared: 03/09/18 07:30 Analyzed: 03/09/18 13:05  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010 Instrument: VOA No. 8

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.50	U
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	2.0	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.21	J
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	8.8	
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-03 File ID: V804225.D  
 Sampled: 03/01/18 10:45 Prepared: 03/09/18 07:30 Analyzed: 03/09/18 13:05  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010 Instrument: VOA No. 8

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	0.50	U
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.45	94.5	69 - 130	
Toluene-d8	10.0	10.0	100	81 - 117	
p-Bromofluorobenzene	10.0	11.4	114	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	25805	4.916	27896	4.918	
Chlorobenzene-d5	90257	7.876	95832	7.876	
1,2-Dichlorobenzene-d4	26617	10.828	31465	10.831	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804225.D  
 Acq On : 9 Mar 2018 1:05 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : 18C0104-03  
 Misc : QBV8030918A 8260 COMP A  
 ALS Vial : 7 Sample Multiplier: 1

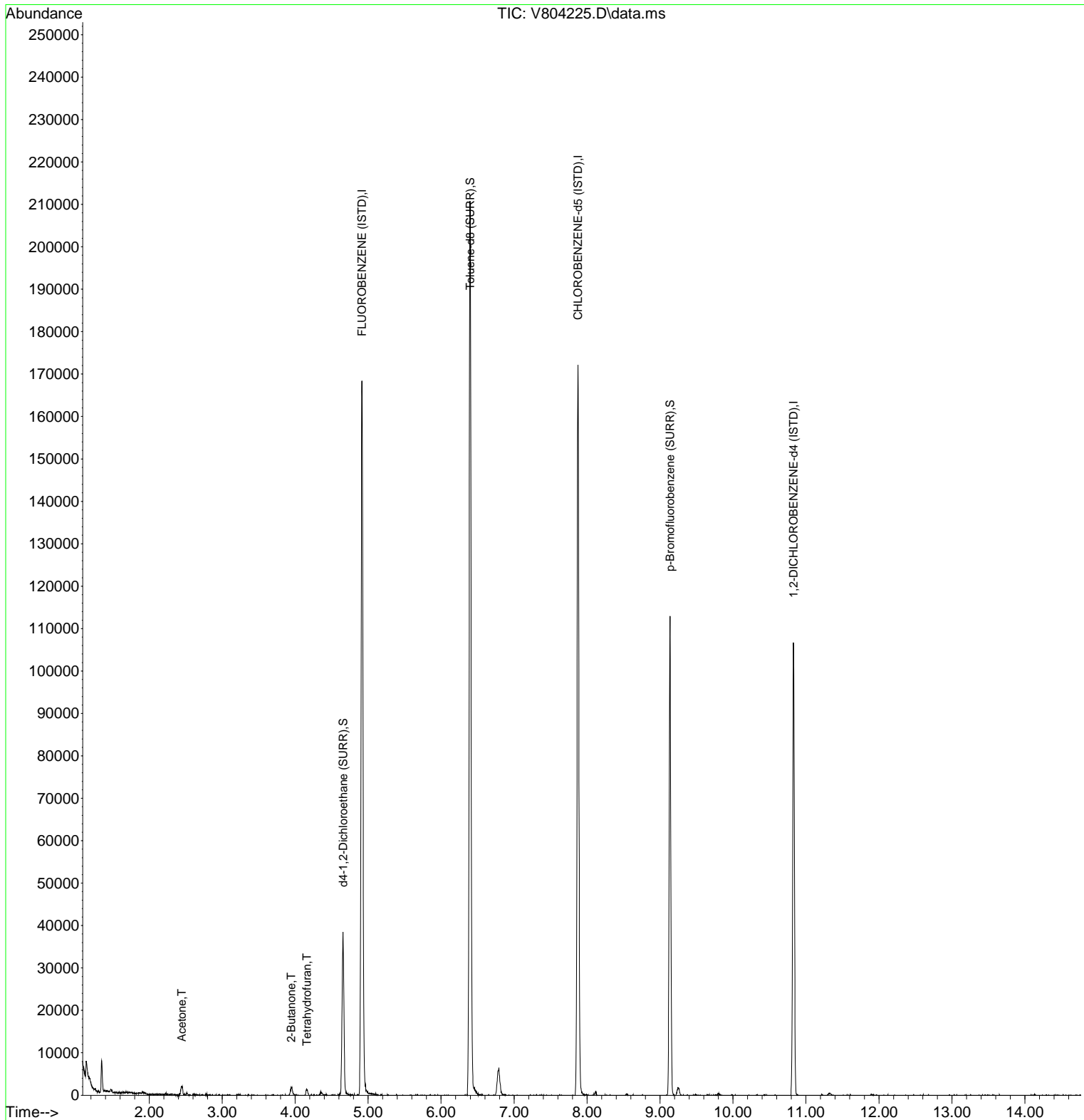
Quant Time: Mar 09 14:22:50 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration

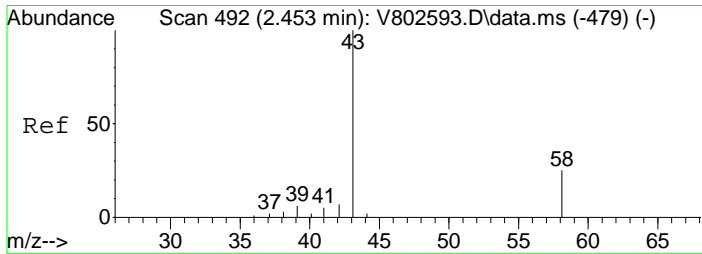
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	4.916	70	25805	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	90257	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.828	152	26617	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	4.657	65	22830	9.45	ppb	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	94.50%	
51) Toluene-d8 (SURR)	6.399	98	130994	10.04	ppb	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	100.40%	
70) p-Bromofluorobenzene (...)	9.136	95	32813	11.35	ppb	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	113.50%	
Target Compounds						
12) Acetone	2.445	43	2731	8.83	ppb	# 97
26) 2-Butanone	3.945	72	19	0.21	ppb	# 69
28) Tetrahydrofuran	4.159	71	237m	2.62	ppb	
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804225.D  
 Acq On : 9 Mar 2018 1:05 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : 18C0104-03  
 Misc : QBV8030918A 8260 COMP A  
 ALS Vial : 7 Sample Multiplier: 1

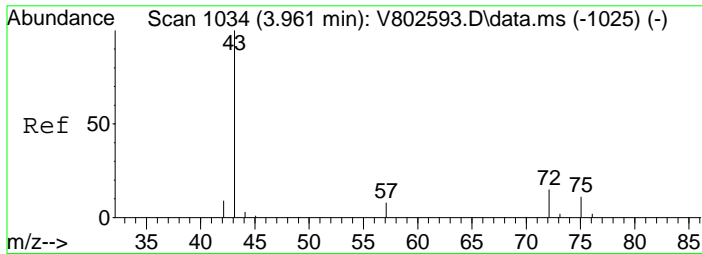
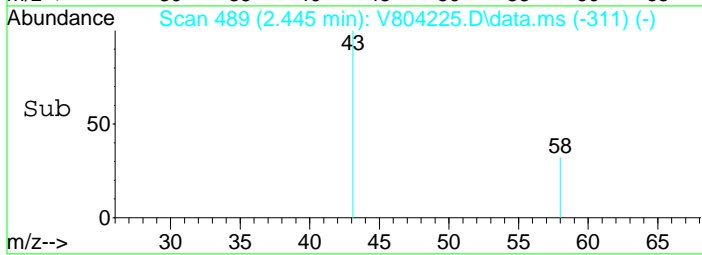
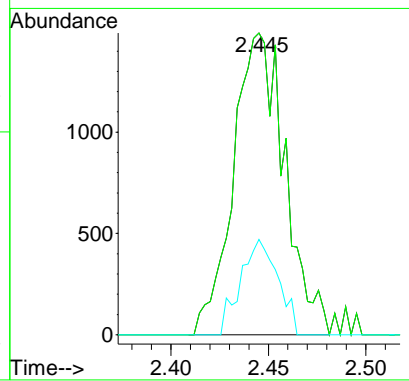
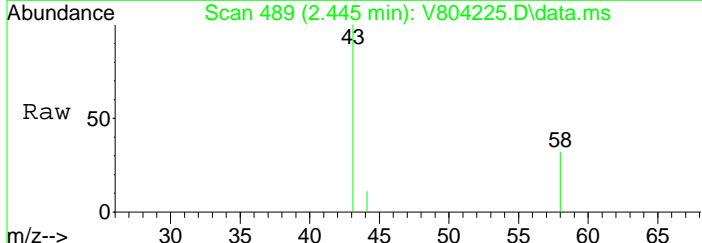
Quant Time: Mar 09 14:22:50 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration





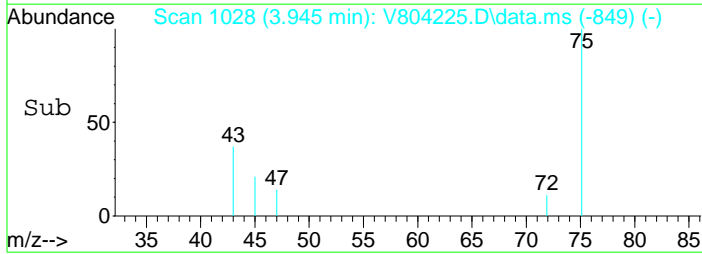
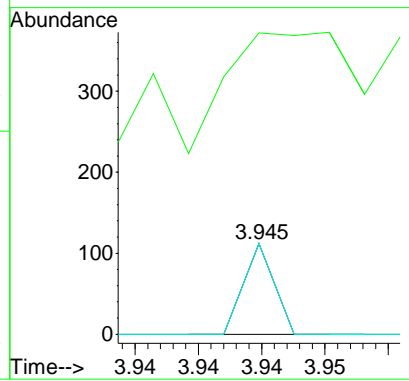
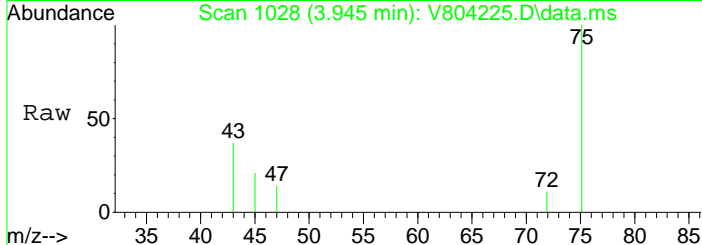
#12  
 Acetone  
 Concen: 8.83 ppb  
 RT: 2.445 min Scan# 489  
 Delta R.T. -0.006 min  
 Lab File: V804225.D  
 Acq: 9 Mar 2018 1:05 pm

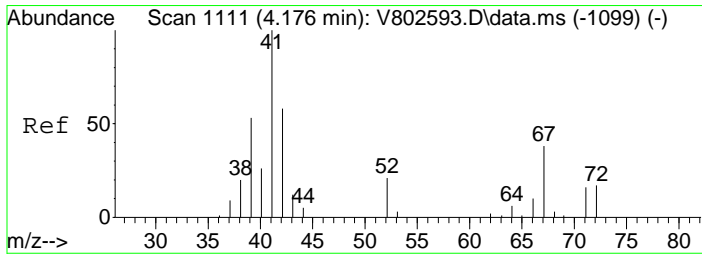
Tgt Ion	Resp	Lower	Upper
43	2731		
43	100		
43	100.0	80.0	120.0
58	23.0	7.1	21.3#



#26  
 2-Butanone  
 Concen: 0.21 ppb  
 RT: 3.945 min Scan# 1028  
 Delta R.T. -0.003 min  
 Lab File: V804225.D  
 Acq: 9 Mar 2018 1:05 pm

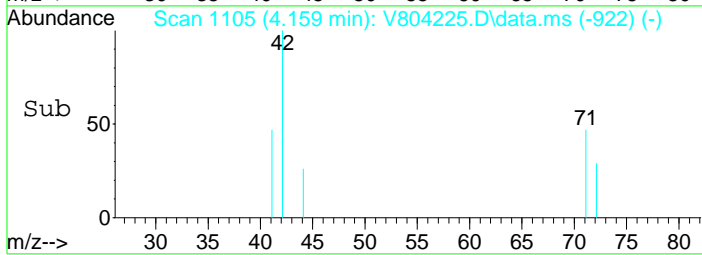
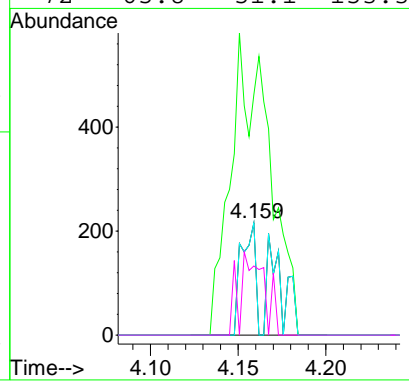
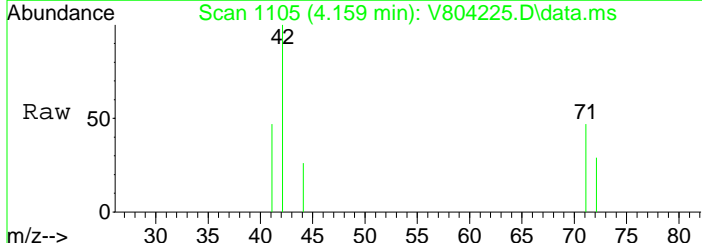
Tgt Ion	Resp	Lower	Upper
72	19		
72	100		
43	3352.6	0.0	0.0#
72	100.0	37.0	110.9





#28  
 Tetrahydrofuran  
 Concen: 2.62 ppb m  
 RT: 4.159 min Scan# 1105  
 Delta R.T. 0.008 min  
 Lab File: V804225.D  
 Acq: 9 Mar 2018 1:05 pm

Tgt Ion	Resp	Lower	Upper
71	100		
42	180.6	273.7	410.5#
71	51.1	50.0	150.0
72	65.8	51.1	153.3



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-04 File ID: V724464.D  
 Sampled: 03/05/18 12:30 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:15  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.38	J
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.29	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.2	
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	12	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-04 File ID: V724464.D  
 Sampled: 03/05/18 12:30 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:15  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.8	J
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.38	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	26	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.23	J
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.61	96.1	69 - 130	
Toluene-d8	10.0	10.5	105	81 - 117	
p-Bromofluorobenzene	10.0	9.98	99.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	258661	5.828	248308	5.828	
Chlorobenzene-d5	944138	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	368825	11.843	370257	11.84	

\* Values outside of QC limits



Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724464.D  
 Acq On : 9 Mar 2018 11:15 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-04  
 Misc : QBV7030918A COMP A AF  
 ALS Vial : 20 Sample Multiplier: 1

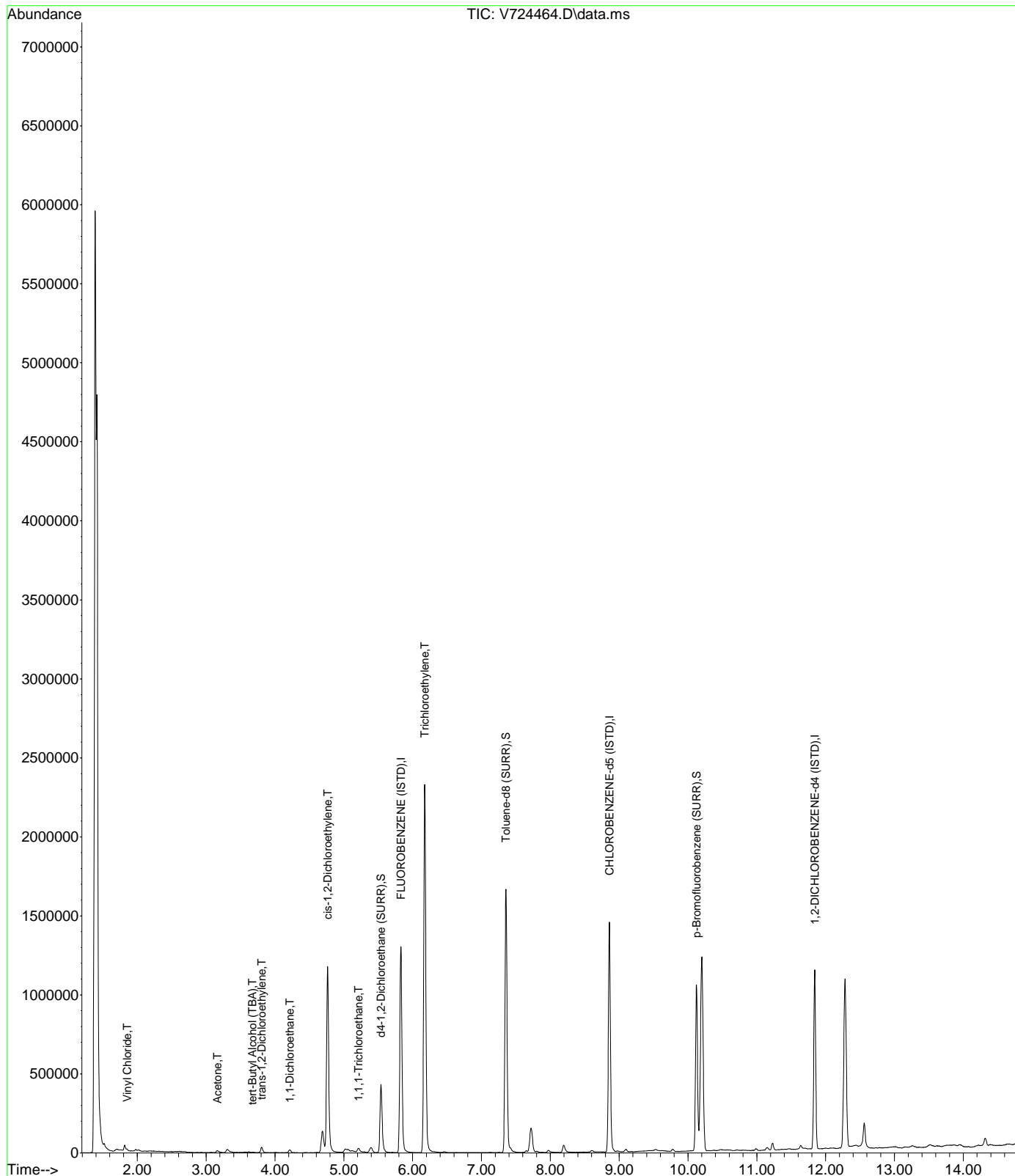
Quant Time: Mar 12 14:10:59 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

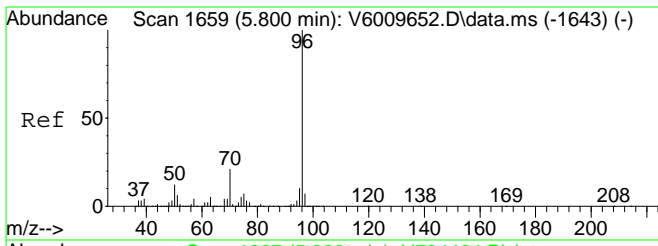
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	5.828	70	258661	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	944138	10.00	ppb	0.00
67) 1,2-DICHLOROENZENE-d4...	11.843	152	368825	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.539	65	311690	9.61	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	96.10%	
51) Toluene-d8 (SURR)	7.355	98	1294841	10.50	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	105.00%	
70) p-Bromofluorobenzene (...)	10.124	95	450893	9.98	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	99.80%	
Target Compounds						
						Qvalue
4) Vinyl Chloride	1.852	62	9517	0.23	ppb	97
12) Acetone	3.163	43	21356	2.23	ppb	# 1
16) tert-Butyl Alcohol (TBA)	3.672	59	5053m	1.80	ppb	
19) trans-1,2-Dichloroethy...	3.805	61	22629	0.38	ppb	# 87
21) 1,1-Dichloroethane	4.217	63	20627	0.29	ppb	# 96
25) cis-1,2-Dichloroethylene	4.765	61	801833	11.86	ppb	97
31) 1,1,1-Trichloroethane	5.213	97	17924	0.38	ppb	# 100
41) Trichloroethylene	6.176	95	868383	26.46	ppb	97
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724464.D  
 Acq On : 9 Mar 2018 11:15 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-04  
 Misc : QEV7030918A COMP A AF  
 ALS Vial : 20 Sample Multiplier: 1

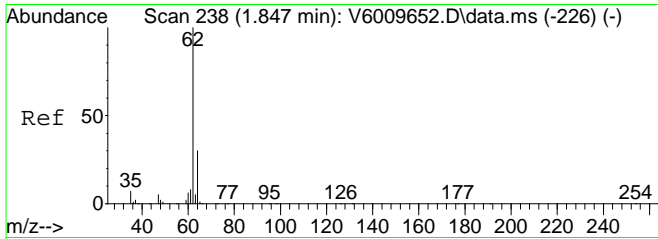
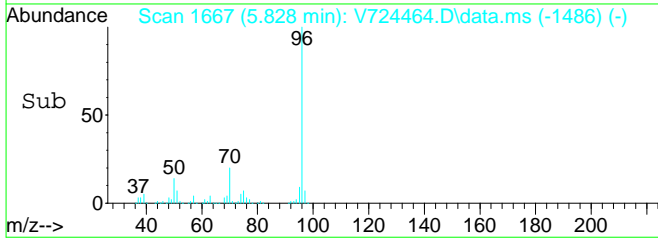
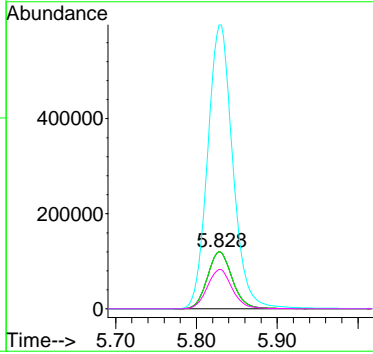
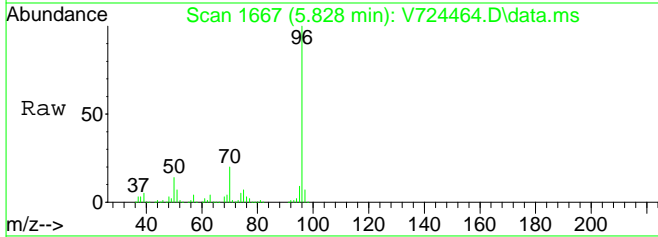
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 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration





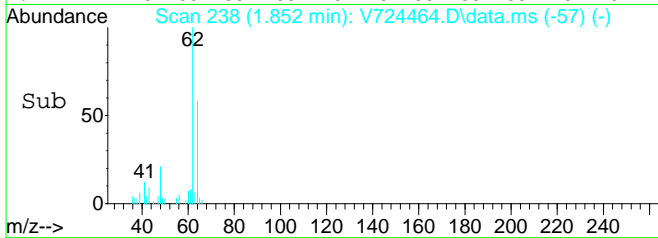
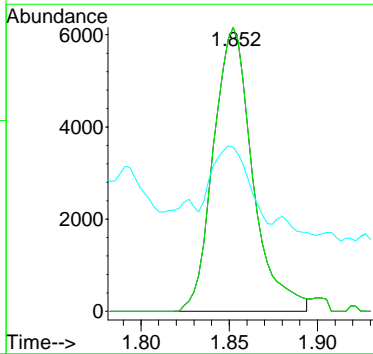
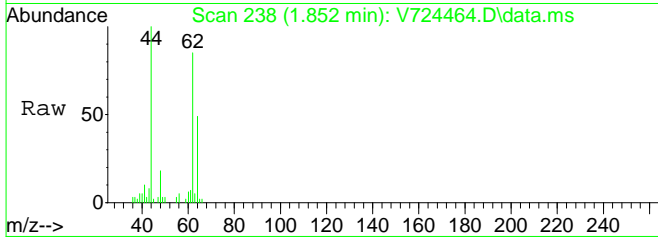
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 FLUOROBENZENE (ISTD)  
 Concen: 10.00 ppb  
 RT: 5.828 min Scan# 1667  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

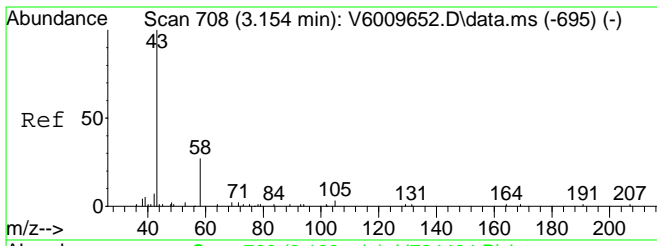
Tgt Ion	Resp	Lower	Upper
70	258661		
70	100		
70	100.0	65.0	135.0
96	500.9	341.4	709.0
50	0.0	0.0	0.0



#4  
 Vinyl Chloride  
 Concen: 0.23 ppb  
 RT: 1.852 min Scan# 238  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

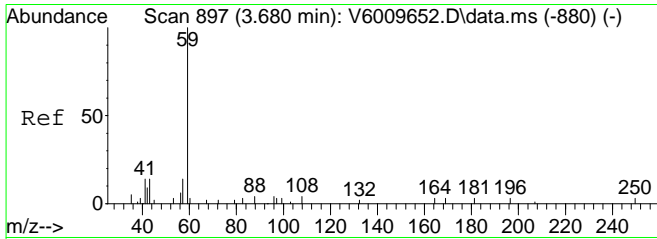
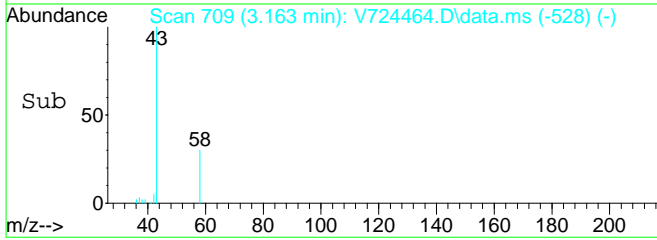
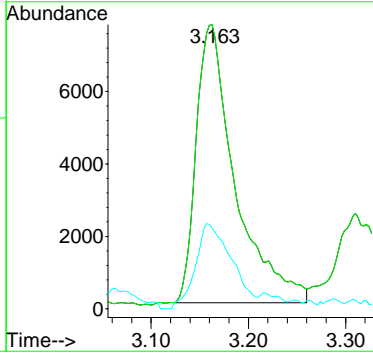
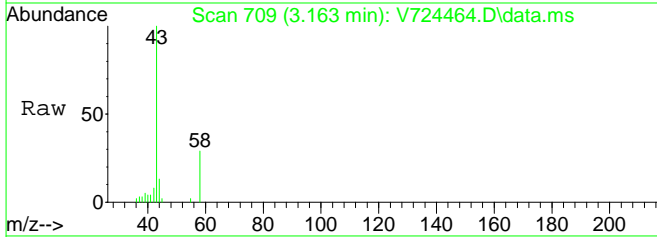
Tgt Ion	Resp	Lower	Upper
62	9517		
62	100		
62	100.0	65.0	135.0
64	25.0	20.6	42.8





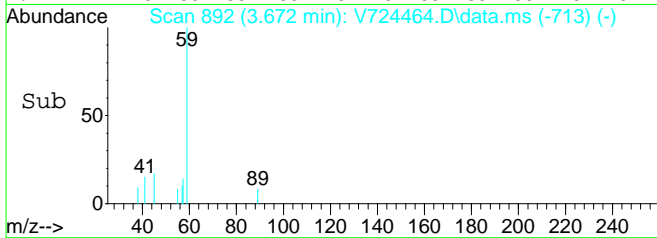
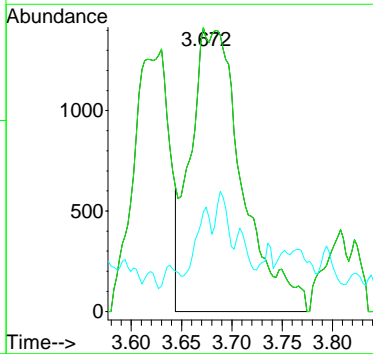
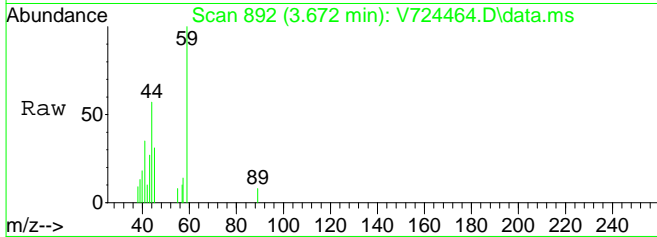
#12  
 Acetone  
 Concen: 2.23 ppb  
 RT: 3.163 min Scan# 709  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

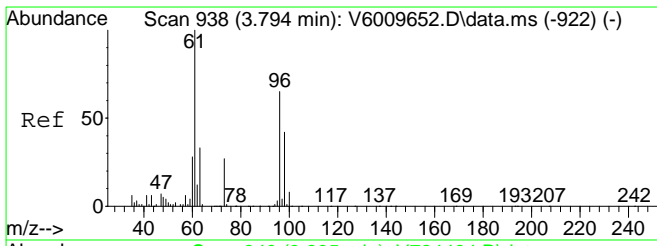
Tgt Ion	Resp	Lower	Upper
43	21356		
43	100		
43	100.0	16.2	24.4#
58	28.7	2.5	7.6#



#16  
 tert-Butyl Alcohol (TBA)  
 Concen: 1.80 ppb m  
 RT: 3.672 min Scan# 892  
 Delta R.T. -0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion	Resp	Lower	Upper
59	5053		
59	100		
59	15.3	37.8	78.6#
41	6.7	338.1	1014.3#

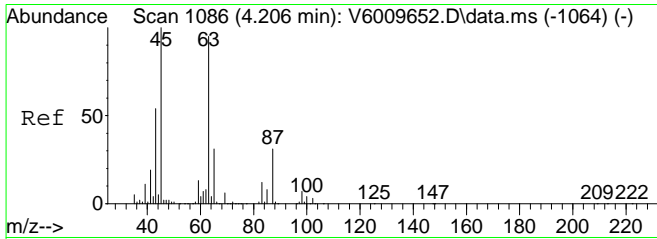
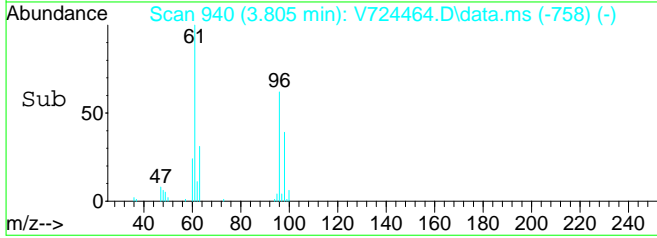
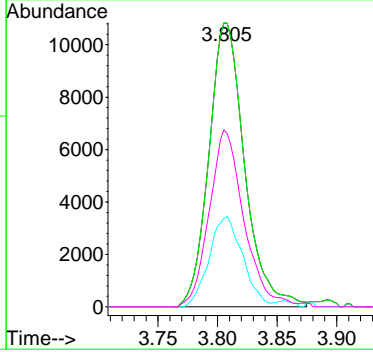
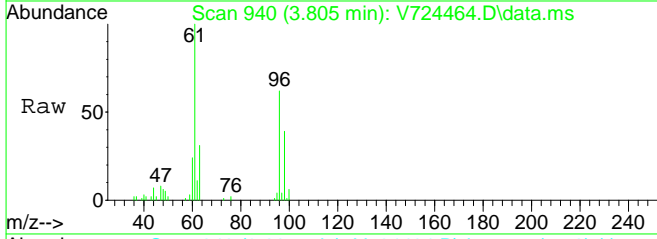




#19  
 trans-1,2-Dichloroethylene  
 Concen: 0.38 ppb  
 RT: 3.805 min Scan# 940  
 Delta R.T. 0.005 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion: 61 Resp: 22629

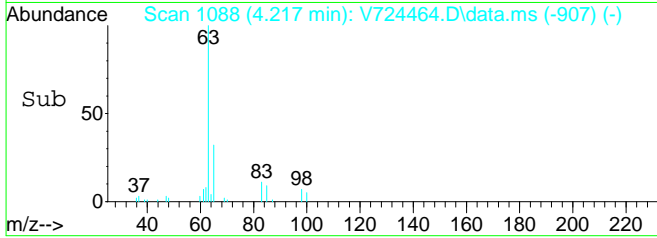
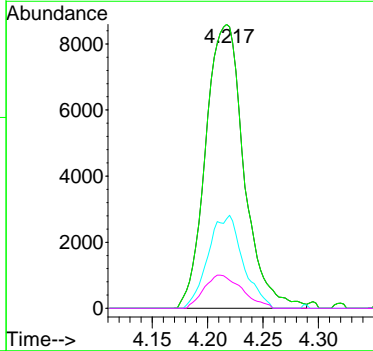
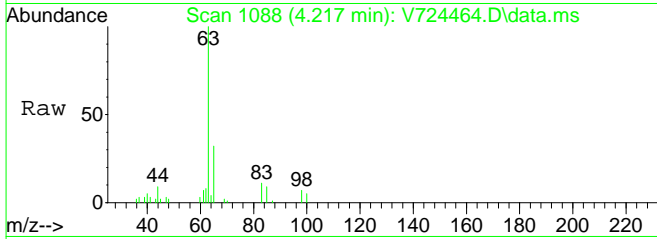
Ion	Ratio	Lower	Upper
61	100		
61	100.0	65.0	135.0
63	0.0	20.1	41.7#
96	0.0	0.0	0.0

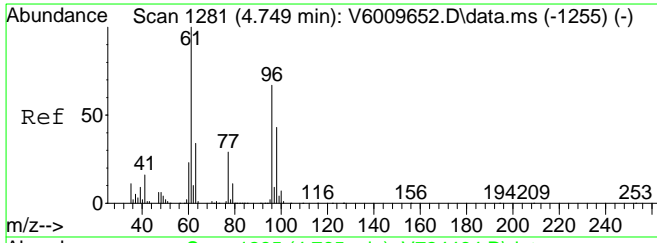


#21  
 1,1-Dichloroethane  
 Concen: 0.29 ppb  
 RT: 4.217 min Scan# 1088  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion: 63 Resp: 20627

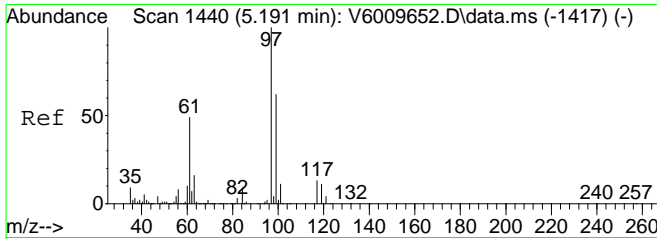
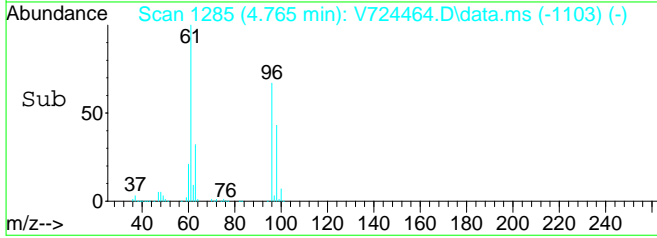
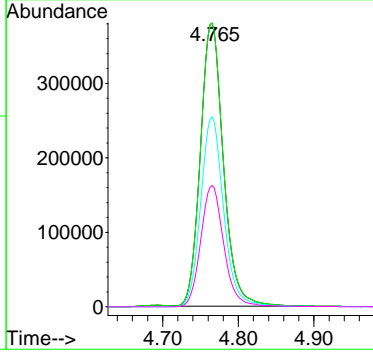
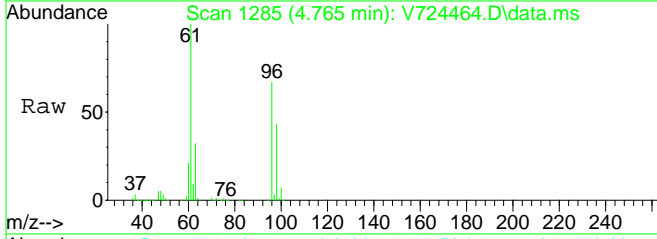
Ion	Ratio	Lower	Upper
63	100		
63	100.0	65.0	135.0
65	29.8	20.7	42.9
83	0.0	7.3	22.0#





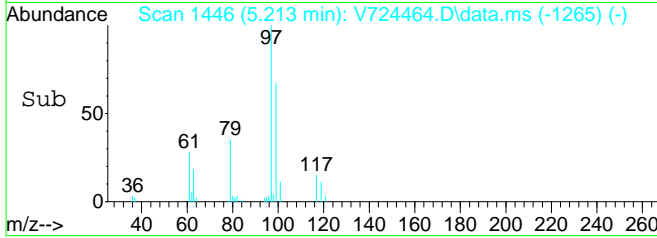
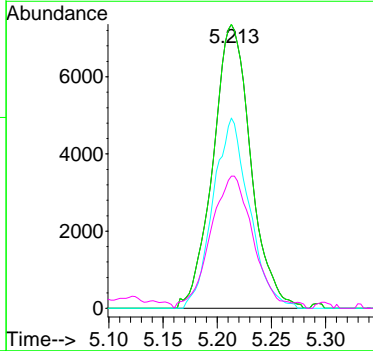
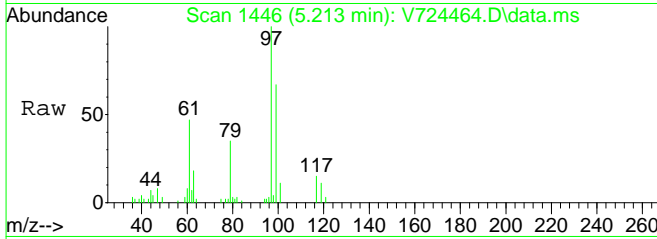
#25  
 cis-1,2-Dichloroethylene  
 Concen: 11.86 ppb  
 RT: 4.765 min Scan# 1285  
 Delta R.T. 0.005 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

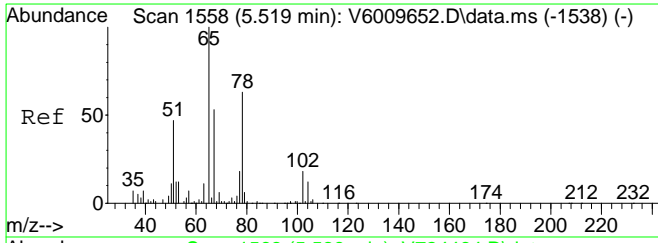
Tgt Ion	Resp	Ion Ratio	Lower	Upper
61	801833	100		
61		100.0	65.0	135.0
96		67.2	46.3	96.1
98		43.1	30.1	62.5



#31  
 1,1,1-Trichloroethane  
 Concen: 0.38 ppb  
 RT: 5.213 min Scan# 1446  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
97	17924	100		
97		100.0	65.0	135.0
99		64.3	41.6	86.4
61		0.0	0.0	0.0

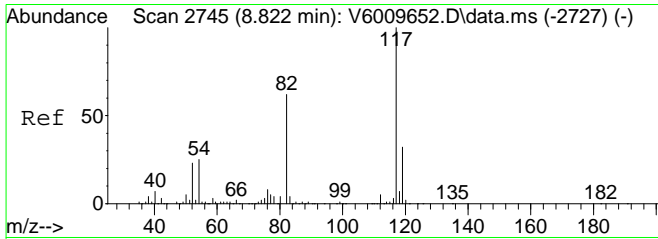
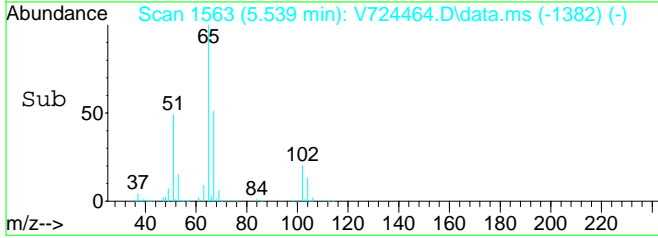
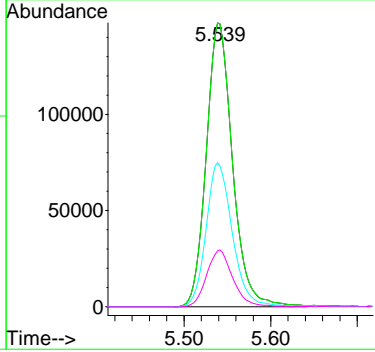
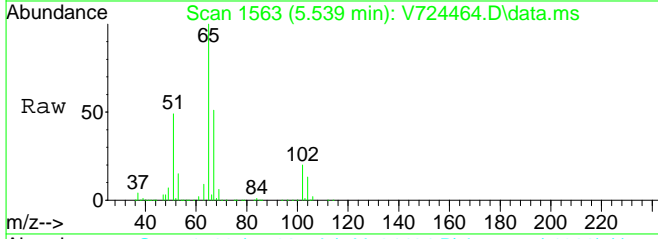




#34  
 d4-1,2-Dichloroethane (SURR)  
 Concen: 9.61 ppb  
 RT: 5.539 min Scan# 1563  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion: 65 Resp: 311690

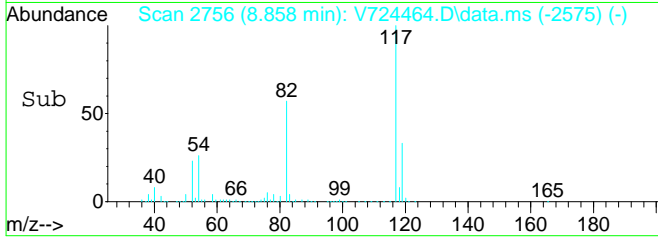
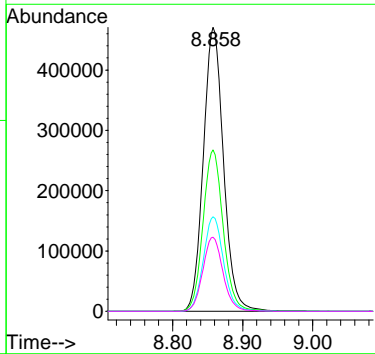
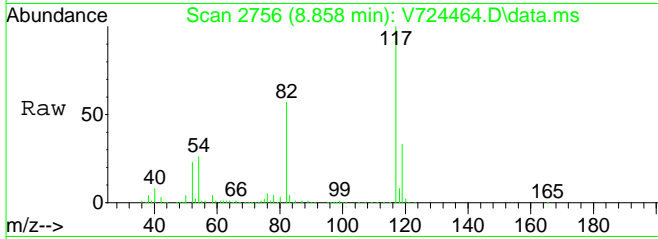
Ion	Ratio	Lower	Upper
65	100		
65	100.0	65.0	135.0
67	50.6	33.9	70.5
102	20.0	10.1	30.3

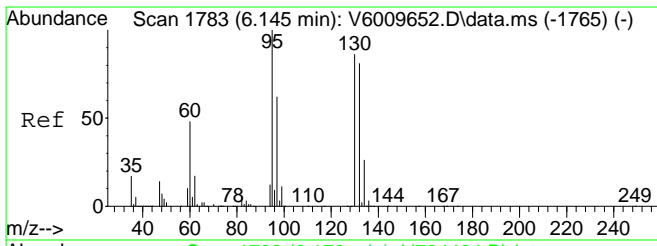


#40  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 10.00 ppb  
 RT: 8.858 min Scan# 2756  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion: 117 Resp: 944138

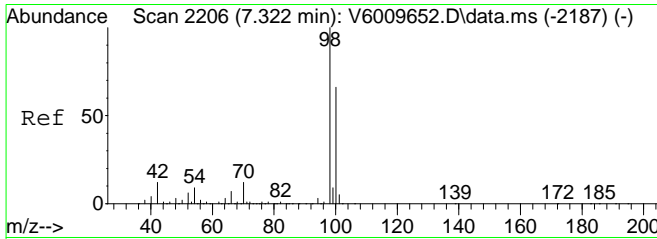
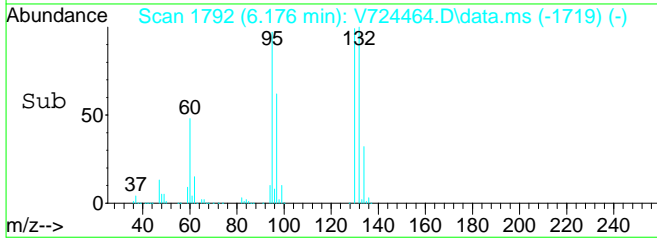
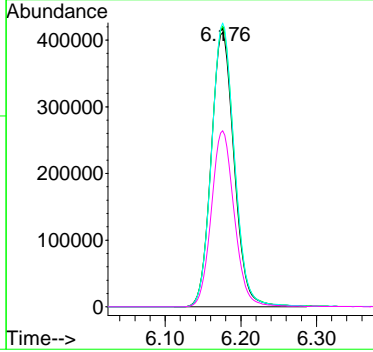
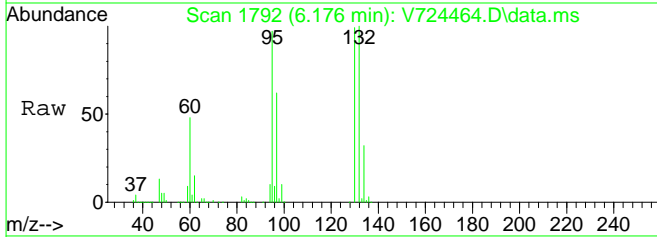
Ion	Ratio	Lower	Upper
117	100		
82	56.5	35.7	74.1
119	33.5	20.8	43.2
54	26.2	13.8	28.8





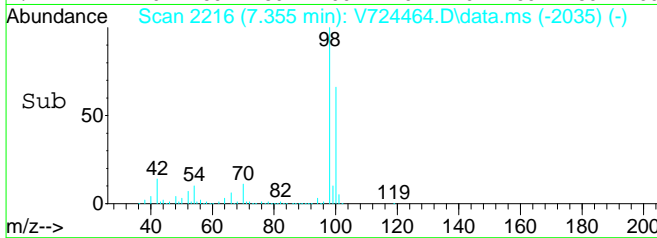
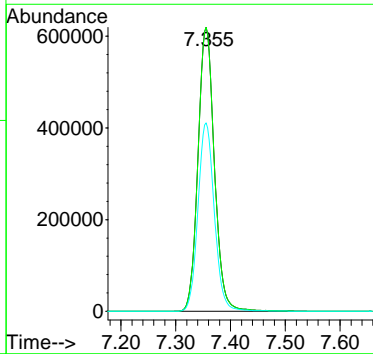
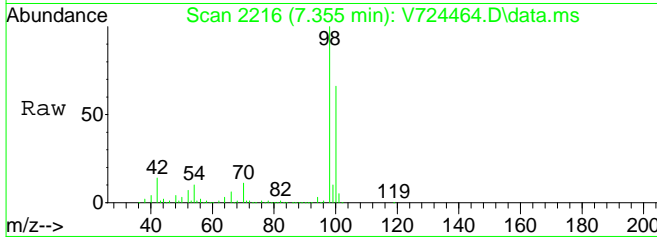
#41  
 Trichloroethylene  
 Concen: 26.46 ppb  
 RT: 6.176 min Scan# 1792  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
95	868383	100		
130	102.9	67.1	139.5	
132	103.3	62.9	130.5	
97	64.1	42.0	87.2	

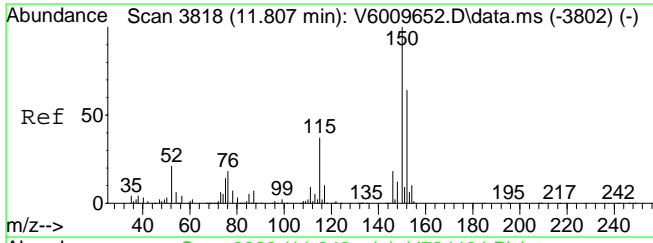


#51  
 Toluene-d8 (SURR)  
 Concen: 10.50 ppb  
 RT: 7.355 min Scan# 2216  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
98	1294841	100		
98	100.0	65.0	135.0	
100	66.4	42.5	88.3	

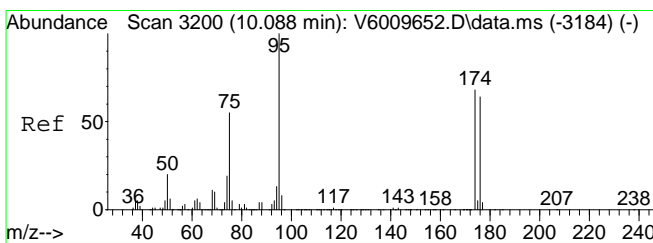
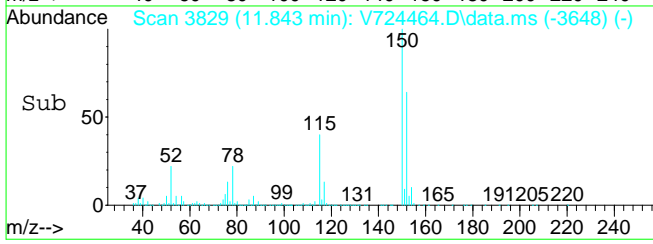
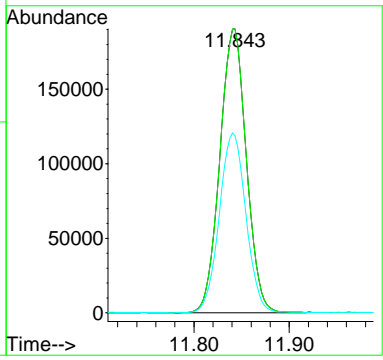
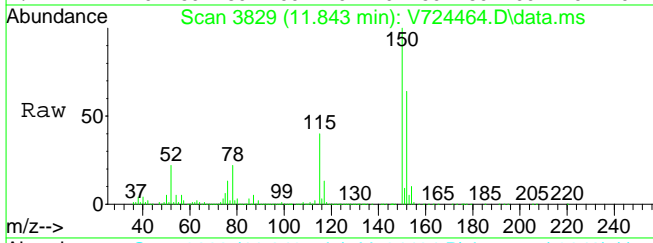






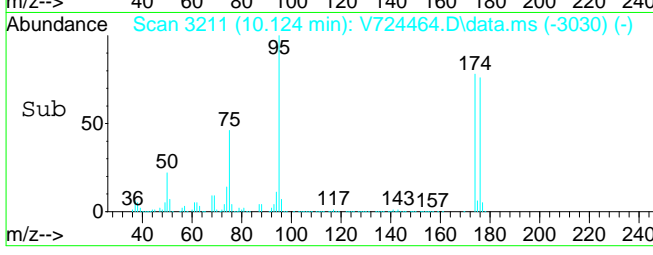
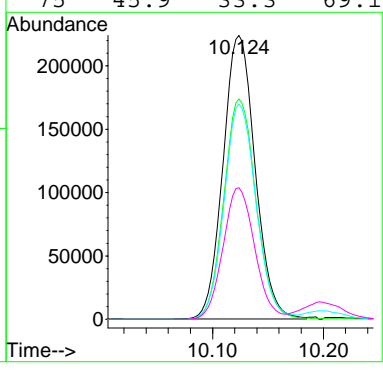
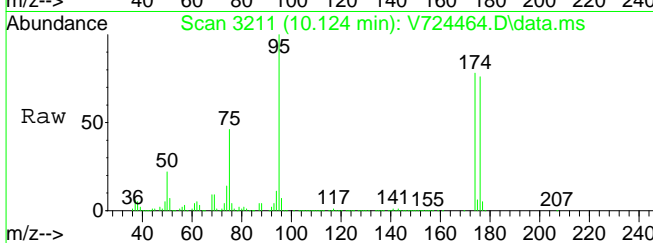
#67  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 10.00 ppb  
 RT: 11.843 min Scan# 3829  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion	Resp	Lower	Upper
152	368825		
152	100		
152	100.0	50.0	150.0
115	63.2	32.6	97.7



#70  
 p-Bromofluorobenzene (SURR)  
 Concen: 9.98 ppb  
 RT: 10.124 min Scan# 3211  
 Delta R.T. 0.003 min  
 Lab File: V724464.D  
 Acq: 9 Mar 2018 11:15 pm

Tgt Ion	Resp	Lower	Upper
95	450893		
95	100		
174	78.1	51.4	106.8
176	76.0	49.9	103.5
75	45.9	33.3	69.1



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-05 File ID: V724465.D  
 Sampled: 03/05/18 18:25 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:47  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	1.5	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	3.6	
75-35-4	1,1-Dichloroethylene	1	0.25	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.0	U
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.32	J
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	11	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-05 File ID: V724465.D  
 Sampled: 03/05/18 18:25 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:47  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.3	J
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.35	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	39	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	2.9	
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.58	95.8	69 - 130	
Toluene-d8	10.0	10.4	104	81 - 117	
p-Bromofluorobenzene	10.0	10.0	100	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	246616	5.828	248308	5.828	
Chlorobenzene-d5	907734	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	353263	11.84	370257	11.84	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724465.D  
 Acq On : 9 Mar 2018 11:47 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-05  
 Misc : QBV7030918A COMP A AF  
 ALS Vial : 21 Sample Multiplier: 1

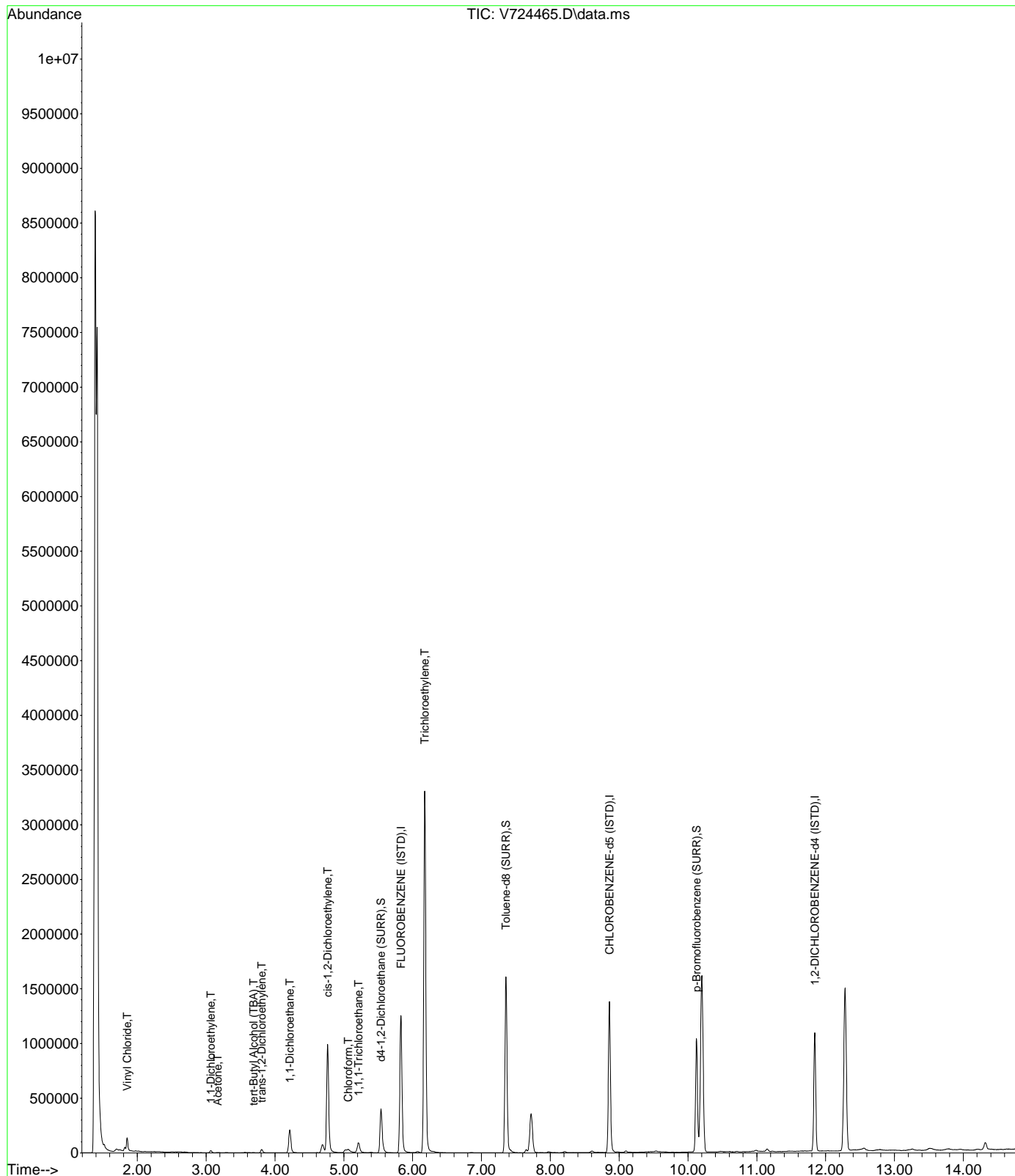
Quant Time: Mar 12 14:17:49 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

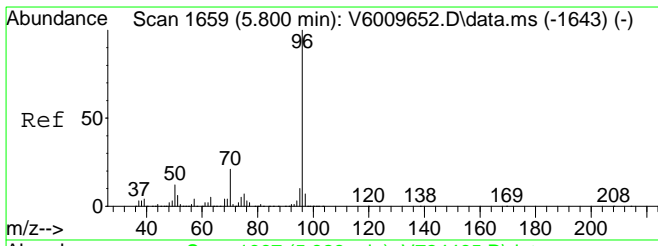
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
1) FLUOROBENZENE (ISTD)	5.828	70	246616	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	907734	10.00	ppb		0.00
67) 1,2-DICHLOROBENZENE-d4...	11.840	152	353263	10.00	ppb		0.00
System Monitoring Compounds							
34) d4-1,2-Dichloroethane ...	5.539	65	296157	9.58	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	95.80%		
51) Toluene-d8 (SURR)	7.356	98	1239341	10.45	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	104.50%		
70) p-Bromofluorobenzene (...)	10.124	95	432639	10.00	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	100.00%		
Target Compounds							
						Qvalue	
4) Vinyl Chloride	1.852	62	116057	2.93	ppb		100
10) 1,1-Dichloroethylene	3.068	61	13741	0.25	ppb	#	58
12) Acetone	3.168	43	5694m	0.62	ppb		
16) tert-Butyl Alcohol (TBA)	3.689	59	3378m	1.26	ppb		
19) trans-1,2-Dichloroethy...	3.805	61	19894	0.35	ppb	#	87
21) 1,1-Dichloroethane	4.214	63	243429	3.63	ppb		99
25) cis-1,2-Dichloroethylene	4.765	61	680727	10.56	ppb		97
30) Chloroform	5.063	83	16351	0.32	ppb	#	98
31) 1,1,1-Trichloroethane	5.213	97	65889	1.46	ppb	#	100
41) Trichloroethylene	6.176	95	1225070	38.83	ppb		97
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724465.D  
 Acq On : 9 Mar 2018 11:47 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-05  
 Misc : QEV7030918A COMP A AF  
 ALS Vial : 21 Sample Multiplier: 1

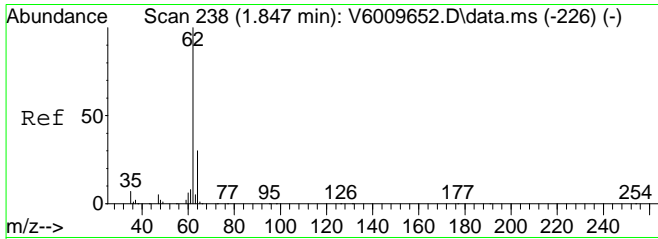
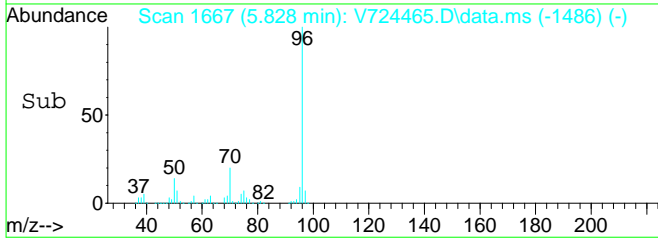
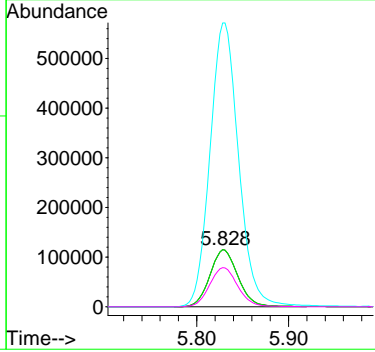
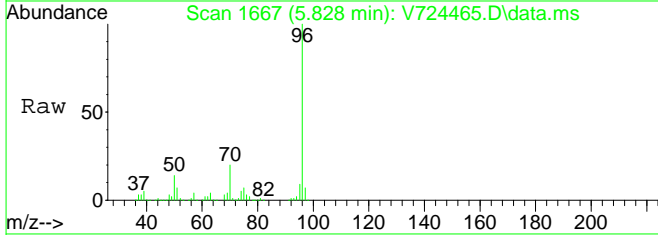
Quant Time: Mar 12 14:17:49 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration





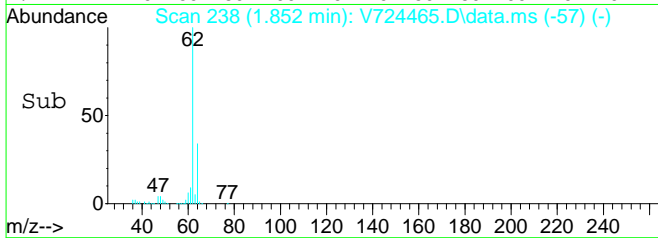
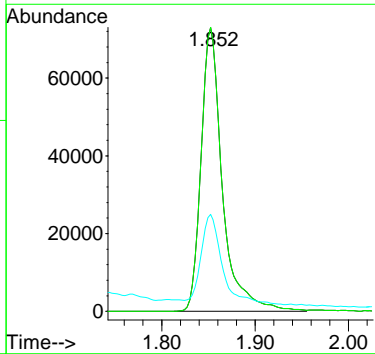
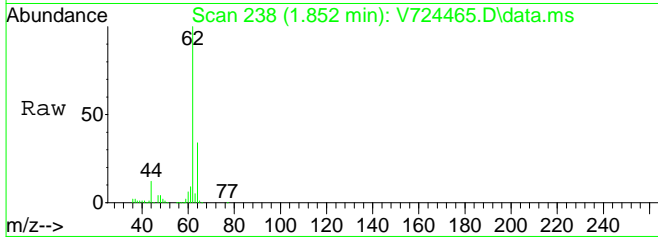
#1  
 FLUOROBENZENE (ISTD)  
 Concen: 10.00 ppb  
 RT: 5.828 min Scan# 1667  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

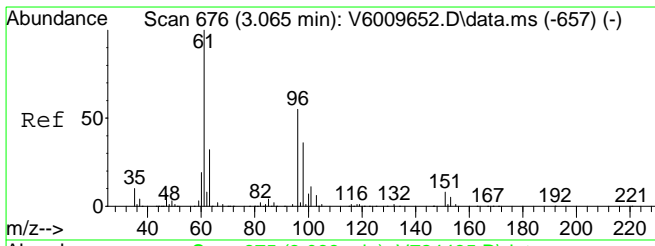
Tgt Ion	Resp	Lower	Upper
70	246616		
70	100		
70	100.0	65.0	135.0
96	504.5	341.4	709.0
50	0.0	0.0	0.0



#4  
 Vinyl Chloride  
 Concen: 2.93 ppb  
 RT: 1.852 min Scan# 238  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

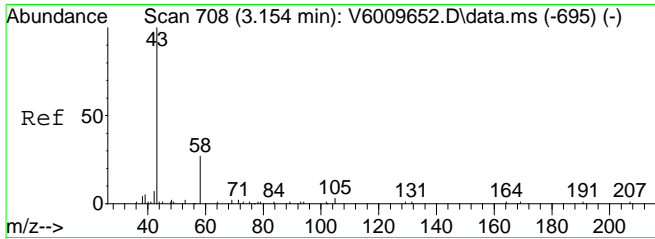
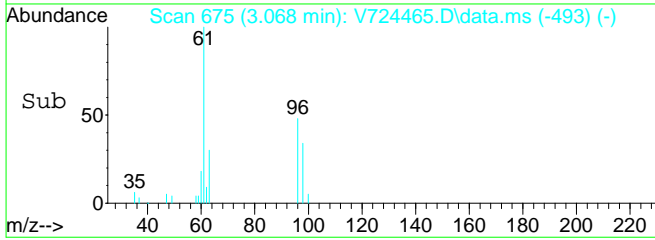
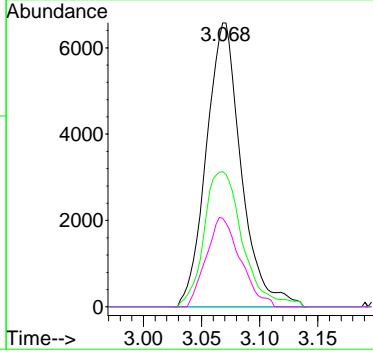
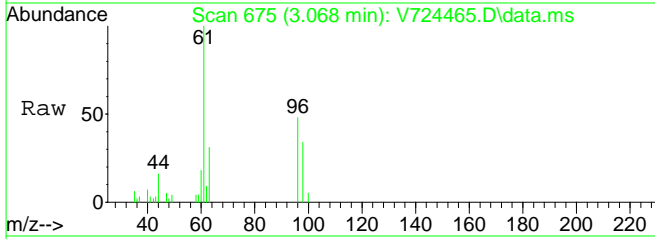
Tgt Ion	Resp	Lower	Upper
62	116057		
62	100		
62	100.0	65.0	135.0
64	31.9	20.6	42.8





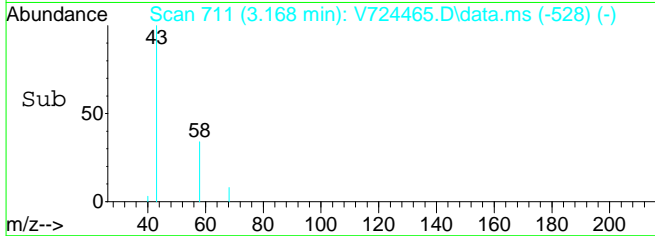
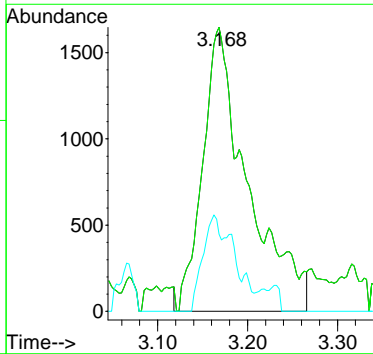
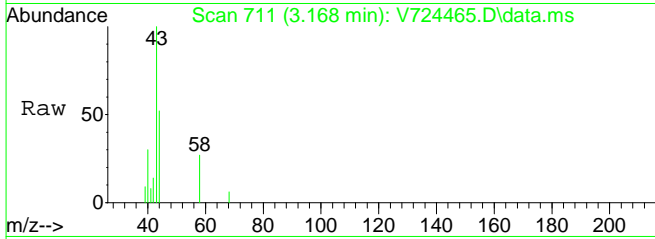
#10  
 1,1-Dichloroethylene  
 Concen: 0.25 ppb  
 RT: 3.068 min Scan# 675  
 Delta R.T. 0.005 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

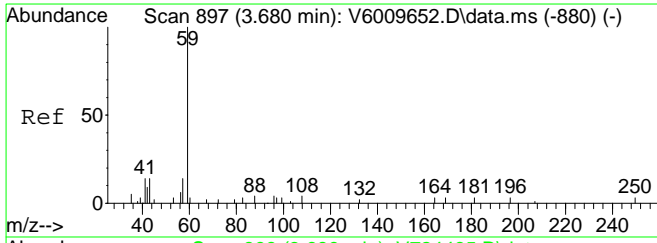
Tgt Ion	Resp	Lower	Upper
61	13741		
96	52.6	41.5	86.3
101	0.0	45.4	94.2#
63	30.8	21.3	44.3



#12  
 Acetone  
 Concen: 0.62 ppb m  
 RT: 3.168 min Scan# 711  
 Delta R.T. 0.008 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

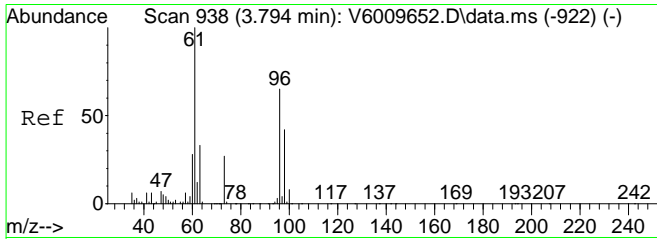
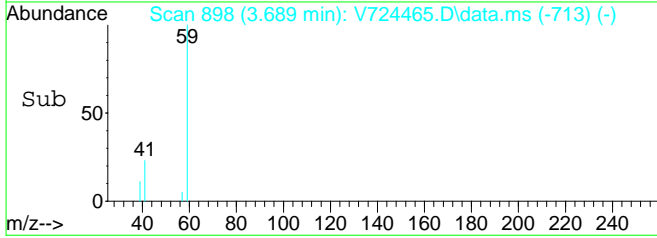
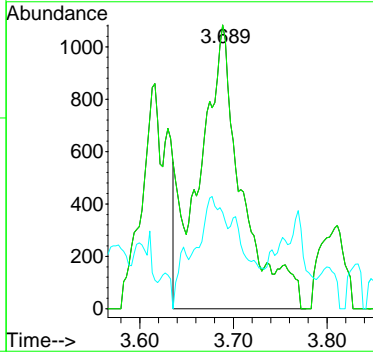
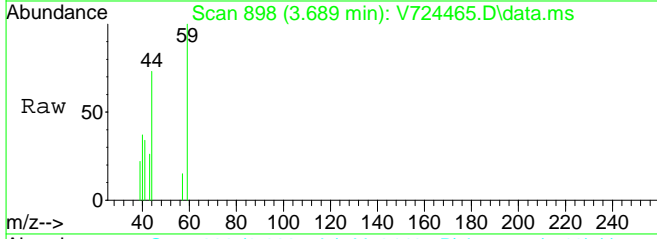
Tgt Ion	Resp	Lower	Upper
43	5694		
43	63.0	16.2	24.4#
58	13.3	2.5	7.6#





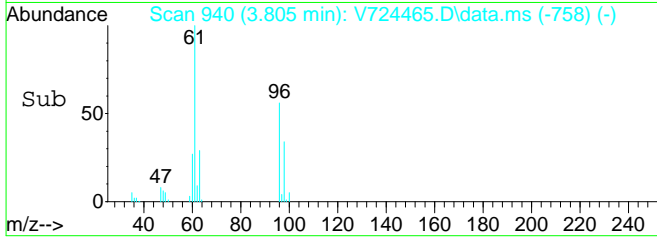
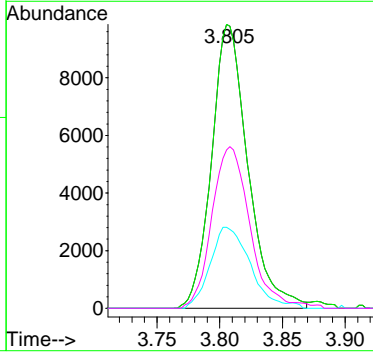
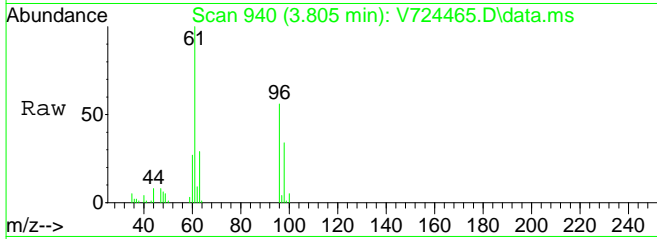
#16  
 tert-Butyl Alcohol (TBA)  
 Concen: 1.26 ppb m  
 RT: 3.689 min Scan# 898  
 Delta R.T. 0.014 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
59	3378	100		
59		65.6	37.8	78.6
41		7.0	338.1	1014.3#

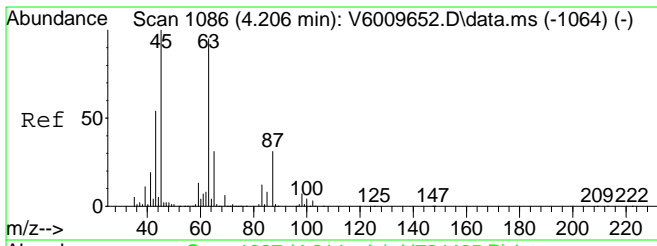


#19  
 trans-1,2-Dichloroethylene  
 Concen: 0.35 ppb  
 RT: 3.805 min Scan# 940  
 Delta R.T. 0.005 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
61	19894	100		
61		100.0	65.0	135.0
63		0.0	20.1	41.7#
96		0.0	0.0	0.0



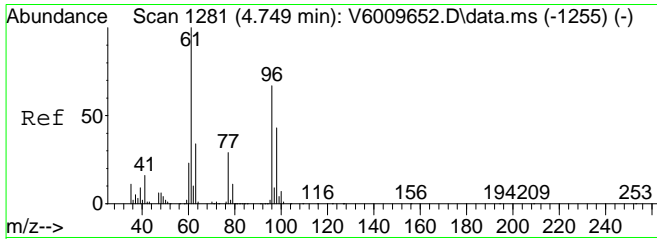
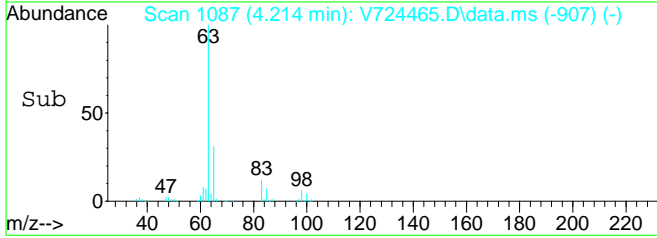
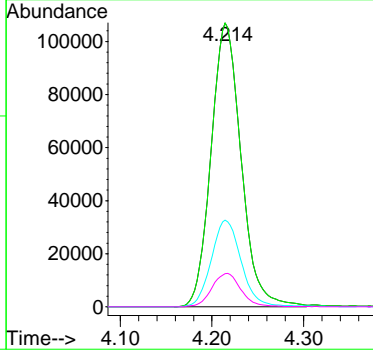
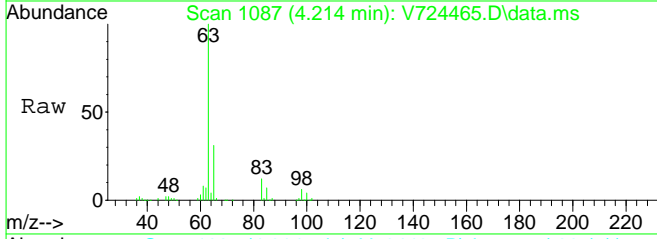




#21  
 1,1-Dichloroethane  
 Concen: 3.63 ppb  
 RT: 4.214 min Scan# 1087  
 Delta R.T. -0.000 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion: 63 Resp: 243429

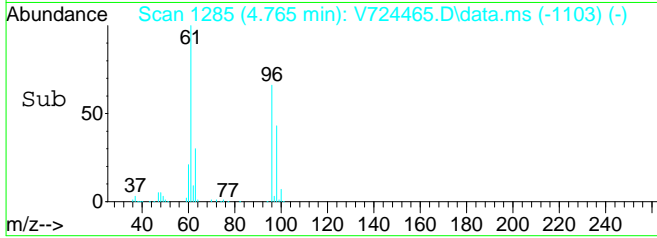
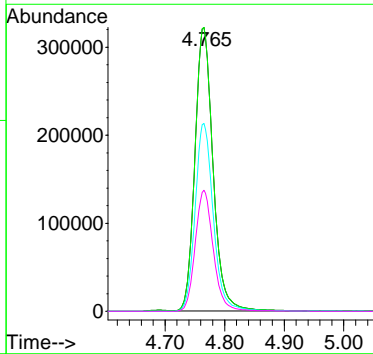
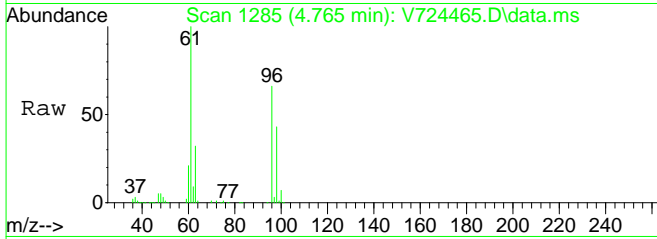
Ion	Ratio	Lower	Upper
63	100		
63	100.0	65.0	135.0
65	30.4	20.7	42.9
83	11.5	7.3	22.0

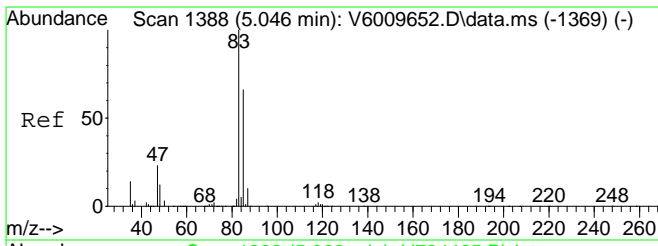


#25  
 cis-1,2-Dichloroethylene  
 Concen: 10.56 ppb  
 RT: 4.765 min Scan# 1285  
 Delta R.T. 0.005 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion: 61 Resp: 680727

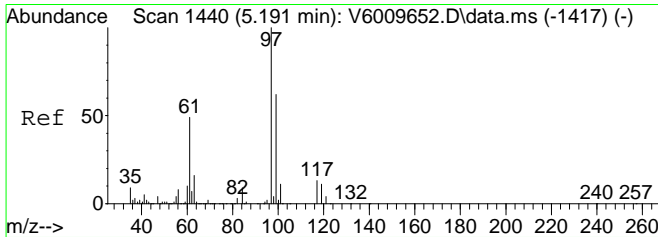
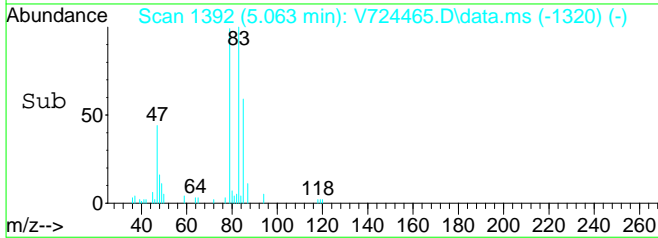
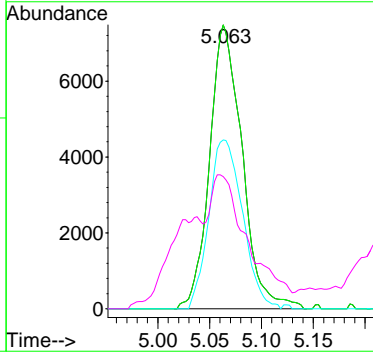
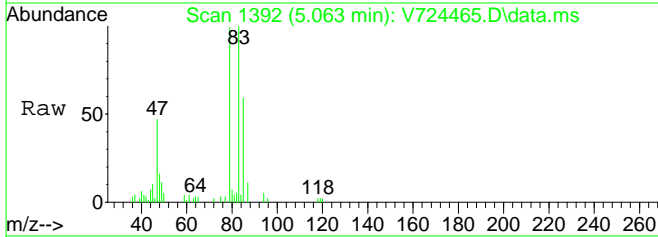
Ion	Ratio	Lower	Upper
61	100		
61	100.0	65.0	135.0
96	66.6	46.3	96.1
98	42.7	30.1	62.5





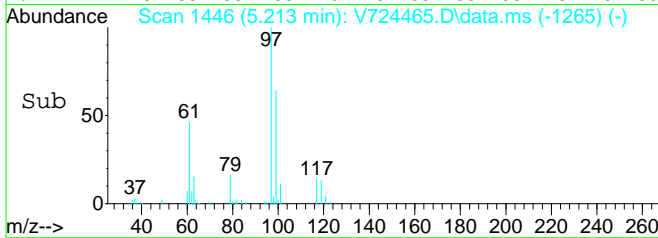
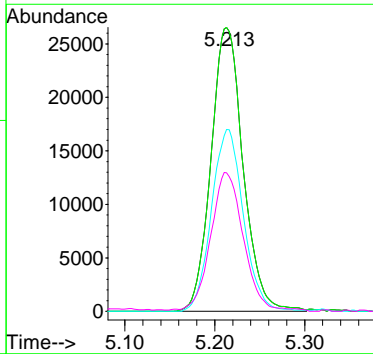
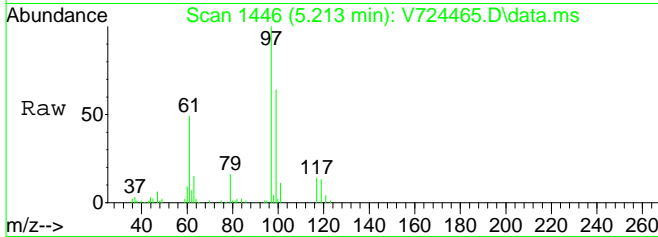
#30  
 Chloroform  
 Concen: 0.32 ppb  
 RT: 5.063 min Scan# 1392  
 Delta R.T. -0.000 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

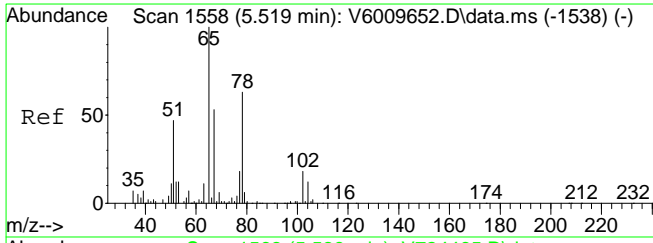
Tgt Ion	Resp	Ion Ratio	Lower	Upper
83	16351	100		
83		100.0	65.0	135.0
85		61.6	42.8	88.8
47		0.0	0.0	0.0



#31  
 1,1,1-Trichloroethane  
 Concen: 1.46 ppb  
 RT: 5.213 min Scan# 1446  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
97	65889	100		
97		100.0	65.0	135.0
99		63.7	41.6	86.4
61		0.0	0.0	0.0

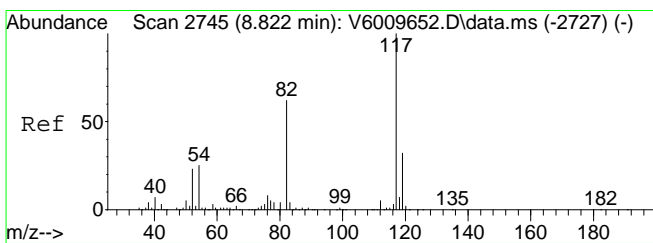
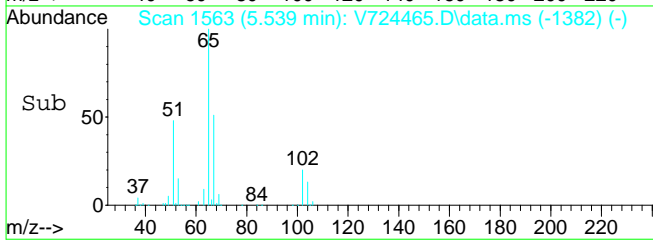
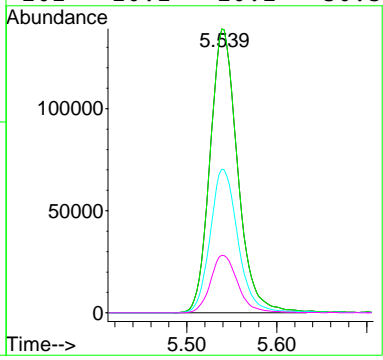
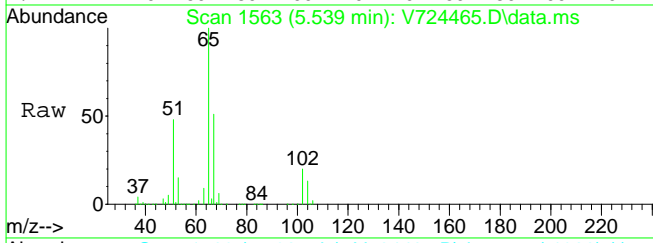




#34  
 d4-1,2-Dichloroethane (SURR)  
 Concen: 9.58 ppb  
 RT: 5.539 min Scan# 1563  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion: 65 Resp: 296157

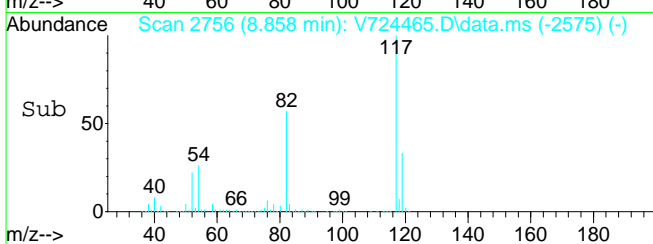
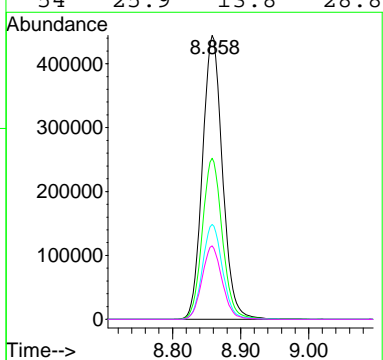
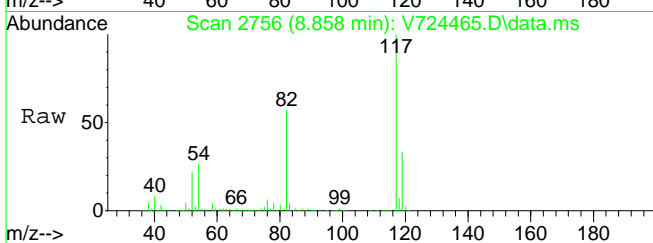
Ion	Ratio	Lower	Upper
65	100		
65	100.0	65.0	135.0
67	51.0	33.9	70.5
102	20.2	10.1	30.3

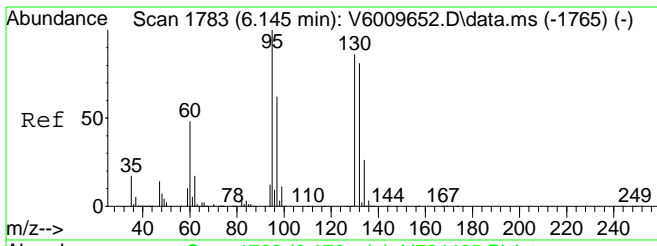


#40  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 10.00 ppb  
 RT: 8.858 min Scan# 2756  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion: 117 Resp: 907734

Ion	Ratio	Lower	Upper
117	100		
82	56.6	35.7	74.1
119	33.5	20.8	43.2
54	25.9	13.8	28.8

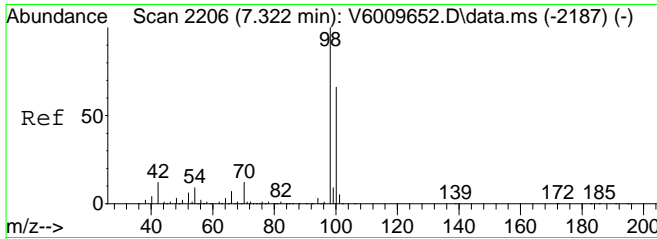
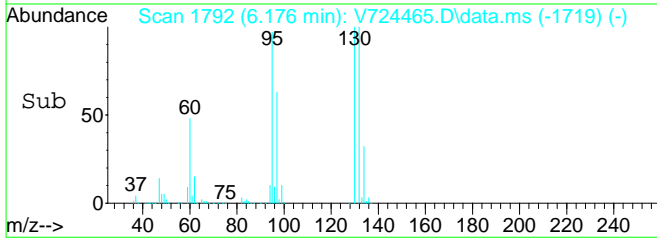
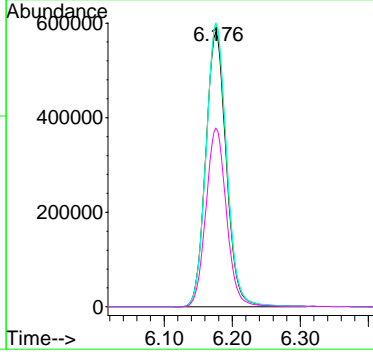
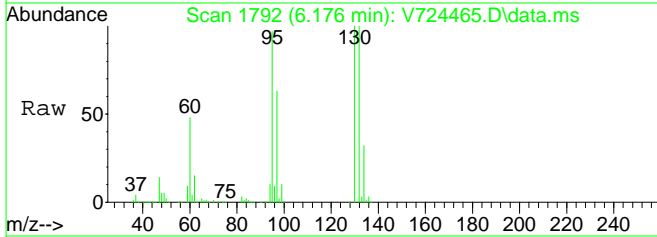




#41  
 Trichloroethylene  
 Concen: 38.83 ppb  
 RT: 6.176 min Scan# 1792  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion: 95 Resp: 1225070

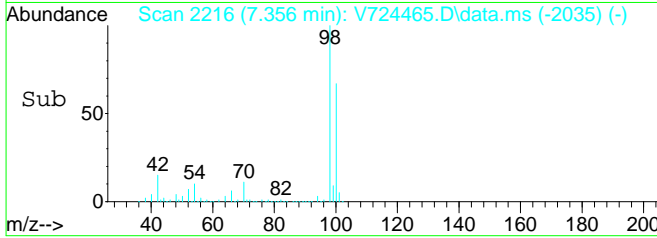
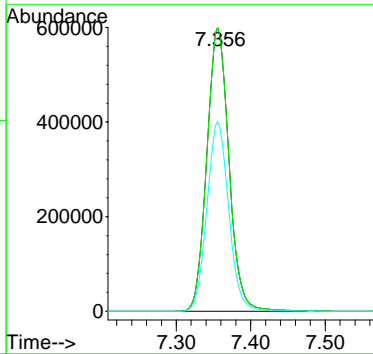
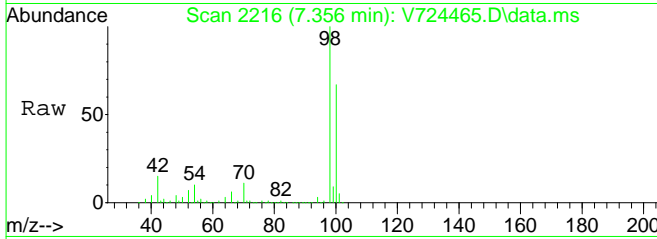
Ion	Ratio	Lower	Upper
95	100		
130	102.6	67.1	139.5
132	103.3	62.9	130.5
97	64.6	42.0	87.2

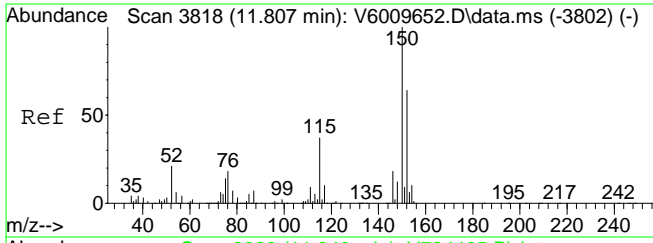


#51  
 Toluene-d8 (SURR)  
 Concen: 10.45 ppb  
 RT: 7.356 min Scan# 2216  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion: 98 Resp: 1239341

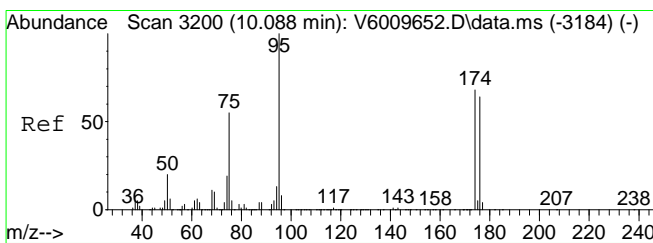
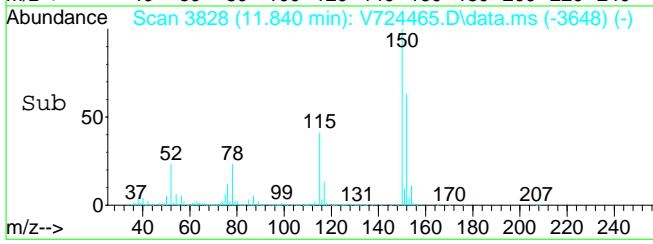
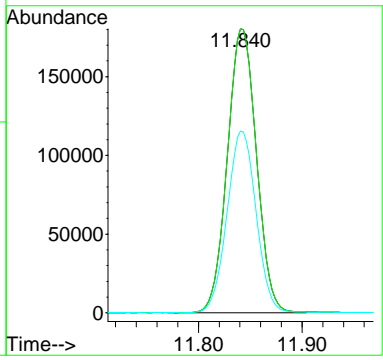
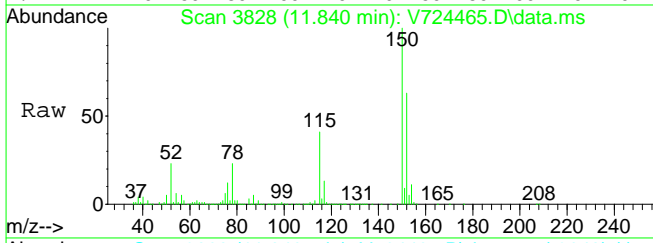
Ion	Ratio	Lower	Upper
98	100		
98	100.0	65.0	135.0
100	66.3	42.5	88.3





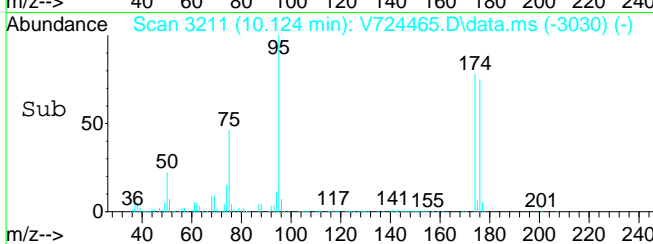
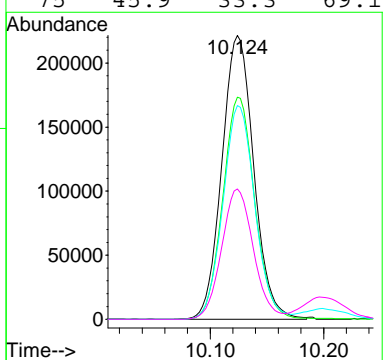
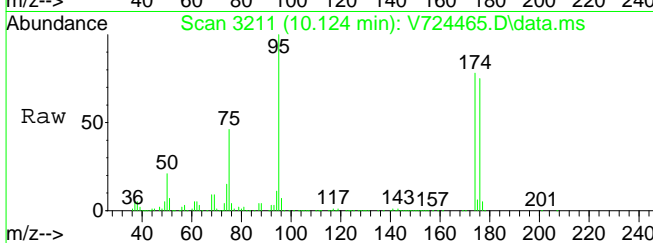
#67  
 1,2-DICHLOROBEZENE-d4 (ISTD)  
 Concen: 10.00 ppb  
 RT: 11.840 min Scan# 3828  
 Delta R.T. -0.000 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion	Resp	Lower	Upper
152	353263		
152	100		
152	100.0	50.0	150.0
115	64.0	32.6	97.7



#70  
 p-Bromofluorobenzene (SURR)  
 Concen: 10.00 ppb  
 RT: 10.124 min Scan# 3211  
 Delta R.T. 0.003 min  
 Lab File: V724465.D  
 Acq: 9 Mar 2018 11:47 pm

Tgt Ion	Resp	Lower	Upper
95	432639		
95	100		
174	78.4	51.4	106.8
176	75.5	49.9	103.5
75	45.9	33.3	69.1



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-06 File ID: V724466.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:19  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.39	J
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.32	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	1.6	J
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	13	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-06 File ID: V724466.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:19  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	2.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.38	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	27	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.33	J
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.46	94.6	69 - 130	
Toluene-d8	10.0	10.5	105	81 - 117	
p-Bromofluorobenzene	10.0	9.97	99.7	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	251844	5.828	248308	5.828	
Chlorobenzene-d5	915028	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	358588	11.841	370257	11.84	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724466.D  
 Acq On : 10 Mar 2018 12:19 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-06  
 Misc : QBV7030918A COMP A AF  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 12 14:19:23 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

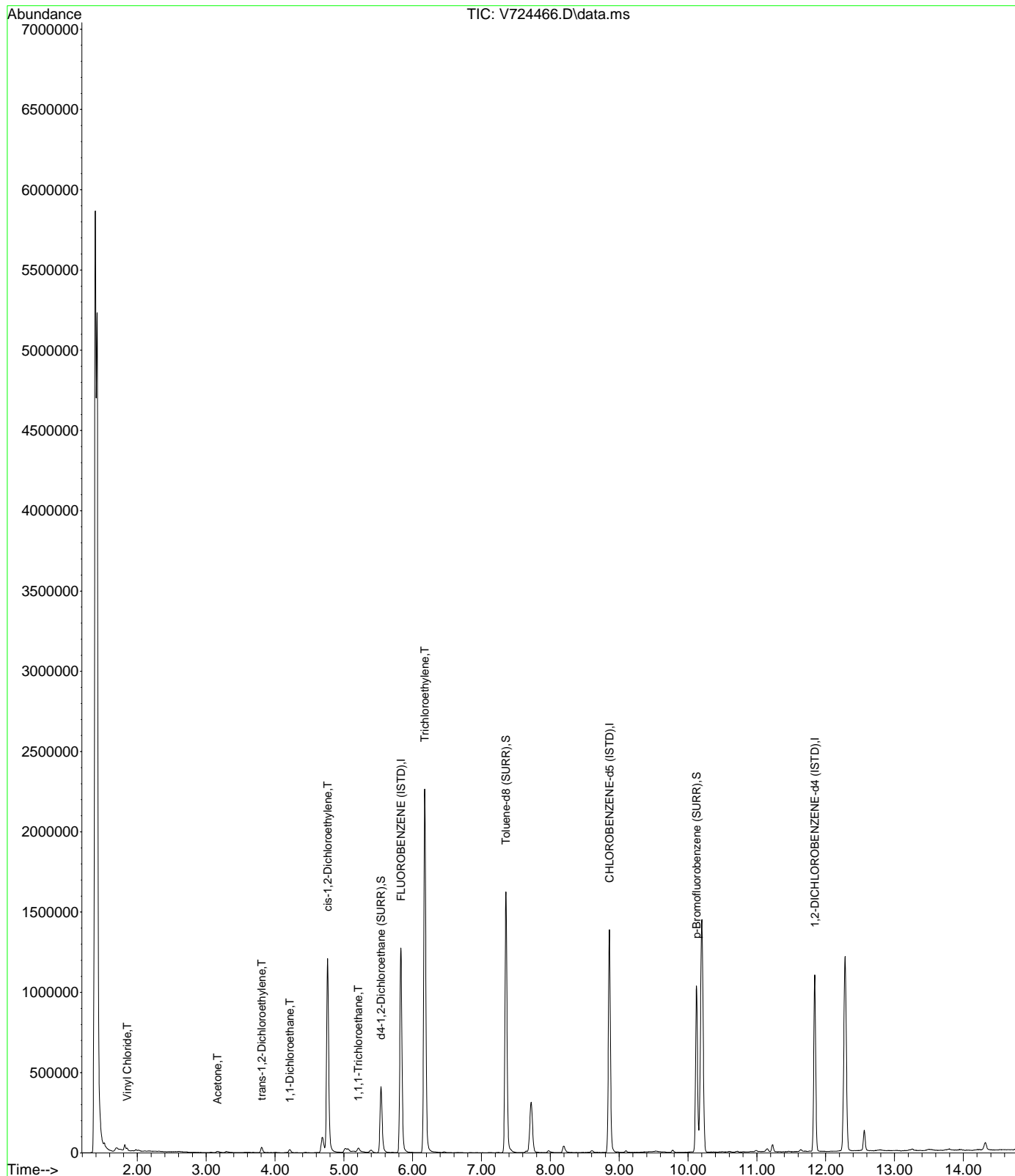
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	5.828	70	251844	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	915028	10.00	ppb	0.00
67) 1,2-DICHLOROENZENE-d4...	11.841	152	358588	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.539	65	298859	9.46	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	94.60%	
51) Toluene-d8 (SURR)	7.356	98	1250350	10.46	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	104.60%	
70) p-Bromofluorobenzene (...)	10.124	95	438214	9.97	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	99.70%	
Target Compounds						
						Qvalue
4) Vinyl Chloride	1.852	62	13488	0.33	ppb	98
12) Acetone	3.163	43	15225	1.63	ppb	# 1
19) trans-1,2-Dichloroethy...	3.805	61	22345	0.38	ppb	# 87
21) 1,1-Dichloroethane	4.217	63	21951	0.32	ppb	# 96
25) cis-1,2-Dichloroethylene	4.765	61	834815	12.68	ppb	97
31) 1,1,1-Trichloroethane	5.210	97	18093	0.39	ppb	# 100
41) Trichloroethylene	6.176	95	844854	26.56	ppb	97
-----						

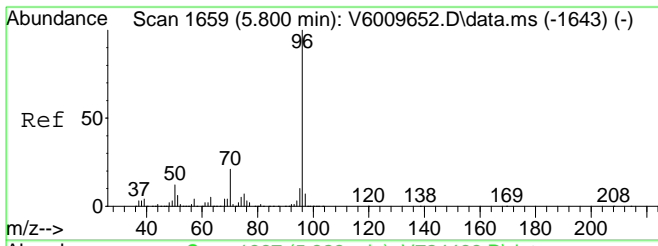
(#) = qualifier out of range (m) = manual integration (+) = signals summed



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 Data File : V724466.D  
 Acq On : 10 Mar 2018 12:19 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-06  
 Misc : QEV7030918A COMP A AF  
 ALS Vial : 22 Sample Multiplier: 1

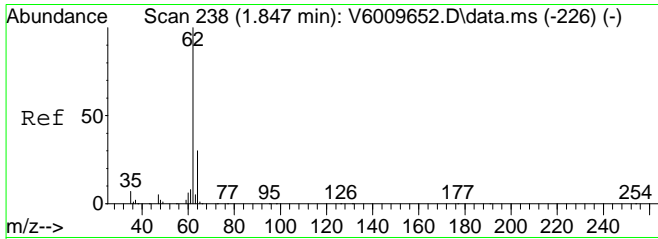
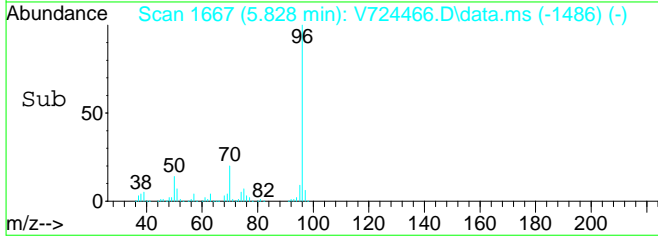
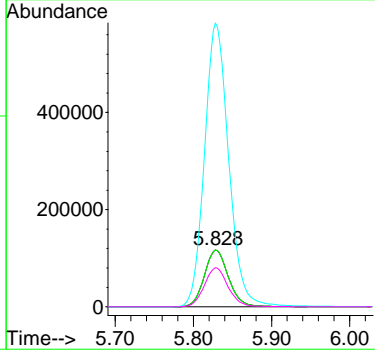
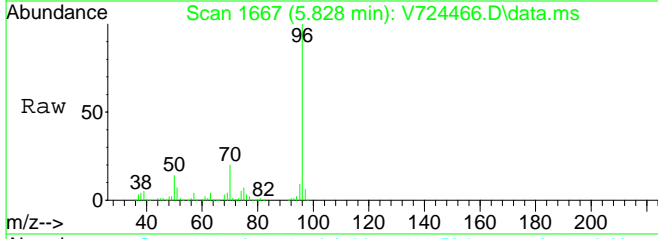
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 Response via : Initial Calibration





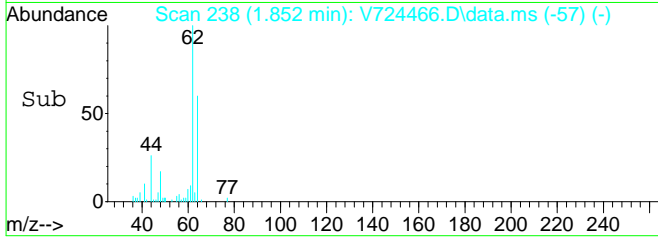
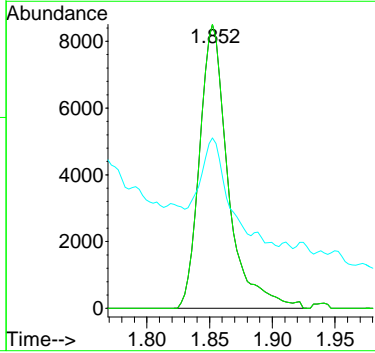
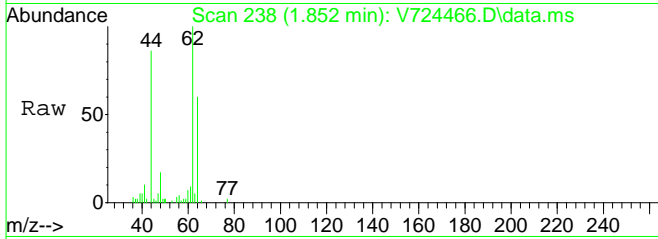
#1  
 FLUOROBENZENE (ISTD)  
 Concen: 10.00 ppb  
 RT: 5.828 min Scan# 1667  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

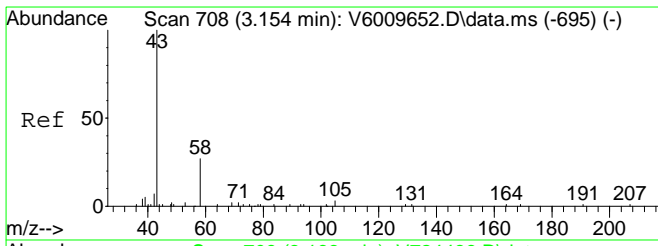
Tgt Ion	Resp	Lower	Upper
70	251844		
70	100		
70	100.0	65.0	135.0
96	499.9	341.4	709.0
50	0.0	0.0	0.0



#4  
 Vinyl Chloride  
 Concen: 0.33 ppb  
 RT: 1.852 min Scan# 238  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

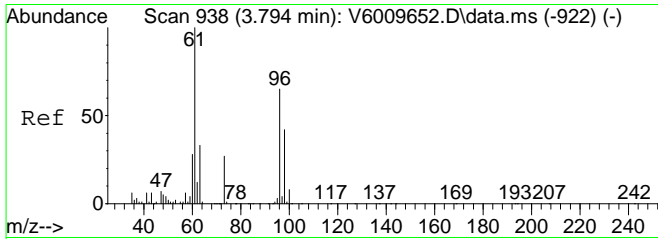
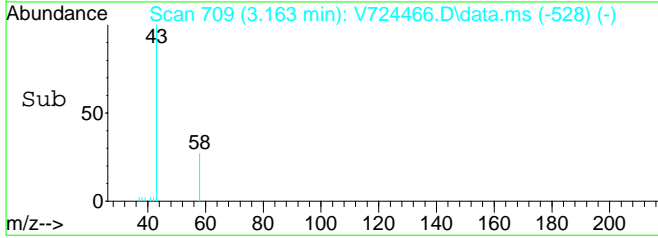
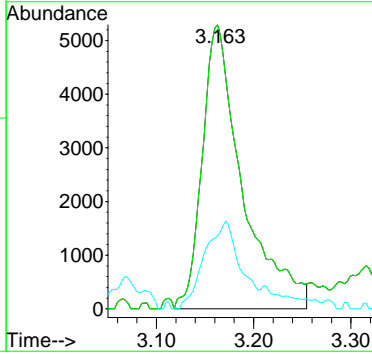
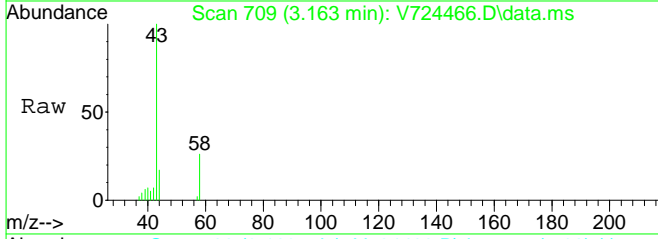
Tgt Ion	Resp	Lower	Upper
62	13488		
62	100		
62	100.0	65.0	135.0
64	27.1	20.6	42.8





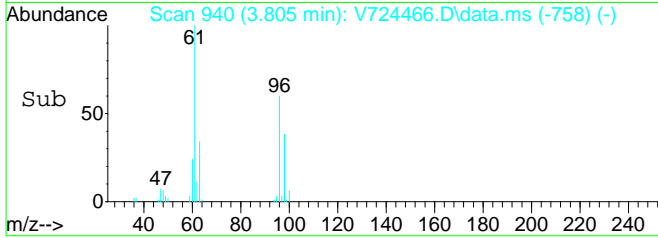
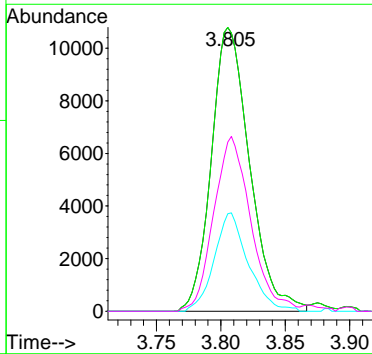
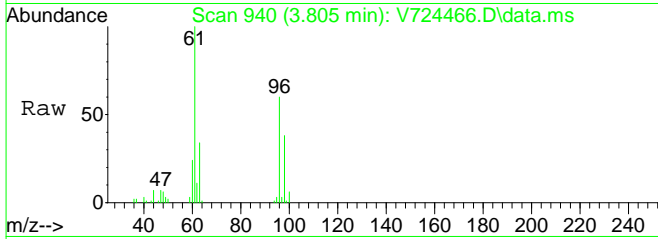
#12  
 Acetone  
 Concen: 1.63 ppb  
 RT: 3.163 min Scan# 709  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

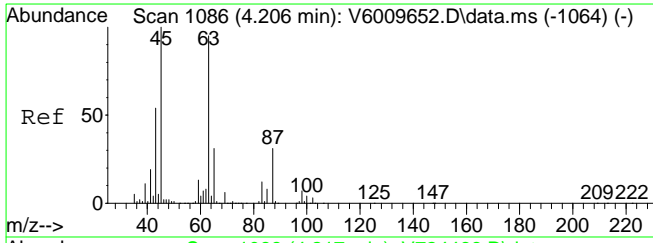
Tgt Ion: 43 Resp: 15225  
 Ion Ratio Lower Upper  
 43 100  
 43 100.0 16.2 24.4#  
 58 27.1 2.5 7.6#



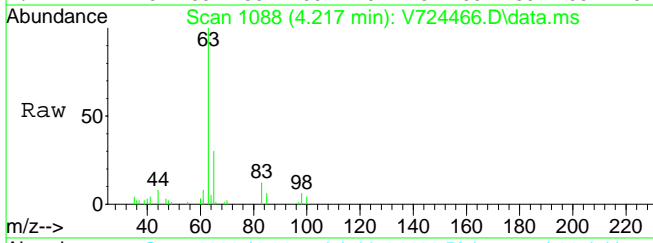
#19  
 trans-1,2-Dichloroethylene  
 Concen: 0.38 ppb  
 RT: 3.805 min Scan# 940  
 Delta R.T. 0.006 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

Tgt Ion: 61 Resp: 22345  
 Ion Ratio Lower Upper  
 61 100  
 61 100.0 65.0 135.0  
 63 0.0 20.1 41.7#  
 96 0.0 0.0 0.0



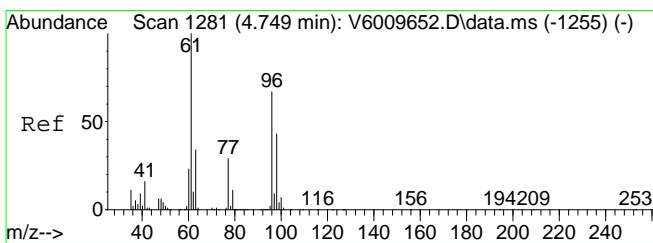
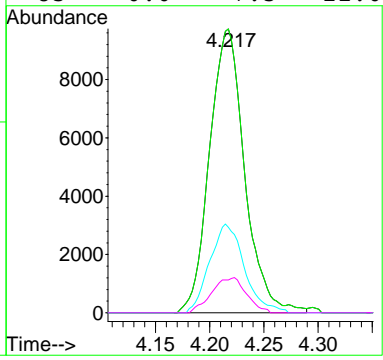
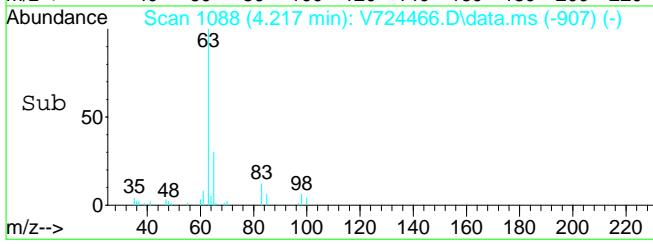


#21  
 1,1-Dichloroethane  
 Concen: 0.32 ppb  
 RT: 4.217 min Scan# 1088  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

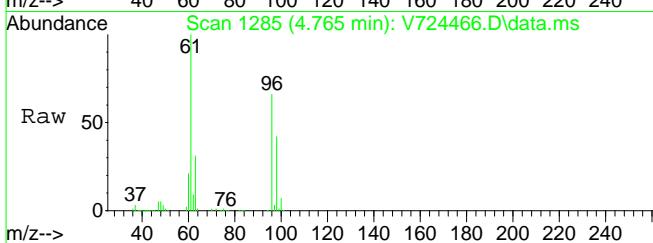


Tgt Ion: 63 Resp: 21951

Ion	Ratio	Lower	Upper
63	100		
63	100.0	65.0	135.0
65	30.9	20.7	42.9
83	0.0	7.3	22.0#

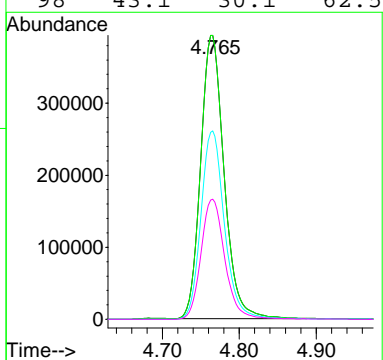
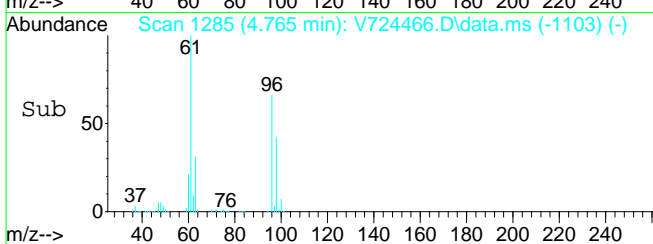


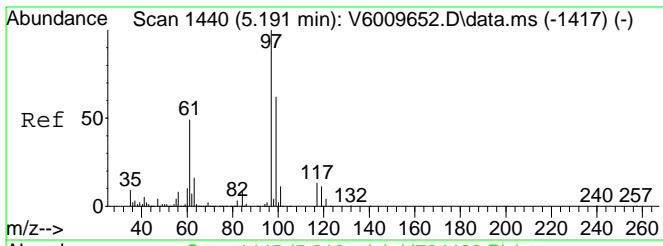
#25  
 cis-1,2-Dichloroethylene  
 Concen: 12.68 ppb  
 RT: 4.765 min Scan# 1285  
 Delta R.T. 0.006 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am



Tgt Ion: 61 Resp: 834815

Ion	Ratio	Lower	Upper
61	100		
61	100.0	65.0	135.0
96	67.0	46.3	96.1
98	43.1	30.1	62.5

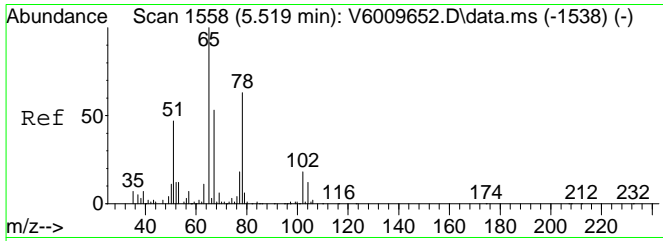
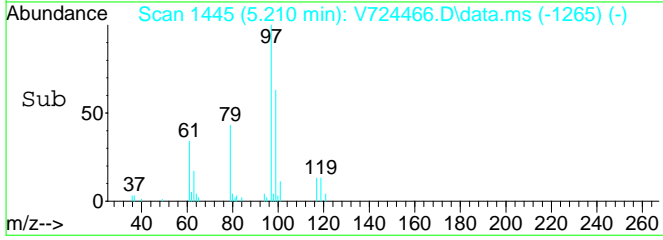
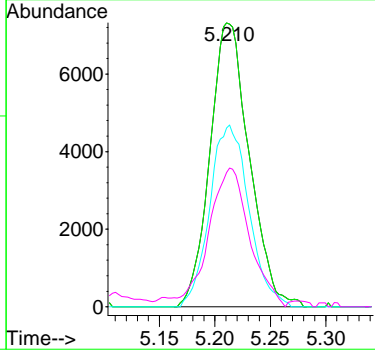
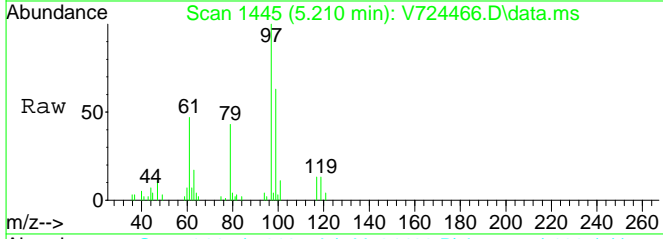




#31  
 1,1,1-Trichloroethane  
 Concen: 0.39 ppb  
 RT: 5.210 min Scan# 1445  
 Delta R.T. -0.000 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

Tgt Ion: 97 Resp: 18093

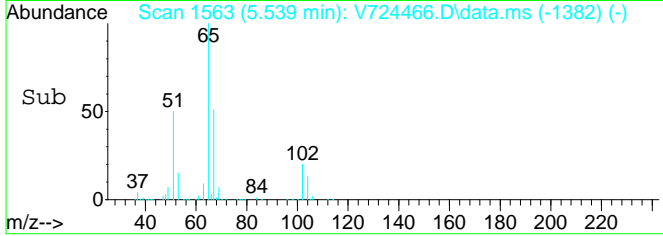
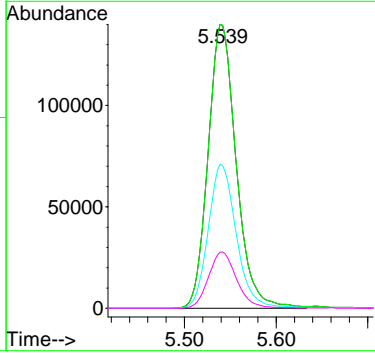
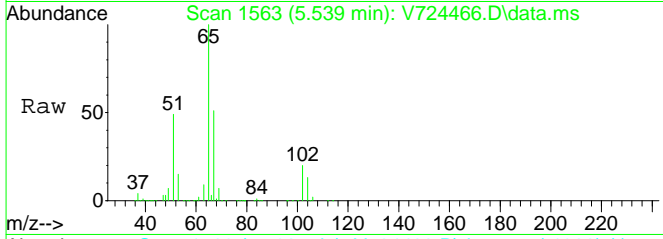
Ion	Ratio	Lower	Upper
97	100		
97	100.0	65.0	135.0
99	63.8	41.6	86.4
61	0.0	0.0	0.0

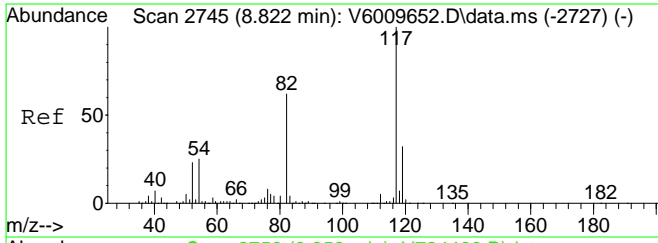


#34  
 d4-1,2-Dichloroethane (SURRE)  
 Concen: 9.46 ppb  
 RT: 5.539 min Scan# 1563  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

Tgt Ion: 65 Resp: 298859

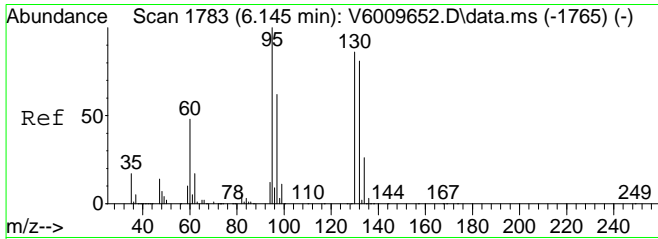
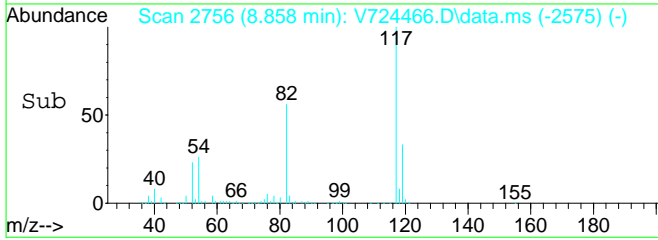
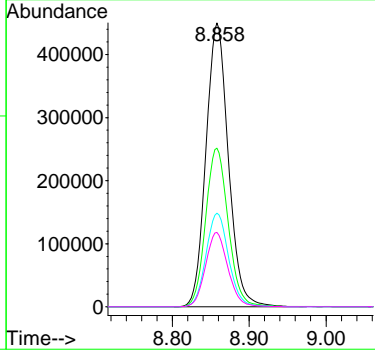
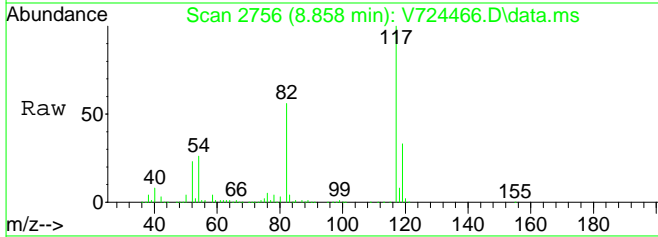
Ion	Ratio	Lower	Upper
65	100		
65	100.0	65.0	135.0
67	50.9	33.9	70.5
102	20.0	10.1	30.3





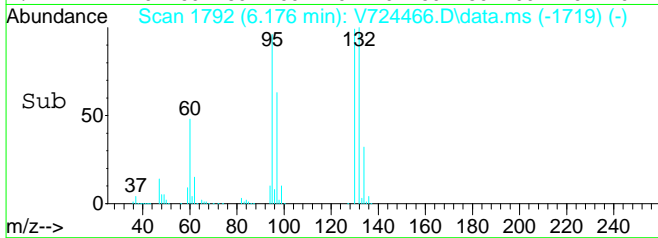
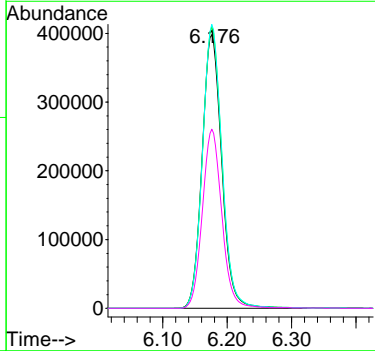
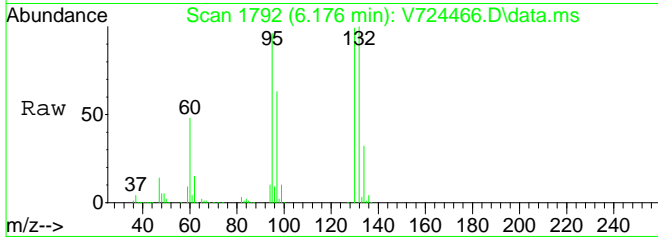
#40  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 10.00 ppb  
 RT: 8.858 min Scan# 2756  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

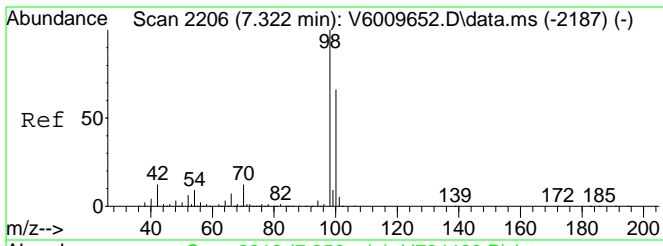
Tgt Ion	Resp	Lower	Upper
117	915028		
117	100		
82	56.4	35.7	74.1
119	33.5	20.8	43.2
54	26.2	13.8	28.8



#41  
 Trichloroethylene  
 Concen: 26.56 ppb  
 RT: 6.176 min Scan# 1792  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

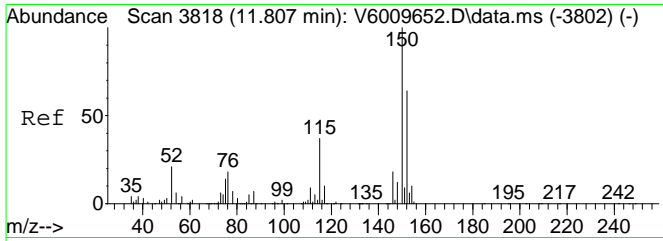
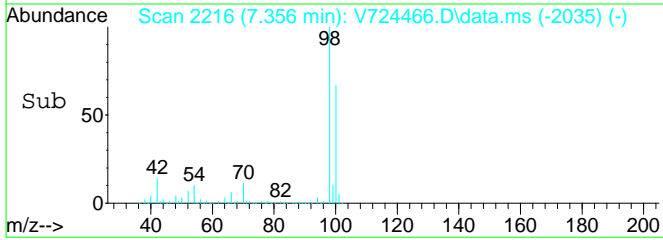
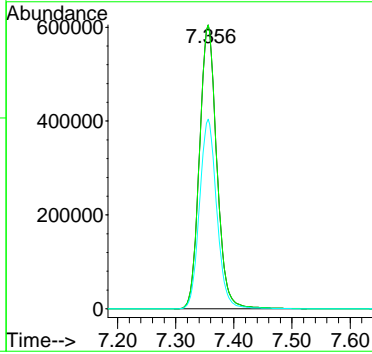
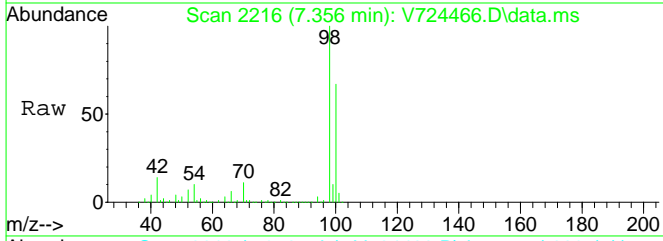
Tgt Ion	Resp	Lower	Upper
95	844854		
95	100		
130	102.3	67.1	139.5
132	103.0	62.9	130.5
97	64.5	42.0	87.2





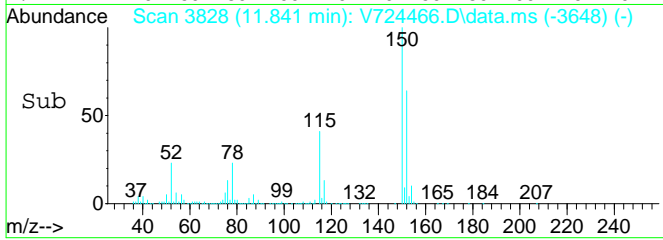
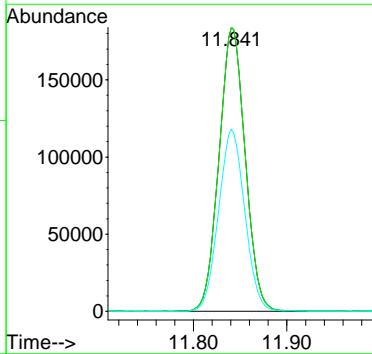
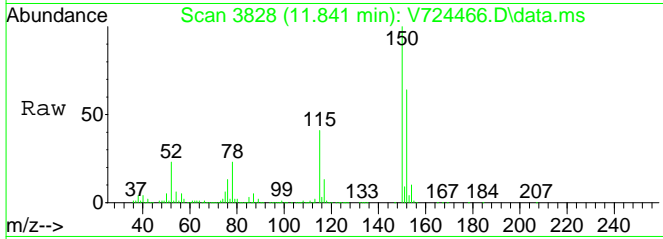
#51  
 Toluene-d8 (SURR)  
 Concen: 10.46 ppb  
 RT: 7.356 min Scan# 2216  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

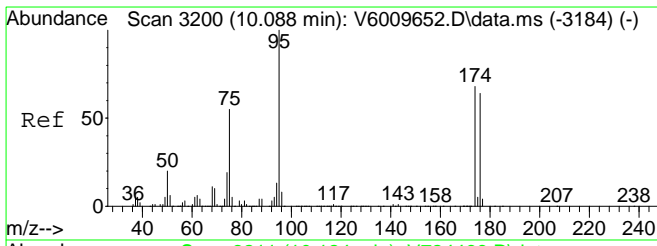
Tgt Ion	Resp	Lower	Upper
98	1250350		
98	100		
98	100.0	65.0	135.0
100	66.7	42.5	88.3



#67  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 10.00 ppb  
 RT: 11.841 min Scan# 3828  
 Delta R.T. -0.000 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

Tgt Ion	Resp	Lower	Upper
152	358588		
152	100		
152	100.0	50.0	150.0
115	64.0	32.6	97.7

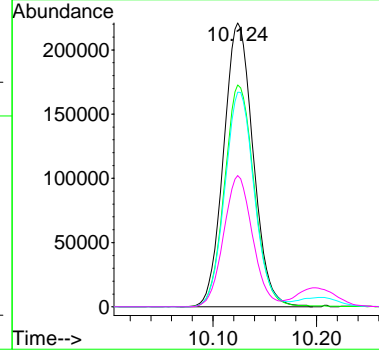
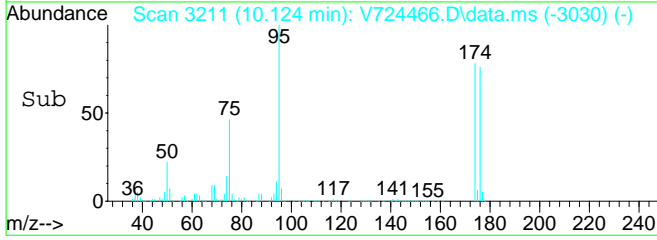
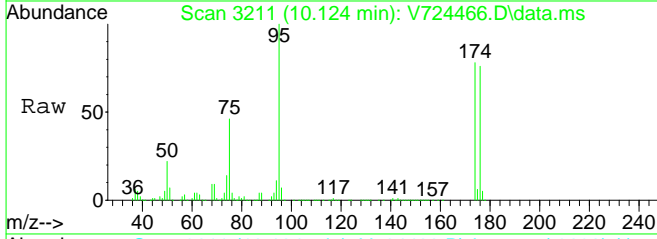




#70  
 p-Bromofluorobenzene (SURR)  
 Concen: 9.97 ppb  
 RT: 10.124 min Scan# 3211  
 Delta R.T. 0.003 min  
 Lab File: V724466.D  
 Acq: 10 Mar 2018 12:19 am

Tgt Ion: 95 Resp: 438214

Ion	Ratio	Lower	Upper
95	100		
174	78.5	51.4	106.8
176	75.4	49.9	103.5
75	45.5	33.3	69.1





Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-07 File ID: V724467.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.50	U
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.42	J
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	1.5	J
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-07 File ID: V724467.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	2.0	
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	0.50	U
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.69	96.9	69 - 130	
Toluene-d8	10.0	10.4	104	81 - 117	
p-Bromofluorobenzene	10.0	10.2	102	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	252608	5.828	248308	5.828	
Chlorobenzene-d5	941814	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	364129	11.84	370257	11.84	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724467.D  
 Acq On : 10 Mar 2018 12:51 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-07  
 Misc : QBV7030918A COMP A  
 ALS Vial : 23 Sample Multiplier: 1

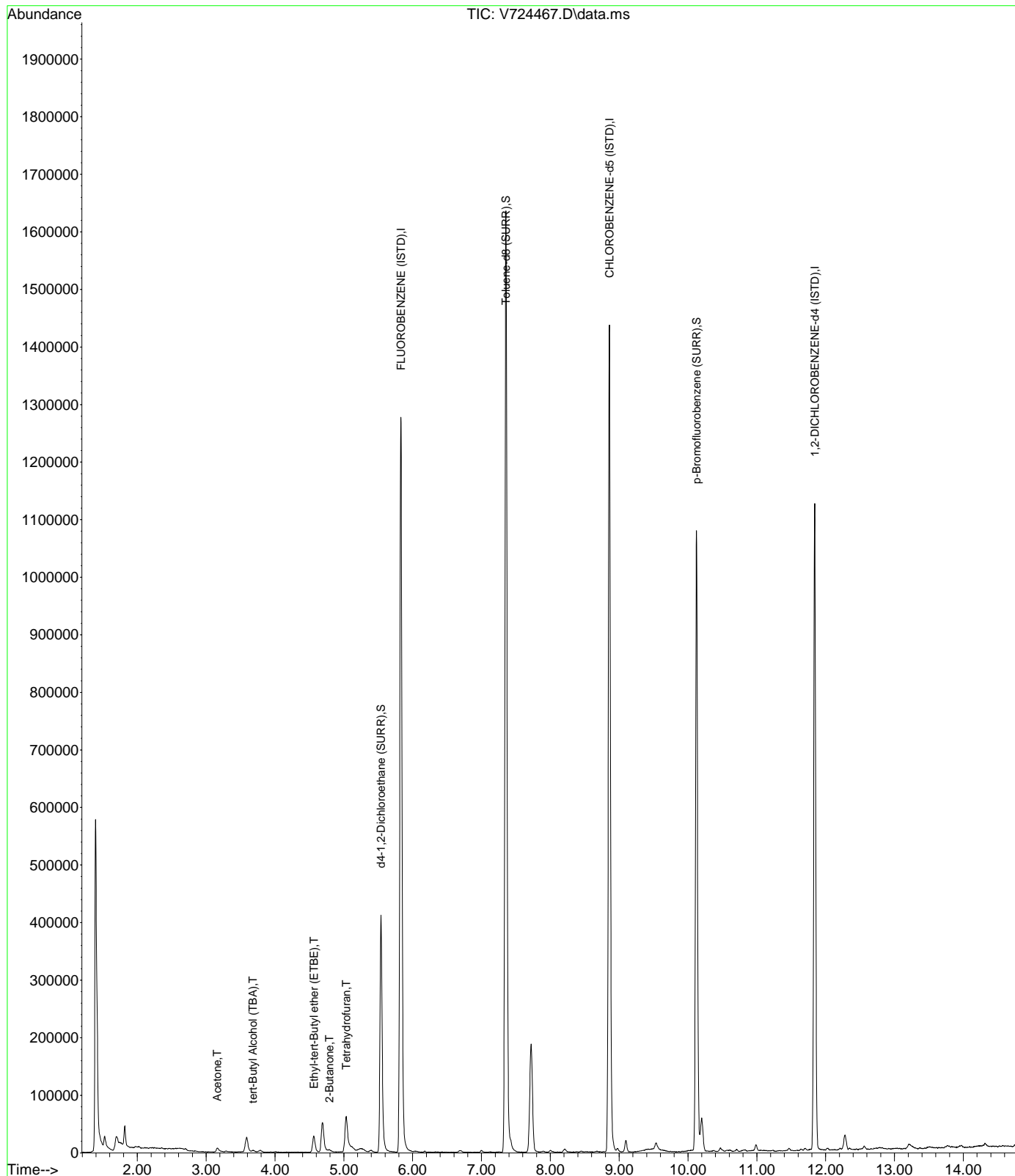
Quant Time: Mar 12 14:20:00 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

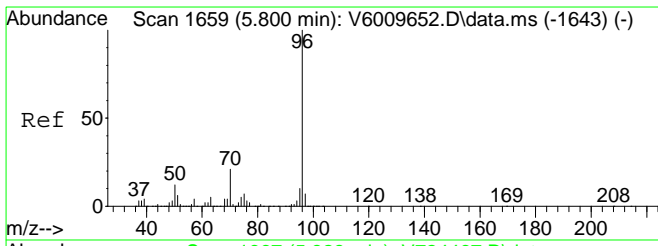
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	5.828	70	252608	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	941814	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.840	152	364129	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.539	65	306868	9.69	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	96.90%	
51) Toluene-d8 (SURR)	7.356	98	1273397	10.35	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	103.50%	
70) p-Bromofluorobenzene (...)	10.124	95	455976	10.22	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	102.20%	
Target Compounds						
12) Acetone	3.160	43	13661	1.46	ppb	# 1
16) tert-Butyl Alcohol (TBA)	3.677	59	5555m	2.02	ppb	
24) Ethyl-tert-Butyl ether...	4.565	59	30541	0.22	ppb	# 86
26) 2-Butanone	4.790	72	1118m	0.42	ppb	
28) Tetrahydrofuran	5.035	71	12506	4.32	ppb	# 73
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724467.D  
 Acq On : 10 Mar 2018 12:51 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : 18C0104-07  
 Misc : QEV7030918A COMP A  
 ALS Vial : 23 Sample Multiplier: 1

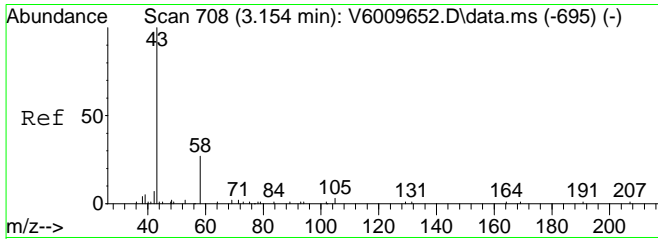
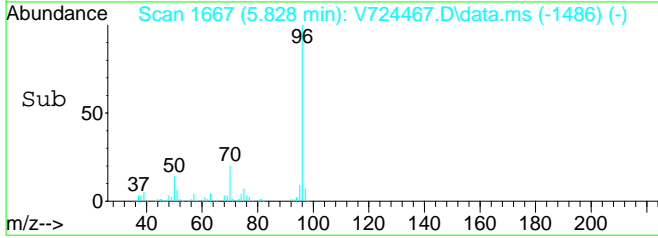
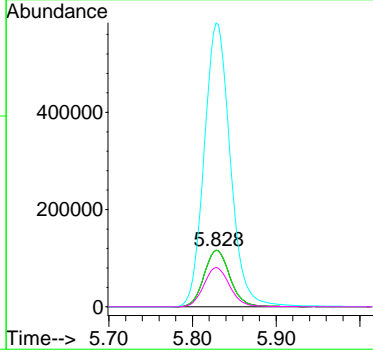
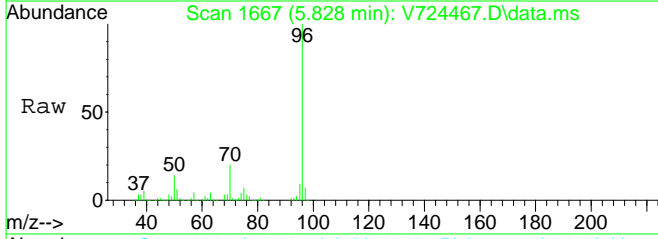
Quant Time: Mar 12 14:20:00 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration





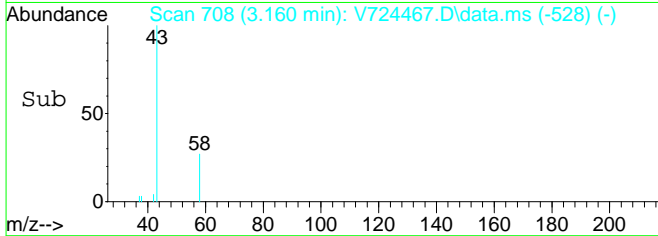
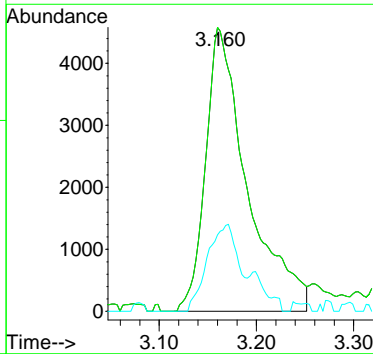
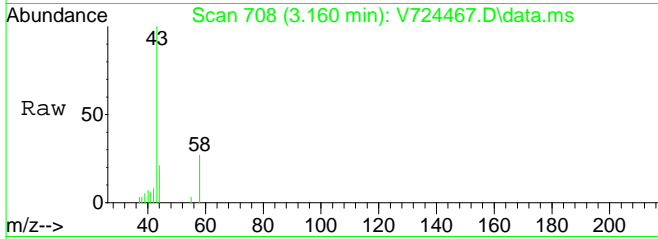
#1  
 FLUOROBENZENE (ISTD)  
 Concen: 10.00 ppb  
 RT: 5.828 min Scan# 1667  
 Delta R.T. 0.003 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

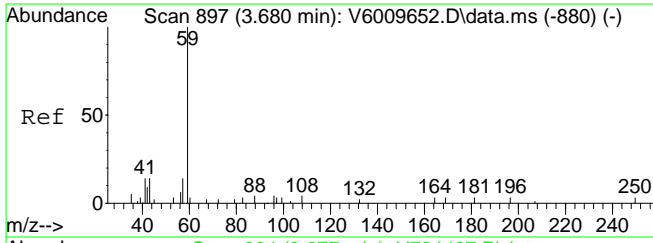
Tgt Ion	Resp	Lower	Upper
70	252608		
70	100		
70	100.0	65.0	135.0
96	501.7	341.4	709.0
50	0.0	0.0	0.0



#12  
 Acetone  
 Concen: 1.46 ppb  
 RT: 3.160 min Scan# 708  
 Delta R.T. -0.000 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

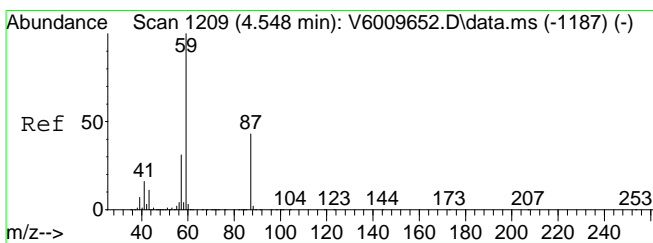
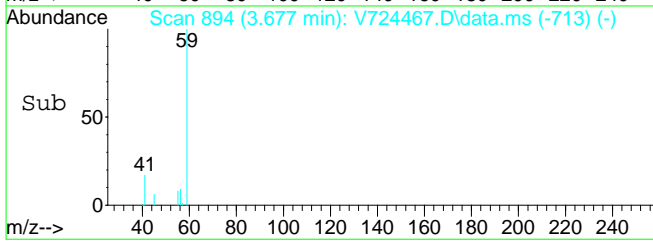
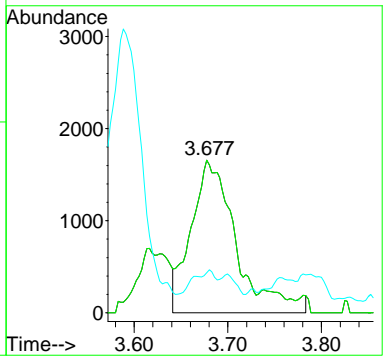
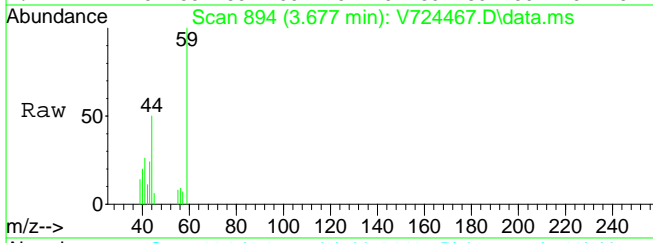
Tgt Ion	Resp	Lower	Upper
43	13661		
43	100		
43	100.0	16.2	24.4#
58	22.7	2.5	7.6#





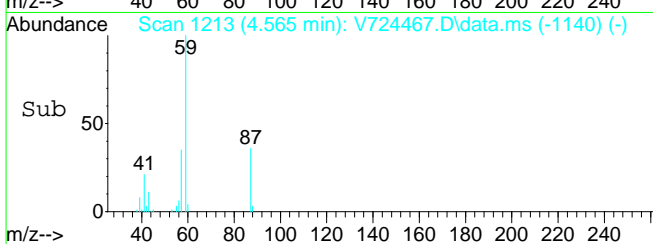
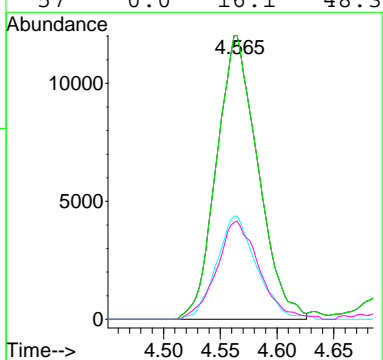
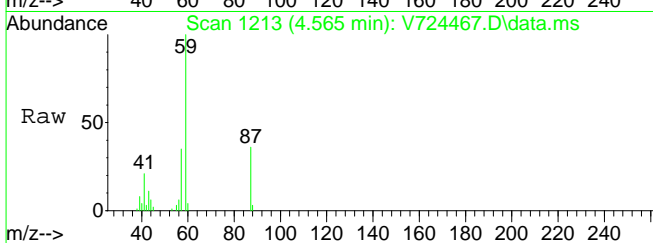
#16  
 tert-Butyl Alcohol (TBA)  
 Concen: 2.02 ppb m  
 RT: 3.677 min Scan# 894  
 Delta R.T. 0.003 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

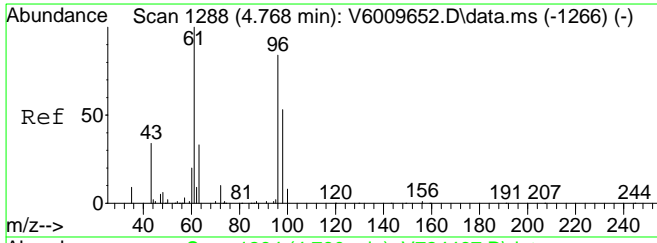
Tgt Ion	Resp	Lower	Upper
59	100		
59	67.9	37.8	78.6
41	0.0	338.1	1014.3#



#24  
 Ethyl-tert-Butyl ether (ETBE)  
 Concen: 0.22 ppb  
 RT: 4.565 min Scan# 1213  
 Delta R.T. 0.003 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion	Resp	Lower	Upper
59	100		
59	100.0	80.0	120.0
87	0.0	0.0	0.0
57	0.0	16.1	48.3#

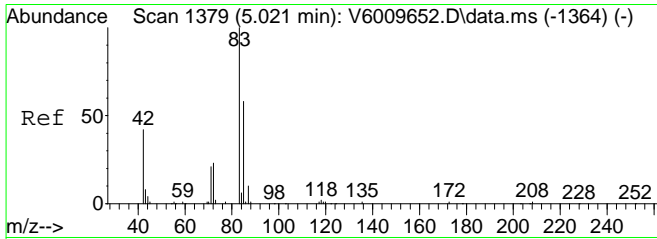
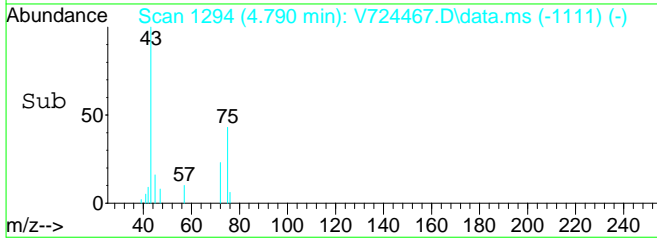
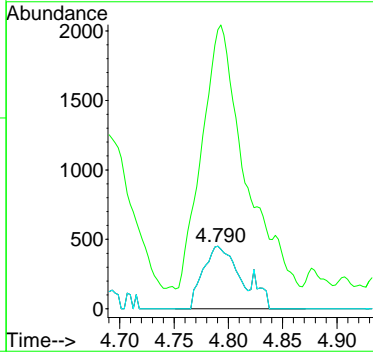
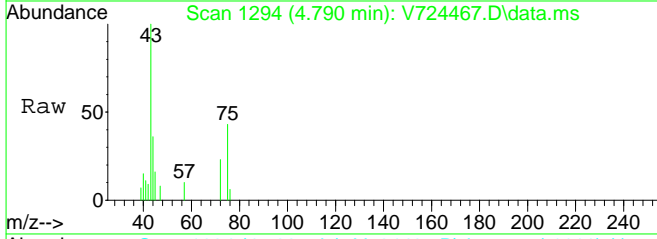




#26  
 2-Butanone  
 Concen: 0.42 ppb m  
 RT: 4.790 min Scan# 1294  
 Delta R.T. 0.008 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion: 72 Resp: 1118

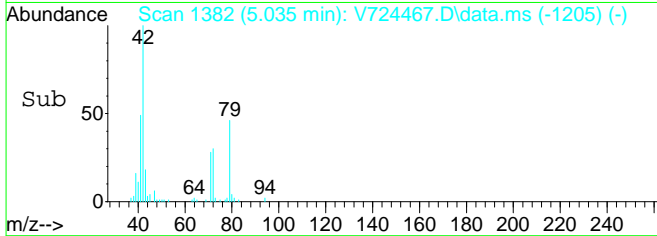
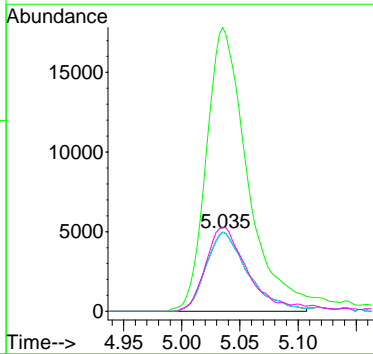
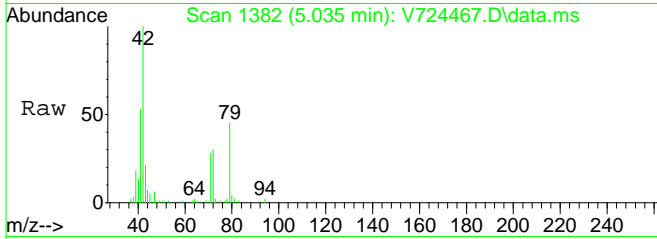
Ion	Ratio	Lower	Upper
72	100		
43	0.0	0.0	0.0
72	85.2	12.2	36.4#

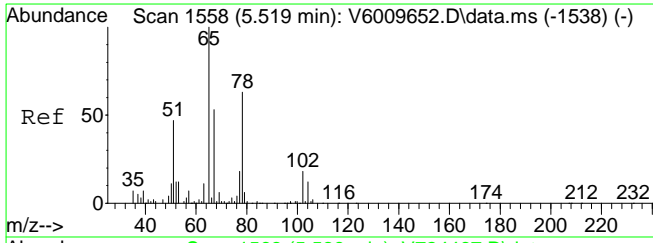


#28  
 Tetrahydrofuran  
 Concen: 4.32 ppb  
 RT: 5.035 min Scan# 1382  
 Delta R.T. -0.008 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion: 71 Resp: 12506

Ion	Ratio	Lower	Upper
71	100		
42	0.0	0.0	0.0
71	100.0	50.0	150.0
72	103.5	23.3	69.9#

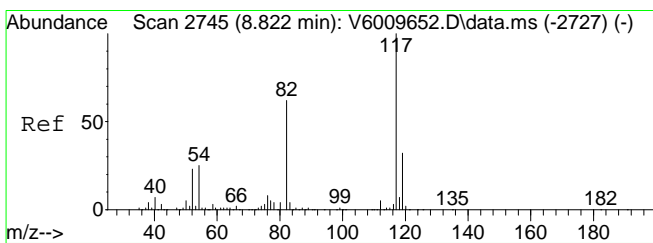
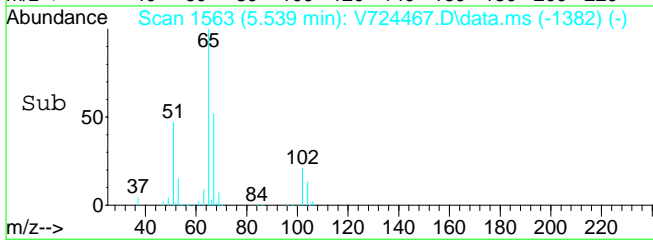
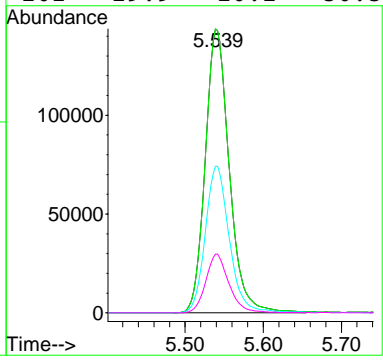
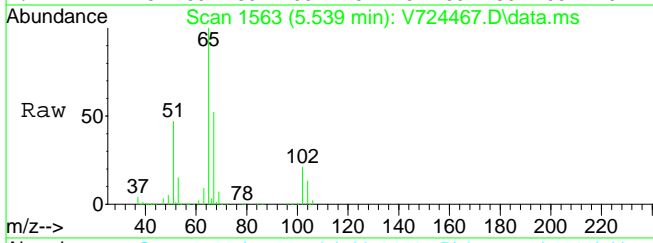




#34  
 d4-1,2-Dichloroethane (SURR)  
 Concen: 9.69 ppb  
 RT: 5.539 min Scan# 1563  
 Delta R.T. 0.003 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion: 65 Resp: 306868

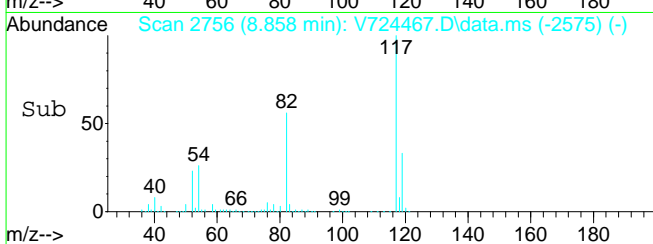
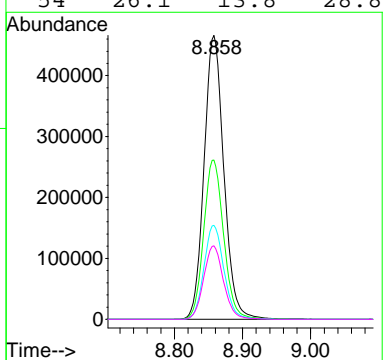
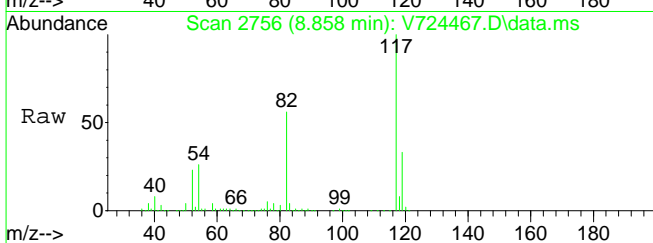
Ion	Ratio	Lower	Upper
65	100		
65	100.0	65.0	135.0
67	51.6	33.9	70.5
102	19.9	10.1	30.3



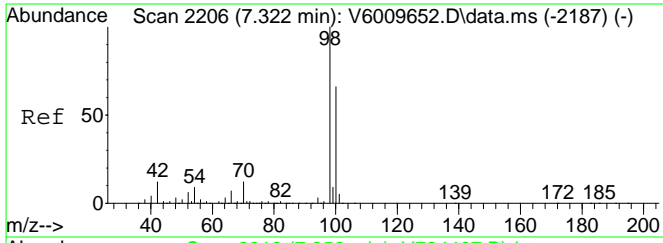
#40  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 10.00 ppb  
 RT: 8.858 min Scan# 2756  
 Delta R.T. 0.003 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion: 117 Resp: 941814

Ion	Ratio	Lower	Upper
117	100		
82	56.7	35.7	74.1
119	33.5	20.8	43.2
54	26.1	13.8	28.8



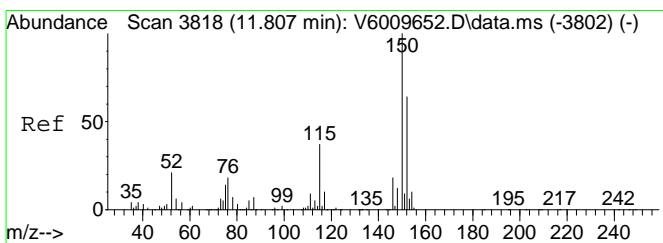
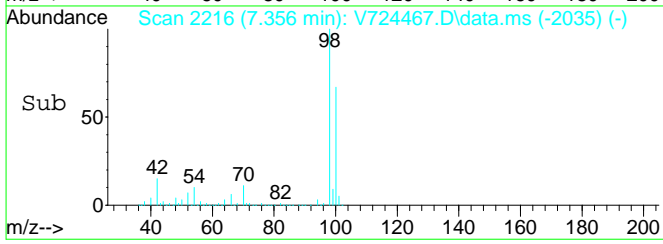
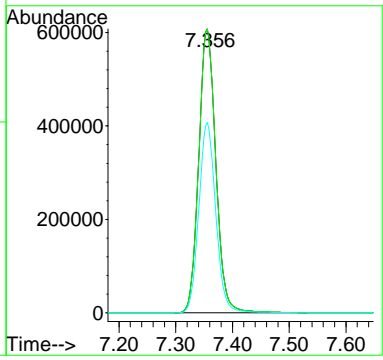
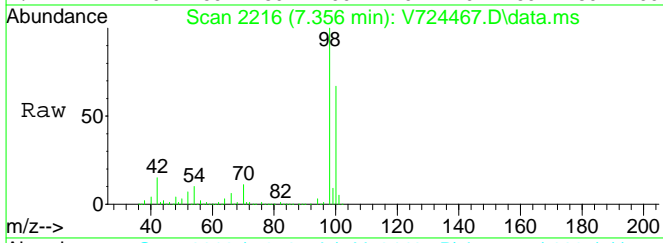




#51  
 Toluene-d8 (SURR)  
 Concen: 10.35 ppb  
 RT: 7.356 min Scan# 2216  
 Delta R.T. 0.003 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion: 98 Resp: 1273397

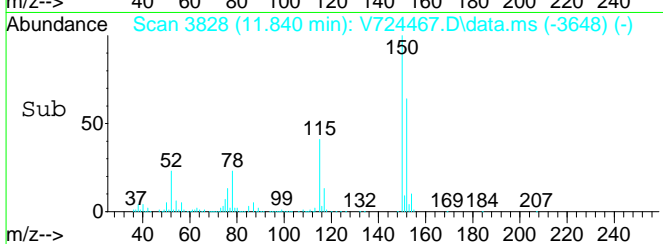
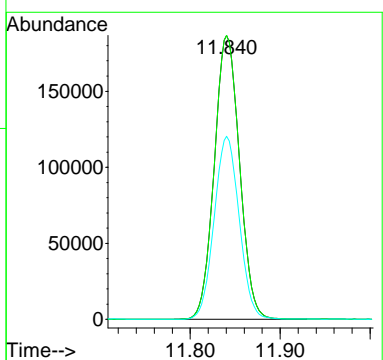
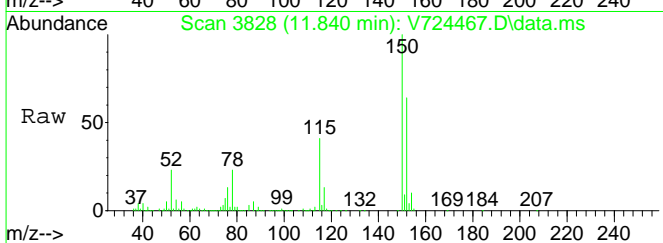
Ion	Ratio	Lower	Upper
98	100		
98	100.0	65.0	135.0
100	66.3	42.5	88.3

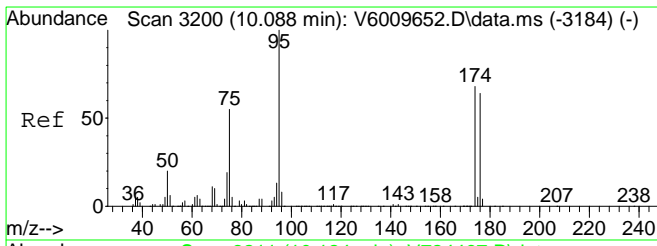


#67  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 10.00 ppb  
 RT: 11.840 min Scan# 3828  
 Delta R.T. -0.000 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion: 152 Resp: 364129

Ion	Ratio	Lower	Upper
152	100		
152	100.0	50.0	150.0
115	64.0	32.6	97.7

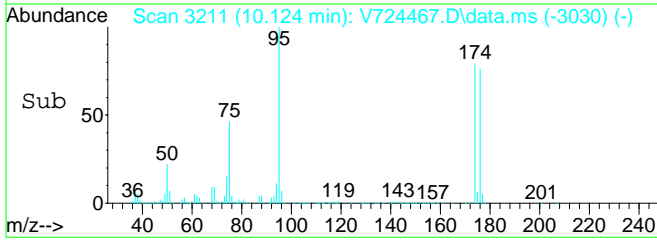
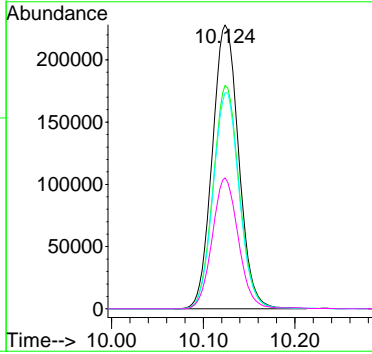
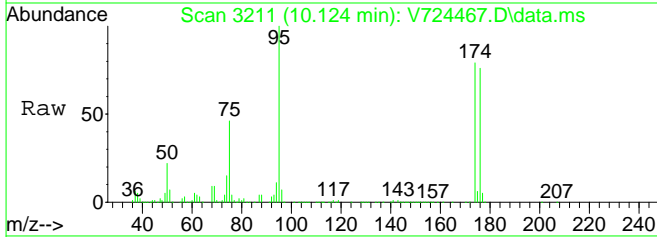




#70  
 p-Bromofluorobenzene (SURR)  
 Concen: 10.22 ppb  
 RT: 10.124 min Scan# 3211  
 Delta R.T. 0.003 min  
 Lab File: V724467.D  
 Acq: 10 Mar 2018 12:51 am

Tgt Ion: 95 Resp: 455976

Ion	Ratio	Lower	Upper
95	100		
174	78.2	51.4	106.8
176	75.5	49.9	103.5
75	45.4	33.3	69.1



# VOA Standards Data

FORM VI

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigat

Calibration: YB80017

Instrument: MSVOA7

Matrix: Water

Calibration Date: 02/14/18 12:07

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	0.5	0.3595104	2	0.3298915	4	0.3258318	10	0.3238437	20	0.3355987	40	0.3314742
1,1,1-Trichloroethane	0.5	1.923727	2	1.835003	4	1.818056	10	1.704599	20	1.844577	40	1.87195
1,1,2,2-Tetrachloroethane	0.5	0.7758649	2	0.700665	4	0.7176602	10	0.687548	20	0.7085504	40	0.682706
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	1.100922	2	1.150513	4	0.9015212	10	0.8102172	20	0.8536521	40	0.9083452
1,1,2-Trichloroethane	0.5	0.2672088	2	0.239504	4	0.2423669	10	0.2373122	20	0.2492064	40	0.2372618
1,1-Dichloroethane	0.5	2.901326	2	2.71898	4	2.741673	10	2.605678	20	2.742287	40	2.732384
1,1-Dichloroethylene	0.5	2.430203	2	2.291739	4	2.238317	10	2.040872	20	2.197568	40	2.267949
1,1-Dichloropropylene	0.5	1.775882	2	1.598388	4	1.685784	10	1.559196	20	1.675808	40	1.699969
1,2,3-Trichlorobenzene	0.5	0.3539983	2	0.3269309	4	0.2898586	10	0.2776044	20	0.2612517	40	0.2549869
1,2,3-Trichloropropane	0.5	0.2243265	2	0.2129743	4	0.2093897	10	0.1946952	20	0.1995212	40	0.1934306
1,2,4,5-Tetramethylbenzene	0.5	3.158982	2	2.969807	4	2.861392	10	2.785924	20	2.963189	40	2.848725
1,2,4-Trichlorobenzene	0.5	0.715722	2	0.6635843	4	0.6319363	10	0.5964281	20	0.6037539	40	0.5937915
1,2,4-Trimethylbenzene	0.5	3.556878	2	3.293721	4	3.385541	10	3.204523	20	3.347151	40	3.355039
1,2-Dibromo-3-chloropropane	0.5	0.1454115	2	0.1221356	4	0.1175582	10	0.1164414	20	0.1136405	40	0.1116321
1,2-Dibromoethane	0.5	0.2505134	2	0.2382778	4	0.2317446	10	0.2350467	20	0.2411109	40	0.2323231
1,2-Dichlorobenzene	0.5	1.708404	2	1.601778	4	1.611649	10	1.547316	20	1.620846	40	1.612091
1,2-Dichloroethane	0.5	1.77486	2	1.723548	4	1.727534	10	1.697688	20	1.750842	40	1.691172
1,2-Dichloroethane-d4	10	1.276702	10	1.278997	10	1.25105	10	1.256975	10	1.241365	10	1.208204
1,2-Dichloropropane	0.5	0.451812	2	0.4230884	4	0.4198303	10	0.4085795	20	0.4316253	40	0.4284221
1,3,5-Trimethylbenzene	0.5	3.522149	2	3.341589	4	3.392901	10	3.165712	20	3.343266	40	3.321448
1,3-Dichlorobenzene	0.5	1.871866	2	1.782906	4	1.795956	10	1.737187	20	1.804635	40	1.81144
1,3-Dichloropropane	0.5	0.464068	2	0.4322175	4	0.4261137	10	0.4216773	20	0.4374114	40	0.4211203
1,4-Dichlorobenzene	0.5	1.895042	2	1.794474	4	1.816749	10	1.764039	20	1.835154	40	1.833016
1,4-Dioxane	10		40	5.22477E-04	80	4.499894E-04	200	5.372337E-04	400	4.04137E-04	800	3.776694E-04
2,2-Dichloropropane	0.5	1.774656	2	1.643798	4	1.638056	10	1.523509	20	1.657785	40	1.662481
2-Butanone	0.5	0.1204628	2	9.717097E-02	4	0.1051666	10	0.103464	20	9.715928E-02	40	9.299977E-02
2-Chlorotoluene	0.5	3.337172	2	3.129023	4	3.167199	10	2.968456	20	3.108265	40	3.090101
2-Hexanone	0.5	0.333337	2	0.2979837	4	0.3057957	10	0.2993036	20	0.3010281	40	0.282177
4-Chlorotoluene	0.5	3.054652	2	2.883208	4	2.967057	10	2.792316	20	2.892545	40	2.901122
4-Methyl-2-pentanone	0.5	0.4406181	2	0.4366573	4	0.4306399	10	0.4235837	20	0.4361548	40	0.4062948
Acetone	0.5	0.5741143	2	0.345282	4	0.3417087	10	0.3908761	20	0.295213	40	0.2995741

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YB80017Instrument: MSVOA7Matrix: WaterCalibration Date: 02/14/18 12:07

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acrolein	0.5		2	0.1383136	4	0.1563198	10	0.1855229	20	0.2050656	40	0.1935471
Acrylonitrile	0.5	0.5440752	2	0.2961317	4	0.3209503	10	0.3813462	20	0.3918176	40	0.4170148
Benzene	0.5	5.414493	2	4.997841	4	5.046722	10	4.805641	20	5.045762	40	5.02427
Bromobenzene	0.5	1.603425	2	1.487272	4	1.49677	10	1.399387	20	1.448582	40	1.453218
Bromochloromethane	0.5	1.767912	2	1.661496	4	1.662301	10	1.604735	20	1.679861	40	1.644827
Bromodichloromethane	0.5	0.4599282	2	0.4120325	4	0.4192949	10	0.4130295	20	0.4310795	40	0.4285668
Bromoform	0.5	0.1669272	2	0.1641002	4	0.1632969	10	0.1659162	20	0.1735952	40	0.1682313
Bromomethane	0.5	0.5072927	2	0.4757386	4	0.4971078	10	0.5009597	20	0.613959	40	0.6895701
Carbon disulfide	0.5	3.647501	2	3.375957	4	3.328591	10	3.07217	20	3.306724	40	3.369911
Carbon tetrachloride	0.5	1.42328	2	1.501745	4	1.544269	10	1.422179	20	1.590576	40	1.634702
Chlorobenzene	0.5	0.9833427	2	0.9177067	4	0.923398	10	0.8875291	20	0.9280251	40	0.9080418
Chloroethane	0.5	1.022248	2	0.9167106	4	0.8706844	10	0.7923733	20	0.876544	40	0.9013137
Chloroform	0.5	2.235255	2	2.059869	4	2.063547	10	2.002274	20	2.081341	40	2.088836
Chloromethane	0.5	2.437866	2	2.229033	4	2.192578	10	2.035439	20	2.185317	40	2.229088
cis-1,2-Dichloroethylene	0.5	2.703109	2	2.577353	4	2.627582	10	2.524873	20	2.648345	40	2.630986
cis-1,3-Dichloropropylene	0.5	0.557568	2	0.5427427	4	0.5406475	10	0.5285422	20	0.5557417	40	0.54921
Cyclohexane	0.5	3.177501	2	3.269674	4	2.72612	10	2.479507	20	2.655431	40	2.752195
Dibromochloromethane	0.5	0.3089883	2	0.2969461	4	0.2995386	10	0.2962078	20	0.3083806	40	0.3026766
Dibromomethane	0.5	0.1854747	2	0.1686007	4	0.1693438	10	0.164674	20	0.1728361	40	0.1676844
Dichlorodifluoromethane	0.5	0.9559376	2	0.9778598	4	0.7626453	10	0.6668103	20	0.6979182	40	0.8061093
Ethyl Benzene	0.5	1.696181	2	1.60204	4	1.596536	10	1.52511	20	1.606517	40	1.571409
Hexachlorobutadiene	0.5	0.2773937	2	0.2563179	4	0.2430076	10	0.2298907	20	0.2434344	40	0.2383542
Isopropylbenzene	0.5	4.202349	2	4.057885	4	4.088915	10	3.799805	20	3.973031	40	3.964263
Methyl acetate	0.5	0.8483486	2	1.038984	4	1.037181	10	1.022109	20	1.054472	40	0.9645678
Methyl tert-butyl ether (MTBE)	0.5	3.605916	2	3.374777	4	3.417394	10	3.296554	20	3.395042	40	3.281437
Methylcyclohexane	0.5	0.5144267	2	0.529322	4	0.4222839	10	0.3930604	20	0.4245001	40	0.4436124
Methylene chloride	0.5	4.406243	2	3.074127	4	2.798842	10	2.600867	20	2.635004	40	2.552702
Naphthalene	0.5	1.305238	2	1.130996	4	1.037813	10	0.9889066	20	0.9526979	40	0.9088676
n-Butylbenzene	0.5	3.477024	2	3.282101	4	3.336628	10	3.112753	20	3.392623	40	3.353735
n-Propylbenzene	0.5	4.844065	2	4.528561	4	4.673931	10	4.254089	20	4.518184	40	4.495206
o-Xylene	0.5	1.343725	2	1.256067	4	1.261074	10	1.207391	20	1.272445	40	1.238732

FORM VI

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigat

Calibration: YB80017

Instrument: MSVOA7

Matrix: Water

Calibration Date: 02/14/18 12:07

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p- & m- Xylenes	1	1.291173	4	1.232092	8	1.25641	20	1.193349	40	1.258052	80	1.208929
p-Bromofluorobenzene	10	1.224222	10	1.233637	10	1.227157	10	1.208552	10	1.192951	10	1.219987
p-Diethylbenzene	0.5	1.811723	2	1.685609	4	1.703385	10	1.606534	20	1.76551	40	1.717142
p-Ethyltoluene	0.5	4.199533	2	3.963036	4	3.846073	10	3.632485	20	3.885928	40	3.784463
p-Isopropyltoluene	0.5	3.546697	2	3.41277	4	3.449227	10	3.233933	20	3.479677	40	3.432602
sec-Butylbenzene	0.5	3.953907	2	3.692028	4	3.706625	10	3.418704	20	3.697864	40	3.683275
Styrene	0.5	1.094927	2	1.042097	4	1.046491	10	1.017769	20	1.06555	40	1.042594
tert-Butyl alcohol (TBA)	0.5		2	0.1056304	4	9.702779E-02	10	0.111151	20	0.102073	40	9.066209E-02
tert-Butylbenzene	0.5	2.914728	2	2.76345	4	2.816551	10	2.601773	20	2.771575	40	2.767427
Tetrachloroethylene	0.5	0.4492791	2	0.3637464	4	0.4354551	10	0.3942293	20	0.3642772	40	0.417581
Toluene	0.5	1.545486	2	1.450478	4	1.461303	10	1.394294	20	1.472347	40	1.453622
Toluene-d8	10	1.299886	10	1.298896	10	1.291466	10	1.296168	10	1.30881	10	1.32151
trans-1,2-Dichloroethylene	0.5	2.437048	2	2.334764	4	2.318883	10	2.193693	20	2.33306	40	2.349021
trans-1,3-Dichloropropylene	0.5	0.503369	2	0.4686123	4	0.4747356	10	0.4645234	20	0.4884358	40	0.468937
trans-1,4-dichloro-2-butene	0.5	0.8757901	2	0.8192521	4	0.8444059	10	0.809556	20	0.8234252	40	0.8051902
Trichloroethylene	0.5	0.3718482	2	0.3375989	4	0.3449251	10	0.3243406	20	0.3482458	40	0.3540231
Trichlorofluoromethane	0.5	1.624256	2	1.580039	4	1.351048	10	1.201955	20	1.336221	40	1.466096
Vinyl acetate	0.5	4.300697	2	3.901549	4	3.567883	10	3.857225	20	4.760738	40	4.017869
Vinyl Chloride	0.5	1.750441	2	1.670783	4	1.585663	10	1.424788	20	1.588486	40	1.686338

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YB80017Instrument: MSVOA7Matrix: WaterCalibration Date: 02/14/18 12:07

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	80	0.3300243	120	0.3186645	160	0.3193238						
1,1,1-Trichloroethane	80	1.761478	120	1.808087	160	1.9037						
1,1,2,2-Tetrachloroethane	80	0.7367723	120	0.7306221	160	0.7611624						
1,1,2-Trichloro-1,2,2-trifluoroethane	80	0.7511327	120	0.8080615	160	0.9584107						
1,1,2-Trichloroethane	80	0.2507537	120	0.2473948	160	0.2538077						
1,1-Dichloroethane	80	2.677419	120	2.644817	160	2.700925						
1,1-Dichloroethylene	80	2.069358	120	2.121553	160	2.264686						
1,1-Dichloropropylene	80	1.581432	120	1.629734	160	1.695073						
1,2,3-Trichlorobenzene	80	0.2639226	120	0.2374412	160	0.17517						
1,2,3-Trichloropropane	80	0.2073138	120	0.2059932	160	0.2121337						
1,2,4,5-Tetramethylbenzene	80	2.78856	120	2.79888	160	2.780243						
1,2,4-Trichlorobenzene	80	0.6066186	120	0.5838995	160	0.5005191						
1,2,4-Trimethylbenzene	80	3.164124	120	3.107765	160	3.104537						
1,2-Dibromo-3-chloropropane	80	0.1220138	120	0.1235101	160	0.1248132						
1,2-Dibromoethane	80	0.248289	120	0.2453062	160	0.2491313						
1,2-Dichlorobenzene	80	1.610309	120	1.56832	160	1.592765						
1,2-Dichloroethane	80	1.747196	120	1.709769	160	1.71888						
1,2-Dichloroethane-d4	10	1.250083	10	1.258518	10	1.264968						
1,2-Dichloropropane	80	0.4348521	120	0.4257211	160	0.4323777						
1,3,5-Trimethylbenzene	80	3.108479	120	3.07643	160	3.10696						
1,3-Dichlorobenzene	80	1.752879	120	1.700204	160	1.706221						
1,3-Dichloropropane	80	0.4432348	120	0.4316707	160	0.436103						
1,4-Dichlorobenzene	80	1.798382	120	1.766828	160	1.784918						
1,4-Dioxane	1600	4.404043E-04	2400	6.229233E-04	3200	7.202755E-04						
2,2-Dichloropropane	80	1.577608	120	1.607689	160	1.67977						
2-Butanone	80	0.1063658	120	0.1085744	160	0.1118258						
2-Chlorotoluene	80	2.952319	120	2.910359	160	2.946212						
2-Hexanone	80	0.3114649	120	0.305775	160	0.3077084						
4-Chlorotoluene	80	2.763999	120	2.687338	160	2.70925						
4-Methyl-2-pentanone	80	0.4499102	120	0.4448125	160	0.4505645						
Acetone	80	0.3492261	120	0.3690833	160	0.3656966						

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YB80017Instrument: MSVOA7Matrix: WaterCalibration Date: 02/14/18 12:07

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acrolein	80	0.2141728	120	0.2156284	160	0.2291398						
Acrylonitrile	80	0.4661369	120	0.4759894	160	0.4912439						
Benzene	80	4.873684	120	4.743108	160	4.726018						
Bromobenzene	80	1.465679	120	1.443839	160	1.500374						
Bromochloromethane	80	1.631176	120	1.571188	160	1.581204						
Bromodichloromethane	80	0.4395177	120	0.4314527	160	0.4393563						
Bromoform	80	0.1809897	120	0.1802741	160	0.1850923						
Bromomethane	80	0.7080062	120	0.7174506	160	0.7488493						
Carbon disulfide	80	3.125977	120	3.195122	160	3.361031						
Carbon tetrachloride	80	1.493319	120	1.556498	160	1.659919						
Chlorobenzene	80	0.9022625	120	0.8774341	160	0.8883772						
Chloroethane	80	0.8511626	120	0.8532642	160	0.8947795						
Chloroform	80	2.085731	120	2.067891	160	2.11811						
Chloromethane	80	2.153789	120	2.281143	160	2.488263						
cis-1,2-Dichloroethylene	80	2.60214	120	2.567882	160	2.638988						
cis-1,3-Dichloropropylene	80	0.5620991	120	0.5504588	160	0.5592425						
Cyclohexane	80	2.281108	120	2.420644	160	2.811394						
Dibromochloromethane	80	0.3173967	120	0.313479	160	0.3205841						
Dibromomethane	80	0.1780552	120	0.1771733	160	0.1803359						
Dichlorodifluoromethane	80	0.6380043	120	0.6833181	160	0.8144523						
Ethyl Benzene	80	1.4753	120	1.432429	160	1.405523						
Hexachlorobutadiene	80	0.2238178	120	0.2388273	160	0.2289621						
Isopropylbenzene	80	3.679758	120	3.719623	160	3.788804						
Methyl acetate	80	1.070338	120	1.076603	160	1.106603						
Methyl tert-butyl ether (MTBE)	80	3.405879	120	3.36727	160	3.431786						
Methylcyclohexane	80	0.3620707	120	0.3975408	160	0.4677328						
Methylene chloride	80	2.575385	120	2.547445	160	2.614547						
Naphthalene	80	0.9909141	120	0.9257362	160	0.7460881						
n-Butylbenzene	80	3.063893	120	3.179231	160	3.257312						
n-Propylbenzene	80	4.122751	120	4.132174	160	4.076879						
o-Xylene	80	1.1964	120	1.168815	160	1.164379						



## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YB80017Instrument: MSVOA7Matrix: WaterCalibration Date: 02/14/18 12:07

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p- & m- Xylenes	160	1.108894	240	1.018244	320	0.8832616						
p-Bromofluorobenzene	10	1.223284	10	1.239425	10	1.258278						
p-Diethylbenzene	80	1.609609	120	1.672442	160	1.736103						
p-Ethyltoluene	80	3.512531	120	3.5042	160	3.539839						
p-Isopropyltoluene	80	3.135784	120	3.196445	160	3.231482						
sec-Butylbenzene	80	3.321742	120	3.431548	160	3.513694						
Styrene	80	1.018652	120	0.980212	160	0.9633043						
tert-Butyl alcohol (TBA)	80	0.1092615	120	0.1218054	160	0.131592						
tert-Butylbenzene	80	2.562215	120	2.647251	160	2.73341						
Tetrachloroethylene	80	0.395204	120	0.4273172	160	0.4048668						
Toluene	80	1.409269	120	1.372147	160	1.368402						
Toluene-d8	10	1.31259	10	1.313689	10	1.310558						
trans-1,2-Dichloroethylene	80	2.258611	120	2.257498	160	2.329852						
trans-1,3-Dichloropropylene	80	0.4900479	120	0.4815856	160	0.4917498						
trans-1,4-dichloro-2-butene	80	0.8707432	120	0.8634627	160	0.8862727						
Trichloroethylene	80	0.3420531	120	0.3459375	160	0.3594767						
Trichlorofluoromethane	80	1.250379	120	1.30362	160	1.479076						
Vinyl acetate	80	3.903757	120	3.819874	160	4.313631						
Vinyl Chloride	80	1.52698	120	1.561476	160	1.679667						

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationCalibration: YB80017Instrument: MSVOA7Matrix: WaterCalibration Date: 02/14/18 12:07

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1,2-Tetrachloroethane	0.3304625	3.706492	8.973333	2.528373E-02			20	
1,1,1-Trichloroethane	1.830131	3.728891	5.209556	1.575475E-02			SPCC (0.1)	
1,1,2,2-Tetrachloroethane	0.7223946	4.408073	10.30667	0.0291848			SPCC (0.3)	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.915864	14.70822	3.040333	7.729413E-02			SPCC (0.1)	
1,1,2-Trichloroethane	0.2472018	3.890178	7.865333	2.296984E-02			SPCC (0.1)	
1,1-Dichloroethane	2.718388	3.046743	4.212	2.769848E-02			SPCC (0.2)	
1,1-Dichloroethylene	2.213583	5.499741	3.063	2.205519E-02			SPCC (0.1)	
1,1-Dichloropropylene	1.655696	4.165395	5.362	2.634397E-02			20	
1,2,3-Trichlorobenzene	0.2712405	18.94601	14.24867	1.438052E-02			20	
1,2,3-Trichloropropane	0.206642	4.714868	10.35589	0.0258636			20	
1,2,4,5-Tetramethylbenzene	2.883967	4.38158	12.657	2.306666E-02			20	
1,2,4-Trichlorobenzene	0.6106948	9.633668	13.68078	0.0105424			SPCC (0.2)	
1,2,4-Trimethylbenzene	3.27992	4.54402	10.98778	3.445876E-02			20	
1,2-Dibromo-3-chloropropane	0.1219063	8.132133	12.76711	1.800111E-02			SPCC (0.05)	
1,2-Dibromoethane	0.2413048	3.042755	8.400222	2.416755E-02			SPCC (0.1)	
1,2-Dichlorobenzene	1.608164	2.764237	11.86211	2.586341E-02			SPCC (0.4)	
1,2-Dichloroethane	1.726832	1.557157	5.609	2.541528E-02			SPCC (0.1)	
1,2-Dichloroethane-d4	1.254096	1.68461	5.537889	3.290266E-02			20	
1,2-Dichloropropane	0.4284787	2.758464	6.407556	9.173884E-03			SPCC (0.1)	
1,3,5-Trimethylbenzene	3.264326	4.752623	10.56522	3.234236E-02			20	
1,3-Dichlorobenzene	1.773699	3.10851	11.33333	3.126658E-02			SPCC (0.6)	
1,3-Dichloropropane	0.4348463	3.028575	8.034445	2.558242E-02			20	
1,4-Dichlorobenzene	1.809845	2.263148	11.43511	2.564604E-02			SPCC (0.5)	
1,4-Dioxane	5.093887E-04	22.87287	6.54375	0.0334184			20	*
2,2-Dichloropropane	1.640595	4.258974	4.739778	3.538153E-02			20	
2-Butanone	0.1047988	8.048304	4.776222	6.534778E-02			SPCC (0.1)	
2-Chlorotoluene	3.067678	4.480007	10.49467	2.897791E-02			20	
2-Hexanone	0.3049526	4.447628	8.085222	1.893896E-02			SPCC (0.1)	
4-Chlorotoluene	2.850165	4.263	10.61556	3.102881E-02			20	
4-Methyl-2-pentanone	0.4354706	3.214755	7.239333	7.143094E-03			SPCC (0.1)	
Acetone	0.370086	22.30513	3.151333	0.1269639			SPCC (0.1)	
Acrolein	0.1922137	16.21432	2.998875	0.1307697			20	

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Calibration: YB80017 Instrument: MSVOA7  
 Matrix: Water Calibration Date: 02/14/18 12:07

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acrylonitrile	0.4205229	19.3888	3.822222	0.1836681			20	
Benzene	4.964171	4.272741	5.566889	1.383275E-02			SPCC (0.5)	
Bromobenzene	1.477616	3.831875	10.29511	2.011429E-02			20	
Bromochloromethane	1.644967	3.610863	4.996333	2.197397E-02			20	
Bromodichloromethane	0.4304731	3.487005	6.683	2.845807E-02			SPCC (0.2)	
Bromoform	0.172047	4.767857	9.802333	1.739546E-02			SPCC (0.1)	
Bromomethane	0.6065482	18.42159	2.195333	7.978897E-02			SPCC (0.1)	
Carbon disulfide	3.30922	5.10625	3.285667	3.849166E-02			SPCC (0.1)	
Carbon tetrachloride	1.536276	5.505049	5.358333	3.596191E-02			SPCC (0.1)	
Chlorobenzene	0.9129019	3.456129	8.887	2.261119E-02			SPCC (0.5)	
Chloroethane	0.8865645	7.042972	2.296333	4.750124E-02			SPCC (0.1)	
Chloroform	2.089206	3.016395	5.060333	2.004851E-02			SPCC (0.2)	
Chloromethane	2.248057	6.224613	1.742	8.616358E-02			SPCC (0.1)	
cis-1,2-Dichloroethylene	2.613473	1.995989	4.759889	9.181783E-03			SPCC (0.1)	
cis-1,3-Dichloropropylene	0.5495836	1.953253	7.108	1.757439E-02			SPCC (0.2)	
Cyclohexane	2.730397	12.03715	5.238778	3.518499E-02			SPCC (0.1)	
Dibromochloromethane	0.3071331	2.894403	8.278445	2.700161E-02			SPCC (0.1)	
Dibromomethane	0.1737976	3.949915	6.542667	1.581022E-02			20	
Dichlorodifluoromethane	0.7781172	15.82488	1.551333	8.381368E-02			SPCC (0.1)	
Ethyl Benzene	1.545672	6.078685	8.976	2.099753E-03			SPCC (0.1)	
Hexachlorobutadiene	0.2422229	6.737871	13.842	1.034878E-02			20	
Isopropylbenzene	3.919381	4.61343	9.919333	2.391948E-02			SPCC (0.1)	
Methyl acetate	1.024356	7.518546	3.450333	0.1084763			SPCC (0.1)	
Methyl tert-butyl ether (MTBE)	3.397339	2.756821	3.778556	3.848149E-02			SPCC (0.1)	
Methylcyclohexane	0.4393944	12.70457	6.322333	1.554369E-02			SPCC (0.1)	
Methylene chloride	2.86724	20.96646	3.559222	4.326812E-02			SPCC (0.1)	
Naphthalene	0.9985842	15.53314	13.97122	1.629774E-02			20	
n-Butylbenzene	3.272811	4.113977	11.79567	3.334196E-02			20	
n-Propylbenzene	4.405093	6.143206	10.37333	2.795357E-02			20	
o-Xylene	1.234336	4.61654	9.532333	2.583089E-02			SPCC (0.3)	
p- & m- Xylenes	1.195893	7.560118	9.097	0.011029			SPCC (0.1)	
p-Bromofluorobenzene	1.225277	1.505035	10.12233	2.266303E-02			20	

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Calibration: YB80017 Instrument: MSVOA7  
 Matrix: Water Calibration Date: 02/14/18 12:07

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
p-Diethylbenzene	1.700895	3.957492	11.76656	3.476754E-02			20	
p-Ethyltoluene	3.763121	6.299672	10.49867	2.871093E-02			20	
p-Isopropyltoluene	3.346513	4.39413	11.33078	3.333915E-02			20	
sec-Butylbenzene	3.602154	5.444289	11.17067	2.228896E-02			20	
Styrene	1.030177	3.952197	9.555	0.0276192			SPCC (0.3)	
tert-Butyl alcohol (TBA)	0.1086504	12.13592	3.676	7.678642E-02			20	
tert-Butylbenzene	2.730931	4.038497	10.92689	2.829474E-02			20	
Tetrachloroethylene	0.4057729	7.347624	7.971333	0.0276163			SPCC (0.2)	
Toluene	1.436372	3.935838	7.420778	2.498101E-02			SPCC (0.4)	
Toluene-d8	1.305953	0.7500877	7.353556	1.920292E-02			20	
trans-1,2-Dichloroethylene	2.312492	2.98625	3.801667	0.0403579			SPCC (0.1)	
trans-1,3-Dichloropropylene	0.4813329	2.710941	7.668	1.756931E-02			SPCC (0.1)	
trans-1,4-dichloro-2-butene	0.8442331	3.655595	10.357	2.544427E-02			20	
Trichloroethylene	0.3476054	3.876254	6.173333	1.033861E-02			SPCC (0.2)	
Trichlorofluoromethane	1.399188	10.43934	2.540667	5.171176E-02			SPCC (0.1)	
Vinyl acetate	4.049247	8.75098	4.236222	0.0346537			20	
Vinyl Chloride	1.608291	6.166222	1.849444	7.127741E-02			SPCC (0.1)	

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YC80010Instrument: VOA No. 8Matrix: WaterCalibration Date: 03/08/18 14:07

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	0.5	0.4709149	2	0.3806048	4	0.3877883	10	0.389388	20	0.4165107	40	0.3987282
1,1,1-Trichloroethane	0.5	3.042071	2	2.436159	4	2.573351	10	2.542515	20	2.788002	40	2.676736
1,1,2,2-Tetrachloroethane	0.5	0.7049585	2	0.5919456	4	0.5544686	10	0.5501778	20	0.5501754	40	0.5212596
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	1.970625	2	1.837242	4	1.863474	10	1.785763	20	1.881407	40	1.72177
1,1,2-Trichloroethane	0.5	0.2401809	2	0.197266	4	0.1947146	10	0.1942568	20	0.1936829	40	0.1834723
1,1-Dichloroethane	0.5	3.168534	2	2.419764	4	2.491864	10	2.53317	20	2.666683	40	2.510242
1,1-Dichloroethylene	0.5	2.991287	2	2.529561	4	2.52557	10	2.509932	20	2.456753	40	2.288914
1,1-Dichloropropylene	0.5	2.298233	2	2.015352	4	2.075391	10	2.020303	20	2.127038	40	2.084832
1,2,3-Trichlorobenzene	0.5		2	5.917288E-02	4	6.656771E-02	10	6.609496E-02	20	6.894737E-02	40	6.531915E-02
1,2,3-Trichloropropane	0.5	0.1535204	2	0.1532426	4	0.1592228	10	0.1572056	20	0.1542495	40	0.1402128
1,2,4,5-Tetramethylbenzene	0.5	2.688371	2	3.212892	4	3.624904	10	3.914202	20	4.224405	40	4.048638
1,2,4-Trichlorobenzene	0.5	1.066702	2	0.9114358	4	0.9838978	10	1.051621	20	1.124912	40	1.052894
1,2,4-Trimethylbenzene	0.5	4.25622	2	4.092899	4	4.28361	10	4.41255	20	4.683899	40	4.465464
1,2-Dibromo-3-chloropropane	0.5	4.058585E-02	2	9.428646E-02	4	8.028606E-02	10	7.291362E-02	20	7.495127E-02	40	6.862128E-02
1,2-Dibromoethane	0.5	0.1897973	2	0.1824103	4	0.1797222	10	0.1827619	20	0.1867339	40	0.1740857
1,2-Dichlorobenzene	0.5	2.634551	2	2.065849	4	2.053704	10	2.016147	20	2.058226	40	1.927855
1,2-Dichloroethane	0.5	1.495644	2	1.227643	4	1.22824	10	1.185812	20	1.23266	40	1.159842
1,2-Dichloroethane-d4	10	0.8966393	10	0.8836944	10	0.8384214	10	0.8524462	10	0.8745193	10	0.9067486
1,2-Dichloropropane	0.5	0.4162373	2	0.325396	4	0.3338231	10	0.3278233	20	0.3424517	40	0.3181251
1,3,5-Trimethylbenzene	0.5	4.675313	2	4.33566	4	4.459137	10	4.53926	20	4.712515	40	4.424996
1,3-Dichlorobenzene	0.5	3.023646	2	2.385339	4	2.439055	10	2.459987	20	2.641014	40	2.563855
1,3-Dichloropropane	0.5	0.3544028	2	0.3147542	4	0.3168168	10	0.301928	20	0.314961	40	0.2880819
1,4-Dichlorobenzene	0.5	0.1799894	2	0.1757846	4	0.1802501	10	0.1745242	20	0.1836452	40	0.1711149
1,4-Dioxane	10		40		80		200	5.994274E-05	400	1.29488E-04	800	1.369196E-04
2,2-Dichloropropane	0.5	2.445606	2	2.185016	4	2.151196	10	2.113894	20	2.232611	40	2.111791
2-Butanone	0.5		2	8.445946E-03	4	2.414897E-02	10	3.639922E-02	20	4.110489E-02	40	3.736686E-02
2-Chlorotoluene	0.5	4.637374	2	3.968918	4	4.135969	10	4.211295	20	4.411637	40	4.186298
2-Hexanone	0.5	6.126188E-02	2	6.856457E-02	4	0.0705985	10	7.390587E-02	20	8.073001E-02	40	7.425303E-02
4-Chlorotoluene	0.5	4.064761	2	3.61193	4	3.59758	10	3.600962	20	3.684561	40	3.420136
4-Methyl-2-pentanone	0.5	0.1001947	2	0.1207736	4	0.1218784	10	0.1213664	20	0.1283491	40	0.1205653
Acetone	0.5	0.3584765	2	0.190779	4	0.140374	10	0.1081703	20	0.1096861	40	9.080965E-02

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YC80010Instrument: VOA No. 8Matrix: WaterCalibration Date: 03/08/18 14:07

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acrolein	0.5		2	4.843998E-02	4	0.0448112	10	5.728963E-02	20	0.0574349	40	0.0538295
Acrylonitrile	0.5	5.775454E-02	2	0.1165044	4	0.1225528	10	0.1249511	20	0.1342662	40	0.1216025
Benzene	0.5	6.305203	2	5.248907	4	5.353841	10	5.230431	20	5.654855	40	5.388242
Bromobenzene	0.5	1.790189	2	1.465883	4	1.520263	10	1.506296	20	1.555867	40	1.432409
Bromochloromethane	0.5	1.173015	2	0.9156399	4	0.9347074	10	0.9125734	20	0.9610854	40	0.8877116
Bromodichloromethane	0.5	0.5021184	2	0.4278144	4	0.4549184	10	0.4478075	20	0.4730448	40	0.4368131
Bromoform	0.5	0.1331158	2	0.1212022	4	0.1175896	10	0.1208022	20	0.1305117	40	0.1257196
Bromomethane	0.5	0.8683097	2	0.8582572	4	0.8883465	10	0.9453523	20	1.136846	40	1.202037
Carbon disulfide	0.5	4.31068	2	3.288951	4	3.272509	10	3.306213	20	3.495425	40	3.25948
Carbon tetrachloride	0.5	2.786159	2	2.402375	4	2.479725	10	2.486155	20	2.71835	40	2.628033
Chlorobenzene	0.5	1.23039	2	1.023112	4	1.040293	10	1.018956	20	1.059958	40	1.003329
Chloroethane	0.5	1.05651	2	1.018233	4	1.000181	10	0.9431996	20	1.003651	40	0.9730742
Chloroform	0.5	3.009211	2	2.515401	4	2.50749	10	2.461791	20	2.635313	40	2.457595
Chloromethane	0.5	2.044312	2	1.856369	4	1.827961	10	1.789041	20	1.872791	40	1.788869
cis-1,2-Dichloroethylene	0.5	2.349017	2	2.132601	4	1.931401	10	2.144961	20	2.314553	40	2.19532
cis-1,3-Dichloropropylene	0.5	0.4628993	2	0.432671	4	0.4570815	10	0.4646197	20	0.4997424	40	0.4619424
Cyclohexane	0.5	2.08713	2	2.273202	4	2.413864	10	2.424902	20	2.661937	40	2.511358
Dibromochloromethane	0.5	0.3140387	2	0.2644736	4	0.2686696	10	0.2736915	20	0.2913277	40	0.2755096
Dibromomethane	0.5	0.1726211	2	0.1464139	4	0.1435093	10	0.1447088	20	0.1495078	40	0.1370626
Dichlorodifluoromethane	0.5	1.86109	2	1.913007	4	1.905574	10	1.816536	20	1.929448	40	1.876155
Ethyl Benzene	0.5	1.9704	2	1.742969	4	1.858124	10	1.887491	20	2.014054	40	1.932423
Hexachlorobutadiene	0.5	0.5037939	2	0.4783683	4	0.480367	10	0.4761765	20	0.5266667	40	0.4644085
Isopropylbenzene	0.5	5.223222	2	5.051587	4	5.472833	10	5.571094	20	5.827973	40	5.39503
Methyl acetate	0.5	0.1712721	2	0.4108704	4	0.3410558	10	0.340362	20	0.3558773	40	0.3201706
Methyl tert-butyl ether (MTBE)	0.5	2.20463	2	1.739616	4	1.776564	10	1.751419	20	1.916695	40	1.812657
Methylcyclohexane	0.5	0.5725409	2	0.6277229	4	0.6754781	10	0.6714856	20	0.7135129	40	0.6601716
Methylene chloride	0.5	2.775205	2	1.933376	4	1.84462	10	1.720841	20	1.785082	40	1.648926
Naphthalene	0.5	1.658726	2	1.372681	4	1.467526	10	1.59703	20	1.676725	40	1.570162
n-Butylbenzene	0.5	5.334392	2	5.2575	4	5.4129	10	5.586112	20	5.929259	40	5.5672
n-Propylbenzene	0.5	7.12811	2	6.340818	4	6.582333	10	6.73424	20	7.060585	40	6.559821
o-Xylene	0.5	1.213214	2	1.181096	4	1.305904	10	1.350009	20	1.436985	40	1.37764

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YC80010Instrument: VOA No. 8Matrix: WaterCalibration Date: 03/08/18 14:07

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p- & m- Xylenes	1	1.545861	4	1.376505	8	1.427652	20	1.458922	40	1.567971	80	1.546623
p-Bromofluorobenzene	10	1.147785	10	1.13911	10	1.13444	10	1.154863	10	1.105146	10	1.069753
p-Diethylbenzene	0.5	2.029292	2	2.26851	4	2.479535	10	2.590755	20	2.844016	40	2.708962
p-Ethyltoluene	0.5	4.539439	2	4.993931	4	5.252553	10	5.291529	20	5.586901	40	5.37886
p-Isopropyltoluene	0.5	5.179107	2	4.745318	4	5.140332	10	5.363564	20	5.868012	40	5.715847
sec-Butylbenzene	0.5	5.374096	2	5.152376	4	5.54165	10	5.662958	20	6.021735	40	5.625498
Styrene	0.5	0.9561434	2	0.9271216	4	0.9796894	10	1.033737	20	1.096119	40	1.053666
tert-Butyl alcohol (TBA)	0.5	3.684342E-02	2		4	7.10264E-03	10	1.453033E-02	20	1.788756E-02	40	1.442966E-02
tert-Butylbenzene	0.5	3.923593	2	3.686492	4	3.923897	10	4.070655	20	4.335166	40	4.072528
Tetrachloroethylene	0.5	0.5817016	2	0.4641679	4	0.4736775	10	0.4770878	20	0.4998034	40	0.4728869
Toluene	0.5	1.967537	2	1.654549	4	1.68959	10	1.663037	20	1.738217	40	1.643735
Toluene-d8	10	1.459922	10	1.479538	10	1.50097	10	1.482349	10	1.466103	10	1.450727
trans-1,2-Dichloroethylene	0.5	2.368932	2	1.84693	4	1.994163	10	1.915313	20	2.075566	40	1.959838
trans-1,3-Dichloropropylene	0.5	0.4125157	2	0.315897	4	0.3413193	10	0.3530275	20	0.3682273	40	0.3434461
trans-1,4-dichloro-2-butene	0.5	0.7084877	2	0.6756112	4	0.6818693	10	0.6756745	20	0.6884405	40	0.6541447
Trichloroethylene	0.5	0.5104202	2	0.4156727	4	0.4286631	10	0.4302901	20	0.4540758	40	0.4282328
Trichlorofluoromethane	0.5	4.124471	2	3.696592	4	3.641975	10	3.478669	20	3.798564	40	3.692204
Vinyl acetate	0.5	0.9818272	2	0.9586149	4	0.9229557	10	0.9931507	20	0.9473838	40	0.9462699
Vinyl Chloride	0.5	1.721683	2	1.748559	4	1.728912	10	1.678425	20	1.796788	40	1.762308

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YC80010Instrument: VOA No. 8Matrix: WaterCalibration Date: 03/08/18 14:07

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	80	0.4723315	120	0.5189219	160	0.5244336						
1,1,1-Trichloroethane	80	2.802096	120	3.078563	160	3.172622						
1,1,2,2-Tetrachloroethane	80	0.5630671	120	0.572531	160	0.5923407						
1,1,2-Trichloro-1,2,2-trifluoroethane	80	1.548731	120	1.621322	160	1.573359						
1,1,2-Trichloroethane	80	0.1977963	120	0.2036305	160	0.1913051						
1,1-Dichloroethane	80	2.725284	120	2.891717	160	2.85783						
1,1-Dichloroethylene	80	2.314512	120	2.353378	160	2.342526						
1,1-Dichloropropylene	80	2.118636	120	2.294196	160	2.33863						
1,2,3-Trichlorobenzene	80	6.547126E-02	120	6.378755E-02	160	0.0649127						
1,2,3-Trichloropropane	80	0.1515274	120	0.155514	160	0.1603833						
1,2,4,5-Tetramethylbenzene	80	4.141825	120	4.221555	160	4.437677						
1,2,4-Trichlorobenzene	80	1.09146	120	1.11144	160	1.150281						
1,2,4-Trimethylbenzene	80	4.859127	120	5.023188	160	5.326092						
1,2-Dibromo-3-chloropropane	80	7.201661E-02	120	0.069538	160	6.772383E-02						
1,2-Dibromoethane	80	0.1899739	120	0.1939455	160	0.1855957						
1,2-Dichlorobenzene	80	1.972927	120	2.017163	160	2.097414						
1,2-Dichloroethane	80	1.31145	120	1.411916	160	1.408587						
1,2-Dichloroethane-d4	10	0.9878355	10	1.078081	10	1.108238						
1,2-Dichloropropane	80	0.3331572	120	0.340795	160	0.3318625						
1,3,5-Trimethylbenzene	80	4.457336	120	4.648114	160	4.987681						
1,3-Dichlorobenzene	80	2.828341	120	2.944546	160	3.072107						
1,3-Dichloropropane	80	0.3071656	120	0.3122712	160	0.2959858						
1,4-Dichlorobenzene	80	0.1779192	120	0.1854299	160	0.1955999						
1,4-Dioxane	1600	1.463965E-04	2400	1.741823E-04	3200	2.420823E-04						
2,2-Dichloropropane	80	2.133805	120	2.201828	160	2.179765						
2-Butanone	80	4.733091E-02	120	4.597823E-02	160	4.054603E-02						
2-Chlorotoluene	80	4.50194	120	4.6453	160	4.911859						
2-Hexanone	80	8.565637E-02	120	0.0868641	160	8.026445E-02						
4-Chlorotoluene	80	3.485868	120	3.583739	160	3.87303						
4-Methyl-2-pentanone	80	0.1332553	120	0.1358331	160	0.1263075						
Acetone	80	0.1046004	120	0.1177776	160	9.716269E-02						



## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YC80010Instrument: VOA No. 8Matrix: WaterCalibration Date: 03/08/18 14:07

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acrolein	80	6.549411E-02	120	6.631222E-02	160	6.506681E-02						
Acrylonitrile	80	0.1399183	120	0.137806	160	0.129211						
Benzene	80	5.787006	120	5.961284	160	5.922693						
Bromobenzene	80	1.474379	120	1.49462	160	1.60158						
Bromochloromethane	80	0.9126641	120	0.9173357	160	0.8633932						
Bromodichloromethane	80	0.466993	120	0.4813317	160	0.4711483						
Bromoform	80	0.146665	120	0.1542015	160	0.1492706						
Bromomethane	80	1.333903	120	1.37073	160	1.284023						
Carbon disulfide	80	3.281341	120	3.371386	160	3.366342						
Carbon tetrachloride	80	2.671735	120	2.970287	160	3.099008						
Chlorobenzene	80	1.095801	120	1.146624	160	1.143063						
Chloroethane	80	0.9774371	120	0.9841593	160	0.9317744						
Chloroform	80	2.652647	120	2.753583	160	2.707989						
Chloromethane	80	1.835857	120	1.929863	160	1.952536						
cis-1,2-Dichloroethylene	80	2.358838	120	2.448827	160	2.44684						
cis-1,3-Dichloropropylene	80	0.4951225	120	0.5074462	160	0.4861684						
Cyclohexane	80	2.250752	120	2.444659	160	2.420107						
Dibromochloromethane	80	0.3051837	120	0.3182678	160	0.3091484						
Dibromomethane	80	0.1485668	120	0.1526301	160	0.1465153						
Dichlorodifluoromethane	80	1.668715	120	1.71132	160	1.701611						
Ethyl Benzene	80	2.162225	120	2.31888	160	2.314913						
Hexachlorobutadiene	80	0.413844	120	0.4118115	160	0.4228408						
Isopropylbenzene	80	5.229226	120	5.317137	160	5.70885						
Methyl acetate	80	0.3588276	120	0.3629852	160	0.3345966						
Methyl tert-butyl ether (MTBE)	80	2.051872	120	2.211027	160	2.15866						
Methylcyclohexane	80	0.5524596	120	0.5792208	160	0.5676785						
Methylene chloride	80	1.766491	120	1.835112	160	1.782958						
Naphthalene	80	1.617124	120	1.603385	160	1.611785						
n-Butylbenzene	80	5.2954	120	5.391547	160	5.600511						
n-Propylbenzene	80	6.344378	120	6.452581	160	6.793876						
o-Xylene	80	1.538797	120	1.665564	160	1.680292						

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigat  
 Calibration: YC80010 Instrument: VOA No. 8  
 Matrix: Water Calibration Date: 03/08/18 14:07

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p- & m- Xylenes	160	1.807646	240	1.929786	320	1.846665						
p-Bromofluorobenzene	10	1.027936	10	0.9720979	10	1.024295						
p-Diethylbenzene	80	2.650989	120	2.718478	160	2.835455						
p-Ethyltoluene	80	5.543823	120	5.662289	160	5.966894						
p-Isopropyltoluene	80	5.903054	120	6.120079	160	6.315103						
sec-Butylbenzene	80	5.133628	120	5.217151	160	5.508605						
Styrene	80	1.193943	120	1.301182	160	1.306261						
tert-Butyl alcohol (TBA)	80	1.912466E-02	120	2.390096E-02	160	2.057982E-02						
tert-Butylbenzene	80	3.863803	120	3.964172	160	4.254352						
Tetrachloroethylene	80	0.4781466	120	0.5991879	160	0.5370536						
Toluene	80	1.75333	120	1.830458	160	1.82553						
Toluene-d8	10	1.423016	10	1.38522	10	1.355744						
trans-1,2-Dichloroethylene	80	2.086322	120	2.212712	160	2.264919						
trans-1,3-Dichloropropylene	80	0.3771717	120	0.3851896	160	0.3714462						
trans-1,4-dichloro-2-butene	80	0.6893833	120	0.7154871	160	0.7594103						
Trichloroethylene	80	0.4506033	120	0.4771772	160	0.4868051						
Trichlorofluoromethane	80	3.265963	120	3.32949	160	3.242131						
Vinyl acetate	80	0.979987	120	1.002962	160	1.022399						
Vinyl Chloride	80	1.73341	120	1.754911	160	1.702542						

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationCalibration: YC80010Instrument: VOA No. 8Matrix: WaterCalibration Date: 03/08/18 14:07

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1,2-Tetrachloroethane	0.439958	13.06431	8.006778	5.000281E-02			20	
1,1,1-Trichloroethane	2.790235	9.307645	4.310667	3.785703E-02			SPCC (0.1)	
1,1,2,2-Tetrachloroethane	0.5778805	9.093747	9.370222	5.149708E-02			SPCC (0.3)	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.755966	8.457789	2.306	9.153118E-02			SPCC (0.1)	
1,1,2-Trichloroethane	0.1995895	8.094532	6.941667	3.927387E-02			SPCC (0.1)	
1,1-Dichloroethane	2.696121	8.975715	3.386556	3.416389E-02			SPCC (0.2)	
1,1-Dichloroethylene	2.479159	8.630095	2.333667	4.215265E-02			SPCC (0.1)	
1,1-Dichloropropylene	2.152512	5.797059	4.456222	4.070649E-02			20	
1,2,3-Trichlorobenzene	0.0650342	4.309577	13.25037	2.654714E-02			20	
1,2,3-Trichloropropane	0.1538976	3.82741	9.397778	5.380015E-02			20	
1,2,4,5-Tetramethylbenzene	3.834941	14.74003	11.65767	2.586182E-02			20	
1,2,4-Trichlorobenzene	1.060516	6.995074	12.67511	5.209139E-03			SPCC (0.2)	
1,2,4-Trimethylbenzene	4.600339	8.793499	9.990667	4.342685E-02			20	
1,2-Dibromo-3-chloropropane	7.121366E-02	19.80863	11.78478	3.703631E-02			SPCC (0.05)	
1,2-Dibromoethane	0.1850029	3.253476	7.436	4.497651E-02			SPCC (0.1)	
1,2-Dichlorobenzene	2.09376	9.991783	10.85244	3.708089E-02			SPCC (0.4)	
1,2-Dichloroethane	1.295755	9.056344	4.727222	0.0433835			SPCC (0.1)	
1,2-Dichloroethane-d4	0.9362915	10.54355	4.657333	0.0668187			20	
1,2-Dichloropropane	0.3410746	8.547678	5.487778	6.439081E-02			SPCC (0.1)	
1,3,5-Trimethylbenzene	4.582224	4.313132	9.575889	4.879602E-02			20	
1,3-Dichlorobenzene	2.706432	9.826604	10.32667	4.227806E-02			SPCC (0.6)	
1,3-Dichloropropane	0.3118186	5.98974	7.098667	4.454166E-02			20	
1,4-Dichlorobenzene	0.180473	3.991844	10.43067	4.359643E-02			SPCC (0.5)	*
1,4-Dioxane	1.481686E-04	40.22234	5.632167	6.636233E-02			20	*
2,2-Dichloropropane	2.195057	4.661561	3.870333	4.115833E-02			20	
2-Butanone	3.516513E-02	36.77741	3.946625	4.745064E-02			SPCC (0.1)	
2-Chlorotoluene	4.401177	6.844022	9.494	0.0387034			20	
2-Hexanone	7.578875E-02	11.04471	7.169	4.238485E-02			SPCC (0.1)	
4-Chlorotoluene	3.658063	5.408525	9.615778	0.0635932			20	
4-Methyl-2-pentanone	0.1231693	8.339428	6.330333	5.437753E-02			SPCC (0.1)	
Acetone	0.11992	26.90457	2.444625	0.1212007			SPCC (0.1)	
Acrolein	5.733479E-02	14.06497	2.30775	0.1819974			20	

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Calibration: YC80010 Instrument: VOA No. 8  
 Matrix: Water Calibration Date: 03/08/18 14:07

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acrylonitrile	0.1205074	20.57931	3.057444	0.0494003			20	*
Benzene	5.650273	6.599823	4.656667	4.820452E-02			SPCC (0.5)	
Bromobenzene	1.537943	6.956148	9.292444	0.035485			20	
Bromochloromethane	0.942014	9.637767	4.135333	3.450572E-02			20	
Bromodichloromethane	0.4624433	4.993917	5.777111	0.032506			SPCC (0.2)	
Bromoform	0.1332309	10.2267	8.833445	3.132186E-02			SPCC (0.1)	
Bromomethane	1.098645	19.15925	1.635667	5.890686E-02			SPCC (0.1)	
Carbon disulfide	3.439147	9.740842	2.519111	5.563397E-02			SPCC (0.1)	
Carbon tetrachloride	2.693536	8.591825	4.443111	7.266604E-02			SPCC (0.1)	
Chlorobenzene	1.084614	6.984486	7.907444	2.474957E-02			SPCC (0.5)	
Chloroethane	0.9875799	3.841943	1.710333	7.905538E-02			SPCC (0.1)	
Chloroform	2.633447	6.7362	4.206667	6.744961E-02			SPCC (0.2)	
Chloromethane	1.877511	4.47751	1.303222	9.310429E-02			SPCC (0.1)	
cis-1,2-Dichloroethylene	2.25804	7.555054	3.908667	2.157605E-02			SPCC (0.1)	
cis-1,3-Dichloropropylene	0.4741882	5.125751	6.184889	2.975271E-02			SPCC (0.2)	
Cyclohexane	2.387546	6.930928	4.315	0.0450562			SPCC (0.1)	
Dibromochloromethane	0.2911456	7.231888	7.335889	0.02812			SPCC (0.1)	
Dibromomethane	0.1490595	6.605083	5.626667	2.703746E-02			20	
Dichlorodifluoromethane	1.820384	5.545248	1.159667	8.503081E-02			SPCC (0.1)	
Ethyl Benzene	2.022387	9.999232	7.997667	3.470246E-02			SPCC (0.1)	
Hexachlorobutadiene	0.464253	8.705122	12.837	5.935667E-03			20	
Isopropylbenzene	5.421884	4.599465	8.930667	3.291096E-02			SPCC (0.1)	
Methyl acetate	0.3328908	19.75434	2.701	8.000653E-02			SPCC (0.1)	
Methyl tert-butyl ether (MTBE)	1.958127	10.21452	2.979222	7.585885E-02			SPCC (0.1)	
Methylcyclohexane	0.6244745	9.334112	5.358	4.144928E-02			SPCC (0.1)	
Methylene chloride	1.899179	17.79992	2.794667	5.664773E-02			SPCC (0.1)	
Naphthalene	1.575016	6.118096	12.96678	0.0160153			20	
n-Butylbenzene	5.486091	3.823492	10.79722	4.657553E-02			20	
n-Propylbenzene	6.666305	4.31928	9.378778	4.932967E-02			20	
o-Xylene	1.416611	12.77234	8.544444	4.155845E-02			SPCC (0.3)	
p- & m- Xylenes	1.611959	12.36444	8.119444	6.479991E-02			SPCC (0.1)	
p-Bromofluorobenzene	1.086158	6.046889	9.136222	2.122569E-02			20	

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Calibration: YC80010 Instrument: VOA No. 8  
 Matrix: Water Calibration Date: 03/08/18 14:07

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
p-Diethylbenzene	2.569555	10.52691	10.76967	4.097634E-02			20	
p-Ethyltoluene	5.357358	7.721087	9.503667	5.959816E-02			20	
p-Isopropyltoluene	5.594491	9.230833	10.33411	4.535575E-02			20	
sec-Butylbenzene	5.470855	5.248569	10.16711	3.525906E-02			20	
Styrene	1.094207	13.05116	8.577556	0.0498662			SPCC (0.3)	
tert-Butyl alcohol (TBA)	1.929988E-02	44.99368	2.970875	0.481064			20	*
tert-Butylbenzene	4.010518	4.955935	9.926444	2.526756E-02			20	
Tetrachloroethylene	0.5093015	10.01714	6.988778	0.0434856			SPCC (0.2)	
Toluene	1.751776	6.096248	6.465	2.772227E-02			SPCC (0.4)	
Toluene-d8	1.444843	3.323281	6.398889	2.564633E-02			20	
trans-1,2-Dichloroethylene	2.080522	8.300707	2.997333	5.072896E-02			SPCC (0.1)	
trans-1,3-Dichloropropylene	0.3631378	7.797417	6.749778	2.756254E-02			SPCC (0.1)	
trans-1,4-dichloro-2-butene	0.6942787	4.383944	10.43033	4.110182E-02			20	
Trichloroethylene	0.4535489	7.03449	5.248	4.055833E-02			SPCC (0.2)	
Trichlorofluoromethane	3.585562	8.00925	1.891889	6.483121E-02			SPCC (0.1)	
Vinyl acetate	0.9728389	3.240945	3.428333	8.817087E-02			20	
Vinyl Chloride	1.736393	1.994722	1.378111	9.864489E-02			SPCC (0.1)	

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723799.D  
 Acq On : 14 Feb 2018 12:35 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL1  
 Misc : QBV7021318A  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 14 10:37:25 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	5.825	70	195745	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	8.855	117	734332	10.00	ppb	# 0.00
67) 1,2-DICHLOROBENZENE-d4...	11.841	152	277007	10.00	ppb	0.00

System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.536	65	249908	10.98	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	109.80%		
51) Toluene-d8 (SURR)	7.353	98	954548	9.40	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.00%		
70) p-Bromofluorobenzene (...)	10.121	95	339118	9.53	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.30%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.552	85	9356m	0.48	ppb	
3) Chloromethane	1.741	50	23860	0.78	ppb	99
4) Vinyl Chloride	1.850	62	17132	0.48	ppb	100
5) Bromomethane	2.195	94	4965	0.26	ppb	96
6) Chloroethane	2.297	64	10005	0.48	ppb	99
7) Trichlorofluoromethane	2.540	101	15897	0.48	ppb	99
8) Ethanol	2.796	45	2746m	62.00	ppb	
9) Freon-113	3.043	101	10775	0.47	ppb	# 89
10) 1,1-Dichloroethylene	3.063	61	23785	0.49	ppb	# 77
12) Acetone	3.160	43	5619	1.48	ppb	# 1
14) Methyl Acetate	3.458	43	8303	0.75	ppb	95
15) Carbon disulfide	3.285	76	35699	0.41	ppb	100
17) Methylene Chloride	3.561	49	43125	1.33	ppb	# 66
18) Acrylonitrile	3.836	53	5325m	0.92	ppb	
19) trans-1,2-Dichloroethy...	3.800	61	23852	0.49	ppb	# 87
20) tert-Butyl Methyl Ethe...	3.780	73	35292	0.48	ppb	# 90
21) 1,1-Dichloroethane	4.214	63	28396	0.47	ppb	99
22) Vinyl Acetate	4.234	43	42092m	0.79	ppb	
23) Diisopropyl ether (DIPE)	4.220	45	75897	0.99	ppb	93
24) Ethyl-tert-Butyl ether...	4.562	59	58131	0.58	ppb	# 98
25) cis-1,2-Dichloroethylene	4.760	61	26456	0.50	ppb	89
26) 2-Butanone	4.782	72	1179m	0.55	ppb	
27) 2,2-Dichloropropane	4.738	77	17369	0.42	ppb	# 66
28) Tetrahydrofuran	5.044	71	2008m	0.89	ppb	
29) Bromochloromethane	4.996	49	17303	0.91	ppb	# 86
30) Chloroform	5.063	83	21877	0.44	ppb	# 67
31) 1,1,1-Trichloroethane	5.210	97	18828	0.43	ppb	# 68
32) Cyclohexane	5.236	56	31099	0.68	ppb	# 75
33) 1,1-Dichloropropylene	5.364	75	17381	0.43	ppb	# 80
35) Carbon Tetrachloride	5.358	117	13930	0.40	ppb	# 59
36) tert-Amyl alcohol (TAA)	5.575	59	14031	6.89	ppb	# 84
37) 1,2-Dichloroethane	5.611	62	17371	0.50	ppb	# 98
38) Benzene	5.567	78	52993	0.44	ppb	# 1
39) tert-Amyl methyl ether...	5.633	73	39890	0.51	ppb	97
41) Trichloroethylene	6.173	95	13653	0.44	ppb	98
42) Methyl Cyclohexane	6.323	83	18888	0.48	ppb	# 63
43) Methyl Methacrylate	6.479	69	9371m	0.62	ppb	
44) Dibromomethane	6.543	93	6810	0.47	ppb	# 98
45) Bromodichloromethane	6.682	83	16887	0.48	ppb	# 92
46) 1,2-Dichloropropane	6.407	63	16589	0.49	ppb	# 100
48) 2-Chloroethyl vinyl ether	6.949	63	6753	0.45	ppb	# 100
49) cis-1,3-Dichloropropene	7.108	75	20472	0.45	ppb	# 81
50) 4-Methyl-2-Pentanone	7.239	43	16178	0.98	ppb	# 88
52) Toluene	7.420	91	56745	0.46	ppb	99
53) trans-1,3-Dichloropropene	7.670	75	18482	0.49	ppb	# 100
54) 1,1,2-Trichloroethane	7.865	97	9811	0.47	ppb	94
55) 1,3-Dichloropropane	8.034	76	17039	0.47	ppb	# 100
56) Tetrachloroethylene	7.970	166	16496	0.56	ppb	# 100

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723799.D  
 Acq On : 14 Feb 2018 12:35 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL1  
 Misc : QBV7021318A  
 ALS Vial : 17 Sample Multiplier: 1

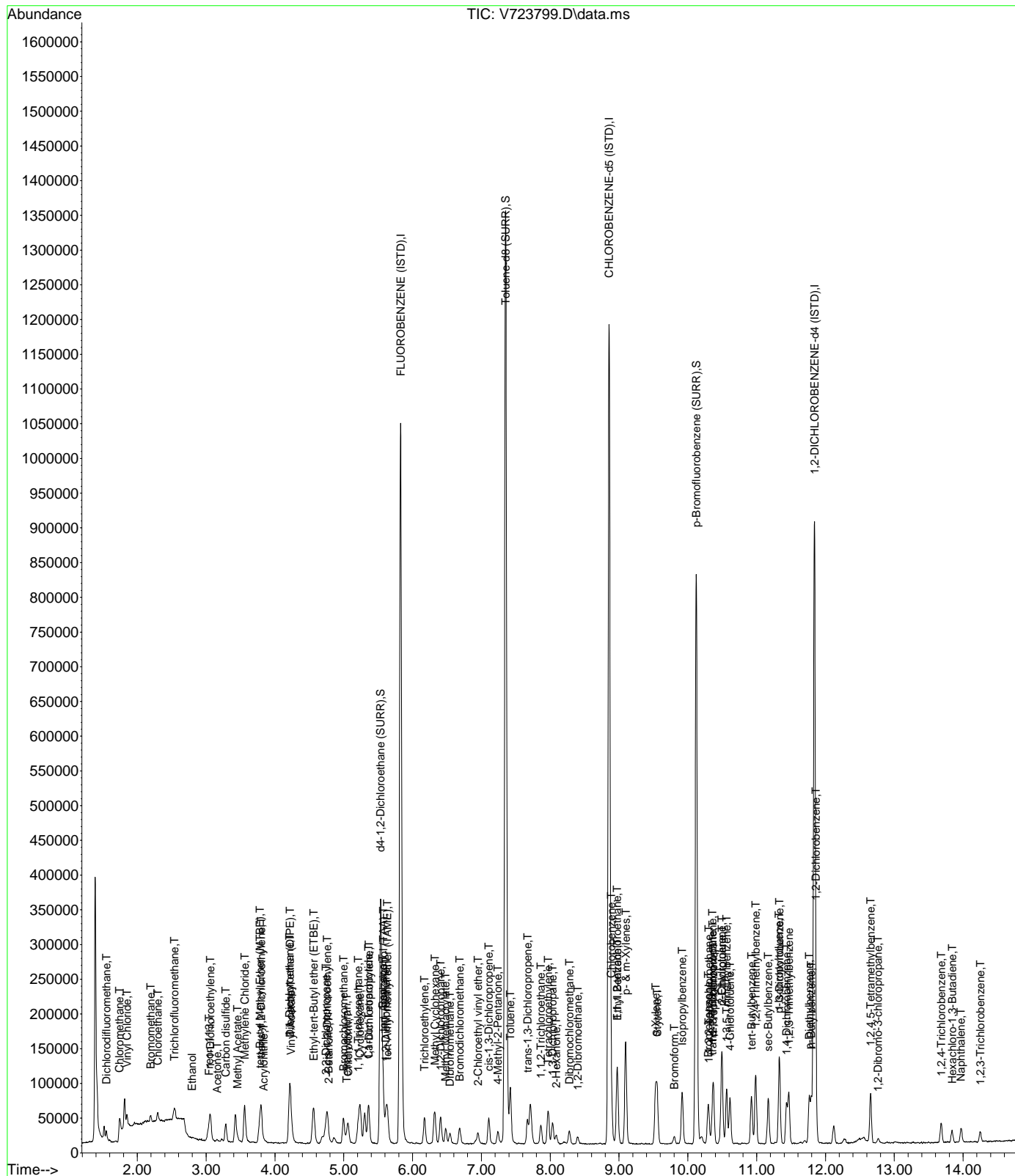
Quant Time: Feb 14 10:37:25 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) 2-Hexanone	8.087	43	12239	1.08	ppb	# 93
58) Dibromochloromethane	8.279	129	11345	0.47	ppb	# 93
59) 1,2-Dibromoethane	8.399	107	9198	0.46	ppb	92
60) Chlorobenzene	8.886	112	36105	0.46	ppb	# 54
61) 1,1,1,2-tetrachloroethane	8.972	131	13200	0.51	ppb	# 69
62) Ethyl Benzene	8.975	91	62278	0.47	ppb	100
63) p- & m-Xylenes	9.097	91	94815	0.94	ppb	98
64) o-Xylene	9.531	91	49337	0.48	ppb	99
65) Styrene	9.554	104	40202	0.50	ppb	# 100
66) Bromoform	9.804	173	6129	0.48	ppb	# 82
68) p-Ethyltoluene	10.497	105	58165	0.53	ppb	# 88
69) Isopropylbenzene	9.918	105	58204	0.47	ppb	98
71) 1,1,2,2-Tetrachloroethane	10.305	83	10746	0.47	ppb	# 98
72) Bromobenzene	10.296	77	22208	0.49	ppb	# 93
73) trans-1,4-Dichloro-2-b...	10.355	75	12130	0.48	ppb	# 88
74) 1,2,3-Trichloropropane	10.360	110	3107	0.49	ppb	72
75) n-Propylbenzene	10.372	91	67092	0.46	ppb	98
76) 2-Chlorotoluene	10.494	91	46221	0.48	ppb	100
77) 4-Chlorotoluene	10.614	91	42308	0.47	ppb	100
78) 1,3,5-Trimethylbenzene	10.564	105	48783	0.48	ppb	99
79) tert-Butylbenzene	10.925	119	40370	0.48	ppb	98
80) 1,2,4-Trimethylbenzene	10.984	105	49264	0.49	ppb	98
81) sec-Butylbenzene	11.167	105	54763	0.48	ppb	99
82) 1,3-Dichlorobenzene	11.331	146	25926	0.48	ppb	98
83) p-Isopropyltoluene	11.326	119	49123	0.47	ppb	99
84) 1,4-Dichlorobenzene	11.434	146	26247	0.48	ppb	95
85) 1,2,3-Trimethylbenzene	11.468	105	48413	0.53	ppb	# 58
86) p-Diethylbenzene	11.763	105	25093	0.47	ppb	94
87) 1,2-Dichlorobenzene	11.860	146	23662	0.49	ppb	# 100
88) n-Butylbenzene	11.793	91	48158	0.45	ppb	96
89) 1,2-Dibromo-3-chloropr...	12.762	75	2014	0.59	ppb	# 84
90) 1,2,4,5-Tetramethylben...	12.656	119	43753	0.51	ppb	99
91) 1,2,4-Trichlorobenzene	13.682	180	9913	0.53	ppb	# 94
92) Hexachloro-1,3-Butadiene	13.841	225	3842	0.49	ppb	# 1
93) Naphthalene	13.969	128	18078	0.53	ppb	# 82
94) 1,2,3-Trichlorobenzene	14.250	180	4903	0.59	ppb	# 78

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723799.D  
 Acq On : 14 Feb 2018 12:35 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL1  
 Misc : QBV7021318A  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Feb 14 10:37:25 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration





Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723800.D  
 Acq On : 14 Feb 2018 1:07 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL2  
 Misc : QBV7021318A  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 14 10:18:12 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
1) FLUOROBENZENE (ISTD)	5.825	70	199185	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.855	117	742138	10.00	ppb	#	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.840	152	281818	10.00	ppb		0.00
System Monitoring Compounds							
34) d4-1,2-Dichloroethane ...	5.536	65	254757	11.00	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	110.00%			
51) Toluene-d8 (SURR)	7.353	98	963960	9.39	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	93.90%			
70) p-Bromofluorobenzene (...)	10.121	95	347661	9.60	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.00%			
Target Compounds							
						Qvalue	
2) Dichlorodifluoromethane	1.549	85	38955	1.98	ppb	#	100
3) Chloromethane	1.741	50	88798	2.87	ppb		99
4) Vinyl Chloride	1.849	62	66559	1.85	ppb		99
5) Bromomethane	2.194	94	18952	0.96	ppb		98
6) Chloroethane	2.295	64	36519	1.72	ppb		98
7) Trichlorofluoromethane	2.539	101	62944	1.88	ppb		100
8) Ethanol	2.787	45	8042	178.44	ppb		100
9) Freon-113	3.037	101	45833	1.94	ppb	#	60
10) 1,1-Dichloroethylene	3.063	61	91296	1.85	ppb		80
11) Acrolein	3.007	56	5510	8.11	ppb	#	1
12) Acetone	3.152	43	13755	3.56	ppb	#	1
13) Iodomethane	3.227	142	23953	0.87	ppb		99
14) Methyl Acetate	3.452	43	41390	3.67	ppb		95
15) Carbon disulfide	3.285	76	134488	1.54	ppb		100
16) tert-Butyl Alcohol (TBA)	3.680	59	4208	2.17	ppb	#	1
17) Methylene Chloride	3.558	49	122464	3.72	ppb	#	65
18) Acrylonitrile	3.828	53	11797	2.01	ppb	#	82
19) trans-1,2-Dichloroethy...	3.803	61	93010	1.88	ppb	#	99
20) tert-Butyl Methyl Ethe...	3.780	73	134441	1.79	ppb		95
21) 1,1-Dichloroethane	4.212	63	108316	1.76	ppb	#	86
22) Vinyl Acetate	4.237	43	155426m	2.85	ppb		
23) Diisopropyl ether (DIPE)	4.217	45	291603	3.74	ppb	#	93
24) Ethyl-tert-Butyl ether...	4.559	59	217144	2.14	ppb	#	86
25) cis-1,2-Dichloroethylene	4.760	61	102674	1.90	ppb		87
26) 2-Butanone	4.779	72	3871	1.77	ppb	#	1
27) 2,2-Dichloropropane	4.737	77	65484	1.56	ppb	#	66
28) Tetrahydrofuran	5.038	71	4117	1.80	ppb	#	73
29) Bromochloromethane	4.996	49	66189	3.43	ppb	#	84
30) Chloroform	5.060	83	82059	1.63	ppb	#	99
31) 1,1,1-Trichloroethane	5.208	97	73101	1.65	ppb	#	100
32) Cyclohexane	5.238	56	130254	2.82	ppb	#	76
33) 1,1-Dichloropropylene	5.361	75	63675	1.56	ppb	#	87
35) Carbon Tetrachloride	5.355	117	59825	1.69	ppb		99
36) tert-Amyl alcohol (TAA)	5.572	59	46848	22.61	ppb	#	84
37) 1,2-Dichloroethane	5.608	62	68661	1.95	ppb		99
38) Benzene	5.567	78	199099	1.63	ppb	#	57
39) tert-Amyl methyl ether...	5.628	73	146833	1.85	ppb	#	96
41) Trichloroethylene	6.173	95	50109	1.62	ppb		97
42) Methyl Cyclohexane	6.321	83	78566	1.98	ppb	#	61
43) Methyl Methacrylate	6.482	69	28515	1.86	ppb	#	46
44) Dibromomethane	6.543	93	25025	1.72	ppb	#	99
45) Bromodichloromethane	6.682	83	61157	1.71	ppb	#	92
46) 1,2-Dichloropropane	6.407	63	62798	1.85	ppb	#	99
47) 1,4-Dioxane	6.546	88	1551m	38.69	ppb		
48) 2-Chloroethyl vinyl ether	6.949	63	27721	1.83	ppb	#	100
49) cis-1,3-Dichloropropene	7.108	75	80558	1.77	ppb	#	84
50) 4-Methyl-2-Pentanone	7.239	43	64812	3.87	ppb	#	87
52) Toluene	7.419	91	215291	1.71	ppb		99

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723800.D  
 Acq On : 14 Feb 2018 1:07 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL2  
 Misc : QBV7021318A  
 ALS Vial : 18 Sample Multiplier: 1

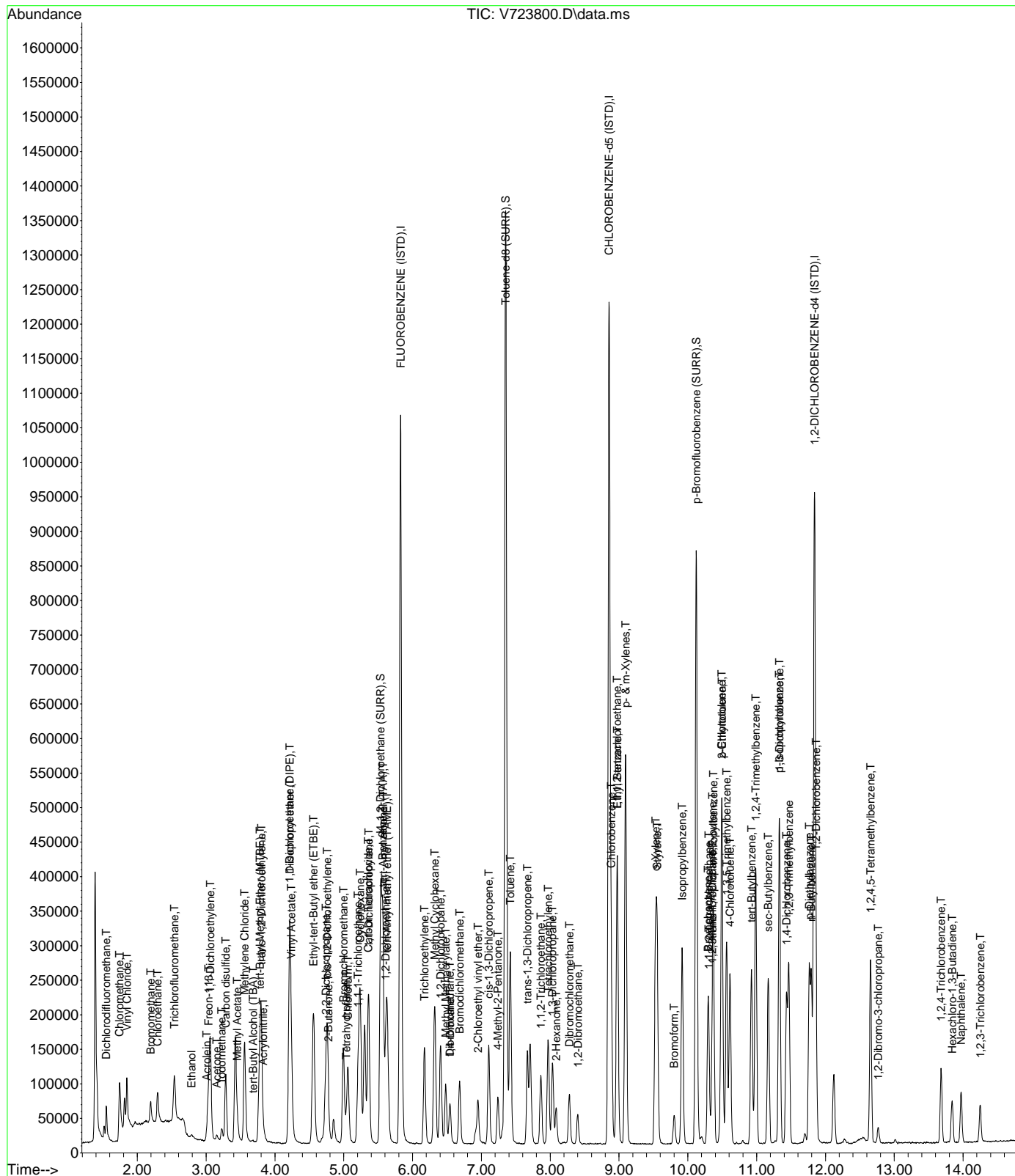
Quant Time: Feb 14 10:18:12 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.667	75	69555	1.81	ppb	# 100
54) 1,1,2-Trichloroethane	7.865	97	35549	1.68	ppb	91
55) 1,3-Dichloropropane	8.032	76	64153	1.75	ppb	# 100
56) Tetrachloroethylene	7.970	166	53990	1.81	ppb	# 100
57) 2-Hexanone	8.087	43	44229	3.87	ppb	# 89
58) Dibromochloromethane	8.279	129	44075	1.80	ppb	96
59) 1,2-Dibromoethane	8.402	107	35367	1.76	ppb	98
60) Chlorobenzene	8.886	112	136213	1.71	ppb	98
61) 1,1,1,2-tetrachloroethane	8.972	131	48965	1.87	ppb	98
62) Ethyl Benzene	8.975	91	237787	1.78	ppb	98
63) p- & m-Xylenes	9.094	91	365753	3.57	ppb	98
64) o-Xylene	9.531	91	186435	1.80	ppb	100
65) Styrene	9.553	104	154676	1.89	ppb	# 100
66) Bromoform	9.801	173	24357	1.89	ppb	# 80
68) p-Ethyltoluene	10.497	105	223371	2.00	ppb	# 75
69) Isopropylbenzene	9.918	105	228717	1.82	ppb	99
71) 1,1,2,2-Tetrachloroethane	10.305	83	39492	1.69	ppb	# 97
72) Bromobenzene	10.294	77	83828	1.80	ppb	# 93
73) trans-1,4-Dichloro-2-b...	10.355	75	46176	1.80	ppb	# 90
74) 1,2,3-Trichloropropane	10.352	110	12004	1.87	ppb	70
75) n-Propylbenzene	10.371	91	255246	1.74	ppb	98
76) 2-Chlorotoluene	10.491	91	176363	1.79	ppb	100
77) 4-Chlorotoluene	10.614	91	162508	1.79	ppb	100
78) 1,3,5-Trimethylbenzene	10.563	105	188344	1.83	ppb	98
79) tert-Butylbenzene	10.925	119	155758	1.82	ppb	97
80) 1,2,4-Trimethylbenzene	10.986	105	185646	1.81	ppb	97
81) sec-Butylbenzene	11.167	105	208096	1.79	ppb	98
82) 1,3-Dichlorobenzene	11.331	146	100491	1.84	ppb	98
83) p-Isopropyltoluene	11.329	119	192356	1.82	ppb	98
84) 1,4-Dichlorobenzene	11.434	146	101143	1.83	ppb	98
85) 1,2,3-Trimethylbenzene	11.468	105	175074	1.87	ppb	# 59
86) p-Diethylbenzene	11.763	105	95007	1.75	ppb	93
87) 1,2-Dichlorobenzene	11.863	146	90282	1.84	ppb	# 100
88) n-Butylbenzene	11.793	91	184991	1.68	ppb	96
89) 1,2-Dibromo-3-chloropr...	12.764	75	6884	1.98	ppb	# 82
90) 1,2,4,5-Tetramethylben...	12.656	119	167389	1.91	ppb	98
91) 1,2,4-Trichlorobenzene	13.680	180	37402	1.96	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.841	225	14447	1.82	ppb	# 1
93) Naphthalene	13.972	128	63747	1.84	ppb	# 83
94) 1,2,3-Trichlorobenzene	14.250	180	18427	2.18	ppb	# 85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7021318\  
Data File : V723800.D  
Acq On : 14 Feb 2018 1:07 am  
InstName : MSVOA7  
Operator : SS  
Sample : SEQ-CAL2  
Misc : QBV7021318A  
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Feb 14 10:18:12 2018  
Quant Method : C:\msdchem\1\methods\V7L00113.M  
Quant Title : Volatile Organics EPA 8260C  
QLast Update : Tue Jan 09 16:39:48 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723801.D  
 Acq On : 14 Feb 2018 1:38 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL3  
 Misc : QBV7021318A  
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 14 10:20:44 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) FLUOROBENZENE (ISTD)	5.825	70	203653	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.855	117	761129	10.00	ppb	#	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.838	152	287347	10.00	ppb		0.00
System Monitoring Compounds							
34) d4-1,2-Dichloroethane ...	5.536	65	254780	10.76	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.60%			
51) Toluene-d8 (SURR)	7.353	98	982972	9.34	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	93.40%			
70) p-Bromofluorobenzene (...)	10.121	95	352620	9.55	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.50%			
Target Compounds							
						Qvalue	
2) Dichlorodifluoromethane	1.552	85	62126	3.09	ppb	#	100
3) Chloromethane	1.744	50	178610	5.64	ppb		98
4) Vinyl Chloride	1.850	62	129170	3.51	ppb		98
5) Bromomethane	2.195	94	40495	2.01	ppb		97
6) Chloroethane	2.297	64	70927	3.26	ppb		99
7) Trichlorofluoromethane	2.540	101	110058	3.21	ppb		100
8) Ethanol	2.793	45	13465	292.21	ppb		100
9) Freon-113	3.043	101	73439	3.05	ppb	#	89
10) 1,1-Dichloroethylene	3.063	61	182336	3.61	ppb	#	75
11) Acrolein	3.001	56	12734	18.34	ppb	#	1
12) Acetone	3.154	43	27836	7.05	ppb	#	1
13) Iodomethane	3.230	142	61205	2.18	ppb		99
14) Methyl Acetate	3.452	43	84490m	7.32	ppb		
15) Carbon disulfide	3.285	76	271151	3.03	ppb		100
16) tert-Butyl Alcohol (TBA)	3.680	59	7904	3.98	ppb	#	1
17) Methylene Chloride	3.561	49	227997	6.77	ppb	#	65
18) Acrylonitrile	3.828	53	26145	4.35	ppb	#	76
19) trans-1,2-Dichloroethy...	3.803	61	188899	3.73	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.780	73	278385	3.62	ppb		94
21) 1,1-Dichloroethane	4.212	63	223340	3.55	ppb		98
22) Vinyl Acetate	4.237	43	290644m	5.21	ppb		
23) Diisopropyl ether (DIPE)	4.220	45	598328	7.50	ppb	#	87
24) Ethyl-tert-Butyl ether...	4.559	59	447423	4.32	ppb	#	86
25) cis-1,2-Dichloroethylene	4.760	61	214046	3.87	ppb		88
26) 2-Butanone	4.779	72	8567	3.84	ppb	#	1
27) 2,2-Dichloropropane	4.743	77	133438	3.10	ppb	#	89
28) Tetrahydrofuran	5.030	71	8127	3.47	ppb	#	78
29) Bromochloromethane	4.996	49	135413	6.86	ppb	#	85
30) Chloroform	5.060	83	168099	3.27	ppb	#	99
31) 1,1,1-Trichloroethane	5.208	97	148101	3.28	ppb	#	100
32) Cyclohexane	5.238	56	222073	4.70	ppb	#	77
33) 1,1-Dichloropropylene	5.361	75	137326	3.30	ppb	#	88
35) Carbon Tetrachloride	5.358	117	125798	3.47	ppb		100
36) tert-Amyl alcohol (TAA)	5.572	59	102946	48.59	ppb		98
37) 1,2-Dichloroethane	5.608	62	140727	3.90	ppb		99
38) Benzene	5.567	78	411112	3.28	ppb	#	85
39) tert-Amyl methyl ether...	5.631	73	302218	3.73	ppb	#	93
41) Trichloroethylene	6.173	95	105013	3.30	ppb		97
42) Methyl Cyclohexane	6.321	83	128565	3.16	ppb	#	62
43) Methyl Methacrylate	6.482	69	59273	3.78	ppb	#	47
44) Dibromomethane	6.543	93	51557	3.45	ppb	#	97
45) Bromodichloromethane	6.682	83	127655	3.47	ppb	#	93
46) 1,2-Dichloropropane	6.407	63	127818	3.67	ppb	#	99
47) 1,4-Dioxane	6.540	88	2740	66.64	ppb		99
48) 2-Chloroethyl vinyl ether	6.949	63	53483	3.45	ppb	#	100
49) cis-1,3-Dichloropropene	7.108	75	164601	3.52	ppb	#	84
50) 4-Methyl-2-Pentanone	7.239	43	131109	7.63	ppb	#	87
52) Toluene	7.420	91	444896	3.44	ppb		99

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723801.D  
 Acq On : 14 Feb 2018 1:38 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL3  
 Misc : QBV7021318A  
 ALS Vial : 19 Sample Multiplier: 1

Quant Time: Feb 14 10:20:44 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.667	75	144534	3.66	ppb	# 100
54) 1,1,2-Trichloroethane	7.862	97	73789	3.39	ppb	92
55) 1,3-Dichloropropane	8.034	76	129731	3.45	ppb	# 100
56) Tetrachloroethylene	7.970	166	132575	4.32	ppb	# 100
57) 2-Hexanone	8.085	43	93100	7.95	ppb	# 91
58) Dibromochloromethane	8.279	129	91195	3.64	ppb	96
59) 1,2-Dibromoethane	8.399	107	70555	3.43	ppb	96
60) Chlorobenzene	8.886	112	281130	3.44	ppb	# 91
61) 1,1,1,2-tetrachloroethane	8.972	131	99200	3.69	ppb	98
62) Ethyl Benzene	8.975	91	486068	3.54	ppb	98
63) p- & m-Xylenes	9.097	91	765032	7.29	ppb	99
64) o-Xylene	9.531	91	383936	3.61	ppb	99
65) Styrene	9.554	104	318606	3.80	ppb	# 100
66) Bromoform	9.801	173	49716	3.77	ppb	# 80
68) p-Ethyltoluene	10.497	105	442063	3.89	ppb	# 75
69) Isopropylbenzene	9.918	105	469975	3.67	ppb	98
71) 1,1,2,2-Tetrachloroethane	10.305	83	82487	3.45	ppb	# 97
72) Bromobenzene	10.294	77	172037	3.63	ppb	# 93
73) trans-1,4-Dichloro-2-b...	10.355	75	97055	3.72	ppb	# 88
74) 1,2,3-Trichloropropane	10.352	110	24067	3.69	ppb	69
75) n-Propylbenzene	10.372	91	537216	3.59	ppb	98
76) 2-Chlorotoluene	10.491	91	364034	3.63	ppb	100
77) 4-Chlorotoluene	10.614	91	341030	3.69	ppb	99
78) 1,3,5-Trimethylbenzene	10.564	105	389976	3.72	ppb	98
79) tert-Butylbenzene	10.925	119	323731	3.72	ppb	97
80) 1,2,4-Trimethylbenzene	10.986	105	389130	3.71	ppb	97
81) sec-Butylbenzene	11.170	105	426035	3.59	ppb	98
82) 1,3-Dichlorobenzene	11.331	146	206425	3.70	ppb	98
83) p-Isopropyltoluene	11.329	119	396450	3.67	ppb	98
84) 1,4-Dichlorobenzene	11.434	146	208815	3.70	ppb	98
85) 1,2,3-Trimethylbenzene	11.468	105	389386	4.07	ppb	# 59
86) p-Diethylbenzene	11.765	105	195785	3.53	ppb	96
87) 1,2-Dichlorobenzene	11.860	146	185241	3.71	ppb	# 100
88) n-Butylbenzene	11.793	91	383508	3.42	ppb	98
89) 1,2-Dibromo-3-chloropr...	12.767	75	13512	3.81	ppb	# 77
90) 1,2,4,5-Tetramethylben...	12.656	119	328885	3.68	ppb	99
91) 1,2,4-Trichlorobenzene	13.680	180	72634	3.74	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.841	225	27931	3.46	ppb	# 1
93) Naphthalene	13.972	128	119285	3.37	ppb	# 83
94) 1,2,3-Trichlorobenzene	14.247	180	33316	3.86	ppb	# 85

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723802.D  
 Acq On : 14 Feb 2018 2:10 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL4  
 Misc : QBV7021318A  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 10:21:50 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) FLUOROBENZENE (ISTD)	5.825	70	208923	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.855	117	776850	10.00	ppb	#	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.841	152	301800	10.00	ppb		0.00
<b>System Monitoring Compounds</b>							
34) d4-1,2-Dichloroethane ...	5.536	65	262611	10.81	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	108.10%		
51) Toluene-d8 (SURR)	7.353	98	1006928	9.37	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	93.70%		
70) p-Bromofluorobenzene (...)	10.121	95	364741	9.41	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	94.10%		
<b>Target Compounds</b>							
							<b>Qvalue</b>
2) Dichlorodifluoromethane	1.552	85	139312	6.75	ppb	#	100
3) Chloromethane	1.744	50	425250	13.10	ppb		98
4) Vinyl Chloride	1.850	62	297671	7.89	ppb		99
5) Bromomethane	2.197	94	104662	5.06	ppb		97
6) Chloroethane	2.297	64	165545	7.42	ppb		99
7) Trichlorofluoromethane	2.540	101	251116	7.14	ppb		100
8) Ethanol	2.790	45	46962	993.45	ppb		100
9) Freon-113	3.040	101	169273	6.85	ppb	#	60
10) 1,1-Dichloroethylene	3.063	61	426385	8.23	ppb	#	75
11) Acrolein	3.001	56	38760	54.41	ppb	#	1
12) Acetone	3.152	43	81663	20.16	ppb	#	1
13) Iodomethane	3.230	142	193109	6.70	ppb		99
14) Methyl Acetate	3.452	43	213542	18.04	ppb		95
15) Carbon disulfide	3.285	76	641847	6.99	ppb		100
16) tert-Butyl Alcohol (TBA)	3.672	59	23222	11.40	ppb	#	1
17) Methylene Chloride	3.561	49	543381	15.73	ppb	#	65
18) Acrylonitrile	3.822	53	79672	12.91	ppb	#	79
19) trans-1,2-Dichloroethy...	3.803	61	458313	8.82	ppb	#	99
20) tert-Butyl Methyl Ethe...	3.780	73	688726	8.73	ppb		94
21) 1,1-Dichloroethane	4.212	63	544386	8.43	ppb		98
22) Vinyl Acetate	4.237	43	805863m	14.09	ppb		
23) Diisopropyl ether (DIPE)	4.220	45	1498877	18.31	ppb		93
24) Ethyl-tert-Butyl ether...	4.559	59	1115774	10.51	ppb	#	86
25) cis-1,2-Dichloroethylene	4.760	61	527504	9.29	ppb		88
26) 2-Butanone	4.776	72	21616	9.44	ppb	#	1
27) 2,2-Dichloropropane	4.740	77	318296	7.21	ppb	#	75
28) Tetrahydrofuran	5.030	71	21084	8.77	ppb	#	67
29) Bromochloromethane	4.996	49	335266	16.57	ppb	#	85
30) Chloroform	5.060	83	418321	7.94	ppb	#	99
31) 1,1,1-Trichloroethane	5.210	97	356130	7.68	ppb	#	100
32) Cyclohexane	5.238	56	518026	10.69	ppb	#	76
33) 1,1-Dichloropropylene	5.361	75	325752	7.62	ppb	#	89
35) Carbon Tetrachloride	5.358	117	297126	7.99	ppb		99
36) tert-Amyl alcohol (TAA)	5.569	59	270699	124.54	ppb	#	85
37) 1,2-Dichloroethane	5.608	62	354686	9.58	ppb		99
38) Benzene	5.567	78	1004009	7.81	ppb	#	89
39) tert-Amyl methyl ether...	5.631	73	767617	9.24	ppb	#	93
41) Trichloroethylene	6.173	95	251964	7.76	ppb		97
42) Methyl Cyclohexane	6.321	83	305349	7.34	ppb	#	63
43) Methyl Methacrylate	6.479	69	147146	9.19	ppb	#	46
44) Dibromomethane	6.543	93	127927	8.39	ppb	#	97
45) Bromodichloromethane	6.682	83	320862	8.55	ppb	#	94
46) 1,2-Dichloropropane	6.407	63	317405	8.92	ppb	#	99
47) 1,4-Dioxane	6.543	88	8347	198.91	ppb		91
48) 2-Chloroethyl vinyl ether	6.949	63	144569	9.14	ppb	#	100
49) cis-1,3-Dichloropropene	7.108	75	410598	8.61	ppb	#	84
50) 4-Methyl-2-Pentanone	7.239	43	329061	18.77	ppb	#	87
52) Toluene	7.420	91	1083157	8.22	ppb		99

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723802.D  
 Acq On : 14 Feb 2018 2:10 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL4  
 Misc : QBV7021318A  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 10:21:50 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

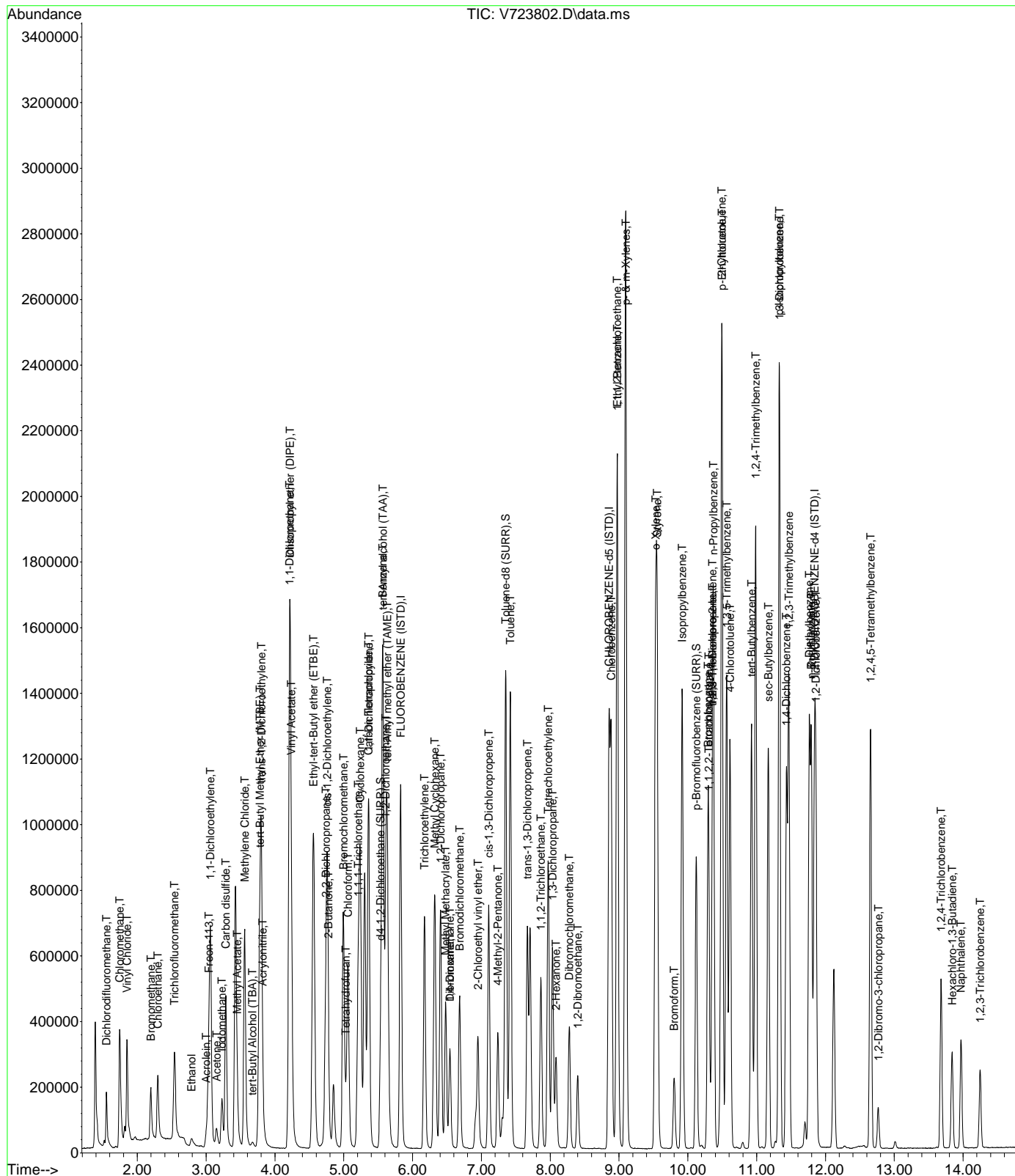
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.667	75	360865	8.96	ppb	# 100
54) 1,1,2-Trichloroethane	7.865	97	184356	8.30	ppb	92
55) 1,3-Dichloropropane	8.034	76	327580	8.52	ppb	# 100
56) Tetrachloroethylene	7.970	166	306257	9.79	ppb	# 100
57) 2-Hexanone	8.085	43	232514	19.46	ppb	# 93
58) Dibromochloromethane	8.277	129	230109	9.00	ppb	# 96
59) 1,2-Dibromoethane	8.399	107	182596	8.69	ppb	99
60) Chlorobenzene	8.886	112	689477	8.26	ppb	# 93
61) 1,1,1,2-tetrachloroethane	8.972	131	251578	9.16	ppb	97
62) Ethyl Benzene	8.975	91	1184782	8.45	ppb	98
63) p- & m-Xylenes	9.097	91	1854106	17.30	ppb	98
64) o-Xylene	9.531	91	937962	8.65	ppb	99
65) Styrene	9.554	104	790654	9.23	ppb	# 100
66) Bromoform	9.801	173	128892	9.58	ppb	# 80
68) p-Ethyltoluene	10.497	105	1096284	9.18	ppb	# 89
69) Isopropylbenzene	9.918	105	1146781	8.52	ppb	98
71) 1,1,2,2-Tetrachloroethane	10.305	83	207502	8.27	ppb	# 98
72) Bromobenzene	10.294	77	422335	8.49	ppb	# 92
73) trans-1,4-Dichloro-2-b...	10.355	75	244324	8.91	ppb	# 87
74) 1,2,3-Trichloropropane	10.355	110	58759	8.57	ppb	73
75) n-Propylbenzene	10.372	91	1283884	8.16	ppb	98
76) 2-Chlorotoluene	10.494	91	895880	8.50	ppb	100
77) 4-Chlorotoluene	10.614	91	842721	8.68	ppb	100
78) 1,3,5-Trimethylbenzene	10.563	105	955412	8.68	ppb	99
79) tert-Butylbenzene	10.925	119	785215	8.58	ppb	98
80) 1,2,4-Trimethylbenzene	10.986	105	967125	8.79	ppb	97
81) sec-Butylbenzene	11.170	105	1031765	8.29	ppb	98
82) 1,3-Dichlorobenzene	11.331	146	524283	8.94	ppb	98
83) p-Isopropyltoluene	11.329	119	976001	8.61	ppb	98
84) 1,4-Dichlorobenzene	11.432	146	532387	8.99	ppb	97
85) 1,2,3-Trimethylbenzene	11.468	105	968572	9.65	ppb	# 59
86) p-Diethylbenzene	11.765	105	484852	8.33	ppb	94
87) 1,2-Dichlorobenzene	11.860	146	466980	8.90	ppb	# 100
88) n-Butylbenzene	11.793	91	939429	7.97	ppb	96
89) 1,2-Dibromo-3-chloropr...	12.767	75	35142	9.45	ppb	# 79
90) 1,2,4,5-Tetramethylben...	12.656	119	840792	8.95	ppb	99
91) 1,2,4-Trichlorobenzene	13.680	180	180002	8.82	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.841	225	69381	8.18	ppb	# 1
93) Naphthalene	13.969	128	298452	8.02	ppb	# 83
94) 1,2,3-Trichlorobenzene	14.247	180	83781	9.25	ppb	# 84

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723802.D  
 Acq On : 14 Feb 2018 2:10 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL4  
 Misc : QEV7021318A  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: Feb 14 10:21:50 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723803.D  
 Acq On : 14 Feb 2018 2:41 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL5  
 Misc : QBV7021318A  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 14 10:24:45 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) FLUOROBENZENE (ISTD)	5.825	70	202801	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.855	117	745663	10.00	ppb	#	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.838	152	294490	10.00	ppb		0.00
<b>System Monitoring Compounds</b>							
34) d4-1,2-Dichloroethane ...	5.539	65	251750	10.68	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	106.80%			
51) Toluene-d8 (SURR)	7.353	98	975931	9.46	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.60%			
70) p-Bromofluorobenzene (...)	10.121	95	351312	9.29	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	92.90%			
<b>Target Compounds</b>							
						Qvalue	
2) Dichlorodifluoromethane	1.552	85	283077	14.12	ppb	#	100
3) Chloromethane	1.744	50	886369	28.12	ppb		98
4) Vinyl Chloride	1.852	62	644293	17.60	ppb		99
5) Bromomethane	2.197	94	249023	12.39	ppb		97
6) Chloroethane	2.297	64	355528	16.42	ppb		99
7) Trichlorofluoromethane	2.542	101	541974	15.87	ppb		100
8) Ethanol	2.784	45	68869	1500.85	ppb		100
9) Freon-113	3.043	101	346243	14.43	ppb	#	88
10) 1,1-Dichloroethylene	3.065	61	891338	17.73	ppb	#	75
11) Acrolein	2.998	56	83175	120.29	ppb	#	1
12) Acetone	3.151	43	119739	30.45	ppb	#	1
13) Iodomethane	3.232	142	483156	17.26	ppb		99
14) Methyl Acetate	3.449	43	427696	37.23	ppb		95
15) Carbon disulfide	3.288	76	1341214	15.04	ppb		100
16) tert-Butyl Alcohol (TBA)	3.677	59	41401	20.95	ppb	#	1
17) Methylene Chloride	3.560	49	1068763	31.87	ppb	#	65
18) Acrylonitrile	3.819	53	158922	26.53	ppb	#	82
19) trans-1,2-Dichloroethy...	3.803	61	946294	18.76	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.777	73	1377036	17.98	ppb	#	89
21) 1,1-Dichloroethane	4.212	63	1112277	17.74	ppb		98
22) Vinyl Acetate	4.237	43	1930965m	34.78	ppb		
23) Diisopropyl ether (DIPE)	4.220	45	3002445	37.79	ppb		93
24) Ethyl-tert-Butyl ether...	4.559	59	2256791	21.89	ppb	#	86
25) cis-1,2-Dichloroethylene	4.760	61	1074174	19.48	ppb		88
26) 2-Butanone	4.776	72	39408	17.72	ppb	#	1
27) 2,2-Dichloropropane	4.740	77	672401	15.70	ppb	#	75
28) Tetrahydrofuran	5.027	71	41025	17.58	ppb	#	78
29) Bromochloromethane	4.996	49	681355	34.68	ppb	#	85
30) Chloroform	5.060	83	844196	16.51	ppb	#	99
31) 1,1,1-Trichloroethane	5.210	97	748164	16.63	ppb	#	100
32) Cyclohexane	5.238	56	1077048	22.89	ppb	#	77
33) 1,1-Dichloropropylene	5.361	75	679711	16.39	ppb	#	87
35) Carbon Tetrachloride	5.358	117	645141	17.87	ppb		99
36) tert-Amyl alcohol (TAA)	5.569	59	491996	233.19	ppb	#	86
37) 1,2-Dichloroethane	5.608	62	710145	19.76	ppb		99
38) Benzene	5.566	78	2046571	16.41	ppb	#	83
39) tert-Amyl methyl ether...	5.630	73	1541947	19.13	ppb	#	93
41) Trichloroethylene	6.173	95	519348	16.66	ppb		97
42) Methyl Cyclohexane	6.323	83	633068	15.86	ppb	#	63
43) Methyl Methacrylate	6.482	69	293379	19.09	ppb	#	46
44) Dibromomethane	6.543	93	257755	17.60	ppb	#	97
45) Bromodichloromethane	6.682	83	642880	17.86	ppb	#	93
46) 1,2-Dichloropropane	6.407	63	643694	18.84	ppb	#	99
47) 1,4-Dioxane	6.543	88	12054	299.26	ppb		87
48) 2-Chloroethyl vinyl ether	6.949	63	296223	19.50	ppb	#	100
49) cis-1,3-Dichloropropene	7.108	75	828792	18.10	ppb	#	84
50) 4-Methyl-2-Pentanone	7.239	43	650449	38.65	ppb	#	87
52) Toluene	7.419	91	2195750	17.35	ppb		99

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723803.D  
 Acq On : 14 Feb 2018 2:41 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL5  
 Misc : QBV7021318A  
 ALS Vial : 21 Sample Multiplier: 1

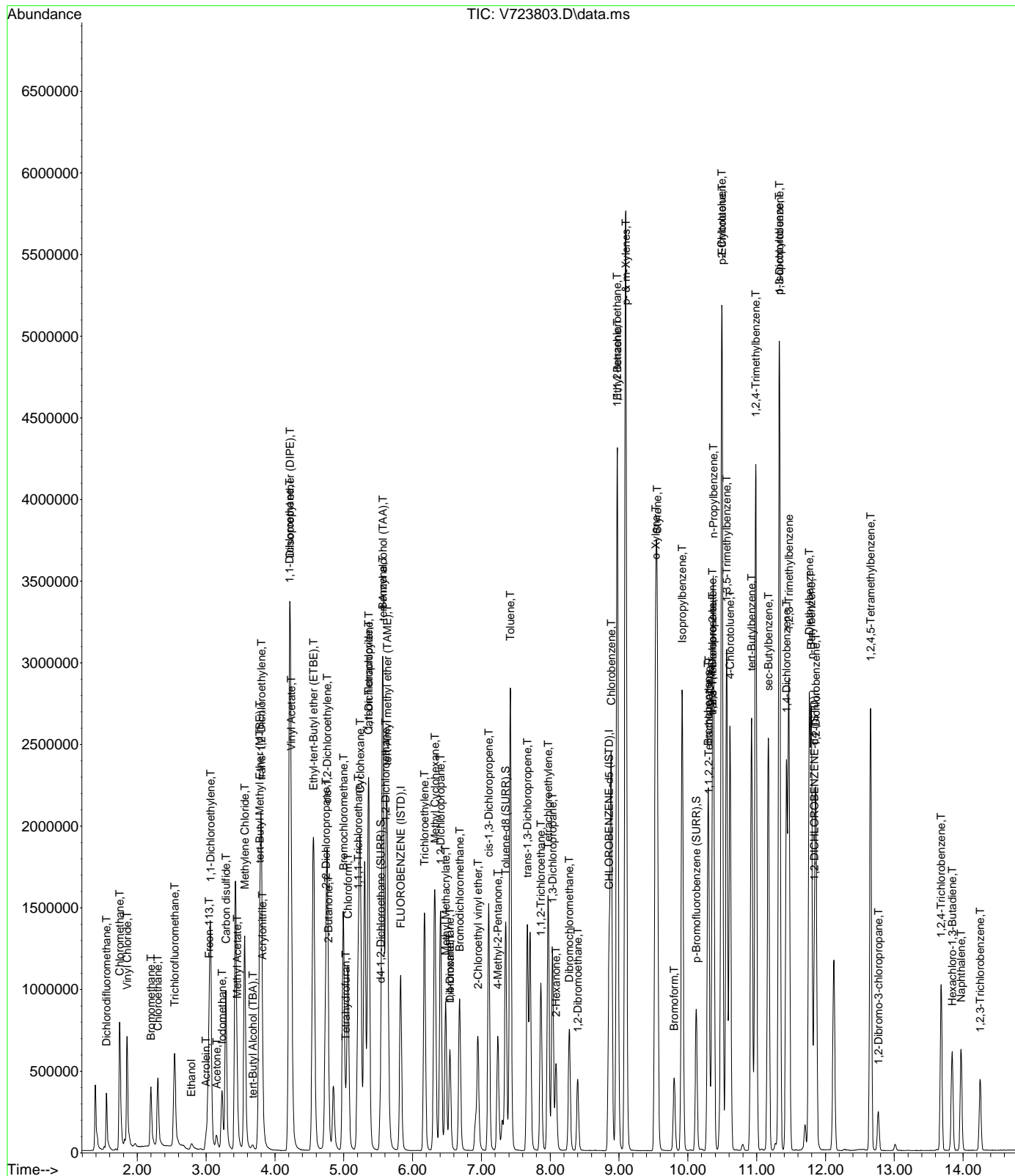
Quant Time: Feb 14 10:24:45 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.667	75	728417	18.84	ppb	# 100
54) 1,1,2-Trichloroethane	7.865	97	371648	17.43	ppb	93
55) 1,3-Dichloropropane	8.034	76	652323	17.69	ppb	# 100
56) Tetrachloroethylene	7.970	166	543256	18.09	ppb	# 100
57) 2-Hexanone	8.084	43	448931	39.14	ppb	# 92
58) Dibromochloromethane	8.276	129	459896	18.74	ppb	# 96
59) 1,2-Dibromoethane	8.399	107	359575	17.84	ppb	98
60) Chlorobenzene	8.886	112	1383988	17.28	ppb	# 94
61) 1,1,1,2-tetrachloroethane	8.972	131	500487	18.98	ppb	98
62) Ethyl Benzene	8.975	91	2395841	17.80	ppb	97
63) p- & m-Xylenes	9.097	91	3752332	36.48	ppb	98
64) o-Xylene	9.531	91	1897630	18.24	ppb	99
65) Styrene	9.553	104	1589082	19.34	ppb	# 100
66) Bromoform	9.801	173	258887	20.04	ppb	# 80
68) p-Ethyltoluene	10.497	105	2288734	19.64	ppb	# 89
69) Isopropylbenzene	9.918	105	2340036	17.82	ppb	98
71) 1,1,2,2-Tetrachloroethane	10.305	83	417322	17.05	ppb	# 98
72) Bromobenzene	10.293	77	853186	17.58	ppb	# 92
73) trans-1,4-Dichloro-2-b...	10.355	75	484981	18.12	ppb	# 88
74) 1,2,3-Trichloropropane	10.355	110	117514	17.56	ppb	73
75) n-Propylbenzene	10.371	91	2661120	17.33	ppb	98
76) 2-Chlorotoluene	10.494	91	1830706	17.80	ppb	100
77) 4-Chlorotoluene	10.613	91	1703651	17.98	ppb	100
78) 1,3,5-Trimethylbenzene	10.563	105	1969117	18.33	ppb	99
79) tert-Butylbenzene	10.925	119	1632402	18.29	ppb	98
80) 1,2,4-Trimethylbenzene	10.986	105	1971405	18.36	ppb	97
81) sec-Butylbenzene	11.170	105	2177968	17.93	ppb	98
82) 1,3-Dichlorobenzene	11.331	146	1062894	18.58	ppb	98
83) p-Isopropyltoluene	11.328	119	2049460	18.53	ppb	98
84) 1,4-Dichlorobenzene	11.434	146	1080869	18.70	ppb	98
85) 1,2,3-Trimethylbenzene	11.468	105	1919793	19.60	ppb	# 59
86) p-Diethylbenzene	11.765	105	1039850	18.31	ppb	93
87) 1,2-Dichlorobenzene	11.860	146	954646	18.64	ppb	# 100
88) n-Butylbenzene	11.793	91	1998187	17.37	ppb	97
89) 1,2-Dibromo-3-chloropr...	12.767	75	66932	18.44	ppb	# 77
90) 1,2,4,5-Tetramethylben...	12.656	119	1745259	19.04	ppb	99
91) 1,2,4-Trichlorobenzene	13.679	180	355599	17.86	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.844	225	143378	17.32	ppb	# 1
93) Naphthalene	13.972	128	561120	15.46	ppb	# 83
94) 1,2,3-Trichlorobenzene	14.247	180	153872	17.41	ppb	# 84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7021318\  
Data File : V723803.D  
Acq On : 14 Feb 2018 2:41 am  
InstName : MSVOA7  
Operator : SS  
Sample : SEQ-CAL5  
Misc : QBV7021318A  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Feb 14 10:24:45 2018  
Quant Method : C:\msdchem\1\methods\V7L00113.M  
Quant Title : Volatile Organics EPA 8260C  
QLast Update : Tue Jan 09 16:39:48 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723804.D  
 Acq On : 14 Feb 2018 3:13 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL6  
 Misc : QBV7021318A  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 14 10:25:59 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) FLUOROBENZENE (ISTD)	5.825	70	202979	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.855	117	739271	10.00	ppb	#	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.841	152	284394	10.00	ppb		0.00
<b>System Monitoring Compounds</b>							
34) d4-1,2-Dichloroethane ...	5.539	65	245240	10.39	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	103.90%			
51) Toluene-d8 (SURR)	7.353	98	976954	9.56	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.60%			
70) p-Bromofluorobenzene (...)	10.121	95	346957	9.50	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.00%			
<b>Target Compounds</b>							
							<b>Qvalue</b>
2) Dichlorodifluoromethane	1.552	85	654493	32.62	ppb	#	100
3) Chloromethane	1.741	50	1809832	57.37	ppb		98
4) Vinyl Chloride	1.849	62	1369165	37.36	ppb		99
5) Bromomethane	2.197	94	559873	27.84	ppb		97
6) Chloroethane	2.297	64	731791	33.78	ppb		99
7) Trichlorofluoromethane	2.542	101	1190347	34.82	ppb		100
8) Ethanol	2.787	45	122206	2660.88	ppb		100
9) Freon-113	3.040	101	737500	30.70	ppb	#	60
10) 1,1-Dichloroethylene	3.063	61	1841384	36.59	ppb	#	75
11) Acrolein	2.996	56	157144	227.07	ppb	#	1
12) Acetone	3.149	43	243229	61.79	ppb	#	1
13) Iodomethane	3.229	142	1098848	39.23	ppb		99
14) Methyl Acetate	3.449	43	783148	68.11	ppb		95
15) Carbon disulfide	3.288	76	2736085	30.66	ppb		100
16) tert-Butyl Alcohol (TBA)	3.675	59	73610	37.21	ppb	#	1
17) Methylene Chloride	3.558	49	2072580	61.75	ppb	#	66
18) Acrylonitrile	3.819	53	338581	56.48	ppb	#	82
19) trans-1,2-Dichloroethy...	3.803	61	1907208	37.77	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.778	73	2664251	34.76	ppb		94
21) 1,1-Dichloroethane	4.212	63	2218466	35.35	ppb		98
22) Vinyl Acetate	4.234	43	3262172m	58.71	ppb		
23) Diisopropyl ether (DIPE)	4.220	45	5854891	73.63	ppb	#	91
24) Ethyl-tert-Butyl ether...	4.559	59	4368915	42.34	ppb	#	86
25) cis-1,2-Dichloroethylene	4.760	61	2136140	38.71	ppb		88
26) 2-Butanone	4.774	72	75508	33.93	ppb	#	1
27) 2,2-Dichloropropane	4.740	77	1349795	31.49	ppb	#	75
28) Tetrahydrofuran	5.027	71	75551	32.34	ppb	#	65
29) Bromochloromethane	4.996	49	1335461	67.92	ppb	#	85
30) Chloroform	5.060	83	1695959	33.14	ppb	#	99
31) 1,1,1-Trichloroethane	5.210	97	1519866	33.75	ppb	#	100
32) Cyclohexane	5.238	56	2234551	47.45	ppb	#	77
33) 1,1-Dichloropropylene	5.361	75	1380232	33.24	ppb	#	87
35) Carbon Tetrachloride	5.358	117	1327241	36.73	ppb		99
36) tert-Amyl alcohol (TAA)	5.569	59	877303	415.45	ppb	#	85
37) 1,2-Dichloroethane	5.608	62	1373090	38.17	ppb		99
38) Benzene	5.567	78	4079285	32.68	ppb	#	81
39) tert-Amyl methyl ether...	5.631	73	2942120	36.46	ppb	#	93
41) Trichloroethylene	6.173	95	1046876	33.87	ppb		97
42) Methyl Cyclohexane	6.323	83	1311799	33.15	ppb	#	63
43) Methyl Methacrylate	6.479	69	553040	36.30	ppb	#	46
44) Dibromomethane	6.540	93	495857	34.16	ppb	#	53
45) Bromodichloromethane	6.682	83	1267308	35.50	ppb	#	93
46) 1,2-Dichloropropane	6.407	63	1266880	37.41	ppb	#	99
47) 1,4-Dioxane	6.546	88	22336	559.32	ppb		89
48) 2-Chloroethyl vinyl ether	6.949	63	551031	36.59	ppb	#	100
49) cis-1,3-Dichloropropene	7.108	75	1624060	35.78	ppb	#	84
50) 4-Methyl-2-Pentanone	7.239	43	1201448	72.02	ppb	#	87
52) Toluene	7.420	91	4298481	34.26	ppb		99

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723804.D  
 Acq On : 14 Feb 2018 3:13 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL6  
 Misc : QBV7021318A  
 ALS Vial : 22 Sample Multiplier: 1

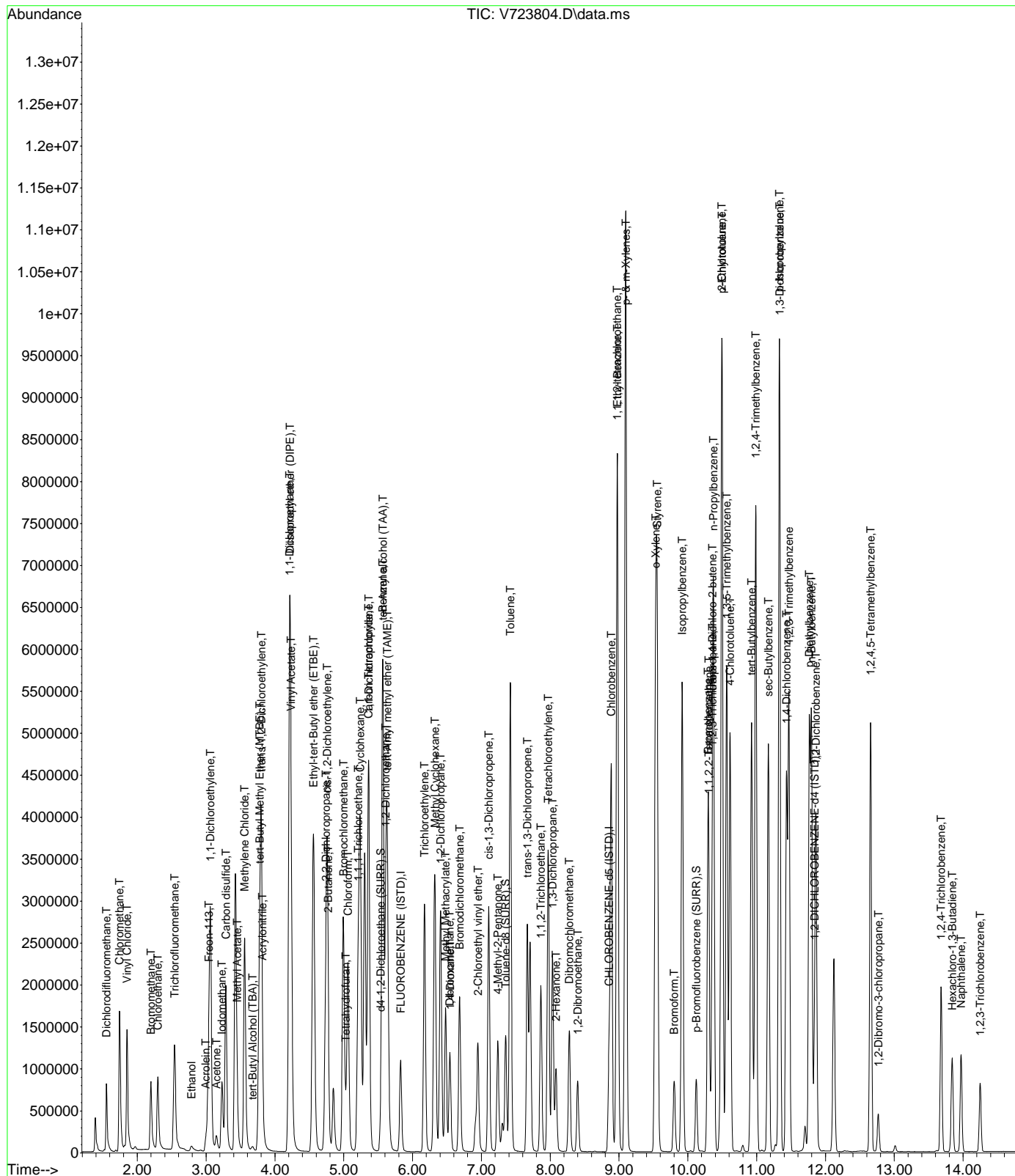
Quant Time: Feb 14 10:25:59 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.667	75	1386686	36.18	ppb	# 100
54) 1,1,2-Trichloroethane	7.865	97	701603	33.19	ppb	93
55) 1,3-Dichloropropane	8.034	76	1245288	34.05	ppb	# 100
56) Tetrachloroethylene	7.970	166	1234822	41.47	ppb	# 100
57) 2-Hexanone	8.084	43	834421	73.38	ppb	# 92
58) Dibromochloromethane	8.276	129	895040	36.79	ppb	96
59) 1,2-Dibromoethane	8.399	107	686999	34.37	ppb	98
60) Chlorobenzene	8.886	112	2685156	33.82	ppb	94
61) 1,1,1,2-tetrachloroethane	8.972	131	980197	37.49	ppb	98
62) Ethyl Benzene	8.975	91	4646789	34.83	ppb	97
63) p- & m-Xylenes	9.097	91	7149807	70.11	ppb	97
64) o-Xylene	9.531	91	3663035	35.51	ppb	99
65) Styrene	9.553	104	3083037	37.84	ppb	# 100
66) Bromoform	9.801	173	497474	38.84	ppb	# 80
68) p-Ethyltoluene	10.497	105	4305114	38.25	ppb	# 89
69) Isopropylbenzene	9.918	105	4509650	35.56	ppb	98
71) 1,1,2,2-Tetrachloroethane	10.305	83	776630	32.85	ppb	# 97
72) Bromobenzene	10.294	77	1653146	35.27	ppb	# 92
73) trans-1,4-Dichloro-2-b...	10.358	75	915965	35.43	ppb	# 88
74) 1,2,3-Trichloropropane	10.355	110	220042	34.05	ppb	75
75) n-Propylbenzene	10.371	91	5113638	34.49	ppb	98
76) 2-Chlorotoluene	10.494	91	3515225	35.40	ppb	100
77) 4-Chlorotoluene	10.614	91	3300247	36.07	ppb	100
78) 1,3,5-Trimethylbenzene	10.563	105	3778399	36.42	ppb	99
79) tert-Butylbenzene	10.925	119	3148159	36.53	ppb	98
80) 1,2,4-Trimethylbenzene	10.986	105	3816612	36.81	ppb	97
81) sec-Butylbenzene	11.170	105	4190005	35.72	ppb	98
82) 1,3-Dichlorobenzene	11.334	146	2060651	37.31	ppb	98
83) p-Isopropyltoluene	11.331	119	3904846	36.55	ppb	99
84) 1,4-Dichlorobenzene	11.434	146	2085195	37.36	ppb	98
85) 1,2,3-Trimethylbenzene	11.468	105	3620541	38.28	ppb	# 59
86) p-Diethylbenzene	11.765	105	1953380	35.61	ppb	95
87) 1,2-Dichlorobenzene	11.860	146	1833876	37.07	ppb	# 100
88) n-Butylbenzene	11.796	91	3815128	34.34	ppb	97
89) 1,2-Dibromo-3-chloropr...	12.767	75	126990	36.22	ppb	# 78
90) 1,2,4,5-Tetramethylben...	12.656	119	3240641	36.61	ppb	99
91) 1,2,4-Trichlorobenzene	13.680	180	675483	35.13	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.841	225	271146	33.92	ppb	# 1
93) Naphthalene	13.972	128	1033906	29.50	ppb	# 83
94) 1,2,3-Trichlorobenzene	14.247	180	290067	33.98	ppb	# 84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723804.D  
 Acq On : 14 Feb 2018 3:13 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL6  
 Misc : QBV7021318A  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Feb 14 10:25:59 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723805.D  
 Acq On : 14 Feb 2018 3:44 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL7  
 Misc : QBV7021318A  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 14 10:28:14 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	5.828	70	208239	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	762765	10.00	ppb	# 0.00
67) 1,2-DICHLOROBENZENE-d4...	11.843	152	293353	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	5.539	65	260316	10.75	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	107.50%		
51) Toluene-d8 (SURR)	7.353	98	1001198	9.49	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	94.90%		
70) p-Bromofluorobenzene (...)	10.124	95	358854	9.52	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.20%		
<b>Target Compounds</b>						
						Qvalue
2) Dichlorodifluoromethane	1.552	85	1062859	51.64	ppb	# 100
3) Chloromethane	1.741	50	3588023	110.86	ppb	99
4) Vinyl Chloride	1.849	62	2543815	67.67	ppb	99
5) Bromomethane	2.197	94	1179476	57.17	ppb	96
6) Chloroethane	2.297	64	1417962	63.80	ppb	99
7) Trichlorofluoromethane	2.542	101	2083021	59.40	ppb	100
8) Ethanol	2.784	45	307482	6525.92	ppb	100
9) Freon-113	3.040	101	1251321	50.77	ppb	# 88
10) 1,1-Dichloroethylene	3.062	61	3447369	66.78	ppb	# 74
11) Acrolein	2.996	56	356793	502.54	ppb	# 1
12) Acetone	3.149	43	581780	144.06	ppb	# 1
13) Iodomethane	3.229	142	2218243	77.19	ppb	99
14) Methyl Acetate	3.446	43	1783089	151.16	ppb	95
15) Carbon disulfide	3.285	76	5207602	56.89	ppb	100
16) tert-Butyl Alcohol (TBA)	3.674	59	182020	89.68	ppb	# 1
17) Methylene Chloride	3.558	49	4290364	124.60	ppb	# 66
18) Acrylonitrile	3.816	53	776543	126.26	ppb	# 82
19) trans-1,2-Dichloroethy...	3.800	61	3762648	72.63	ppb	# 100
20) tert-Butyl Methyl Ethe...	3.777	73	5673894	72.16	ppb	94
21) 1,1-Dichloroethane	4.211	63	4460344	69.27	ppb	98
22) Vinyl Acetate	4.236	43	6503315m	114.09	ppb	
23) Diisopropyl ether (DIPE)	4.220	45	11782948	144.44	ppb	93
24) Ethyl-tert-Butyl ether...	4.559	59	9051393	85.51	ppb	# 86
25) cis-1,2-Dichloroethylene	4.759	61	4334936	76.58	ppb	88
26) 2-Butanone	4.773	72	177196	77.61	ppb	# 1
27) 2,2-Dichloropropane	4.740	77	2628156	59.76	ppb	# 75
28) Tetrahydrofuran	5.027	71	177441	74.03	ppb	# 67
29) Bromochloromethane	4.996	49	2717395	134.72	ppb	# 86
30) Chloroform	5.060	83	3474645	66.19	ppb	# 99
31) 1,1,1-Trichloroethane	5.210	97	2934468	63.51	ppb	# 100
32) Cyclohexane	5.241	56	3800126	78.66	ppb	# 77
33) 1,1-Dichloropropylene	5.363	75	2634527	61.85	ppb	# 89
35) Carbon Tetrachloride	5.358	117	2487738	67.10	ppb	99
36) tert-Amyl alcohol (TAA)	5.569	59	2111582	974.68	ppb	# 85
37) 1,2-Dichloroethane	5.608	62	2910675	78.88	ppb	99
38) Benzene	5.566	78	8119128	63.40	ppb	# 79
39) tert-Amyl methyl ether...	5.630	73	6148515	74.28	ppb	# 94
41) Trichloroethylene	6.173	95	2087249	65.46	ppb	97
42) Methyl Cyclohexane	6.323	83	2209399	54.11	ppb	# 63
43) Methyl Methacrylate	6.482	69	1244662	79.18	ppb	# 48
44) Dibromomethane	6.543	93	1086514	72.54	ppb	# 97
45) Bromodichloromethane	6.685	83	2681990	72.82	ppb	# 93
46) 1,2-Dichloropropane	6.407	63	2653520	75.94	ppb	# 99
47) 1,4-Dioxane	6.543	88	53748	1304.45	ppb	89
48) 2-Chloroethyl vinyl ether	6.949	63	1267435	81.57	ppb	# 100
49) cis-1,3-Dichloropropene	7.108	75	3429996	73.25	ppb	# 85
50) 4-Methyl-2-Pentanone	7.238	43	2745406	159.49	ppb	# 87
52) Toluene	7.422	91	8599526	66.43	ppb	98



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723805.D  
 Acq On : 14 Feb 2018 3:44 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL7  
 Misc : QBV7021318A  
 ALS Vial : 23 Sample Multiplier: 1

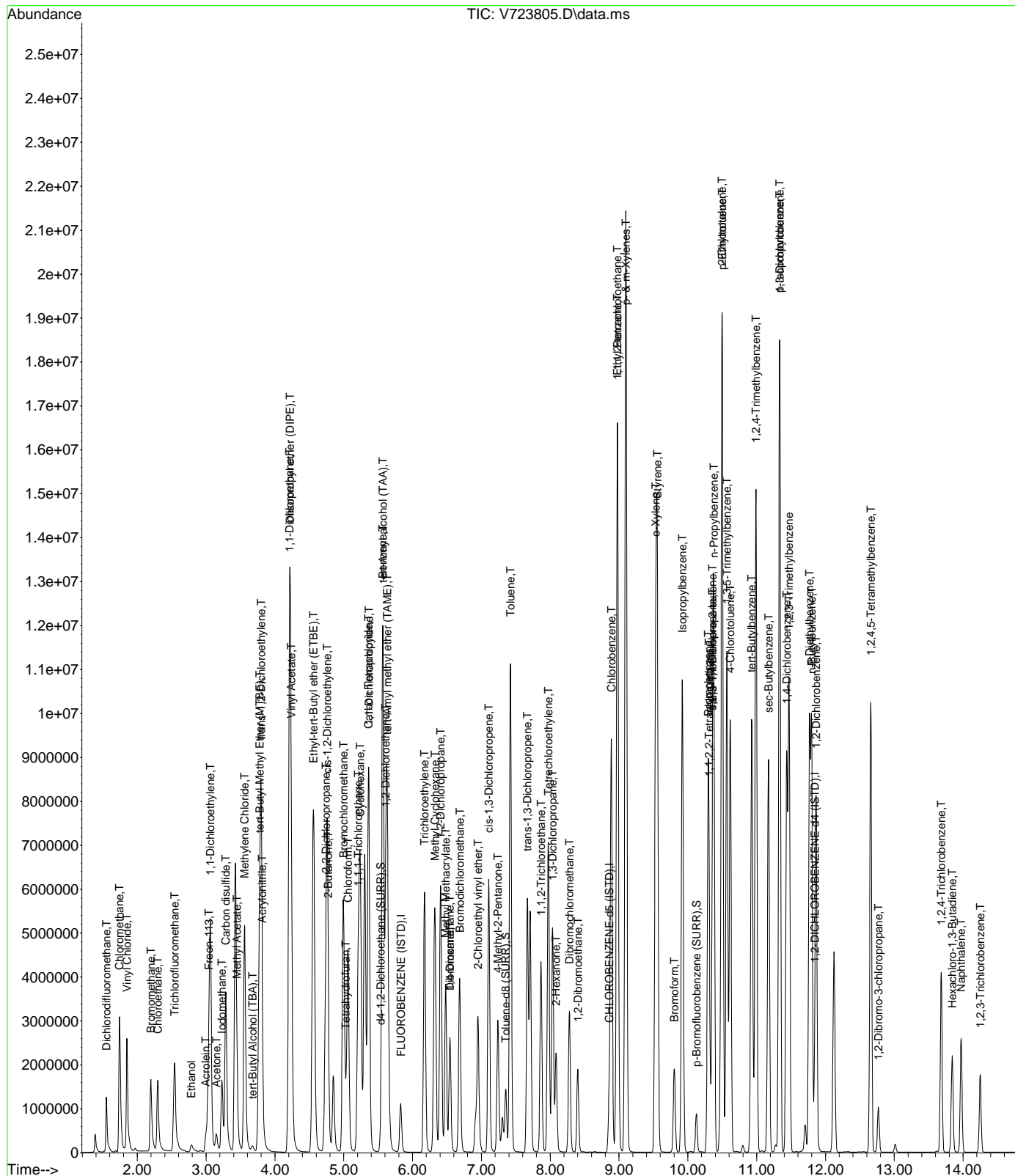
Quant Time: Feb 14 10:28:14 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.667	75	2990331	75.62	ppb	# 100
54) 1,1,2-Trichloroethane	7.867	97	1530129	70.15	ppb	92
55) 1,3-Dichloropropane	8.034	76	2704672	71.68	ppb	# 100
56) Tetrachloroethylene	7.973	166	2411582	78.49	ppb	# 100
57) 2-Hexanone	8.084	43	1900596	161.99	ppb	# 92
58) Dibromochloromethane	8.279	129	1936793	77.16	ppb	95
59) 1,2-Dibromoethane	8.401	107	1515089	73.47	ppb	98
60) Chlorobenzene	8.888	112	5505714	67.22	ppb	95
61) 1,1,1,2-tetrachloroethane	8.975	131	2013848	74.65	ppb	98
62) Ethyl Benzene	8.977	91	9002456	65.40	ppb	96
63) p- & m-Xylenes	9.100	91	13533208	128.62	ppb	96
64) o-Xylene	9.534	91	7300576	68.59	ppb	99
65) Styrene	9.556	104	6215937	73.94	ppb	# 100
66) Bromoform	9.804	173	1104421	83.57	ppb	# 80
68) p-Ethyltoluene	10.499	105	8243293	70.99	ppb	# 89
69) Isopropylbenzene	9.921	105	8635744	66.02	ppb	98
71) 1,1,2,2-Tetrachloroethane	10.307	83	1729075	70.91	ppb	# 98
72) Bromobenzene	10.296	77	3439690	71.15	ppb	# 92
73) trans-1,4-Dichloro-2-b...	10.357	75	2043481	76.64	ppb	# 83
74) 1,2,3-Trichloropropane	10.357	110	486529	72.99	ppb	72
75) n-Propylbenzene	10.377	91	9675370	63.26	ppb	97
76) 2-Chlorotoluene	10.496	91	6928573	67.64	ppb	100
77) 4-Chlorotoluene	10.616	91	6486620	68.72	ppb	100
78) 1,3,5-Trimethylbenzene	10.566	105	7295052	68.16	ppb	99
79) tert-Butylbenzene	10.928	119	6013068	67.63	ppb	98
80) 1,2,4-Trimethylbenzene	10.989	105	7425641	69.43	ppb	97
81) sec-Butylbenzene	11.173	105	7795545	64.43	ppb	98
82) 1,3-Dichlorobenzene	11.334	146	4113698	72.20	ppb	98
83) p-Isopropyltoluene	11.334	119	7359132	66.78	ppb	99
84) 1,4-Dichlorobenzene	11.437	146	4220486	73.32	ppb	99
85) 1,2,3-Trimethylbenzene	11.470	105	7166236	73.45	ppb	# 59
86) p-Diethylbenzene	11.768	105	3777470	66.77	ppb	93
87) 1,2-Dichlorobenzene	11.863	146	3779112	74.06	ppb	# 100
88) n-Butylbenzene	11.799	91	7190417	62.75	ppb	96
89) 1,2-Dibromo-3-chloropr...	12.770	75	286345	79.18	ppb	# 76
90) 1,2,4,5-Tetramethylben...	12.658	119	6544259	71.68	ppb	99
91) 1,2,4-Trichlorobenzene	13.682	180	1423627	71.78	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.841	225	525261	63.70	ppb	# 1
93) Naphthalene	13.971	128	2325501	64.33	ppb	# 82
94) 1,2,3-Trichlorobenzene	14.250	180	619380	70.35	ppb	# 84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723805.D  
 Acq On : 14 Feb 2018 3:44 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL7  
 Misc : QBV7021318A  
 ALS Vial : 23 Sample Multiplier: 1

Quant Time: Feb 14 10:28:14 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723806.D  
 Acq On : 14 Feb 2018 4:16 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL8  
 Misc : QBV7021318A  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 14 10:29:39 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) FLUOROBENZENE (ISTD)	5.828	70	208450	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	767042	10.00	ppb	#	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.843	152	291582	10.00	ppb		0.00
System Monitoring Compounds							
34) d4-1,2-Dichloroethane ...	5.539	65	262338	10.83	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	108.30%		
51) Toluene-d8 (SURR)	7.355	98	1007655	9.50	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	95.00%		
70) p-Bromofluorobenzene (...)	10.124	95	361394	9.65	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	96.50%		
Target Compounds							
						Qvalue	
2) Dichlorodifluoromethane	1.552	85	1709252	82.95	ppb	#	100
3) Chloromethane	1.741	50	5706050	176.13	ppb		99
4) Vinyl Chloride	1.849	62	3905877	103.79	ppb		99
5) Bromomethane	2.194	94	1794631	86.91	ppb		97
6) Chloroethane	2.295	64	2134355	95.93	ppb		99
7) Trichlorofluoromethane	2.542	101	3260874	92.89	ppb		100
8) Ethanol	2.787	45	688297	14593.45	ppb		100
9) Freon-113	3.040	101	2021285	81.93	ppb	#	89
10) 1,1-Dichloroethylene	3.062	61	5306853	102.70	ppb	#	75
11) Acrolein	2.996	56	539373	758.93	ppb	#	1
12) Acetone	3.149	43	923225	228.38	ppb	#	1
13) Iodomethane	3.229	142	3138581	109.10	ppb		99
14) Methyl Acetate	3.449	43	2693014	228.06	ppb		95
15) Carbon disulfide	3.285	76	7992277	87.22	ppb		100
16) tert-Butyl Alcohol (TBA)	3.675	59	304684	149.97	ppb	#	1
17) Methylene Chloride	3.558	49	6372179	184.87	ppb	#	66
18) Acrylonitrile	3.816	53	1190640	193.40	ppb	#	82
19) trans-1,2-Dichloroethy...	3.800	61	5646905	108.89	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.777	73	8422889	107.01	ppb	#	85
21) 1,1-Dichloroethane	4.211	63	6615746	102.64	ppb	#	96
22) Vinyl Acetate	4.237	43	9555033m	167.46	ppb		
23) Diisopropyl ether (DIPE)	4.220	45	16937465	207.41	ppb		94
24) Ethyl-tert-Butyl ether...	4.559	59	13270442	125.24	ppb	#	86
25) cis-1,2-Dichloroethylene	4.760	61	6423301	113.35	ppb		88
26) 2-Butanone	4.773	72	271588	118.83	ppb	#	1
27) 2,2-Dichloropropane	4.740	77	4021473	91.35	ppb	#	75
28) Tetrahydrofuran	5.027	71	271306	113.08	ppb	#	67
29) Bromochloromethane	4.996	49	3930170	194.64	ppb	#	86
30) Chloroform	5.060	83	5172622	98.43	ppb	#	99
31) 1,1,1-Trichloroethane	5.210	97	4522749	97.79	ppb	#	100
32) Cyclohexane	5.241	56	6055000	125.21	ppb	#	78
33) 1,1-Dichloropropylene	5.363	75	4076616	95.61	ppb	#	89
35) Carbon Tetrachloride	5.361	117	3893425	104.91	ppb	#	92
36) tert-Amyl alcohol (TAA)	5.572	59	3361863	1550.23	ppb	#	85
37) 1,2-Dichloroethane	5.611	62	4276815	115.78	ppb		99
38) Benzene	5.566	78	11864406	92.55	ppb	#	79
39) tert-Amyl methyl ether...	5.630	73	8953464	108.06	ppb	#	93
41) Trichloroethylene	6.173	95	3184183	99.30	ppb		97
42) Methyl Cyclohexane	6.323	83	3659166	89.11	ppb	#	64
43) Methyl Methacrylate	6.482	69	1855365	117.38	ppb	#	46
44) Dibromomethane	6.543	93	1630792	108.27	ppb	#	97
45) Bromodichloromethane	6.685	83	3971308	107.22	ppb	#	93
46) 1,2-Dichloropropane	6.409	63	3918552	111.52	ppb	#	99
47) 1,4-Dioxane	6.543	88	114674	2767.59	ppb		89
48) 2-Chloroethyl vinyl ether	6.949	63	1909741	122.23	ppb	#	100
49) cis-1,3-Dichloropropene	7.108	75	5066700	107.60	ppb	#	86
50) 4-Methyl-2-Pentanone	7.241	43	4094278	236.53	ppb	#	87
52) Toluene	7.422	91	12629931	97.02	ppb		98

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723806.D  
 Acq On : 14 Feb 2018 4:16 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL8  
 Misc : QBV7021318A  
 ALS Vial : 24 Sample Multiplier: 1

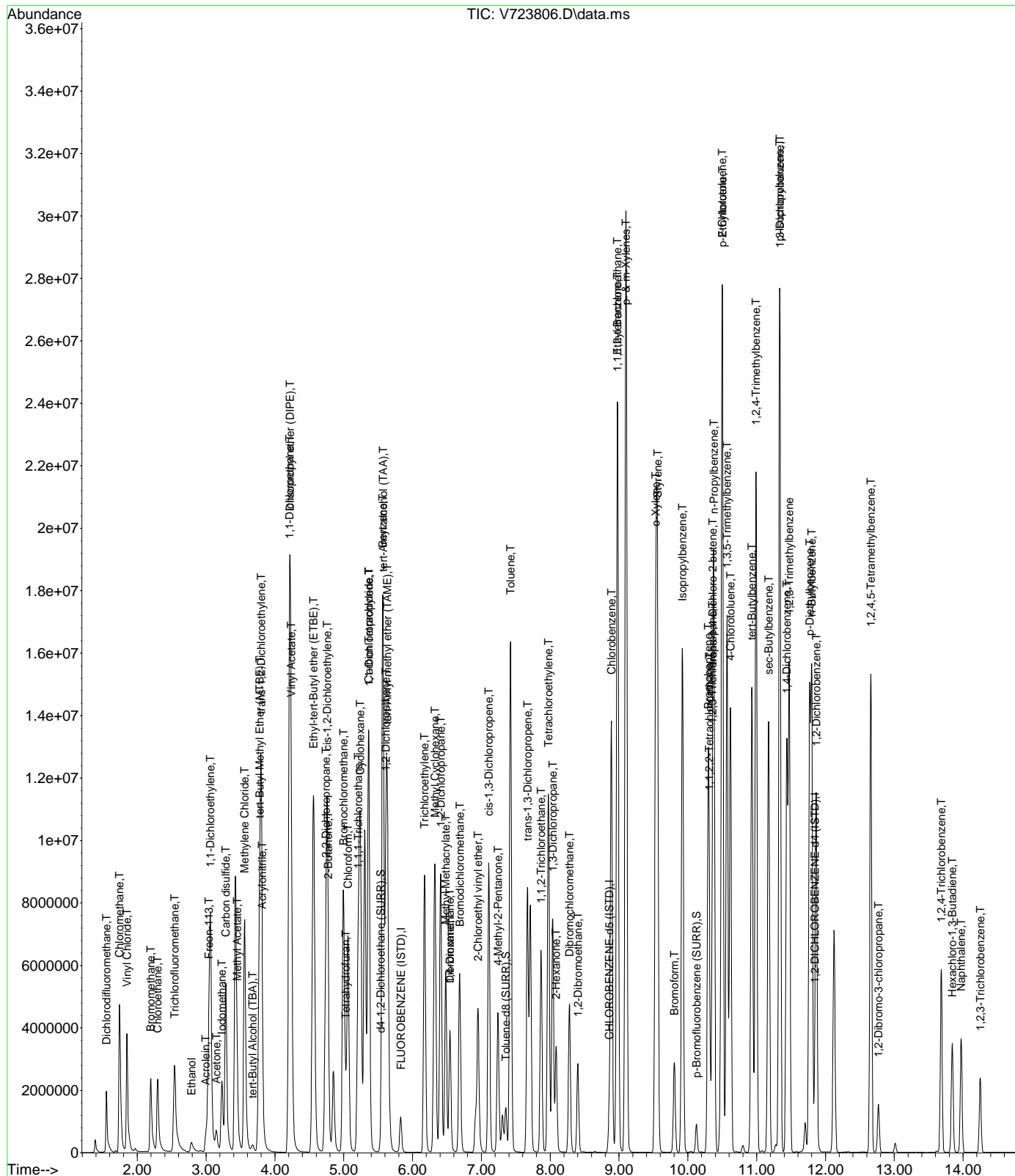
Quant Time: Feb 14 10:29:39 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.670	75	4432757	111.48	ppb	# 100
54) 1,1,2-Trichloroethane	7.867	97	2277146	103.81	ppb	92
55) 1,3-Dichloropropane	8.037	76	3973315	104.72	ppb	# 100
56) Tetrachloroethylene	7.973	166	3933243	127.30	ppb	# 100
57) 2-Hexanone	8.084	43	2814507	238.54	ppb	# 92
58) Dibromochloromethane	8.279	129	2885419	114.31	ppb	# 96
59) 1,2-Dibromoethane	8.402	107	2257922	108.88	ppb	98
60) Chlorobenzene	8.888	112	8076346	98.05	ppb	95
61) 1,1,1,2-tetrachloroethane	8.975	131	2933149	108.12	ppb	98
62) Ethyl Benzene	8.977	91	13184796	95.25	ppb	95
63) p- & m-Xylenes	9.097	91	18744855	177.16	ppb	93
64) o-Xylene	9.534	91	10758361	100.52	ppb	99
65) Styrene	9.559	104	9022365	106.72	ppb	# 100
66) Bromoform	9.804	173	1659334	124.86	ppb	# 80
68) p-Ethyltoluene	10.502	105	12261139	106.24	ppb	# 89
69) Isopropylbenzene	9.921	105	13014903	100.11	ppb	97
71) 1,1,2,2-Tetrachloroethane	10.310	83	2556435	105.47	ppb	# 97
72) Bromobenzene	10.296	77	5051970	105.13	ppb	# 92
73) trans-1,4-Dichloro-2-b...	10.360	75	3021242	114.00	ppb	# 83
74) 1,2,3-Trichloropropane	10.357	110	720767	108.79	ppb	72
75) n-Propylbenzene	10.377	91	14458409	95.11	ppb	96
76) 2-Chlorotoluene	10.499	91	10183304	100.01	ppb	100
77) 4-Chlorotoluene	10.619	91	9402954	100.22	ppb	100
78) 1,3,5-Trimethylbenzene	10.569	105	10764380	101.19	ppb	98
79) tert-Butylbenzene	10.931	119	9262688	104.82	ppb	98
80) 1,2,4-Trimethylbenzene	10.992	105	10874017	102.29	ppb	97
81) sec-Butylbenzene	11.173	105	12006931	99.84	ppb	98
82) 1,3-Dichlorobenzene	11.337	146	5948988	105.04	ppb	98
83) p-Isopropyltoluene	11.334	119	11184306	102.11	ppb	99
84) 1,4-Dichlorobenzene	11.437	146	6182103	108.05	ppb	99
85) 1,2,3-Trimethylbenzene	11.473	105	10336915	106.59	ppb	# 59
86) p-Diethylbenzene	11.771	105	5851848	104.06	ppb	94
87) 1,2-Dichlorobenzene	11.865	146	5487526	108.20	ppb	# 100
88) n-Butylbenzene	11.799	91	11124078	97.67	ppb	97
89) 1,2-Dibromo-3-chloropr...	12.770	75	432160	120.22	ppb	# 76
90) 1,2,4,5-Tetramethylben...	12.658	119	9793238	107.91	ppb	98
91) 1,2,4-Trichlorobenzene	13.682	180	2043055	103.64	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.844	225	835653	101.96	ppb	# 1
93) Naphthalene	13.972	128	3239136	90.14	ppb	# 82
94) 1,2,3-Trichlorobenzene	14.250	180	830803	94.93	ppb	# 85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723806.D  
 Acq On : 14 Feb 2018 4:16 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL8  
 Misc : QEV7021318A  
 ALS Vial : 24 Sample Multiplier: 1

Quant Time: Feb 14 10:29:39 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723807.D  
 Acq On : 14 Feb 2018 4:47 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL9  
 Misc : QBV7021318A  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 14 10:31:14 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) FLUOROBENZENE (ISTD)	5.828	70	210682	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.861	117	779424	10.00	ppb	#	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.843	152	289421	10.00	ppb		0.00
<b>System Monitoring Compounds</b>							
34) d4-1,2-Dichloroethane ...	5.541	65	266506	10.88	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	108.80%		
51) Toluene-d8 (SURR)	7.356	98	1021480	9.48	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	94.80%		
70) p-Bromofluorobenzene (...)	10.127	95	364172	9.80	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	98.00%		
<b>Target Compounds</b>							
							Qvalue
2) Dichlorodifluoromethane	1.549	85	2745447	131.83	ppb	#	100
3) Chloromethane	1.741	50	8387715	256.16	ppb		100
4) Vinyl Chloride	1.847	62	5662009	148.86	ppb		99
5) Bromomethane	2.192	94	2524305	120.95	ppb		97
6) Chloroethane	2.295	64	3016223	134.13	ppb		99
7) Trichlorofluoromethane	2.539	101	4985836	140.53	ppb		100
8) Ethanol	2.784	45	1092299	22913.85	ppb		100
9) Freon-113	3.037	101	3230718	129.57	ppb	#	60
10) 1,1-Dichloroethylene	3.063	61	7634056	146.17	ppb	#	77
11) Acrolein	2.996	56	772410	1075.32	ppb	#	1
12) Acetone	3.146	43	1232731	301.71	ppb	#	1
13) Iodomethane	3.229	142	4258127	146.45	ppb		99
14) Methyl Acetate	3.446	43	3730263	312.55	ppb		95
15) Carbon disulfide	3.285	76	11329740	122.33	ppb		100
16) tert-Butyl Alcohol (TBA)	3.675	59	443585	216.02	ppb	#	1
17) Methylene Chloride	3.558	49	8813408	252.99	ppb	#	67
18) Acrylonitrile	3.816	53	1655940	266.13	ppb	#	82
19) trans-1,2-Dichloroethy...	3.800	61	7853727	149.84	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.778	73	11568245	145.41	ppb	#	85
21) 1,1-Dichloroethane	4.212	63	9104579	139.76	ppb		99
22) Vinyl Acetate	4.237	43	14540873m	252.14	ppb		
23) Diisopropyl ether (DIPE)	4.220	45	22367734	271.01	ppb		94
24) Ethyl-tert-Butyl ether...	4.559	59	18028146	168.34	ppb	#	86
25) cis-1,2-Dichloroethylene	4.760	61	8895796	155.32	ppb		88
26) 2-Butanone	4.774	72	376955	163.18	ppb	#	1
27) 2,2-Dichloropropane	4.740	77	5662356	127.27	ppb	#	75
28) Tetrahydrofuran	5.027	71	384205	158.44	ppb	#	67
29) Bromochloromethane	4.999	49	5330100	261.18	ppb	#	86
30) Chloroform	5.060	83	7139961	134.43	ppb	#	99
31) 1,1,1-Trichloroethane	5.210	97	6417206	137.29	ppb	#	100
32) Cyclohexane	5.241	56	9476963	193.89	ppb	#	78
33) 1,1-Dichloropropylene	5.363	75	5713943	132.59	ppb	#	87
35) Carbon Tetrachloride	5.361	117	5595441	149.17	ppb		99
36) tert-Amyl alcohol (TAA)	5.572	59	4759159	2171.31	ppb	#	84
37) 1,2-Dichloroethane	5.611	62	5794193	155.20	ppb		100
38) Benzene	5.569	78	15930990	122.95	ppb	#	80
39) tert-Amyl methyl ether...	5.633	73	12053765	143.93	ppb	#	93
41) Trichloroethylene	6.176	95	4482956	137.58	ppb		97
42) Methyl Cyclohexane	6.323	83	5832995	139.80	ppb	#	65
43) Methyl Methacrylate	6.482	69	2568623	159.92	ppb	#	46
44) Dibromomethane	6.543	93	2248930	146.94	ppb	#	53
45) Bromodichloromethane	6.685	83	5479118	145.58	ppb	#	93
46) 1,2-Dichloropropane	6.410	63	5392089	151.02	ppb	#	99
47) 1,4-Dioxane	6.546	88	179648	4266.82	ppb	#	71
48) 2-Chloroethyl vinyl ether	6.952	63	2654883	167.22	ppb	#	100
49) cis-1,3-Dichloropropene	7.108	75	6974192	145.75	ppb	#	86
50) 4-Methyl-2-Pentanone	7.241	43	5618893	319.45	ppb	#	88
52) Toluene	7.425	91	17065036	129.01	ppb		97

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723807.D  
 Acq On : 14 Feb 2018 4:47 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL9  
 Misc : QBV7021318A  
 ALS Vial : 25 Sample Multiplier: 1

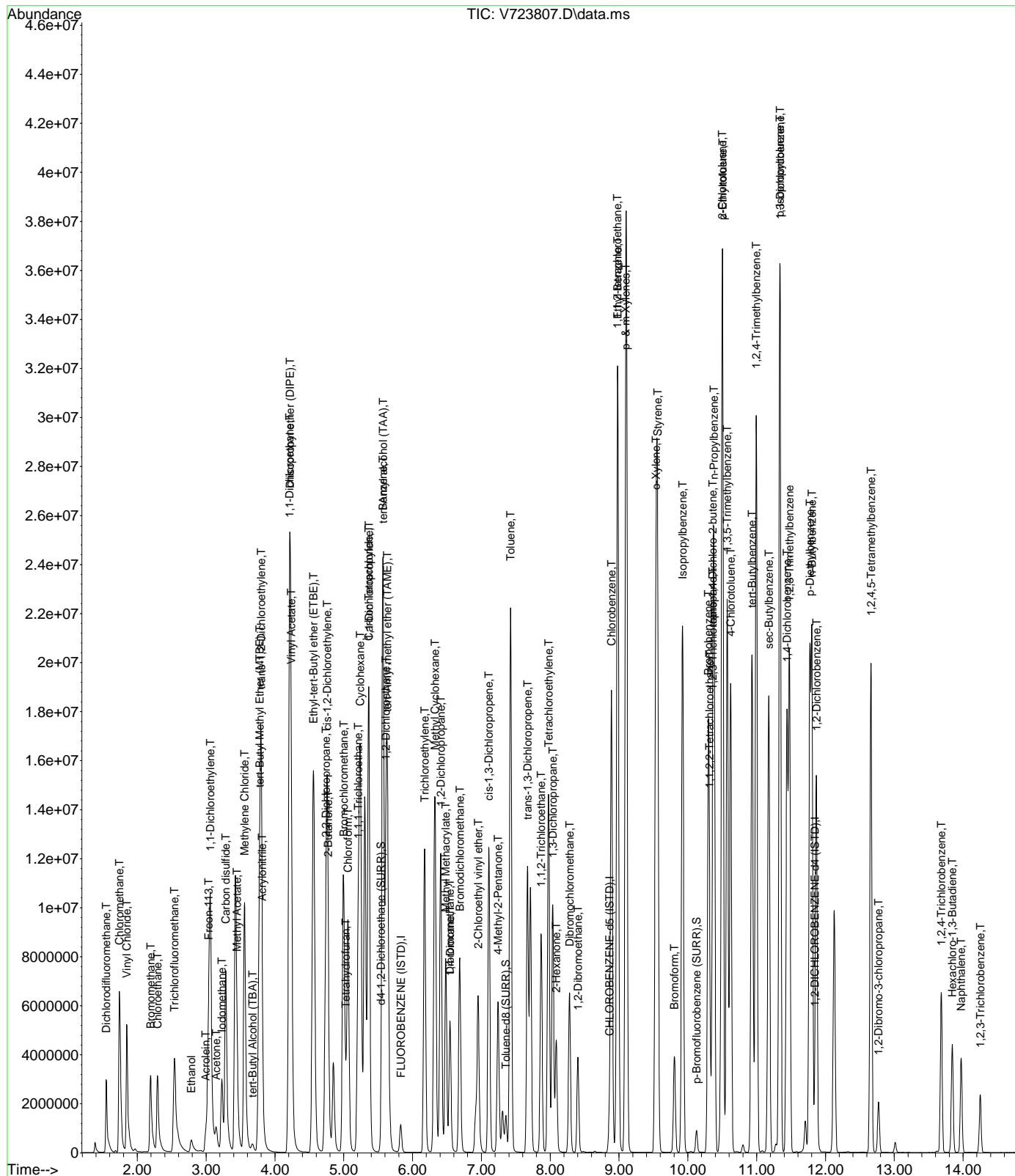
Quant Time: Feb 14 10:31:14 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	7.670	75	6132505	151.77	ppb	# 100
54) 1,1,2-Trichloroethane	7.867	97	3165181	142.01	ppb	93
55) 1,3-Dichloropropane	8.037	76	5438546	141.06	ppb	# 100
56) Tetrachloroethylene	7.976	166	5049007	160.82	ppb	# 100
57) 2-Hexanone	8.087	43	3837365	320.07	ppb	# 93
58) Dibromochloromethane	8.282	129	3997935	155.87	ppb	# 96
59) 1,2-Dibromoethane	8.402	107	3106863	147.44	ppb	97
60) Chlorobenzene	8.891	112	11078760	132.37	ppb	95
61) 1,1,1,2-tetrachloroethane	8.978	131	3982218	144.46	ppb	98
62) Ethyl Benzene	8.980	91	17527970	124.61	ppb	94
63) p- & m-Xylenes	9.094	91	22029933m	204.91	ppb	
64) o-Xylene	9.537	91	14520715	133.51	ppb	99
65) Styrene	9.559	104	12013161	139.84	ppb	# 100
66) Bromoform	9.804	173	2308246	170.94	ppb	# 80
68) p-Ethyltoluene	10.505	105	16392062	143.09	ppb	# 64
69) Isopropylbenzene	9.924	105	17544948	135.96	ppb	96
71) 1,1,2,2-Tetrachloroethane	10.313	83	3524742	146.50	ppb	# 97
72) Bromobenzene	10.299	77	6947834	145.67	ppb	# 92
73) trans-1,4-Dichloro-2-b...	10.363	75	4104095	156.01	ppb	# 83
74) 1,2,3-Trichloropropane	10.360	110	982335	149.38	ppb	73
75) n-Propylbenzene	10.377	91	18878952	125.11	ppb	94
76) 2-Chlorotoluene	10.499	91	13643127	135.00	ppb	100
77) 4-Chlorotoluene	10.622	91	12545818	134.72	ppb	100
78) 1,3,5-Trimethylbenzene	10.572	105	14387511	136.26	ppb	98
79) tert-Butylbenzene	10.933	119	12657704	144.31	ppb	99
80) 1,2,4-Trimethylbenzene	10.995	105	14376294	136.25	ppb	96
81) sec-Butylbenzene	11.176	105	16270994	136.31	ppb	97
82) 1,3-Dichlorobenzene	11.340	146	7901057	140.55	ppb	98
83) p-Isopropyltoluene	11.337	119	14964136	137.64	ppb	99
84) 1,4-Dichlorobenzene	11.440	146	8265486	145.54	ppb	99
85) 1,2,3-Trimethylbenzene	11.476	105	13592693	141.21	ppb	# 58
86) p-Diethylbenzene	11.774	105	8039433	144.03	ppb	93
87) 1,2-Dichlorobenzene	11.868	146	7375675	146.51	ppb	# 100
88) n-Butylbenzene	11.802	91	15083753	133.43	ppb	96
89) 1,2-Dibromo-3-chloropr...	12.770	75	577977	161.99	ppb	# 82
90) 1,2,4,5-Tetramethylben...	12.661	119	12874568	142.92	ppb	98
91) 1,2,4-Trichlorobenzene	13.682	180	2317772	118.46	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.844	225	1060263	130.33	ppb	# 1
93) Naphthalene	13.972	128	3454937	96.87	ppb	# 82
94) 1,2,3-Trichlorobenzene	14.250	180	811166	93.38	ppb	# 85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723807.D  
 Acq On : 14 Feb 2018 4:47 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CAL9  
 Misc : QBV7021318A  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: Feb 14 10:31:14 2018  
 Quant Method : C:\msdchem\1\methods\V7L00113.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Tue Jan 09 16:39:48 2018  
 Response via : Initial Calibration





Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804204.D  
 Acq On : 8 Mar 2018 3:04 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL1  
 Misc : QBV8030818A  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 09 08:26:37 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	4.919	70	20085	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.879	117	69864	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	22668	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	4.657	65	18009	11.19	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	111.90%	
51) Toluene-d8 (SURR)	6.399	98	101996	9.76	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	97.60%	
70) p-Bromofluorobenzene (...)	9.136	95	26018	8.47	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	84.70%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.157	85	1869	0.71	ppb	98
3) Chloromethane	1.304	50	2053	0.91	ppb	# 95
4) Vinyl Chloride	1.380	62	1729	0.68	ppb	# 87
5) Bromomethane	1.638	94	872	1.38	ppb	99
6) Chloroethane	1.708	64	1061	0.74	ppb	98
7) Trichlorofluoromethane	1.891	101	4142	0.99	ppb	99
9) Freon-113	2.306	101	1979m	0.70	ppb	
10) 1,1-Dichloroethylene	2.334	61	3004	0.65	ppb	# 79
12) Acetone	2.451	43	360m	1.57	ppb	
13) Iodomethane	2.484	142	2947	2.77	ppb	99
14) Methyl Acetate	2.704	43	172	0.28	ppb	# 93
15) Carbon disulfide	2.520	76	4329	0.68	ppb	# 100
16) tert-Butyl Alcohol (TBA)	2.996	59	37	0.25	ppb	# 100
17) Methylene Chloride	2.793	49	2787	0.80	ppb	# 98
18) Acrylonitrile	3.057	53	58	0.24	ppb	# 100
19) trans-1,2-Dichloroethy...	2.996	61	2379	0.59	ppb	95
20) tert-Butyl Methyl Ethe...	2.979	73	2214m	0.61	ppb	
21) 1,1-Dichloroethane	3.388	63	3182	0.65	ppb	# 93
22) Vinyl Acetate	3.433	43	986m	0.55	ppb	
23) Diisopropyl ether (DIPE)	3.391	45	3669	0.53	ppb	# 97
24) Ethyl-tert-Butyl ether...	3.703	59	2468	0.45	ppb	# 97
25) cis-1,2-Dichloroethylene	3.906	61	2359	0.54	ppb	92
27) 2,2-Dichloropropane	3.870	77	2456	0.56	ppb	# 75
29) Bromochloromethane	4.134	49	1178m	0.70	ppb	
30) Chloroform	4.204	83	3022	0.65	ppb	# 84
31) 1,1,1-Trichloroethane	4.312	97	3055	0.63	ppb	# 68
32) Cyclohexane	4.315	56	2096	0.45	ppb	# 82
33) 1,1-Dichloropropylene	4.454	75	2308	0.57	ppb	85
35) Carbon Tetrachloride	4.440	117	2798	0.64	ppb	# 93
36) tert-Amyl alcohol (TAA)	4.743	59	82m	2.10	ppb	
37) 1,2-Dichloroethane	4.729	62	1502	0.62	ppb	# 98
38) Benzene	4.657	78	6332	0.63	ppb	# 1
39) tert-Amyl methyl ether...	4.724	73	1856m	0.45	ppb	
41) Trichloroethylene	5.250	95	1783m	0.55	ppb	
42) Methyl Cyclohexane	5.358	83	2000m	0.40	ppb	
43) Methyl Methacrylate	6.797	69	567m	0.38	ppb	
44) Dibromomethane	5.628	93	603	0.58	ppb	# 100
45) Bromodichloromethane	5.775	83	1754	0.53	ppb	# 92
46) 1,2-Dichloropropane	5.489	63	1454	0.57	ppb	89
48) 2-Chloroethyl vinyl ether	6.054	63	177m	0.41	ppb	
49) cis-1,3-Dichloropropene	6.187	75	1617	0.46	ppb	# 38
50) 4-Methyl-2-Pentanone	6.332	43	350	0.42	ppb	# 66
52) Toluene	6.465	91	6873	0.57	ppb	99

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804204.D  
 Acq On : 8 Mar 2018 3:04 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL1  
 Misc : QBV8030818A  
 ALS Vial : 10 Sample Multiplier: 1

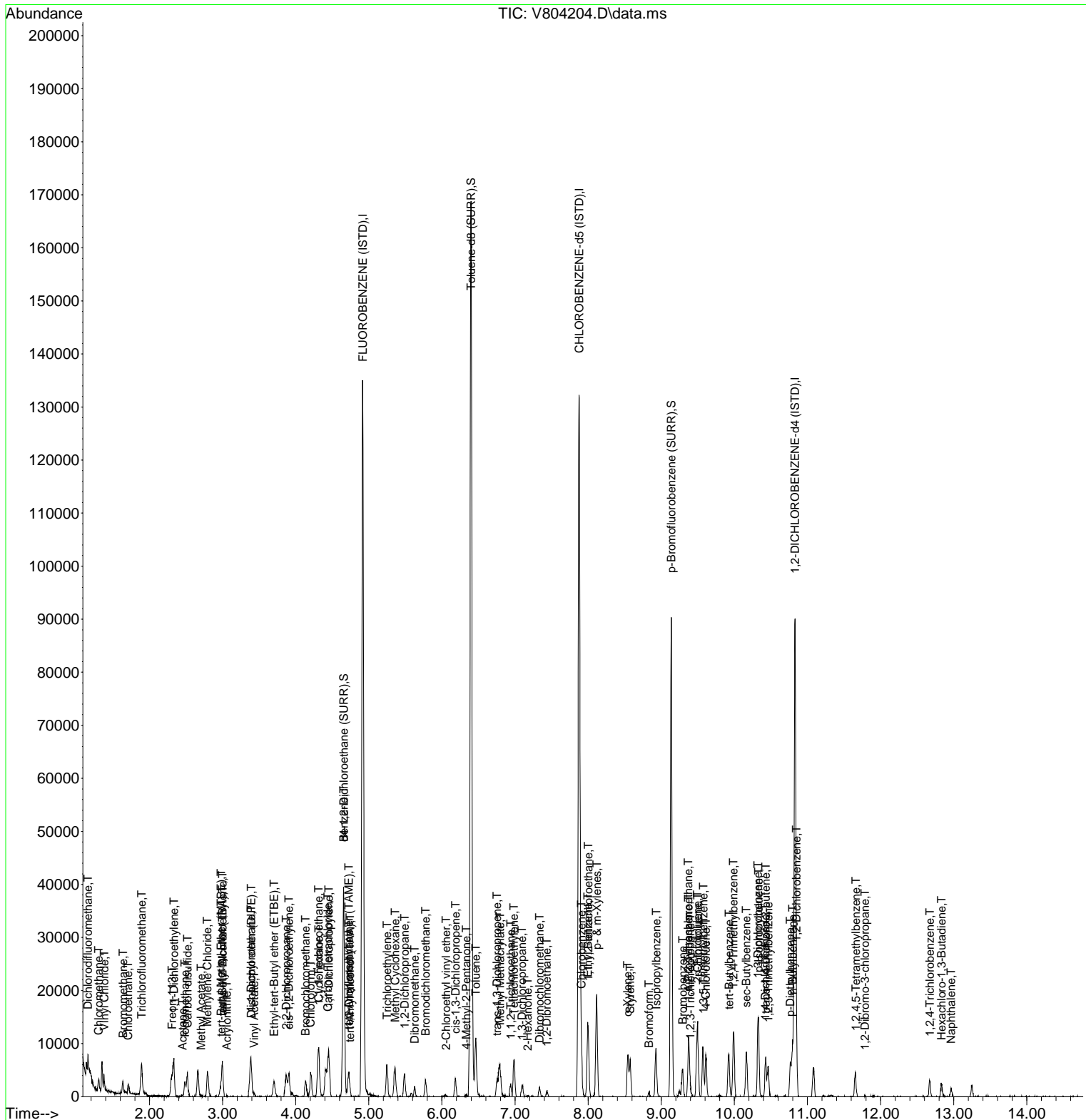
Quant Time: Mar 09 08:26:37 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
53) trans-1,3-Dichloropropene	6.752	75	1441	0.53	ppb	# 82
54) 1,1,2-Trichloroethane	6.941	97	839m	0.61	ppb	
55) 1,3-Dichloropropane	7.094	76	1238	0.52	ppb	# 69
56) Tetrachloroethylene	6.983	166	2032	0.56	ppb	99
57) 2-Hexanone	7.172	43	214m	0.41	ppb	
58) Dibromochloromethane	7.336	129	1097	0.63	ppb	# 95
59) 1,2-Dibromoethane	7.434	107	663	0.53	ppb	# 84
60) Chlorobenzene	7.907	112	4298	0.59	ppb	# 86
61) 1,1,1,2-tetrachloroethane	8.001	131	1645	0.67	ppb	# 51
62) Ethyl Benzene	7.996	91	6883	0.51	ppb	93
63) p- & m-Xylenes	8.118	91	10800	1.06	ppb	94
64) o-Xylene	8.538	91	4238	0.42	ppb	95
65) Styrene	8.574	104	3340	0.48	ppb	# 100
66) Bromoform	8.830	173	465	0.54	ppb	# 74
68) p-Ethyltoluene	9.498	105	5145	0.43	ppb	# 98
69) Isopropylbenzene	8.931	105	5920	0.47	ppb	# 85
71) 1,1,2,2-Tetrachloroethane	9.370	83	799	0.65	ppb	# 96
72) Bromobenzene	9.295	77	2029	0.49	ppb	# 81
73) trans-1,4-Dichloro-2-b...	10.427	75	803	0.46	ppb	# 99
74) 1,2,3-Trichloropropane	9.398	110	174m	0.50	ppb	
75) n-Propylbenzene	9.373	91	8079	0.52	ppb	97
76) 2-Chlorotoluene	9.493	91	5256	0.51	ppb	97
77) 4-Chlorotoluene	9.609	91	4607	0.49	ppb	100
78) 1,3,5-Trimethylbenzene	9.576	105	5299	0.50	ppb	93
79) tert-Butylbenzene	9.927	119	4447	0.49	ppb	# 91
80) 1,2,4-Trimethylbenzene	9.988	105	4824m	0.48	ppb	
81) sec-Butylbenzene	10.163	105	6091	0.48	ppb	97
82) 1,3-Dichlorobenzene	10.322	146	3427	0.66	ppb	92
83) p-Isopropyltoluene	10.330	119	5870	0.53	ppb	94
84) 1,4-Dichlorobenzene	10.422	147	204	0.56	ppb	# 70
85) 1,2,3-Trimethylbenzene	10.466	105	3758	0.42	ppb	# 88
86) p-Diethylbenzene	10.764	105	2300	0.39	ppb	# 26
87) 1,2-Dichlorobenzene	10.850	146	2986	0.66	ppb	# 68
88) n-Butylbenzene	10.795	91	6046m	0.49	ppb	
89) 1,2-Dibromo-3-chloropr...	11.785	75	46	0.25	ppb	# 49
90) 1,2,4,5-Tetramethylben...	11.660	119	3047	0.38	ppb	# 96
91) 1,2,4-Trichlorobenzene	12.673	180	1209	0.51	ppb	# 91
92) Hexachloro-1,3-Butadiene	12.834	225	571	0.49	ppb	# 74
93) Naphthalene	12.965	128	1880	0.60	ppb	# 77

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804204.D  
 Acq On : 8 Mar 2018 3:04 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL1  
 Misc : QBV8030818A  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 09 08:26:37 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804205.D  
 Acq On : 8 Mar 2018 3:31 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL2  
 Misc : QBV8030818A  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 09:45:51 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.916	70	20128	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	70007	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.828	152	23068	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.654	65	17787	11.02	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	110.20%		
51) Toluene-d8 (SURR)	6.399	98	103578	9.89	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	98.90%		
70) p-Bromofluorobenzene (...)	9.136	95	26277	8.41	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	84.10%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.160	85	7701	2.92	ppb	99
3) Chloromethane	1.304	50	7473	3.32	ppb	99
4) Vinyl Chloride	1.379	62	7039	2.75	ppb	100
5) Bromomethane	1.635	94	3455	5.44	ppb	98
6) Chloroethane	1.711	64	4099	2.85	ppb	99
7) Trichlorofluoromethane	1.891	101	14881	3.56	ppb	100
8) Ethanol	2.150	45	92m	12.92	ppb	
9) Freon-113	2.309	101	7396	2.61	ppb	# 100
10) 1,1-Dichloroethylene	2.334	61	10183	2.19	ppb	88
11) Acrolein	2.317	56	195m	15.33	ppb	
12) Acetone	2.451	43	768m	3.34	ppb	
13) Iodomethane	2.484	142	10178	9.55	ppb	98
14) Methyl Acetate	2.701	43	1654	2.68	ppb	97
15) Carbon disulfide	2.520	76	13240	2.06	ppb	100
17) Methylene Chloride	2.796	49	7783	2.22	ppb	98
18) Acrylonitrile	3.057	53	469	1.92	ppb	# 100
19) trans-1,2-Dichloroethy...	2.996	61	7435	1.85	ppb	93
20) tert-Butyl Methyl Ethe...	2.979	73	7003	1.92	ppb	# 95
21) 1,1-Dichloroethane	3.386	63	9741	1.98	ppb	99
22) Vinyl Acetate	3.424	43	3859m	2.15	ppb	
23) Diisopropyl ether (DIPE)	3.383	45	15512	2.24	ppb	99
24) Ethyl-tert-Butyl ether...	3.703	59	10662	1.94	ppb	# 83
25) cis-1,2-Dichloroethylene	3.909	61	8585m	1.95	ppb	
26) 2-Butanone	3.948	72	34m	0.42	ppb	
27) 2,2-Dichloropropane	3.870	77	8796	2.01	ppb	# 75
28) Tetrahydrofuran	4.151	71	59m	0.83	ppb	
29) Bromochloromethane	4.137	49	3686	2.18	ppb	# 79
30) Chloroform	4.212	83	10126	2.19	ppb	# 68
31) 1,1,1-Trichloroethane	4.309	97	9807	2.03	ppb	# 99
32) Cyclohexane	4.318	56	9151	1.94	ppb	91
33) 1,1-Dichloropropylene	4.457	75	8113	2.00	ppb	90
35) Carbon Tetrachloride	4.443	117	9671	2.19	ppb	100
36) tert-Amyl alcohol (TAA)	4.746	59	720m	18.38	ppb	
37) 1,2-Dichloroethane	4.724	62	4942	2.03	ppb	99
38) Benzene	4.654	78	21130	2.11	ppb	# 68
39) tert-Amyl methyl ether...	4.721	73	8063	1.97	ppb	# 100
41) Trichloroethylene	5.244	95	5820	1.78	ppb	87
42) Methyl Cyclohexane	5.355	83	8789	1.76	ppb	93
43) Methyl Methacrylate	6.791	69	2389	1.58	ppb	# 100
44) Dibromomethane	5.625	93	2050	1.98	ppb	# 100
45) Bromodichloromethane	5.775	83	5990	1.82	ppb	98
46) 1,2-Dichloropropane	5.481	63	4556m	1.78	ppb	
48) 2-Chloroethyl vinyl ether	6.048	63	933	2.17	ppb	98

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804205.D  
 Acq On : 8 Mar 2018 3:31 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL2  
 Misc : QBV8030818A  
 ALS Vial : 11 Sample Multiplier: 1

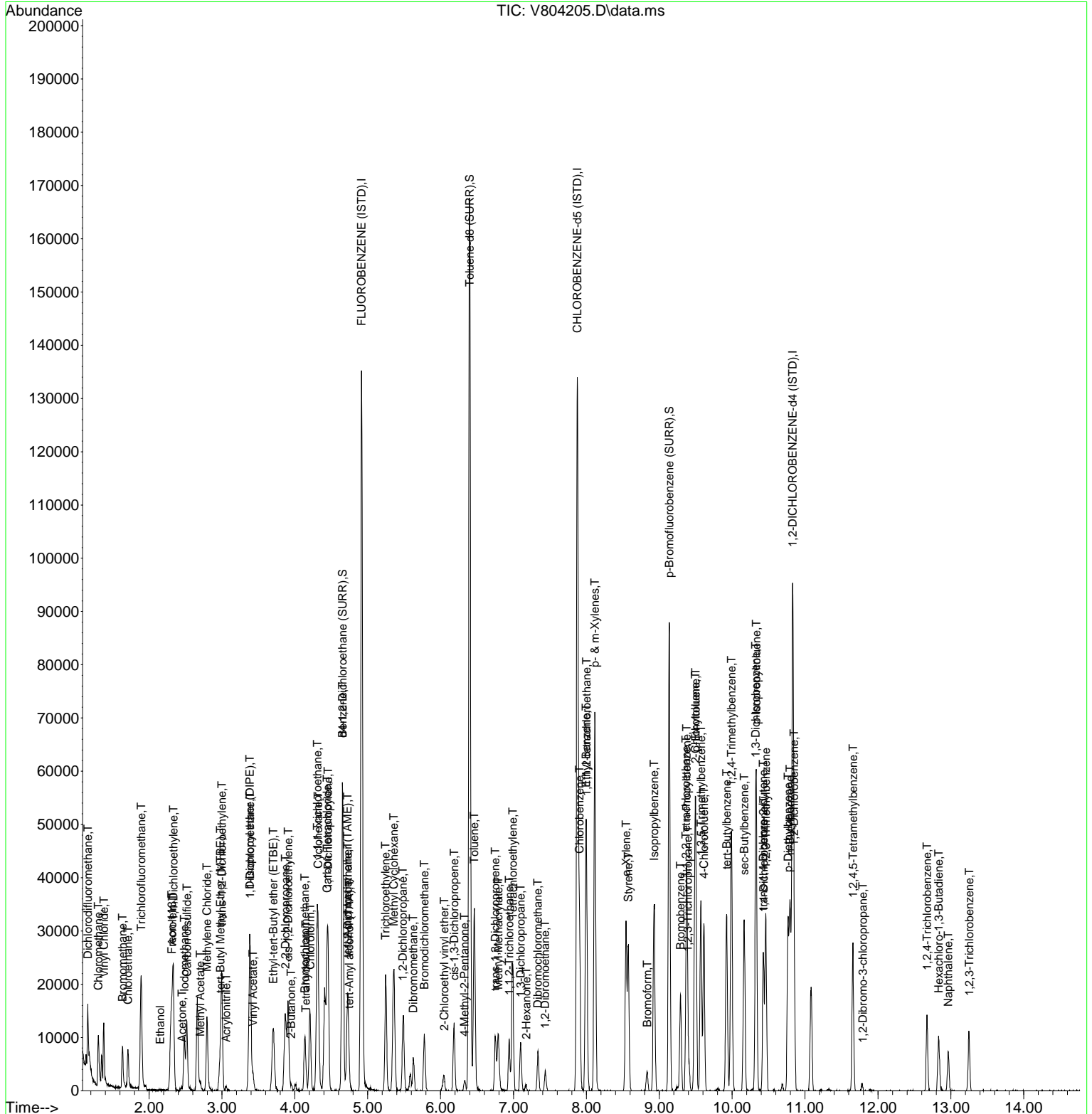
Quant Time: Mar 09 09:45:51 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
49) cis-1,3-Dichloropropene	6.187	75	6058	1.72	ppb	91
50) 4-Methyl-2-Pentanone	6.326	43	1691	2.02	ppb #	82
52) Toluene	6.463	91	23166	1.92	ppb	99
53) trans-1,3-Dichloropropene	6.749	75	4423	1.63	ppb	97
54) 1,1,2-Trichloroethane	6.941	97	2762	1.99	ppb #	83
55) 1,3-Dichloropropane	7.097	76	4407	1.84	ppb #	89
56) Tetrachloroethylene	6.989	166	6499	1.78	ppb	99
57) 2-Hexanone	7.175	43	960	1.82	ppb #	69
58) Dibromochloromethane	7.333	129	3703	2.11	ppb #	63
59) 1,2-Dibromoethane	7.434	107	2554	2.05	ppb #	86
60) Chlorobenzene	7.904	112	14325	1.98	ppb	94
61) 1,1,1,2-tetrachloroethane	8.001	131	5329	2.15	ppb	98
62) Ethyl Benzene	7.996	91	24404	1.82	ppb	94
63) p- & m-Xylenes	8.115	91	38546	3.79	ppb	94
64) o-Xylene	8.544	91	16537	1.65	ppb	97
65) Styrene	8.574	104	12981	1.85	ppb #	100
66) Bromoform	8.833	173	1697	1.96	ppb	98
68) p-Ethyltoluene	9.498	105	23040	1.89	ppb #	99
69) Isopropylbenzene	8.928	105	23306	1.80	ppb	97
71) 1,1,2,2-Tetrachloroethane	9.367	83	2731	2.19	ppb #	96
72) Bromobenzene	9.289	77	6763	1.60	ppb	88
73) trans-1,4-Dichloro-2-b...	10.425	75	3117	1.74	ppb #	99
74) 1,2,3-Trichloropropane	9.392	110	707m	1.98	ppb	
75) n-Propylbenzene	9.376	91	29254	1.85	ppb	97
76) 2-Chlorotoluene	9.493	91	18311	1.76	ppb	98
77) 4-Chlorotoluene	9.612	91	16664	1.76	ppb	100
78) 1,3,5-Trimethylbenzene	9.573	105	20003	1.85	ppb	96
79) tert-Butylbenzene	9.924	119	17008	1.85	ppb	93
80) 1,2,4-Trimethylbenzene	9.991	105	18883	1.84	ppb	94
81) sec-Butylbenzene	10.166	105	23771	1.85	ppb	99
82) 1,3-Dichlorobenzene	10.322	146	11005	2.07	ppb	96
83) p-Isopropyltoluene	10.330	119	21893	1.94	ppb	97
84) 1,4-Dichlorobenzene	10.430	147	811m	2.18	ppb	
85) 1,2,3-Trimethylbenzene	10.461	105	17843m	1.95	ppb	
86) p-Diethylbenzene	10.767	105	10466	1.76	ppb	94
87) 1,2-Dichlorobenzene	10.850	146	9531	2.08	ppb #	68
88) n-Butylbenzene	10.792	91	24256	1.92	ppb	97
89) 1,2-Dibromo-3-chloropr...	11.793	75	435m	2.31	ppb	
90) 1,2,4,5-Tetramethylben...	11.657	119	14823	1.81	ppb	98
91) 1,2,4-Trichlorobenzene	12.673	180	4205	1.74	ppb	97
92) Hexachloro-1,3-Butadiene	12.834	225	2207	1.86	ppb #	86
93) Naphthalene	12.965	128	6333	2.00	ppb	97
94) 1,2,3-Trichlorobenzene	13.254	181	273m	2.21	ppb	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804205.D  
 Acq On : 8 Mar 2018 3:31 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL2  
 Misc : QBV8030818A  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 09 09:45:51 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804206.D  
 Acq On : 8 Mar 2018 3:58 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL3  
 Misc : QBV8030818A  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 09:43:00 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	4.916	70	19359	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	67034	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	22233	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	4.657	65	16231	10.46	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	104.60%	
51) Toluene-d8 (SURR)	6.399	98	100616	10.03	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	100.30%	
70) p-Bromofluorobenzene (...)	9.136	95	25222	8.37	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	83.70%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.160	85	14756	5.82	ppb	99
3) Chloromethane	1.304	50	14155	6.54	ppb	99
4) Vinyl Chloride	1.379	62	13388	5.44	ppb	100
5) Bromomethane	1.635	94	6879	11.26	ppb	98
6) Chloroethane	1.711	64	7745	5.59	ppb	100
7) Trichlorofluoromethane	1.891	101	28202	7.01	ppb	100
8) Ethanol	2.178	45	143m	20.88	ppb	
9) Freon-113	2.309	101	14430	5.30	ppb	# 60
10) 1,1-Dichloroethylene	2.334	61	19557	4.38	ppb	87
11) Acrolein	2.303	56	347	28.37	ppb	100
12) Acetone	2.445	43	1087	4.91	ppb	95
13) Iodomethane	2.487	142	18912	18.45	ppb	98
14) Methyl Acetate	2.701	43	2641	4.45	ppb	99
15) Carbon disulfide	2.517	76	25341	4.10	ppb	100
16) tert-Butyl Alcohol (TBA)	2.974	59	55m	0.39	ppb	
17) Methylene Chloride	2.793	49	14284	4.24	ppb	# 98
18) Acrylonitrile	3.060	53	949m	4.04	ppb	
19) trans-1,2-Dichloroethy...	2.996	61	15442	4.00	ppb	# 88
20) tert-Butyl Methyl Ethe...	2.976	73	13757	3.91	ppb	# 91
21) 1,1-Dichloroethane	3.388	63	19296	4.08	ppb	# 87
22) Vinyl Acetate	3.424	43	7147m	4.15	ppb	
23) Diisopropyl ether (DIPE)	3.385	45	31192	4.69	ppb	# 97
24) Ethyl-tert-Butyl ether...	3.703	59	21588	4.08	ppb	# 83
25) cis-1,2-Dichloroethylene	3.909	61	14956	3.53	ppb	90
26) 2-Butanone	3.945	72	187m	2.39	ppb	
27) 2,2-Dichloropropane	3.867	77	16658	3.96	ppb	95
28) Tetrahydrofuran	4.167	71	168m	2.45	ppb	
29) Bromochloromethane	4.134	49	7238	4.46	ppb	# 73
30) Chloroform	4.206	83	19417	4.37	ppb	# 100
31) 1,1,1-Trichloroethane	4.309	97	19927	4.29	ppb	# 99
32) Cyclohexane	4.312	56	18692	4.12	ppb	89
33) 1,1-Dichloropropylene	4.454	75	16071	4.12	ppb	88
35) Carbon Tetrachloride	4.443	117	19202	4.53	ppb	100
36) tert-Amyl alcohol (TAA)	4.735	59	1439m	38.20	ppb	
37) 1,2-Dichloroethane	4.724	62	9511	4.06	ppb	# 98
38) Benzene	4.654	78	41458	4.31	ppb	# 86
39) tert-Amyl methyl ether...	4.721	73	16244	4.12	ppb	# 100
41) Trichloroethylene	5.247	95	11494	3.68	ppb	89
42) Methyl Cyclohexane	5.358	83	18112	3.79	ppb	# 69
43) Methyl Methacrylate	6.788	69	4923	3.40	ppb	# 100
44) Dibromomethane	5.625	93	3848	3.88	ppb	# 100
45) Bromodichloromethane	5.778	83	12198	3.87	ppb	98
46) 1,2-Dichloropropane	5.486	63	8951	3.64	ppb	# 89

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804206.D  
 Acq On : 8 Mar 2018 3:58 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL3  
 Misc : QBV8030818A  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 09:43:00 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

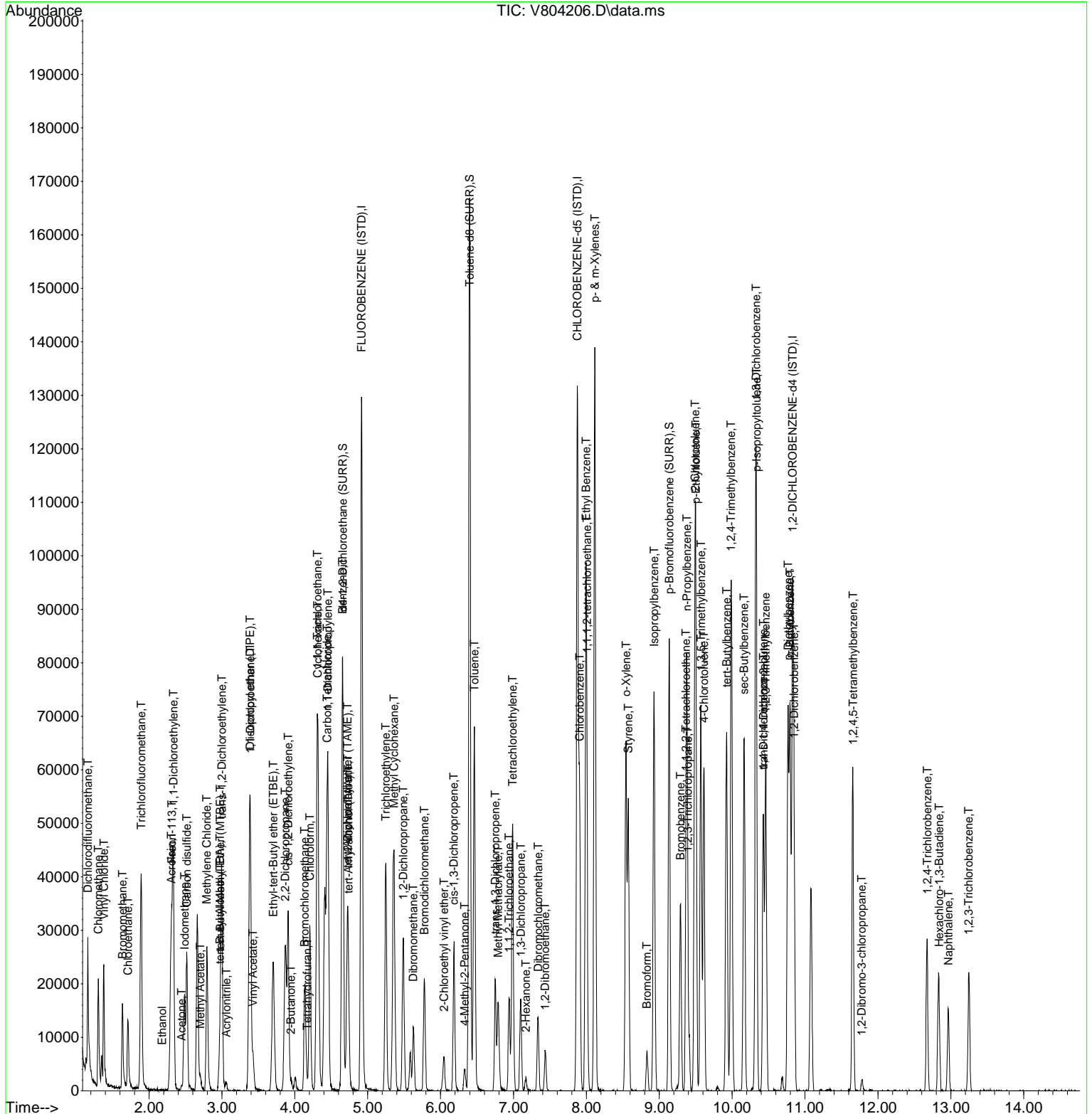
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 2-Chloroethyl vinyl ether	6.045	63	1999	4.85	ppb	99
49) cis-1,3-Dichloropropene	6.182	75	12256	3.62	ppb	91
50) 4-Methyl-2-Pentanone	6.329	43	3268	4.08	ppb #	70
52) Toluene	6.465	91	45304	3.92	ppb	99
53) trans-1,3-Dichloropropene	6.749	75	9152	3.51	ppb	98
54) 1,1,2-Trichloroethane	6.938	97	5221	3.93	ppb	99
55) 1,3-Dichloropropane	7.100	76	8495	3.71	ppb	97
56) Tetrachloroethylene	6.986	166	12701	3.63	ppb	99
57) 2-Hexanone	7.169	43	1893	3.74	ppb #	79
58) Dibromochloromethane	7.339	129	7204	4.28	ppb	98
59) 1,2-Dibromoethane	7.431	107	4819	4.03	ppb	95
60) Chlorobenzene	7.907	112	27894	4.02	ppb	94
61) 1,1,1,2-tetrachloroethane	8.007	131	10398	4.38	ppb	98
62) Ethyl Benzene	7.996	91	49823	3.87	ppb	94
63) p- & m-Xylenes	8.115	91	76561	7.87	ppb	93
64) o-Xylene	8.544	91	35016	3.64	ppb	98
65) Styrene	8.574	104	26269	3.91	ppb #	100
66) Bromoform	8.828	173	3153	3.80	ppb	99
68) p-Ethyltoluene	9.501	105	46712	3.97	ppb #	99
69) Isopropylbenzene	8.928	105	48671	3.90	ppb	97
71) 1,1,2,2-Tetrachloroethane	9.364	83	4931	4.11	ppb #	100
72) Bromobenzene	9.289	77	13520	3.33	ppb	90
73) trans-1,4-Dichloro-2-b...	10.427	75	6064	3.51	ppb #	99
74) 1,2,3-Trichloropropane	9.392	110	1416	4.12	ppb #	100
75) n-Propylbenzene	9.378	91	58538	3.83	ppb	97
76) 2-Chlorotoluene	9.490	91	36782	3.67	ppb	98
77) 4-Chlorotoluene	9.612	91	31994	3.50	ppb	100
78) 1,3,5-Trimethylbenzene	9.573	105	39656	3.80	ppb	95
79) tert-Butylbenzene	9.924	119	34896	3.94	ppb	94
80) 1,2,4-Trimethylbenzene	9.985	105	38095	3.86	ppb	95
81) sec-Butylbenzene	10.163	105	49283	3.98	ppb	97
82) 1,3-Dichlorobenzene	10.327	146	21691	4.23	ppb	95
83) p-Isopropyltoluene	10.333	119	45714	4.20	ppb	97
84) 1,4-Dichlorobenzene	10.427	147	1603m	4.47	ppb	
85) 1,2,3-Trimethylbenzene	10.458	105	34816	3.95	ppb	96
86) p-Diethylbenzene	10.767	105	22051	3.85	ppb	95
87) 1,2-Dichlorobenzene	10.850	146	18264	4.14	ppb #	100
88) n-Butylbenzene	10.792	91	48138	3.96	ppb	96
89) 1,2-Dibromo-3-chloropr...	11.777	75	714m	3.94	ppb	
90) 1,2,4,5-Tetramethylben...	11.657	119	32237	4.08	ppb	99
91) 1,2,4-Trichlorobenzene	12.675	180	8750	3.76	ppb	97
92) Hexachloro-1,3-Butadiene	12.840	225	4272	3.74	ppb	94
93) Naphthalene	12.967	128	13051	4.27	ppb	98
94) 1,2,3-Trichlorobenzene	13.243	181	592	4.96	ppb #	59

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804206.D  
 Acq On : 8 Mar 2018 3:58 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL3  
 Misc : QBV8030818A  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Mar 09 09:43:00 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804207.D  
 Acq On : 8 Mar 2018 4:25 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL4  
 Misc : QBV8030818A  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 09:40:33 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.919	70	20440	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	70901	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	23905	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.654	65	17424	10.63	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	106.30%	
51) Toluene-d8 (SURR)	6.399	98	105100	9.91	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	99.10%	
70) p-Bromofluorobenzene (...)	9.136	95	27607	8.52	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	85.20%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.160	85	37130	13.87	ppb	Qvalue 100
3) Chloromethane	1.302	50	36568	16.01	ppb	98
4) Vinyl Chloride	1.380	62	34307	13.21	ppb	# 87
5) Bromomethane	1.636	94	19323	29.94	ppb	99
6) Chloroethane	1.711	64	19279	13.19	ppb	100
7) Trichlorofluoromethane	1.892	101	71104	16.73	ppb	100
8) Ethanol	2.156	45	530m	73.30	ppb	
9) Freon-113	2.303	101	36501	12.71	ppb	# 99
10) 1,1-Dichloroethylene	2.334	61	51303	10.88	ppb	89
11) Acrolein	2.309	56	1171	90.67	ppb	# 78
12) Acetone	2.442	43	2211	9.46	ppb	95
13) Iodomethane	2.484	142	46669	43.12	ppb	98
14) Methyl Acetate	2.701	43	6957	11.10	ppb	99
15) Carbon disulfide	2.518	76	67579	10.36	ppb	100
16) tert-Butyl Alcohol (TBA)	2.957	59	297m	1.98	ppb	
17) Methylene Chloride	2.793	49	35174	9.89	ppb	98
18) Acrylonitrile	3.057	53	2554	10.29	ppb	# 100
19) trans-1,2-Dichloroethy...	2.996	61	39149	9.60	ppb	95
20) tert-Butyl Methyl Ethe...	2.979	73	35799	9.64	ppb	# 98
21) 1,1-Dichloroethane	3.386	63	51778	10.38	ppb	# 87
22) Vinyl Acetate	3.430	43	20300m	11.16	ppb	
23) Diisopropyl ether (DIPE)	3.386	45	84177	11.98	ppb	# 97
24) Ethyl-tert-Butyl ether...	3.703	59	56720	10.16	ppb	# 83
25) cis-1,2-Dichloroethylene	3.909	61	43843	9.79	ppb	96
26) 2-Butanone	3.948	72	744m	9.01	ppb	
27) 2,2-Dichloropropane	3.870	77	43208	9.74	ppb	# 75
28) Tetrahydrofuran	4.162	71	732	10.13	ppb	# 85
29) Bromochloromethane	4.134	49	18653	10.88	ppb	95
30) Chloroform	4.204	83	50319	10.71	ppb	# 100
31) 1,1,1-Trichloroethane	4.312	97	51969	10.59	ppb	# 100
32) Cyclohexane	4.312	56	49565	10.35	ppb	90
33) 1,1-Dichloropropylene	4.454	75	41295	10.03	ppb	86
35) Carbon Tetrachloride	4.437	117	50817	11.35	ppb	100
36) tert-Amyl alcohol (TAA)	4.732	59	3901	98.09	ppb	# 100
37) 1,2-Dichloroethane	4.727	62	24238	9.79	ppb	99
38) Benzene	4.657	78	106910	10.52	ppb	97
39) tert-Amyl methyl ether...	4.727	73	41493	9.98	ppb	# 100
41) Trichloroethylene	5.247	95	30508	9.24	ppb	89
42) Methyl Cyclohexane	5.355	83	47609	9.41	ppb	92
43) Methyl Methacrylate	6.794	69	13825	9.02	ppb	# 100
44) Dibromomethane	5.628	93	10260	9.77	ppb	# 100
45) Bromodichloromethane	5.778	83	31750	9.53	ppb	99
46) 1,2-Dichloropropane	5.486	63	23243	8.95	ppb	99

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804207.D  
 Acq On : 8 Mar 2018 4:25 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL4  
 Misc : QBV8030818A  
 ALS Vial : 13 Sample Multiplier: 1

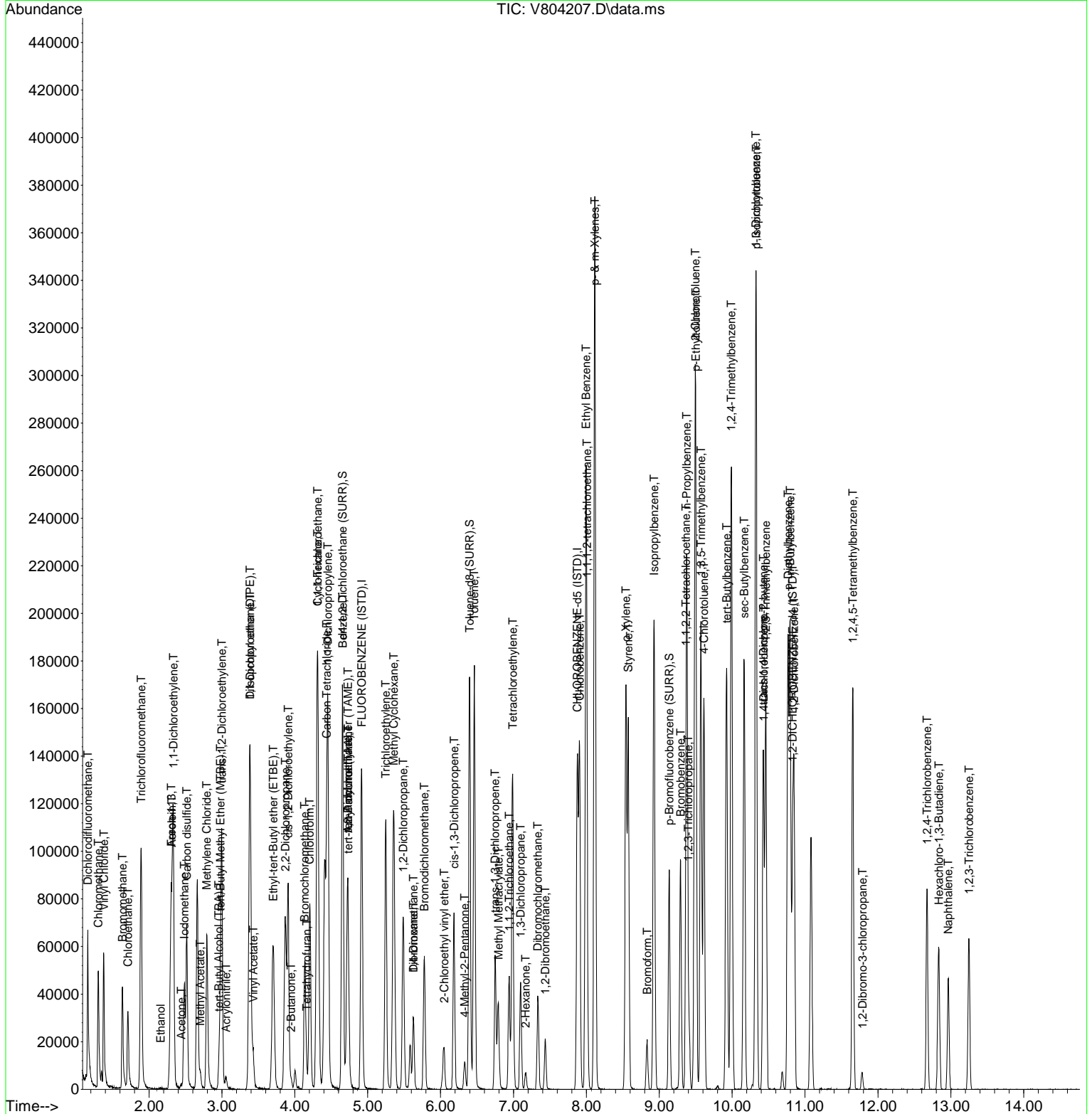
Quant Time: Mar 09 09:40:33 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	5.628	88	85m	45.81	ppb	
48) 2-Chloroethyl vinyl ether	6.048	63	5912	13.56	ppb	99
49) cis-1,3-Dichloropropene	6.184	75	32942	9.21	ppb	91
50) 4-Methyl-2-Pentanone	6.329	43	8605	10.15	ppb	# 96
52) Toluene	6.463	91	117911	9.64	ppb	100
53) trans-1,3-Dichloropropene	6.747	75	25030	9.09	ppb	99
54) 1,1,2-Trichloroethane	6.941	97	13773	9.80	ppb	97
55) 1,3-Dichloropropane	7.097	76	21407	8.84	ppb	# 88
56) Tetrachloroethylene	6.989	166	33826	9.13	ppb	98
57) 2-Hexanone	7.167	43	5240	9.79	ppb	# 72
58) Dibromochloromethane	7.334	129	19405	10.91	ppb	# 63
59) 1,2-Dibromoethane	7.437	107	12958	10.26	ppb	97
60) Chlorobenzene	7.907	112	72245	9.85	ppb	96
61) 1,1,1,2-tetrachloroethane	8.007	131	27608	11.00	ppb	98
62) Ethyl Benzene	7.996	91	133825	9.84	ppb	93
63) p- & m-Xylenes	8.115	91	206878	20.10	ppb	94
64) o-Xylene	8.541	91	95717	9.41	ppb	97
65) Styrene	8.574	104	73293	10.32	ppb	# 100
66) Bromoform	8.833	173	8565	9.76	ppb	# 80
68) p-Ethyltoluene	9.501	105	126494	9.99	ppb	# 99
69) Isopropylbenzene	8.928	105	133177	9.92	ppb	96
71) 1,1,2,2-Tetrachloroethane	9.367	83	13152	10.19	ppb	# 67
72) Bromobenzene	9.292	77	36008	8.24	ppb	90
73) trans-1,4-Dichloro-2-b...	10.427	75	16152	8.69	ppb	# 100
74) 1,2,3-Trichloropropane	9.395	110	3758	10.16	ppb	# 100
75) n-Propylbenzene	9.376	91	160982	9.80	ppb	97
76) 2-Chlorotoluene	9.493	91	100671	9.33	ppb	98
77) 4-Chlorotoluene	9.612	91	86081	8.75	ppb	100
78) 1,3,5-Trimethylbenzene	9.570	105	108511	9.66	ppb	96
79) tert-Butylbenzene	9.924	119	97309	10.22	ppb	93
80) 1,2,4-Trimethylbenzene	9.988	105	105482	9.94	ppb	95
81) sec-Butylbenzene	10.166	105	135373	10.18	ppb	98
82) 1,3-Dichlorobenzene	10.324	146	58806	10.68	ppb	97
83) p-Isopropyltoluene	10.330	119	128216	10.94	ppb	97
84) 1,4-Dichlorobenzene	10.430	147	4172	10.82	ppb	73
85) 1,2,3-Trimethylbenzene	10.461	105	95304	10.05	ppb	97
86) p-Diethylbenzene	10.767	105	61932	10.05	ppb	94
87) 1,2-Dichlorobenzene	10.848	146	48196	10.16	ppb	# 100
88) n-Butylbenzene	10.795	91	133536	10.22	ppb	96
89) 1,2-Dibromo-3-chloropr...	11.788	75	1743	8.95	ppb	91
90) 1,2,4,5-Tetramethylben...	11.654	119	93569	11.00	ppb	98
91) 1,2,4-Trichlorobenzene	12.673	180	25139	10.05	ppb	99
92) Hexachloro-1,3-Butadiene	12.837	225	11383m	9.26	ppb	
93) Naphthalene	12.965	128	38177	11.61	ppb	98
94) 1,2,3-Trichlorobenzene	13.249	181	1580	12.32	ppb	# 67

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804207.D  
 Acq On : 8 Mar 2018 4:25 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL4  
 Misc : QBV8030818A  
 ALS Vial : 13 Sample Multiplier: 1

Quant Time: Mar 09 09:40:33 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804208.D  
 Acq On : 8 Mar 2018 4:52 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL5  
 Misc : QBV8030818A  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 09 09:40:52 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.916	70	20545	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	73752	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	25650	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.657	65	17967	10.91	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	109.10%
51) Toluene-d8 (SURR)	6.396	98	108128	9.80	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	98.00%
70) p-Bromofluorobenzene (...)	9.134	95	28347	8.16	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	81.60%
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.160	85	79281	29.46	ppb	100
3) Chloromethane	1.305	50	76953	33.53	ppb	99
4) Vinyl Chloride	1.377	62	73830	28.28	ppb	99
5) Bromomethane	1.636	94	46713	72.02	ppb	98
6) Chloroethane	1.711	64	41240	28.06	ppb	100
7) Trichlorofluoromethane	1.892	101	156083	36.54	ppb	100
8) Ethanol	2.161	45	1620m	222.90	ppb	
9) Freon-113	2.303	101	77307	26.78	ppb	# 99
10) 1,1-Dichloroethylene	2.334	61	100948	21.29	ppb	# 85
11) Acrolein	2.306	56	2360m	181.80	ppb	
12) Acetone	2.442	43	4507	19.18	ppb	99
13) Iodomethane	2.487	142	96894	89.06	ppb	98
14) Methyl Acetate	2.698	43	14623	23.20	ppb	99
15) Carbon disulfide	2.520	76	143627	21.91	ppb	100
16) tert-Butyl Alcohol (TBA)	2.963	59	735m	4.88	ppb	
17) Methylene Chloride	2.793	49	73349	20.51	ppb	98
18) Acrylonitrile	3.055	53	5517	22.12	ppb	# 100
19) trans-1,2-Dichloroethy...	2.996	61	85285	20.80	ppb	96
20) tert-Butyl Methyl Ethe...	2.977	73	78757	21.11	ppb	# 91
21) 1,1-Dichloroethane	3.386	63	109574	21.85	ppb	98
22) Vinyl Acetate	3.430	43	38928	21.30	ppb	# 33
23) Diisopropyl ether (DIPE)	3.383	45	169322	23.98	ppb	100
24) Ethyl-tert-Butyl ether...	3.700	59	116269	20.72	ppb	# 99
25) cis-1,2-Dichloroethylene	3.909	61	95105	21.13	ppb	95
26) 2-Butanone	3.945	72	1689m	20.34	ppb	
27) 2,2-Dichloropropane	3.870	77	91738	20.57	ppb	# 75
28) Tetrahydrofuran	4.162	71	1710	23.54	ppb	# 96
29) Bromochloromethane	4.134	49	39491	22.92	ppb	94
30) Chloroform	4.204	83	108285	22.94	ppb	# 100
31) 1,1,1-Trichloroethane	4.309	97	114559	23.22	ppb	# 100
32) Cyclohexane	4.315	56	109379	22.73	ppb	91
33) 1,1-Dichloropropylene	4.457	75	87400	21.13	ppb	82
35) Carbon Tetrachloride	4.443	117	111697	24.82	ppb	100
36) tert-Amyl alcohol (TAA)	4.741	59	7885	197.25	ppb	# 100
37) 1,2-Dichloroethane	4.727	62	50650	20.36	ppb	# 98
38) Benzene	4.657	78	232358	22.76	ppb	# 97
39) tert-Amyl methyl ether...	4.724	73	87601	20.96	ppb	# 100
41) Trichloroethylene	5.247	95	66978	19.49	ppb	90
42) Methyl Cyclohexane	5.358	83	105246	19.99	ppb	92
43) Methyl Methacrylate	6.791	69	30700	19.25	ppb	# 100
44) Dibromomethane	5.625	93	22053	20.19	ppb	# 100
45) Bromodichloromethane	5.776	83	69776	20.13	ppb	98
46) 1,2-Dichloropropane	5.486	63	50513	18.70	ppb	99

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804208.D  
 Acq On : 8 Mar 2018 4:52 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL5  
 Misc : QBV8030818A  
 ALS Vial : 14 Sample Multiplier: 1

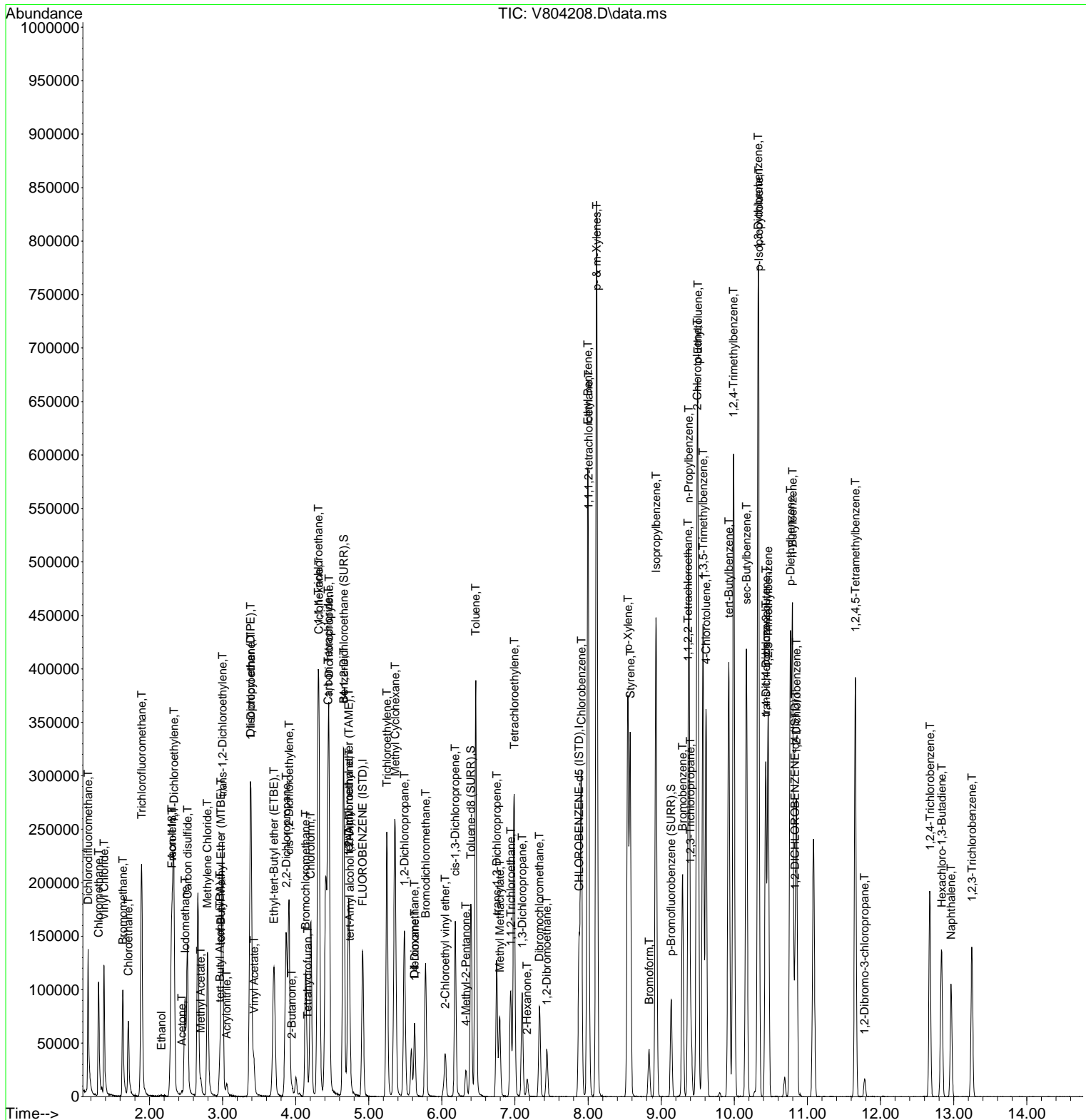
Quant Time: Mar 09 09:40:52 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	5.628	88	382m	197.93	ppb	
48) 2-Chloroethyl vinyl ether	6.043	63	13218	29.14	ppb	99
49) cis-1,3-Dichloropropene	6.182	75	73714	19.82	ppb	93
50) 4-Methyl-2-Pentanone	6.326	43	18932	21.47	ppb	# 95
52) Toluene	6.463	91	256394	20.15	ppb	100
53) trans-1,3-Dichloropropene	6.749	75	54315	18.96	ppb	99
54) 1,1,2-Trichloroethane	6.941	97	28569	19.54	ppb	97
55) 1,3-Dichloropropane	7.097	76	46458	18.44	ppb	# 90
56) Tetrachloroethylene	6.989	166	73723	19.13	ppb	98
57) 2-Hexanone	7.164	43	11908	21.39	ppb	91
58) Dibromochloromethane	7.334	129	42972	23.22	ppb	# 63
59) 1,2-Dibromoethane	7.434	107	27544	20.96	ppb	98
60) Chlorobenzene	7.907	112	156348	20.50	ppb	94
61) 1,1,1,2-tetrachloroethane	8.004	131	61437	23.53	ppb	97
62) Ethyl Benzene	7.996	91	297081	20.99	ppb	93
63) p- & m-Xylenes	8.115	91	462564	43.21	ppb	93
64) o-Xylene	8.544	91	211961	20.04	ppb	97
65) Styrene	8.577	104	161682	21.89	ppb	# 100
66) Bromoform	8.833	173	19251	21.09	ppb	100
68) p-Ethyltoluene	9.501	105	286608	21.10	ppb	# 99
69) Isopropylbenzene	8.928	105	298975	20.76	ppb	96
71) 1,1,2,2-Tetrachloroethane	9.367	83	28224	20.38	ppb	# 100
72) Bromobenzene	9.290	77	79816	17.02	ppb	92
73) trans-1,4-Dichloro-2-b...	10.430	75	35317	17.70	ppb	# 99
74) 1,2,3-Trichloropropane	9.395	110	7913	19.94	ppb	# 100
75) n-Propylbenzene	9.376	91	362208	20.55	ppb	97
76) 2-Chlorotoluene	9.490	91	226317	19.55	ppb	98
77) 4-Chlorotoluene	9.612	91	189018	17.92	ppb	100
78) 1,3,5-Trimethylbenzene	9.573	105	241752	20.06	ppb	95
79) tert-Butylbenzene	9.924	119	222394	21.76	ppb	92
80) 1,2,4-Trimethylbenzene	9.988	105	240284	21.10	ppb	95
81) sec-Butylbenzene	10.166	105	308915	21.65	ppb	97
82) 1,3-Dichlorobenzene	10.325	146	135484	22.92	ppb	96
83) p-Isopropyltoluene	10.333	119	301029	23.95	ppb	97
84) 1,4-Dichlorobenzene	10.430	147	9421	22.78	ppb	69
85) 1,2,3-Trimethylbenzene	10.461	105	205272	20.18	ppb	96
86) p-Diethylbenzene	10.767	105	145898	22.07	ppb	91
87) 1,2-Dichlorobenzene	10.850	146	105587	20.74	ppb	# 99
88) n-Butylbenzene	10.795	91	304171	21.70	ppb	94
89) 1,2-Dibromo-3-chloropr...	11.780	75	3845	18.40	ppb	91
90) 1,2,4,5-Tetramethylben...	11.654	119	216712	23.74	ppb	98
91) 1,2,4-Trichlorobenzene	12.676	180	57708	21.50	ppb	99
92) Hexachloro-1,3-Butadiene	12.837	225	27018	20.49	ppb	97
93) Naphthalene	12.965	128	86016	24.38	ppb	98
94) 1,2,3-Trichlorobenzene	13.249	181	3537	25.71	ppb	# 66

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804208.D  
 Acq On : 8 Mar 2018 4:52 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL5  
 Misc : QBV8030818A  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 09 09:40:52 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804209.D  
 Acq On : 8 Mar 2018 5:19 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL6  
 Misc : QBV8030818A  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 09:43:31 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.913	70	22627	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	82165	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	29375	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.654	65	20517	11.31	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	113.10%		
51) Toluene-d8 (SURR)	6.399	98	119199	9.70	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	97.00%		
70) p-Bromofluorobenzene (...)	9.134	95	31424	7.89	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	78.90%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.160	85	169807	57.29	ppb	100
3) Chloromethane	1.302	50	161907	64.05	ppb	99
4) Vinyl Chloride	1.377	62	159503	55.48	ppb	99
5) Bromomethane	1.635	94	108794	152.29	ppb	99
6) Chloroethane	1.711	64	88071	54.41	ppb	100
7) Trichlorofluoromethane	1.891	101	334174	71.03	ppb	100
8) Ethanol	2.156	45	2472m	308.83	ppb	
9) Freon-113	2.306	101	155834	49.01	ppb	# 60
10) 1,1-Dichloroethylene	2.334	61	207165	39.67	ppb	86
11) Acrolein	2.306	56	4872	340.77	ppb	# 78
12) Acetone	2.442	43	8219	31.76	ppb	100
13) Iodomethane	2.484	142	194226	162.09	ppb	98
14) Methyl Acetate	2.701	43	28978	41.75	ppb	100
15) Carbon disulfide	2.517	76	295009	40.87	ppb	100
16) tert-Butyl Alcohol (TBA)	2.968	59	1306m	7.87	ppb	
17) Methylene Chloride	2.796	49	149241	37.90	ppb	99
18) Acrylonitrile	3.057	53	11006	40.07	ppb	# 100
19) trans-1,2-Dichloroethy...	2.999	61	177381	39.28	ppb	# 87
20) tert-Butyl Methyl Ethe...	2.977	73	164060	39.92	ppb	# 91
21) 1,1-Dichloroethane	3.386	63	227197	41.14	ppb	# 87
22) Vinyl Acetate	3.427	43	85645	42.54	ppb	# 33
23) Diisopropyl ether (DIPE)	3.383	45	387207	49.80	ppb	99
24) Ethyl-tert-Butyl ether...	3.703	59	259107	41.93	ppb	# 99
25) cis-1,2-Dichloroethylene	3.909	61	198694	40.09	ppb	95
26) 2-Butanone	3.945	72	3382m	36.98	ppb	
27) 2,2-Dichloropropane	3.870	77	191134	38.90	ppb	# 75
28) Tetrahydrofuran	4.159	71	3418m	42.72	ppb	
29) Bromochloromethane	4.137	49	80345	42.34	ppb	# 78
30) Chloroform	4.209	83	222432	42.78	ppb	# 68
31) 1,1,1-Trichloroethane	4.309	97	242266	44.59	ppb	# 99
32) Cyclohexane	4.315	56	227298	42.88	ppb	92
33) 1,1-Dichloropropylene	4.457	75	188694	41.41	ppb	84
35) Carbon Tetrachloride	4.443	117	237858	48.00	ppb	100
36) tert-Amyl alcohol (TAA)	4.738	59	17051	387.30	ppb	# 100
37) 1,2-Dichloroethane	4.727	62	104975	38.31	ppb	99
38) Benzene	4.654	78	487679	43.37	ppb	95
39) tert-Amyl methyl ether...	4.727	73	196503	42.69	ppb	# 100
41) Trichloroethylene	5.247	95	140743	36.77	ppb	89
42) Methyl Cyclohexane	5.358	83	216972	36.99	ppb	92
43) Methyl Methacrylate	6.794	69	64171	36.11	ppb	# 100
44) Dibromomethane	5.625	93	45047	37.01	ppb	# 100
45) Bromodichloromethane	5.778	83	143563	37.18	ppb	99
46) 1,2-Dichloropropane	5.489	63	104555	34.73	ppb	# 89



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804209.D  
 Acq On : 8 Mar 2018 5:19 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL6  
 Misc : QBV8030818A  
 ALS Vial : 15 Sample Multiplier: 1

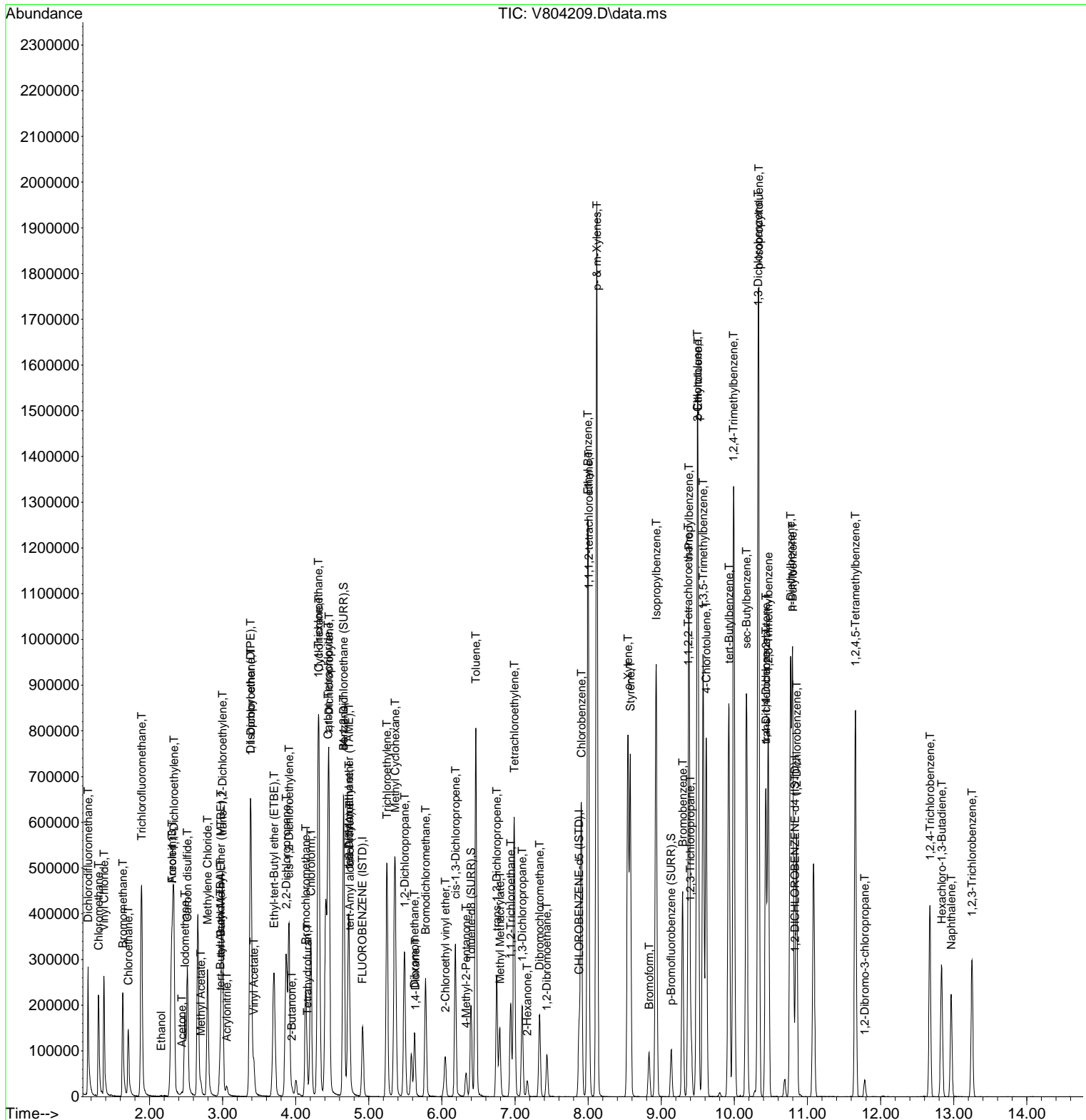
Quant Time: Mar 09 09:43:31 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	5.636	88	900m	418.58	ppb	
48) 2-Chloroethyl vinyl ether	6.045	63	28518	56.44	ppb	99
49) cis-1,3-Dichloropropene	6.184	75	151822	36.63	ppb	93
50) 4-Methyl-2-Pentanone	6.329	43	39625	40.34	ppb	# 95
52) Toluene	6.465	91	540230	38.11	ppb	99
53) trans-1,3-Dichloropropene	6.749	75	112877	35.37	ppb	98
54) 1,1,2-Trichloroethane	6.941	97	60300	37.02	ppb	96
55) 1,3-Dichloropropane	7.097	76	94681	33.74	ppb	# 89
56) Tetrachloroethylene	6.989	166	155419	36.19	ppb	98
57) 2-Hexanone	7.167	43	24404	39.35	ppb	# 91
58) Dibromochloromethane	7.336	129	90549	43.91	ppb	99
59) 1,2-Dibromoethane	7.434	107	57215	39.08	ppb	99
60) Chlorobenzene	7.907	112	329754	38.81	ppb	94
61) 1,1,1,2-tetrachloroethane	8.007	131	131046	45.05	ppb	98
62) Ethyl Benzene	7.996	91	635110	40.28	ppb	94
63) p- & m-Xylenes	8.118	91	1016626	85.24	ppb	94
64) o-Xylene	8.544	91	452775	38.42	ppb	97
65) Styrene	8.577	104	346298	42.08	ppb	# 100
66) Bromoform	8.836	173	41319	40.64	ppb	100
68) p-Ethyltoluene	9.504	105	632016	40.62	ppb	# 99
69) Isopropylbenzene	8.931	105	633916	38.44	ppb	96
71) 1,1,2,2-Tetrachloroethane	9.370	83	61248	38.61	ppb	# 100
72) Bromobenzene	9.292	77	168308	31.34	ppb	91
73) trans-1,4-Dichloro-2-b...	10.430	75	76862	33.64	ppb	# 100
74) 1,2,3-Trichloropropane	9.398	110	16475	36.24	ppb	# 100
75) n-Propylbenzene	9.378	91	770779	38.19	ppb	97
76) 2-Chlorotoluene	9.493	91	491890	37.11	ppb	98
77) 4-Chlorotoluene	9.615	91	401866	33.26	ppb	100
78) 1,3,5-Trimethylbenzene	9.573	105	519937	37.67	ppb	95
79) tert-Butylbenzene	9.927	119	478522	40.88	ppb	91
80) 1,2,4-Trimethylbenzene	9.988	105	524692	40.23	ppb	95
81) sec-Butylbenzene	10.166	105	660996	40.45	ppb	97
82) 1,3-Dichlorobenzene	10.324	146	301253	44.50	ppb	96
83) p-Isopropyltoluene	10.333	119	671612	46.65	ppb	98
84) 1,4-Dichlorobenzene	10.430	147	20106	42.45	ppb	71
85) 1,2,3-Trimethylbenzene	10.464	105	461333	39.60	ppb	96
86) p-Diethylbenzene	10.770	105	318303	42.05	ppb	90
87) 1,2-Dichlorobenzene	10.853	146	226523	38.85	ppb	# 68
88) n-Butylbenzene	10.797	91	654146	40.75	ppb	94
89) 1,2-Dibromo-3-chloropr...	11.782	75	8063	33.69	ppb	90
90) 1,2,4,5-Tetramethylben...	11.654	119	475715	45.51	ppb	98
91) 1,2,4-Trichlorobenzene	12.675	180	123715	40.25	ppb	99
92) Hexachloro-1,3-Butadiene	12.837	225	54568	36.13	ppb	96
93) Naphthalene	12.968	128	184494	45.66	ppb	98
94) 1,2,3-Trichlorobenzene	13.249	181	7675	48.71	ppb	# 63

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
Data File : V804209.D  
Acq On : 8 Mar 2018 5:19 pm  
Operator : RDS  
InstName : VOA No. 8  
Sample : SEQ-CAL6  
Misc : QBV8030818A  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Mar 09 09:43:31 2018  
Quant Method : C:\msdchem\1\methods\V8L00063.M  
Quant Title : Volatile Organics EPA 8260C  
QLast Update : Sun Feb 25 13:19:17 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804210.D  
 Acq On : 8 Mar 2018 5:46 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL7  
 Misc : QBV8030818A  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 09 09:41:13 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.916	70	23922	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.879	117	88928	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.834	152	35044	10.00	ppb	# 0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.660	65	23631	12.32	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	123.20%		
51) Toluene-d8 (SURR)	6.399	98	126546	9.51	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	95.10%		
70) p-Bromofluorobenzene (...)	9.139	95	36023	7.59	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	75.90%		
<b>Target Compounds</b>						
						Qvalue
2) Dichlorodifluoromethane	1.160	85	319352	101.92	ppb	100
3) Chloromethane	1.304	50	351339	131.46	ppb	99
4) Vinyl Chloride	1.377	62	331733	109.14	ppb	99
5) Bromomethane	1.636	94	255277	338.00	ppb	98
6) Chloroethane	1.711	64	187058	109.31	ppb	100
7) Trichlorofluoromethane	1.891	101	625027	125.65	ppb	100
8) Ethanol	2.159	45	5628	665.05	ppb	64
9) Freon-113	2.306	101	296390	88.17	ppb	# 99
10) 1,1-Dichloroethylene	2.334	61	442942	80.23	ppb	91
11) Acrolein	2.306	56	12534	829.23	ppb	# 78
12) Acetone	2.445	43	20018	73.17	ppb	100
13) Iodomethane	2.487	142	406926	321.22	ppb	98
14) Methyl Acetate	2.698	43	68671	93.58	ppb	99
15) Carbon disulfide	2.520	76	627970	82.28	ppb	100
16) tert-Butyl Alcohol (TBA)	2.951	59	3660m	20.86	ppb	
17) Methylene Chloride	2.796	49	338064	81.20	ppb	99
18) Acrylonitrile	3.057	53	26777	92.22	ppb	# 100
19) trans-1,2-Dichloroethy...	2.999	61	399272	83.62	ppb	96
20) tert-Butyl Methyl Ethe...	2.982	73	392679	90.38	ppb	# 98
21) 1,1-Dichloroethane	3.386	63	521554	89.33	ppb	99
22) Vinyl Acetate	3.430	43	187546	88.11	ppb	# 33
23) Diisopropyl ether (DIPE)	3.386	45	909337	110.62	ppb	99
24) Ethyl-tert-Butyl ether...	3.703	59	613161	93.86	ppb	# 99
25) cis-1,2-Dichloroethylene	3.909	61	451425	86.15	ppb	95
26) 2-Butanone	3.950	72	9058m	93.68	ppb	
27) 2,2-Dichloropropane	3.872	77	408359	78.62	ppb	# 75
28) Tetrahydrofuran	4.159	71	8085	95.58	ppb	# 90
29) Bromochloromethane	4.134	49	174662	87.05	ppb	92
30) Chloroform	4.206	83	507653	92.36	ppb	# 99
31) 1,1,1-Trichloroethane	4.312	97	536254	93.35	ppb	# 100
32) Cyclohexane	4.315	56	430740	76.86	ppb	92
33) 1,1-Dichloropropylene	4.457	75	405456	84.17	ppb	83
35) Carbon Tetrachloride	4.446	117	511306	97.59	ppb	100
36) tert-Amyl alcohol (TAA)	4.738	59	49872	1071.49	ppb	# 100
37) 1,2-Dichloroethane	4.729	62	250980	86.64	ppb	99
38) Benzene	4.657	78	1107494	93.16	ppb	95
39) tert-Amyl methyl ether...	4.727	73	471189	96.83	ppb	# 100
41) Trichloroethylene	5.250	95	320570	77.37	ppb	90
42) Methyl Cyclohexane	5.358	83	393033	61.91	ppb	92
43) Methyl Methacrylate	6.794	69	153901	80.02	ppb	# 100
44) Dibromomethane	5.628	93	105694	80.24	ppb	# 100
45) Bromodichloromethane	5.778	83	332230	79.49	ppb	99
46) 1,2-Dichloropropane	5.489	63	237016	72.75	ppb	99

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804210.D  
 Acq On : 8 Mar 2018 5:46 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL7  
 Misc : QBV8030818A  
 ALS Vial : 16 Sample Multiplier: 1

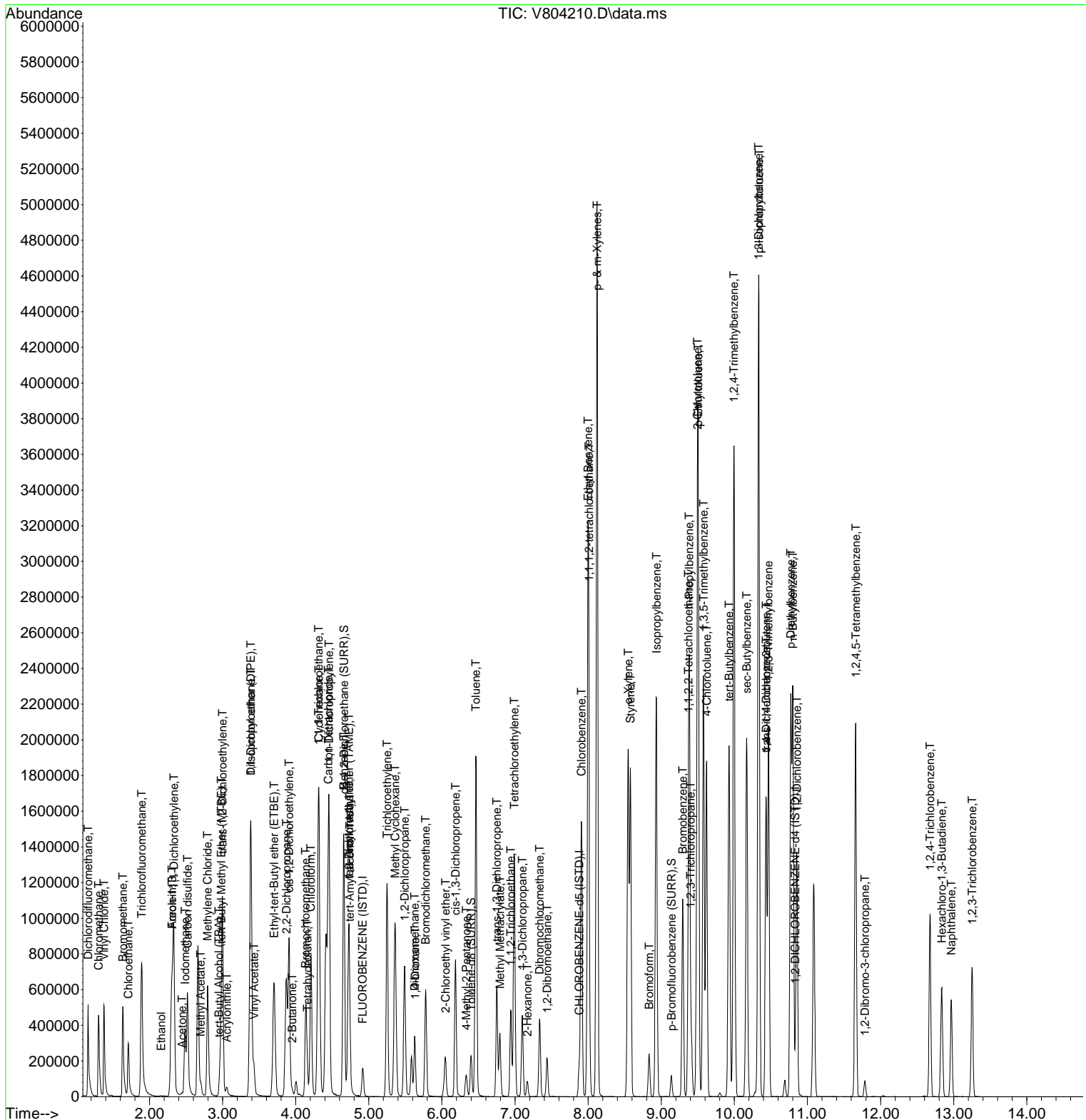
Quant Time: Mar 09 09:41:13 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	5.634	88	2083	895.10	ppb	# 51
48) 2-Chloroethyl vinyl ether	6.048	63	67668	123.73	ppb	99
49) cis-1,3-Dichloropropene	6.184	75	352242	78.53	ppb	92
50) 4-Methyl-2-Pentanone	6.332	43	94801	89.17	ppb	# 95
52) Toluene	6.465	91	1247361	81.29	ppb	99
53) trans-1,3-Dichloropropene	6.749	75	268329	77.68	ppb	98
54) 1,1,2-Trichloroethane	6.941	97	140717	79.82	ppb	96
55) 1,3-Dichloropropane	7.100	76	218525	71.95	ppb	98
56) Tetrachloroethylene	6.989	166	340165	73.19	ppb	98
57) 2-Hexanone	7.169	43	60938	90.79	ppb	94
58) Dibromochloromethane	7.336	129	217115	97.28	ppb	# 97
59) 1,2-Dibromoethane	7.439	107	135152	85.29	ppb	100
60) Chlorobenzene	7.907	112	779579	84.77	ppb	94
61) 1,1,1,2-tetrachloroethane	8.010	131	336028	106.72	ppb	98
62) Ethyl Benzene	7.998	91	1538259	90.13	ppb	94
63) p- & m-Xylenes	8.124	91	2572006	199.25	ppb	95
64) o-Xylene	8.547	91	1094737	85.83	ppb	97
65) Styrene	8.580	104	849400	95.37	ppb	# 100
66) Bromoform	8.836	173	104341	94.81	ppb	# 81
68) p-Ethyltoluene	9.506	105	1554222	83.73	ppb	# 99
69) Isopropylbenzene	8.933	105	1466024	74.52	ppb	97
71) 1,1,2,2-Tetrachloroethane	9.373	83	157857	83.42	ppb	# 99
72) Bromobenzene	9.292	77	413345	64.52	ppb	91
73) trans-1,4-Dichloro-2-b...	10.433	75	193270	70.89	ppb	# 100
74) 1,2,3-Trichloropropane	9.401	110	42481	78.33	ppb	# 100
75) n-Propylbenzene	9.381	91	1778659	73.86	ppb	98
76) 2-Chlorotoluene	9.495	91	1262128	79.82	ppb	98
77) 4-Chlorotoluene	9.621	91	977270	67.80	ppb	100
78) 1,3,5-Trimethylbenzene	9.579	105	1249623	75.90	ppb	95
79) tert-Butylbenzene	9.927	119	1083225	77.57	ppb	92
80) 1,2,4-Trimethylbenzene	9.993	105	1362266	87.56	ppb	96
81) sec-Butylbenzene	10.169	105	1439223	73.83	ppb	98
82) 1,3-Dichlorobenzene	10.330	146	792931	98.19	ppb	97
83) p-Isopropyltoluene	10.336	119	1654933	96.36	ppb	98
84) 1,4-Dichlorobenzene	10.433	147	49880	88.28	ppb	73
85) 1,2,3-Trimethylbenzene	10.466	105	1136539	81.78	ppb	96
86) p-Diethylbenzene	10.772	105	743210	82.30	ppb	87
87) 1,2-Dichlorobenzene	10.856	146	553114	79.52	ppb	# 99
88) n-Butylbenzene	10.800	91	1484576	77.52	ppb	# 93
89) 1,2-Dibromo-3-chloropr...	11.785	75	20190	70.71	ppb	90
90) 1,2,4,5-Tetramethylben...	11.660	119	1161169	93.12	ppb	98
91) 1,2,4-Trichlorobenzene	12.675	180	305993	83.46	ppb	99
92) Hexachloro-1,3-Butadiene	12.837	225	116022	64.39	ppb	96
93) Naphthalene	12.968	128	453364	94.05	ppb	99
94) 1,2,3-Trichlorobenzene	13.254	181	18355	97.64	ppb	# 1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
Data File : V804210.D  
Acq On : 8 Mar 2018 5:46 pm  
Operator : RDS  
InstName : VOA No. 8  
Sample : SEQ-CAL7  
Misc : QBV8030818A  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 09 09:41:13 2018  
Quant Method : C:\msdchem\1\methods\V8L00063.M  
Quant Title : Volatile Organics EPA 8260C  
QLast Update : Sun Feb 25 13:19:17 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804211.D  
 Acq On : 8 Mar 2018 6:13 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL8  
 Misc : QBV8030818A  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 09 09:41:25 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.916	70	25909	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.879	117	97264	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.836	152	40678	10.00	ppb	# 0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.660	65	27932	13.45	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	134.50%#	
51) Toluene-d8 (SURR)	6.399	98	134732	9.26	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	92.60%	
70) p-Bromofluorobenzene (...)	9.136	95	39543	7.17	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery	=	71.70%	
<b>Target Compounds</b>						
						Qvalue
2) Dichlorodifluoromethane	1.160	85	532063	156.78	ppb	100
3) Chloromethane	1.302	50	600010	207.30	ppb	99
4) Vinyl Chloride	1.377	62	545616	165.74	ppb	99
5) Bromomethane	1.635	94	426171	521.00	ppb	99
6) Chloroethane	1.708	64	305983	165.10	ppb	100
7) Trichlorofluoromethane	1.894	101	1035165	192.14	ppb	100
8) Ethanol	2.158	45	8799	960.03	ppb	64
9) Freon-113	2.306	101	504082	138.45	ppb	# 99
10) 1,1-Dichloroethylene	2.331	61	731684	122.36	ppb	90
11) Acrolein	2.306	56	20617	1259.39	ppb	# 78
12) Acetone	2.445	43	36618	123.58	ppb	100
13) Iodomethane	2.484	142	625321	455.76	ppb	98
14) Methyl Acetate	2.701	43	112855	142.00	ppb	99
15) Carbon disulfide	2.520	76	1048191	126.80	ppb	100
16) tert-Butyl Alcohol (TBA)	2.979	59	7431m	39.10	ppb	
17) Methylene Chloride	2.796	49	570551	126.53	ppb	99
18) Acrylonitrile	3.057	53	42845	136.24	ppb	# 100
19) trans-1,2-Dichloroethy...	2.999	61	687950	133.04	ppb	96
20) tert-Butyl Methyl Ethe...	2.982	73	687426	146.09	ppb	# 98
21) 1,1-Dichloroethane	3.385	63	899058	142.17	ppb	99
22) Vinyl Acetate	3.427	43	311829	135.27	ppb	# 33
23) Diisopropyl ether (DIPE)	3.385	45	1586944	178.25	ppb	# 92
24) Ethyl-tert-Butyl ether...	3.703	59	1048771	148.22	ppb	# 99
25) cis-1,2-Dichloroethylene	3.909	61	761360	134.15	ppb	94
26) 2-Butanone	3.945	72	14295m	136.51	ppb	
27) 2,2-Dichloropropane	3.872	77	684566	121.69	ppb	# 75
28) Tetrahydrofuran	4.159	71	14153	154.48	ppb	# 91
29) Bromochloromethane	4.137	49	285207	131.24	ppb	91
30) Chloroform	4.206	83	856111	143.81	ppb	# 100
31) 1,1,1-Trichloroethane	4.312	97	957150	153.84	ppb	# 100
32) Cyclohexane	4.315	56	760064	125.23	ppb	92
33) 1,1-Dichloropropylene	4.457	75	713284	136.72	ppb	80
35) Carbon Tetrachloride	4.445	117	923486	162.74	ppb	100
36) tert-Amyl alcohol (TAA)	4.735	59	83581	1658.00	ppb	# 100
37) 1,2-Dichloroethane	4.729	62	438976	139.91	ppb	99
38) Benzene	4.660	78	1853411	143.95	ppb	95
39) tert-Amyl methyl ether...	4.726	73	819045	155.41	ppb	# 100
41) Trichloroethylene	5.250	95	556946	122.90	ppb	90
42) Methyl Cyclohexane	5.361	83	676048	97.37	ppb	93
43) Methyl Methacrylate	6.794	69	260741	123.96	ppb	# 100
44) Dibromomethane	5.628	93	178145	123.65	ppb	# 100
45) Bromodichloromethane	5.778	83	561795	122.89	ppb	99
46) 1,2-Dichloropropane	5.492	63	397765	111.63	ppb	99

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804211.D  
 Acq On : 8 Mar 2018 6:13 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL8  
 Misc : QBV8030818A  
 ALS Vial : 17 Sample Multiplier: 1

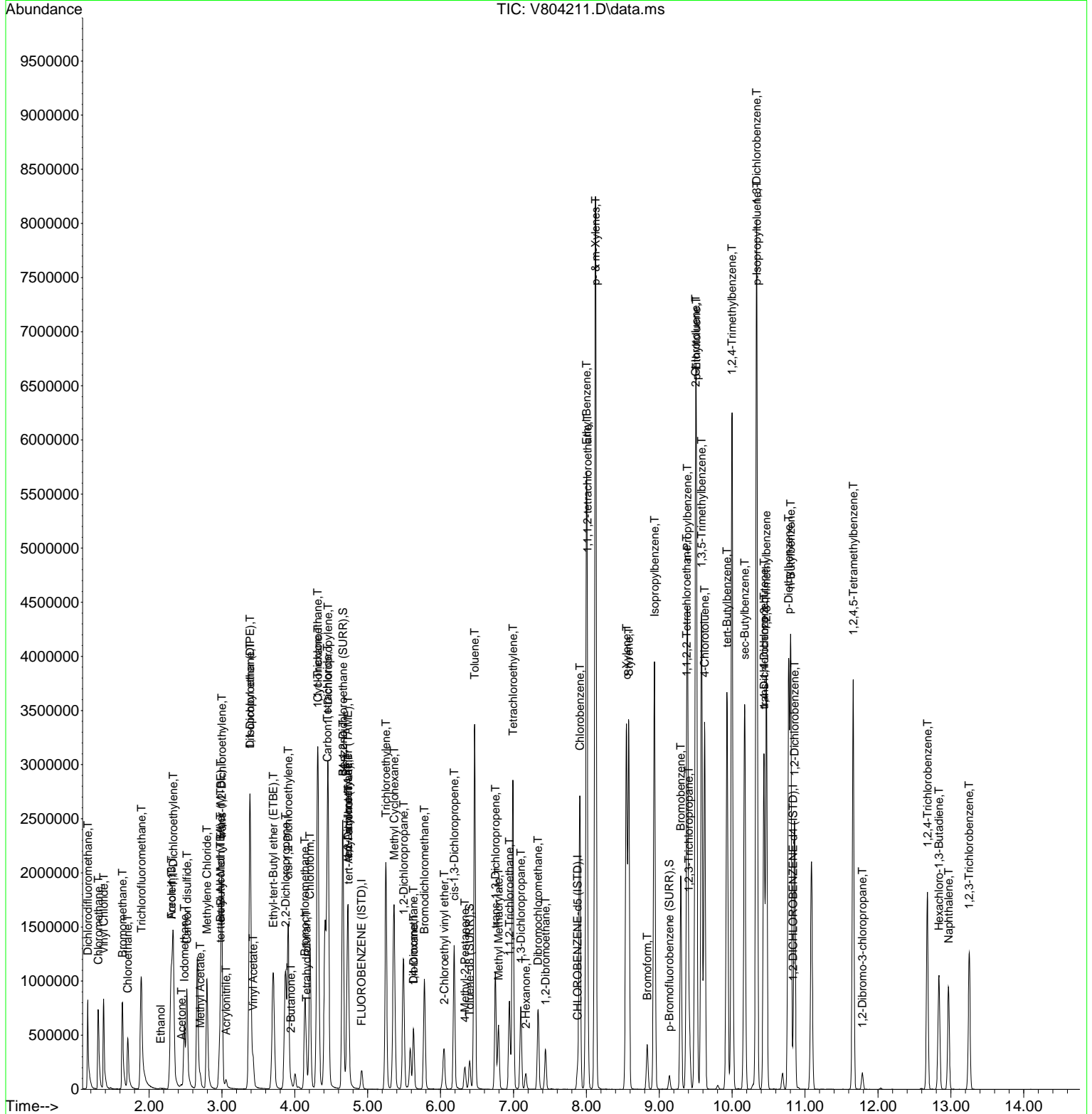
Quant Time: Mar 09 09:41:25 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	5.631	88	4066m	1597.49	ppb	
48) 2-Chloroethyl vinyl ether	6.048	63	114101	190.75	ppb	99
49) cis-1,3-Dichloropropene	6.187	75	592275	120.73	ppb	91
50) 4-Methyl-2-Pentanone	6.335	43	158540	136.34	ppb	# 95
52) Toluene	6.468	91	2136452	127.30	ppb	100
53) trans-1,3-Dichloropropene	6.752	75	449581	119.00	ppb	98
54) 1,1,2-Trichloroethane	6.944	97	237671	123.26	ppb	96
55) 1,3-Dichloropropane	7.103	76	364473	109.72	ppb	98
56) Tetrachloroethylene	6.991	166	699353	137.57	ppb	98
57) 2-Hexanone	7.169	43	101385	138.11	ppb	95
58) Dibromochloromethane	7.336	129	371472	152.18	ppb	99
59) 1,2-Dibromoethane	7.439	107	226367	130.61	ppb	100
60) Chlorobenzene	7.909	112	1338303	133.05	ppb	94
61) 1,1,1,2-tetrachloroethane	8.012	131	605669	175.87	ppb	98
62) Ethyl Benzene	8.001	91	2706522	145.00	ppb	94
63) p- & m-Xylenes	8.126	91	4504769	319.07	ppb	95
64) o-Xylene	8.549	91	1943993	139.35	ppb	97
65) Styrene	8.583	104	1518698	155.90	ppb	# 100
66) Bromoform	8.836	173	179979	149.52	ppb	# 81
68) p-Ethyltoluene	9.509	105	2763967	128.28	ppb	# 99
69) Isopropylbenzene	8.933	105	2595486	113.66	ppb	97
71) 1,1,2,2-Tetrachloroethane	9.376	83	279473	127.24	ppb	# 100
72) Bromobenzene	9.295	77	729578	98.11	ppb	92
73) trans-1,4-Dichloro-2-b...	10.436	75	349255	110.37	ppb	# 100
74) 1,2,3-Trichloropropane	9.403	110	75912	120.59	ppb	# 100
75) n-Propylbenzene	9.384	91	3149737	112.68	ppb	97
76) 2-Chlorotoluene	9.498	91	2267538	123.54	ppb	98
77) 4-Chlorotoluene	9.623	91	1749352	104.55	ppb	100
78) 1,3,5-Trimethylbenzene	9.582	105	2268912	118.72	ppb	95
79) tert-Butylbenzene	9.929	119	1935055	119.38	ppb	92
80) 1,2,4-Trimethylbenzene	9.996	105	2451999	135.77	ppb	96
81) sec-Butylbenzene	10.171	105	2546679	112.55	ppb	98
82) 1,3-Dichlorobenzene	10.333	146	1437339	153.33	ppb	98
83) p-Isopropyltoluene	10.338	119	2987431	149.86	ppb	98
84) 1,4-Dichlorobenzene	10.436	147	90515	138.02	ppb	72
85) 1,2,3-Trimethylbenzene	10.469	105	2057833	127.56	ppb	96
86) p-Diethylbenzene	10.775	105	1326987	126.59	ppb	87
87) 1,2-Dichlorobenzene	10.856	146	984650	121.95	ppb	# 99
88) n-Butylbenzene	10.803	91	2631808	118.38	ppb	# 94
89) 1,2-Dibromo-3-chloropr...	11.785	75	33944	102.42	ppb	89
90) 1,2,4,5-Tetramethylben...	11.660	119	2060693	142.37	ppb	99
91) 1,2,4-Trichlorobenzene	12.678	180	542534	127.47	ppb	98
92) Hexachloro-1,3-Butadiene	12.837	225	201020	96.11	ppb	96
93) Naphthalene	12.970	128	782670	139.88	ppb	99
94) 1,2,3-Trichlorobenzene	13.251	181	31137	142.69	ppb	# 73

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804211.D  
 Acq On : 8 Mar 2018 6:13 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL8  
 Misc : QBV8030818A  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 09 09:41:25 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration





Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804212.D  
 Acq On : 8 Mar 2018 6:40 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL9  
 Misc : QBV8030818A  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 09:41:40 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.918	70	28927	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.879	117	108176	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.839	152	42354	10.00	ppb	# 0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.663	65	32058	13.83	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	138.30%#
51) Toluene-d8 (SURR)	6.401	98	146659	9.06	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	90.60%
70) p-Bromofluorobenzene (...)	9.139	95	43383	7.56	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	75.60%
<b>Target Compounds</b>						
						Qvalue
2) Dichlorodifluoromethane	1.160	85	787560	207.85	ppb	100
3) Chloromethane	1.302	50	903696	279.64	ppb	99
4) Vinyl Chloride	1.377	62	787991	214.39	ppb	99
5) Bromomethane	1.635	94	594287	650.73	ppb	99
6) Chloroethane	1.711	64	431255	208.41	ppb	100
7) Trichlorofluoromethane	1.894	101	1500562	249.47	ppb	100
8) Ethanol	2.159	45	17535m	1713.57	ppb	
9) Freon-113	2.306	101	728201	179.14	ppb	# 99
10) 1,1-Dichloroethylene	2.334	61	1084196	162.40	ppb	91
11) Acrolein	2.309	56	30115	1647.64	ppb	# 78
12) Acetone	2.445	43	44970	135.94	ppb	99
13) Iodomethane	2.487	142	884693	577.53	ppb	98
14) Methyl Acetate	2.704	43	154862	174.53	ppb	99
15) Carbon disulfide	2.520	76	1558051	168.82	ppb	100
16) tert-Butyl Alcohol (TBA)	2.979	59	9525m	44.89	ppb	
17) Methylene Chloride	2.796	49	825210	163.92	ppb	99
18) Acrylonitrile	3.060	53	59803	170.32	ppb	# 100
19) trans-1,2-Dichloroethy...	2.999	61	1048277	181.57	ppb	96
20) tert-Butyl Methyl Ethe...	2.982	73	999097	190.18	ppb	# 91
21) 1,1-Dichloroethane	3.388	63	1322695	187.34	ppb	100
22) Vinyl Acetate	3.430	43	473199	183.86	ppb	# 33
23) Diisopropyl ether (DIPE)	3.385	45	2315108	232.91	ppb	99
24) Ethyl-tert-Butyl ether...	3.705	59	1505565	190.58	ppb	# 99
25) cis-1,2-Dichloroethylene	3.909	61	1132476	178.72	ppb	95
26) 2-Butanone	3.947	72	18766m	160.51	ppb	
27) 2,2-Dichloropropane	3.872	77	1008865	160.63	ppb	# 75
28) Tetrahydrofuran	4.156	71	18985	185.60	ppb	# 1
29) Bromochloromethane	4.137	49	399606	164.70	ppb	91
30) Chloroform	4.209	83	1253344	188.58	ppb	# 100
31) 1,1,1-Trichloroethane	4.312	97	1468391	211.38	ppb	# 100
32) Cyclohexane	4.318	56	1120103	165.29	ppb	92
33) 1,1-Dichloropropylene	4.459	75	1082393	185.82	ppb	79
35) Carbon Tetrachloride	4.448	117	1434320	226.39	ppb	100
36) tert-Amyl alcohol (TAA)	4.738	59	117194	2082.24	ppb	# 100
37) 1,2-Dichloroethane	4.729	62	651939	186.11	ppb	99
38) Benzene	4.660	78	2741212	190.69	ppb	95
39) tert-Amyl methyl ether...	4.729	73	1173542	199.44	ppb	# 100
41) Trichloroethylene	5.250	95	842570	167.18	ppb	90
42) Methyl Cyclohexane	5.361	83	982547	127.24	ppb	93
43) Methyl Methacrylate	6.797	69	362655	155.01	ppb	# 100
44) Dibromomethane	5.628	93	253591	158.27	ppb	# 100
45) Bromodichloromethane	5.778	83	815471	160.39	ppb	99
46) 1,2-Dichloropropane	5.492	63	574393	144.94	ppb	99

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804212.D  
 Acq On : 8 Mar 2018 6:40 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL9  
 Misc : QBV8030818A  
 ALS Vial : 18 Sample Multiplier: 1

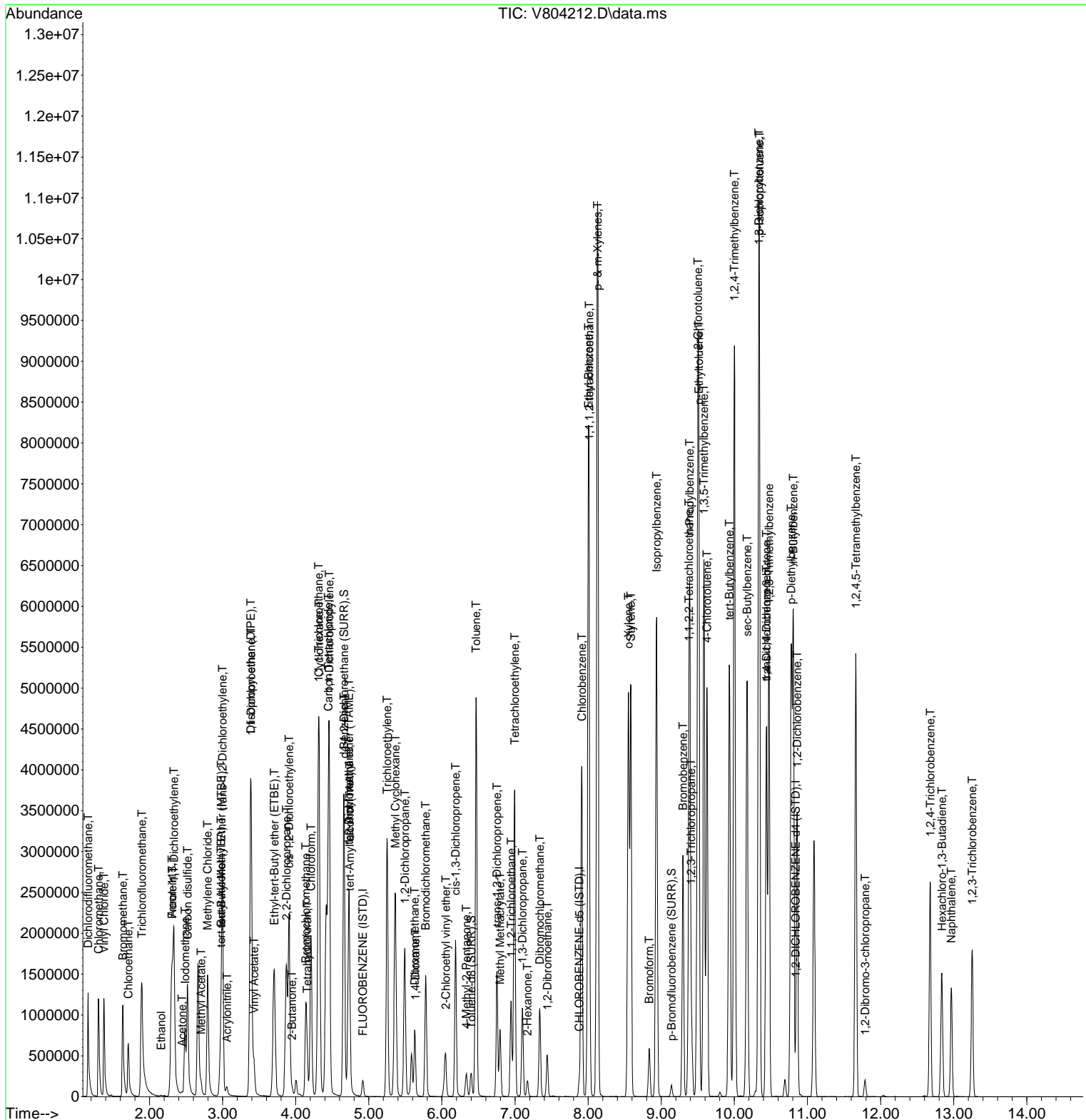
Quant Time: Mar 09 09:41:40 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	5.636	88	8380m	2960.29	ppb	
48) 2-Chloroethyl vinyl ether	6.051	63	158970	238.96	ppb	98
49) cis-1,3-Dichloropropene	6.187	75	841468	154.22	ppb	90
50) 4-Methyl-2-Pentanone	6.335	43	218615	169.04	ppb	# 96
52) Toluene	6.468	91	3159657	169.28	ppb	100
53) trans-1,3-Dichloropropene	6.752	75	642905	153.01	ppb	98
54) 1,1,2-Trichloroethane	6.947	97	331114	154.40	ppb	97
55) 1,3-Dichloropropane	7.103	76	512297	138.67	ppb	# 88
56) Tetrachloroethylene	6.994	166	929541	164.41	ppb	98
57) 2-Hexanone	7.169	43	138923	170.16	ppb	94
58) Dibromochloromethane	7.339	129	535079	197.09	ppb	99
59) 1,2-Dibromoethane	7.442	107	321232	166.65	ppb	100
60) Chlorobenzene	7.912	112	1978431	176.85	ppb	94
61) 1,1,1,2-tetrachloroethane	8.012	131	907698	236.99	ppb	98
62) Ethyl Benzene	8.004	91	4006689	193.00	ppb	94
63) p- & m-Xylenes	8.129	91	6392474	407.11	ppb	94
64) o-Xylene	8.549	91	2908276	187.44	ppb	97
65) Styrene	8.585	104	2260898	208.68	ppb	# 100
66) Bromoform	8.836	173	258360	192.99	ppb	# 81
68) p-Ethyltoluene	9.515	105	4043549	180.24	ppb	# 88
69) Isopropylbenzene	8.936	105	3868682	162.72	ppb	97
71) 1,1,2,2-Tetrachloroethane	9.378	83	401408	175.52	ppb	# 67
72) Bromobenzene	9.298	77	1085333	140.17	ppb	92
73) trans-1,4-Dichloro-2-b...	10.438	75	514625	156.19	ppb	# 100
74) 1,2,3-Trichloropropane	9.406	110	108686	165.83	ppb	# 100
75) n-Propylbenzene	9.387	91	4603965	158.19	ppb	97
76) 2-Chlorotoluene	9.501	91	3328590	174.17	ppb	98
77) 4-Chlorotoluene	9.626	91	2624613	150.66	ppb	100
78) 1,3,5-Trimethylbenzene	9.584	105	3379972	169.85	ppb	95
79) tert-Butylbenzene	9.932	119	2883021	170.82	ppb	93
80) 1,2,4-Trimethylbenzene	9.999	105	3609301	191.94	ppb	96
81) sec-Butylbenzene	10.174	105	3732983	158.45	ppb	98
82) 1,3-Dichlorobenzene	10.333	146	2081856	213.30	ppb	97
83) p-Isopropyltoluene	10.344	119	4279518	206.17	ppb	97
84) 1,4-Dichlorobenzene	10.438	147	132551	194.11	ppb	73
85) 1,2,3-Trimethylbenzene	10.475	105	3015900	179.55	ppb	96
86) p-Diethylbenzene	10.778	105	1921486	176.05	ppb	88
87) 1,2-Dichlorobenzene	10.859	146	1421342	169.07	ppb	# 100
88) n-Butylbenzene	10.806	91	3795265	163.96	ppb	96
89) 1,2-Dibromo-3-chloropr...	11.788	75	45894	133.00	ppb	88
90) 1,2,4,5-Tetramethylben...	11.663	119	3007254	199.55	ppb	99
91) 1,2,4-Trichlorobenzene	12.678	180	779504	175.91	ppb	99
92) Hexachloro-1,3-Butadiene	12.840	225	286544	131.58	ppb	97
93) Naphthalene	12.968	128	1092249	187.48	ppb	99
94) 1,2,3-Trichlorobenzene	13.254	181	43989	193.61	ppb	# 72

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804212.D  
 Acq On : 8 Mar 2018 6:40 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CAL9  
 Misc : QBV8030818A  
 ALS Vial : 18 Sample Multiplier: 1

Quant Time: Mar 09 09:41:40 2018  
 Quant Method : C:\msdchem\1\methods\V8L00063.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Sun Feb 25 13:19:17 2018  
 Response via : Initial Calibration



# SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0104

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900-Kingston CVS Investig

**Calibration:** YB80017

**Laboratory ID:** Y8B1409-SCV1

**Sequence:** Y8B1409

**Standard ID:** Y18A104

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
1,1,1,2-Tetrachloroethane	10.0	10.4	4.5	30.00
1,1,1-Trichloroethane	10.0	9.75	-2.5	30.00
1,1,2,2-Tetrachloroethane	10.0	10.6	6.1	30.00
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.14	-8.6	30.00
1,1,2-Trichloroethane	10.0	10.4	3.5	30.00
1,1-Dichloroethane	10.0	10.1	0.9	30.00
1,1-Dichloroethylene	10.0	9.71	-2.9	30.00
1,2,3-Trichlorobenzene	10.0	13.9	39.3 *	30.00
1,2,3-Trichloropropane	10.0	10.8	8.5	30.00
1,2,4-Trichlorobenzene	10.0	11.9	18.8	30.00
1,2,4-Trimethylbenzene	10.0	10.1	0.9	30.00
1,2-Dibromo-3-chloropropane	10.0	10.8	7.9	30.00
1,2-Dibromoethane	10.0	10.7	6.9	30.00
1,2-Dichlorobenzene	10.0	10.5	5.3	30.00
1,2-Dichloroethane	10.0	10.9	9.2	30.00
1,2-Dichloropropane	10.0	10.0	0.3	30.00
1,3,5-Trimethylbenzene	10.0	10.1	0.8	30.00
1,3-Dichlorobenzene	10.0	10.3	2.6	30.00
1,4-Dichlorobenzene	10.0	10.2	2.1	30.00
1,4-Dioxane	210	221	5.2	30.00
2-Butanone	10.0	11.3	12.8	30.00
2-Hexanone	10.0	11.4	13.7	30.00
4-Methyl-2-pentanone	10.0	11.2	12.3	30.00
Acetone	10.0	14.0	40.1 *	30.00
Acrolein	10.0	7.97	-20.3	30.00
Acrylonitrile	10.0	9.65	-3.5	30.00
Benzene	10.0	10.1	0.7	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

**EPA 8260C**

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0104

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900-Kingston CVS Investig

**Calibration:** YB80017

**Laboratory ID:** Y8B1409-SCV1

**Sequence:** Y8B1409

**Standard ID:** Y18A104

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
Bromochloromethane	10.0	10.9	9.0	30.00
Bromodichloromethane	10.0	9.95	-0.5	30.00
Bromoform	10.0	10.8	8.3	30.00
Bromomethane	10.0	9.68	-3.2	30.00
Carbon disulfide	10.0	10.8	8.4	30.00
Carbon tetrachloride	10.0	10.2	1.5	30.00
Chlorobenzene	10.0	10.2	2.3	30.00
Chloroethane	10.0	9.64	-3.6	30.00
Chloroform	10.0	9.90	-1.0	30.00
Chloromethane	10.0	11.0	10.0	30.00
cis-1,2-Dichloroethylene	10.0	10.1	0.7	30.00
cis-1,3-Dichloropropylene	10.0	10.2	1.9	30.00
Cyclohexane	10.0	9.50	-5.0	30.00
Dibromochloromethane	10.0	10.9	8.8	30.00
Dibromomethane	10.0	10.3	2.6	30.00
Dichlorodifluoromethane	10.0	11.4	13.6	30.00
Ethyl Benzene	10.0	10.2	1.9	30.00
Hexachlorobutadiene	10.0	11.2	11.8	30.00
Isopropylbenzene	10.0	9.95	-0.5	30.00
Methyl acetate	10.0	11.7	16.7	30.00
Methyl tert-butyl ether (MTBE)	10.0	11.1	10.6	30.00
Methylcyclohexane	10.0	8.92	-10.8	30.00
Methylene chloride	10.0	9.88	-1.2	30.00
n-Butylbenzene	10.0	10.2	1.5	30.00
n-Propylbenzene	10.0	10.1	0.9	30.00
o-Xylene	10.0	10.3	2.6	30.00
p- & m- Xylenes	20.0	20.5	2.6	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

## EPA 8260C

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0104

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900-Kingston CVS Investig

**Calibration:** YB80017

**Laboratory ID:** Y8B1409-SCV1

**Sequence:** Y8B1409

**Standard ID:** Y18A104

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
p-Isopropyltoluene	10.0	10.2	2.1	30.00
sec-Butylbenzene	10.0	10.5	4.6	30.00
Styrene	10.0	9.95	-0.5	30.00
tert-Butyl alcohol (TBA)	50.0	55.8	11.6	30.00
tert-Butylbenzene	10.0	9.98	-0.2	30.00
Tetrachloroethylene	10.0	8.08	-19.2	30.00
Toluene	10.0	10.1	0.6	30.00
trans-1,2-Dichloroethylene	10.0	9.88	-1.2	30.00
trans-1,3-Dichloropropylene	10.0	10.3	3.1	30.00
trans-1,4-dichloro-2-butene	10.0	10.6	6.4	30.00
Trichloroethylene	10.0	10.1	1.4	30.00
Trichlorofluoromethane	10.0	9.42	-5.8	30.00
Vinyl Chloride	10.0	10.2	1.6	30.00

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723811.D  
 Acq On : 14 Feb 2018 6:53 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-SCV1  
 Misc : QBV7021318A  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 14 10:40:48 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	5.825	70	213140	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	8.855	117	790163	10.00	ppb	# 0.00
67) 1,2-DICHLOROBENZENE-d4...	11.840	152	304628	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.536	65	263223	9.85	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.50%		
51) Toluene-d8 (SURR)	7.353	98	1020534	9.89	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.90%		
70) p-Bromofluorobenzene (...)	10.124	95	367690	9.85	ppb	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.50%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.552	85	188374	11.36	ppb	# 100
3) Chloromethane	1.744	50	527023	11.00	ppb	99
4) Vinyl Chloride	1.849	62	348287	10.16	ppb	99
5) Bromomethane	2.197	94	125189	9.68	ppb	97
6) Chloroethane	2.297	64	182100	9.64	ppb	99
7) Trichlorofluoromethane	2.539	101	281050	9.42	ppb	100
9) Freon-113	3.040	101	178472	9.14	ppb	# 89
10) 1,1-Dichloroethylene	3.062	61	458124	9.71	ppb	# 74
11) Acrolein	3.004	56	32664	7.97	ppb	# 1
12) Acetone	3.151	43	110495	14.01	ppb	# 1
13) Iodomethane	3.229	142	209482	9.68	ppb	98
14) Methyl Acetate	3.452	43	254843m	11.67	ppb	
15) Carbon disulfide	3.288	76	764837	10.84	ppb	100
16) tert-Butyl Alcohol (TBA)	3.675	59	129236	55.81	ppb	# 1
17) Methylene Chloride	3.560	49	603559	9.88	ppb	# 64
18) Acrylonitrile	3.822	53	86519	9.65	ppb	# 82
19) trans-1,2-Dichloroethy...	3.802	61	486971	9.88	ppb	# 99
20) tert-Butyl Methyl Ethe...	3.780	73	800650	11.06	ppb	94
21) 1,1-Dichloroethane	4.211	63	584487	10.09	ppb	98
22) Vinyl Acetate	4.234	43	1220483	14.14	ppb	# 100
23) Diisopropyl ether (DIPE)	4.220	45	1678511	10.96	ppb	# 93
24) Ethyl-tert-Butyl ether...	4.559	59	1258814	10.79	ppb	# 99
25) cis-1,2-Dichloroethylene	4.760	61	560978	10.07	ppb	88
26) 2-Butanone	4.776	72	25204	11.28	ppb	# 1
27) 2,2-Dichloropropane	4.740	77	329471	9.42	ppb	# 75
28) Tetrahydrofuran	5.032	71	24152	9.88	ppb	# 68
29) Bromochloromethane	4.996	49	382171	10.90	ppb	# 85
30) Chloroform	5.063	83	440728	9.90	ppb	# 99
31) 1,1,1-Trichloroethane	5.210	97	380364	9.75	ppb	# 100
32) Cyclohexane	5.238	56	553053	9.50	ppb	# 75
33) 1,1-Dichloropropylene	5.361	75	352336	9.98	ppb	# 88
35) Carbon Tetrachloride	5.358	117	332207	10.15	ppb	100
36) tert-Amyl alcohol (TAA)	5.572	59	301410	110.81	ppb	# 86
37) 1,2-Dichloroethane	5.608	62	401804	10.92	ppb	99
38) Benzene	5.566	78	1065598	10.07	ppb	# 88
39) tert-Amyl methyl ether...	5.630	73	867343	10.96	ppb	# 93
41) Trichloroethylene	6.173	95	278556	10.14	ppb	97
42) Methyl Cyclohexane	6.320	83	309831	8.92	ppb	# 62
43) Methyl Methacrylate	6.482	69	162425	10.13	ppb	# 46
44) Dibromomethane	6.543	93	140949	10.26	ppb	# 97
45) Bromodichloromethane	6.685	83	338380	9.95	ppb	# 93
46) 1,2-Dichloropropane	6.407	63	339698	10.03	ppb	# 99
47) 1,4-Dioxane	6.546	88	8840	220.98	ppb	# 71
48) 2-Chloroethyl vinyl ether	6.949	63	177215	11.56	ppb	# 100
49) cis-1,3-Dichloropropene	7.108	75	442463	10.19	ppb	# 83
50) 4-Methyl-2-Pentanone	7.239	43	386556	11.23	ppb	# 85
52) Toluene	7.419	91	1141369	10.06	ppb	99
53) trans-1,3-Dichloropropene	7.667	75	392188	10.31	ppb	# 100

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723811.D  
 Acq On : 14 Feb 2018 6:53 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-SCV1  
 Misc : QBV7021318A  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 14 10:40:48 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

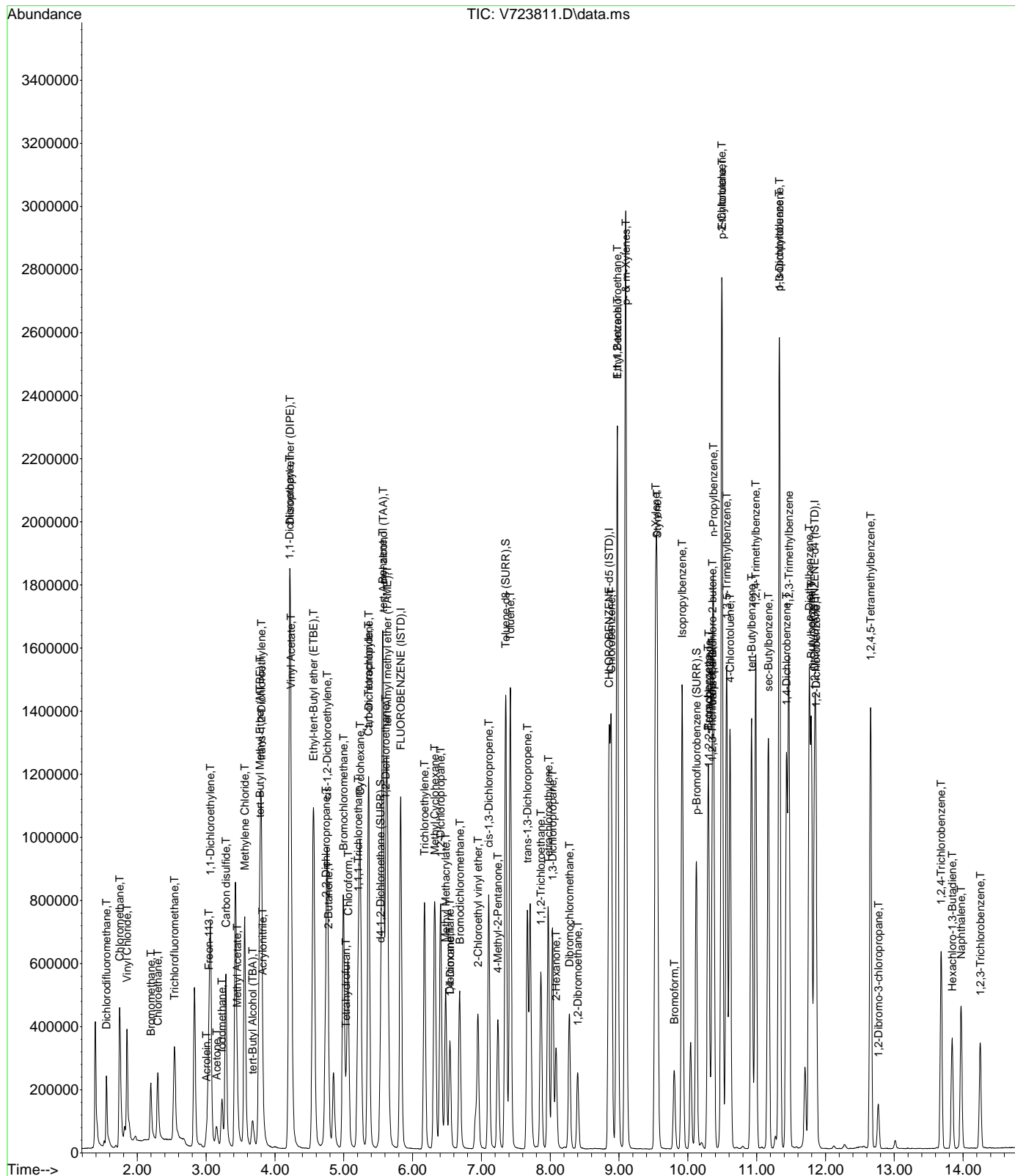
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
54) 1,1,2-Trichloroethane	7.865	97	202208	10.35	ppb	92
55) 1,3-Dichloropropane	8.034	76	366580	10.67	ppb #	100
56) Tetrachloroethylene	7.973	166	258956	8.08	ppb #	100
57) 2-Hexanone	8.084	43	274071	11.37	ppb #	90
58) Dibromochloromethane	8.279	129	264036	10.88	ppb	96
59) 1,2-Dibromoethane	8.399	107	203797	10.69	ppb	98
60) Chlorobenzene	8.886	112	738019	10.23	ppb #	93
61) 1,1,1,2-tetrachloroethane	8.975	131	272899	10.45	ppb	98
62) Ethyl Benzene	8.975	91	1244309	10.19	ppb	98
63) p- & m-Xylenes	9.097	91	1938949	20.52	ppb	98
64) o-Xylene	9.531	91	1001152	10.26	ppb	99
65) Styrene	9.553	104	810307	9.95	ppb #	100
66) Bromoform	9.804	173	147204	10.83	ppb #	80
68) p-Ethyltoluene	10.497	105	1183256	10.32	ppb #	89
69) Isopropylbenzene	9.918	105	1187545	9.95	ppb	98
71) 1,1,2,2-Tetrachloroethane	10.305	83	233385	10.61	ppb #	98
72) Bromobenzene	10.293	77	460679	10.23	ppb #	92
73) trans-1,4-Dichloro-2-b...	10.355	75	273531	10.64	ppb #	86
74) 1,2,3-Trichloropropane	10.352	110	68309	10.85	ppb	69
75) n-Propylbenzene	10.371	91	1354523	10.09	ppb	98
76) 2-Chlorotoluene	10.494	91	945316	10.12	ppb	100
77) 4-Chlorotoluene	10.613	91	875434	10.08	ppb	100
78) 1,3,5-Trimethylbenzene	10.563	105	1002264	10.08	ppb	98
79) tert-Butylbenzene	10.925	119	829934	9.98	ppb	98
80) 1,2,4-Trimethylbenzene	10.986	105	1008017	10.09	ppb	97
81) sec-Butylbenzene	11.170	105	1147256	10.46	ppb	98
82) 1,3-Dichlorobenzene	11.331	146	554367	10.26	ppb	98
83) p-Isopropyltoluene	11.328	119	1041268	10.21	ppb	99
84) 1,4-Dichlorobenzene	11.434	146	563079	10.21	ppb	98
85) 1,2,3-Trimethylbenzene	11.468	105	1052178	10.88	ppb #	59
86) p-Diethylbenzene	11.765	105	557690	10.76	ppb	89
87) 1,2-Dichlorobenzene	11.863	146	515733	10.53	ppb #	100
88) n-Butylbenzene	11.793	91	1012347	10.15	ppb	95
89) 1,2-Dibromo-3-chloropr...	12.767	75	40072	10.79	ppb #	77
90) 1,2,4,5-Tetramethylben...	12.656	119	908207	10.34	ppb	99
91) 1,2,4-Trichlorobenzene	13.679	180	220928	11.88	ppb #	95
92) Hexachloro-1,3-Butadiene	13.841	225	82513	11.18	ppb #	1
93) Naphthalene	13.972	128	401986	13.21	ppb #	83
94) 1,2,3-Trichlorobenzene	14.250	180	115125	13.93	ppb #	86

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723811.D  
 Acq On : 14 Feb 2018 6:53 am  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-SCV1  
 Misc : QBV7021318A  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 14 10:40:48 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration



# SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0104

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900-Kingston CVS Investig

**Calibration:** YC80010

**Laboratory ID:** Y8C0903-SCV1

**Sequence:** Y8C0903

**Standard ID:** Y18B194

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
1,1,1,2-Tetrachloroethane	10.0	8.62	-13.8	30.00
1,1,1-Trichloroethane	10.0	9.19	-8.1	30.00
1,1,2,2-Tetrachloroethane	10.0	9.42	-5.8	30.00
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.55	-4.5	30.00
1,1,2-Trichloroethane	10.0	9.10	-9.0	30.00
1,1-Dichloroethane	10.0	9.35	-6.5	30.00
1,1-Dichloroethylene	10.0	9.03	-9.7	30.00
1,2,3-Trichlorobenzene	10.0	9.19	-8.1	30.00
1,2,3-Trichloropropane	10.0	9.92	-0.8	30.00
1,2,4-Trichlorobenzene	10.0	9.62	-3.8	30.00
1,2,4-Trimethylbenzene	10.0	9.09	-9.1	30.00
1,2-Dibromo-3-chloropropane	10.0	9.76	-2.4	30.00
1,2-Dibromoethane	10.0	9.52	-4.8	30.00
1,2-Dichlorobenzene	10.0	9.47	-5.3	30.00
1,2-Dichloroethane	10.0	9.25	-7.5	30.00
1,2-Dichloropropane	10.0	9.55	-4.5	30.00
1,3,5-Trimethylbenzene	10.0	9.42	-5.8	30.00
1,3-Dichlorobenzene	10.0	8.79	-12.1	30.00
1,4-Dichlorobenzene	10.0	9.20	-8.0	30.00
1,4-Dioxane	210	193	-7.9	30.00
2-Butanone	10.0	11.5	14.8	30.00
2-Hexanone	10.0	10.0	0.1	30.00
4-Methyl-2-pentanone	10.0	10.0	0.1	30.00
Acetone	10.0	9.59	-4.1	30.00
Acrolein	10.0	8.69	-13.1	30.00
Acrylonitrile	10.0	11.2	11.9	30.00
Benzene	10.0	9.48	-5.2	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investig

Calibration: YC80010

Laboratory ID: Y8C0903-SCV1

Sequence: Y8C0903

Standard ID: Y18B194

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
Bromochloromethane	10.0	9.74	-2.6	30.00
Bromodichloromethane	10.0	9.51	-4.9	30.00
Bromoform	10.0	8.99	-10.1	30.00
Bromomethane	10.0	10.3	3.1	30.00
Carbon disulfide	10.0	10.4	4.2	30.00
Carbon tetrachloride	10.0	9.42	-5.8	30.00
Chlorobenzene	10.0	9.10	-9.0	30.00
Chloroethane	10.0	10.5	4.7	30.00
Chloroform	10.0	9.40	-6.0	30.00
Chloromethane	10.0	11.0	10.5	30.00
cis-1,2-Dichloroethylene	10.0	8.41	-15.9	30.00
cis-1,3-Dichloropropylene	10.0	9.44	-5.6	30.00
Cyclohexane	10.0	10.6	5.8	30.00
Dibromochloromethane	10.0	9.54	-4.6	30.00
Dibromomethane	10.0	9.39	-6.1	30.00
Dichlorodifluoromethane	10.0	12.2	21.5	30.00
Ethyl Benzene	10.0	8.99	-10.1	30.00
Hexachlorobutadiene	10.0	10.3	3.4	30.00
Isopropylbenzene	10.0	9.94	-0.6	30.00
Methyl acetate	10.0	11.0	9.8	30.00
Methyl tert-butyl ether (MTBE)	10.0	9.79	-2.1	30.00
Methylcyclohexane	10.0	10.6	6.0	30.00
Methylene chloride	10.0	9.24	-7.6	30.00
n-Butylbenzene	10.0	9.59	-4.1	30.00
n-Propylbenzene	10.0	9.55	-4.5	30.00
o-Xylene	10.0	9.33	-6.7	30.00
p- & m- Xylenes	20.0	17.5	-12.4	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investig

Calibration: YC80010

Laboratory ID: Y8C0903-SCV1

Sequence: Y8C0903

Standard ID: Y18B194

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
p-Isopropyltoluene	10.0	9.29	-7.1	30.00
sec-Butylbenzene	10.0	10.4	3.9	30.00
Styrene	10.0	8.87	-11.3	30.00
tert-Butyl alcohol (TBA)	50.0	47.2	-5.7	30.00
tert-Butylbenzene	10.0	9.72	-2.8	30.00
Tetrachloroethylene	10.0	8.85	-11.5	30.00
Toluene	10.0	9.27	-7.3	30.00
trans-1,2-Dichloroethylene	10.0	9.42	-5.8	30.00
trans-1,3-Dichloropropylene	10.0	9.14	-8.6	30.00
trans-1,4-dichloro-2-butene	10.0	8.97	-10.3	30.00
Trichloroethylene	10.0	9.43	-5.7	30.00
Trichlorofluoromethane	10.0	10.2	2.4	30.00
Vinyl Chloride	10.0	10.8	7.6	30.00

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804216.D  
 Acq On : 8 Mar 2018 8:28 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-SCV1  
 Misc : QBV8030818A  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 09 10:00:42 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 09:56:09 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.919	70	27472	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	97735	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	32533	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.657	65	24518	9.53	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	95.30%		
51) Toluene-d8 (SURR)	6.399	98	142391	10.08	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	100.80%		
70) p-Bromofluorobenzene (...)	9.134	95	37682	10.66	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	106.60%		
<b>Target Compounds</b>						
						Qvalue
2) Dichlorodifluoromethane	1.160	85	60781	12.15	ppb	100
3) Chloromethane	1.304	50	56985	11.05	ppb	99
4) Vinyl Chloride	1.377	62	51306	10.76	ppb	# 100
5) Bromomethane	1.636	94	31131	10.31	ppb	99
6) Chloroethane	1.711	64	28409	10.47	ppb	100
7) Trichlorofluoromethane	1.892	101	100877	10.24	ppb	100
9) Freon-113	2.303	101	46071	9.55	ppb	100
10) 1,1-Dichloroethylene	2.334	61	61498	9.03	ppb	97
11) Acrolein	2.312	56	1369	8.69	ppb	# 100
12) Acetone	2.445	43	3161	9.59	ppb	100
13) Iodomethane	2.487	142	70868	11.19	ppb	100
14) Methyl Acetate	2.701	43	10044	10.98	ppb	100
15) Carbon disulfide	2.518	76	98413	10.42	ppb	100
16) tert-Butyl Alcohol (TBA)	2.954	59	1972	47.16	ppb	# 1
17) Methylene Chloride	2.796	49	48197	9.24	ppb	# 98
18) Acrylonitrile	3.055	53	3704	11.19	ppb	# 99
19) trans-1,2-Dichloroethy...	2.999	61	53847	9.42	ppb	99
20) tert-Butyl Methyl Ethe...	2.979	73	52668	9.79	ppb	# 88
21) 1,1-Dichloroethane	3.388	63	69276	9.35	ppb	# 96
22) Vinyl Acetate	3.427	43	26227m	9.81	ppb	
23) Diisopropyl ether (DIPE)	3.383	45	118780	10.00	ppb	# 100
24) Ethyl-tert-Butyl ether...	3.700	59	80882	10.12	ppb	# 100
25) cis-1,2-Dichloroethylene	3.906	61	52156	8.41	ppb	93
26) 2-Butanone	3.942	72	1109m	11.48	ppb	
27) 2,2-Dichloropropane	3.872	77	53213	8.82	ppb	# 86
28) Tetrahydrofuran	4.159	71	1148	11.93	ppb	# 70
29) Bromochloromethane	4.134	49	25206	9.74	ppb	# 80
30) Chloroform	4.206	83	68006	9.40	ppb	99
31) 1,1,1-Trichloroethane	4.309	97	70481	9.19	ppb	# 100
32) Cyclohexane	4.312	56	69398	10.58	ppb	98
33) 1,1-Dichloropropylene	4.454	75	55765	9.43	ppb	98
35) Carbon Tetrachloride	4.443	117	69723	9.42	ppb	100
36) tert-Amyl alcohol (TAA)	4.735	59	5859	99.28	ppb	# 100
37) 1,2-Dichloroethane	4.727	62	32925	9.25	ppb	# 87
38) Benzene	4.654	78	147206	9.48	ppb	99
39) tert-Amyl methyl ether...	4.727	73	62011	10.20	ppb	# 90
41) Trichloroethylene	5.247	95	41806	9.43	ppb	99
42) Methyl Cyclohexane	5.353	83	64719	10.60	ppb	99
43) Methyl Methacrylate	6.791	69	18618	9.72	ppb	# 100
44) Dibromomethane	5.628	93	13677	9.39	ppb	# 100
45) Bromodichloromethane	5.778	83	42975	9.51	ppb	100
46) 1,2-Dichloropropane	5.489	63	31844	9.55	ppb	# 82
47) 1,4-Dioxane	5.636	88	280m	193.35	ppb	

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804216.D  
 Acq On : 8 Mar 2018 8:28 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-SCV1  
 Misc : QBV8030818A  
 ALS Vial : 22 Sample Multiplier: 1

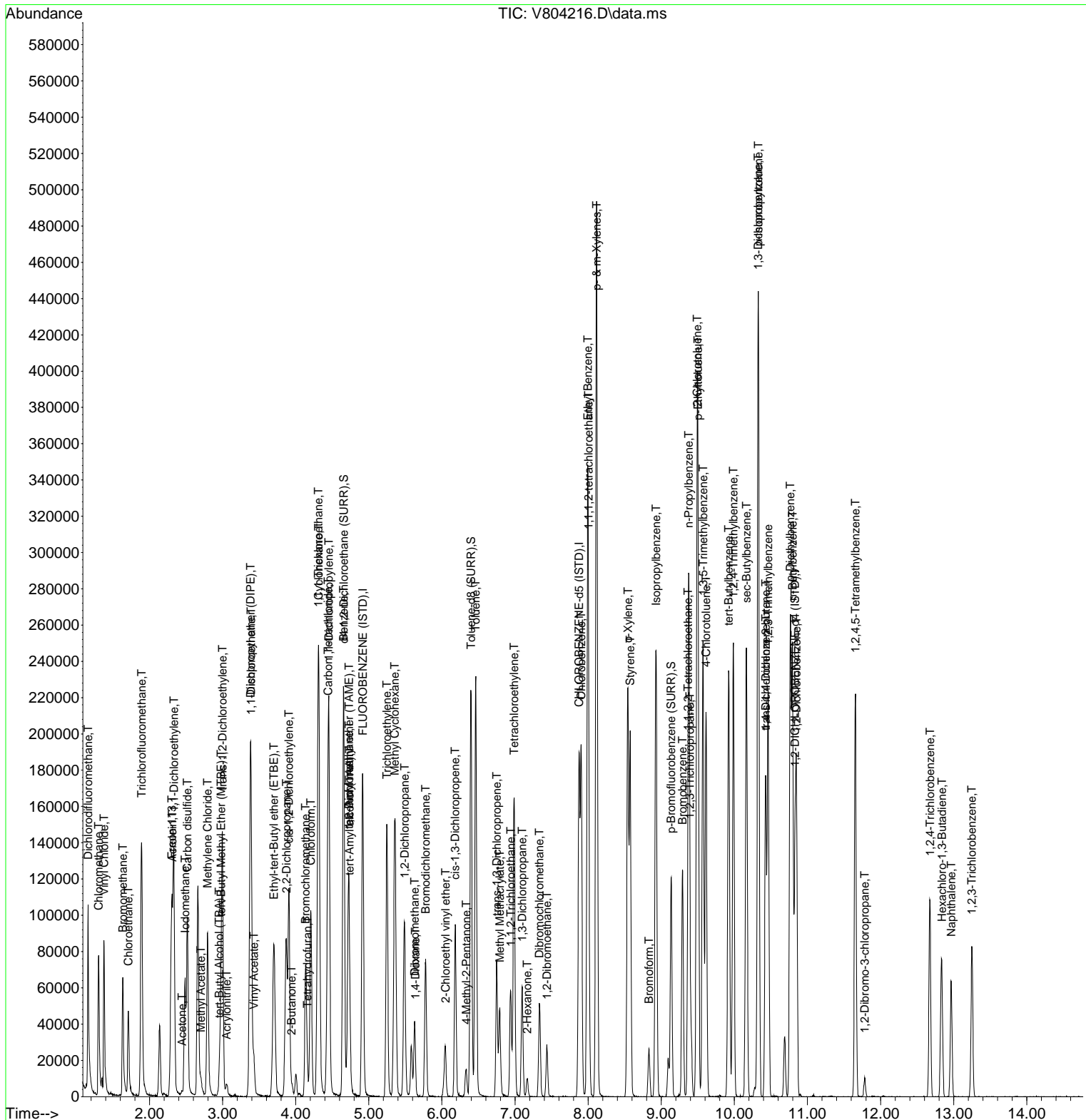
Quant Time: Mar 09 10:00:42 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 09:56:09 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 2-Chloroethyl vinyl ether	6.048	63	9512	11.90	ppb	100
49) cis-1,3-Dichloropropene	6.182	75	43769	9.44	ppb	99
50) 4-Methyl-2-Pentanone	6.335	43	12050	10.01	ppb #	94
52) Toluene	6.463	91	158664	9.27	ppb	100
53) trans-1,3-Dichloropropene	6.749	75	32451	9.14	ppb	99
54) 1,1,2-Trichloroethane	6.941	97	17759	9.10	ppb	99
55) 1,3-Dichloropropane	7.097	76	29570	9.70	ppb #	100
56) Tetrachloroethylene	6.986	166	44057	8.85	ppb	100
57) 2-Hexanone	7.167	43	7411	10.01	ppb #	67
58) Dibromochloromethane	7.334	129	27137	9.54	ppb #	92
59) 1,2-Dibromoethane	7.437	107	17222	9.52	ppb	98
60) Chlorobenzene	7.904	112	96415	9.10	ppb	99
61) 1,1,1,2-tetrachloroethane	8.004	131	37067	8.62	ppb	99
62) Ethyl Benzene	7.996	91	177690	8.99	ppb	100
63) p- & m-Xylenes	8.115	91	275948	17.52	ppb	99
64) o-Xylene	8.544	91	129111	9.33	ppb	100
65) Styrene	8.574	104	94807	8.87	ppb #	100
66) Bromoform	8.830	173	11706	8.99	ppb #	99
68) p-Ethyltoluene	9.504	105	172195	9.88	ppb #	100
69) Isopropyltoluene	8.928	105	175287	9.94	ppb	100
71) 1,1,2,2-Tetrachloroethane	9.365	83	17710	9.42	ppb #	100
72) Bromobenzene	9.290	77	49303	9.85	ppb	98
73) trans-1,4-Dichloro-2-b...	10.427	75	20268	8.97	ppb #	99
74) 1,2,3-Trichloropropane	9.392	110	4965	9.92	ppb #	100
75) n-Propylbenzene	9.376	91	207211	9.55	ppb	99
76) 2-Chlorotoluene	9.490	91	132324	9.24	ppb	100
77) 4-Chlorotoluene	9.612	91	112572	9.46	ppb	100
78) 1,3,5-Trimethylbenzene	9.571	105	140473	9.42	ppb	99
79) tert-Butylbenzene	9.921	119	126863	9.72	ppb	100
80) 1,2,4-Trimethylbenzene	9.988	105	136030	9.09	ppb	99
81) sec-Butylbenzene	10.166	105	185003	10.39	ppb	100
82) 1,3-Dichlorobenzene	10.325	146	77428	8.79	ppb	99
83) p-Isopropyltoluene	10.327	119	169086	9.29	ppb	99
84) 1,4-Dichlorobenzene	10.427	147	5404	9.20	ppb	96
85) 1,2,3-Trimethylbenzene	10.461	105	128489	9.95	ppb	98
86) p-Diethylbenzene	10.764	105	88403	10.58	ppb	90
87) 1,2-Dichlorobenzene	10.850	146	64483	9.47	ppb #	87
88) n-Butyltoluene	10.795	91	171163	9.59	ppb	95
89) 1,2-Dibromo-3-chloropr...	11.782	75	2262	9.76	ppb	95
90) 1,2,4,5-Tetramethylben...	11.654	119	127029	10.18	ppb	99
91) 1,2,4-Trichlorobenzene	12.676	180	33184	9.62	ppb	99
92) Hexachloro-1,3-Butadiene	12.840	225	15614	10.34	ppb	95
93) Naphthalene	12.968	128	53019	10.35	ppb	98
94) 1,2,3-Trichlorobenzene	13.246	181	1944m	9.19	ppb	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030818\  
Data File : V804216.D  
Acq On : 8 Mar 2018 8:28 pm  
Operator : RDS  
InstName : VOA No. 8  
Sample : SEQ-SCV1  
Misc : QBV8030818A  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Mar 09 10:00:42 2018  
Quant Method : C:\msdchem\1\methods\V8L00064.M  
Quant Title : Volatile Organics EPA 8260C  
QLast Update : Fri Mar 09 09:56:09 2018  
Response via : Initial Calibration



## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: VOA No. 8 Calibration: YC80010  
 Lab File ID: V804220.D Calibration Date: 03/08/18 14:07  
 Sequence: Y8C1201 Injection Date: 03/09/18  
 Lab Sample ID: Y8C1201-CCV1 Injection Time: 10:37

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	10.0	8.93	0.439958	0.3928124		-10.7	20
1,1,1-Trichloroethane	A	10.0	8.98	2.790235	2.504338	0.1	-10.2	20
1,1,2,2-Tetrachloroethane	A	10.0	8.77	0.5778805	0.5066264	0.3	-12.3	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	10.0	9.35	1.755966	1.642386	0.1	-6.5	20
1,1,2-Trichloroethane	A	10.0	9.17	0.1995895	0.1829243	0.1	-8.3	20
1,1-Dichloroethane	A	10.0	9.05	2.696121	2.438952	0.2	-9.5	20
1,1-Dichloroethylene	A	10.0	8.88	2.479159	2.200495	0.1	-11.2	20
1,2,3-Trichlorobenzene	A	10.0	10.5	0.0650342	6.836167E-02		5.1	20
1,2,3-Trichloropropane	A	10.0	9.87	0.1538976	0.1519466		-1.3	20
1,2,4-Trichlorobenzene	A	10.0	9.85	1.060516	1.044113	0.2	-1.5	20
1,2,4-Trimethylbenzene	A	10.0	9.34	4.600339	4.29598		-6.6	20
1,2-Dibromo-3-chloropropane	A	10.0	10.3	7.121366E-02	7.309709E-02	0.05	2.6	20
1,2-Dibromoethane	A	10.0	9.60	0.1850029	0.1776338	0.1	-4.0	20
1,2-Dichlorobenzene	A	10.0	9.43	2.09376	1.974956	0.4	-5.7	20
1,2-Dichloroethane	A	10.0	8.89	1.295755	1.152172	0.1	-11.1	20
1,2-Dichloropropane	A	10.0	9.43	0.3410746	0.3215523	0.1	-5.7	20
1,3,5-Trimethylbenzene	A	10.0	9.71	4.582224	4.449833		-2.9	20
1,3-Dichlorobenzene	A	10.0	8.99	2.706432	2.434133	0.6	-10.1	20
1,4-Dichlorobenzene	A	10.0	9.99	0.180473	0.1802956	0.5 *	-0.1	20
1,4-Dioxane	A	210	201	1.481686E-04	1.416169E-04		-4.4	20
2-Butanone	A	10.0	10.0	3.516513E-02	3.527387E-02	0.1	0.3	20
2-Hexanone	A	10.0	10.0	7.578875E-02	7.606019E-02	0.1	0.4	20
4-Methyl-2-pentanone	A	10.0	10.3	0.1231693	0.1267844	0.1	2.9	20
Acetone	A	10.0	10.4	0.11992	0.1248925	0.1	4.1	20
Acrolein	A	10.0	4.13	5.733479E-02	2.369515E-02		-58.7	20 *
Acrylonitrile	A	10.0	10.5	0.1205074	0.1260396		4.6	20
Benzene	A	10.0	9.12	5.650273	5.152603	0.5	-8.8	20
Bromochloromethane	A	10.0	9.41	0.942014	0.8859693		-5.9	20
Bromodichloromethane	A	10.0	9.52	0.4624433	0.4403853	0.2	-4.8	20



## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: VOA No. 8 Calibration: YC80010  
 Lab File ID: V804220.D Calibration Date: 03/08/18 14:07  
 Sequence: Y8C1201 Injection Date: 03/09/18  
 Lab Sample ID: Y8C1201-CCV1 Injection Time: 10:37

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Bromoform	A	10.0	8.99	0.1332309	0.1198347	0.1	-10.1	20
Bromomethane	A	10.0	9.68	1.098645	1.063378	0.1	-3.2	20
Carbon disulfide	A	10.0	9.33	3.439147	3.208345	0.1	-6.7	20
Carbon tetrachloride	A	10.0	9.02	2.693536	2.428413	0.1	-9.8	20
Chlorobenzene	A	10.0	9.21	1.084614	0.9992904	0.5	-7.9	20
Chloroethane	A	10.0	9.26	0.9875799	0.9145039	0.1	-7.4	20
Chloroform	A	10.0	9.15	2.633447	2.410166	0.2	-8.5	20
Chloromethane	A	10.0	9.00	1.877511	1.689024	0.1	-10.0	20
cis-1,2-Dichloroethylene	A	10.0	8.61	2.25804	1.943325	0.1	-13.9	20
cis-1,3-Dichloropropylene	A	10.0	8.89	0.4741882	0.4216024	0.2	-11.1	20
Cyclohexane	A	10.0	9.99	2.387546	2.38579	0.1	-0.07	20
Dibromochloromethane	A	10.0	9.33	0.2911456	0.2717151	0.1	-6.7	20
Dibromomethane	A	10.0	9.18	0.1490595	0.1368541		-8.2	20
Dichlorodifluoromethane	A	10.0	9.31	1.820384	1.693935	0.1	-6.9	20
Ethyl Benzene	A	10.0	9.15	2.022387	1.850749	0.1	-8.5	20
Hexachlorobutadiene	A	10.0	9.87	0.464253	0.4580645		-1.3	20
Isopropylbenzene	A	10.0	10.2	5.421884	5.557922	0.1	2.5	20
Methyl acetate	A	10.0	9.97	0.3328908	0.3318397	0.1	-0.3	20
Methyl tert-butyl ether (MTBE)	A	10.0	9.13	1.958127	1.788715	0.1	-8.7	20
Methylcyclohexane	A	10.0	10.4	0.6244745	0.6485203	0.1	3.9	20
Methylene chloride	A	10.0	8.55	1.899179	1.623423	0.1	-14.5	20
n-Butylbenzene	A	10.0	9.55	5.486091	5.241856		-4.5	20
n-Propylbenzene	A	10.0	9.91	6.666305	6.605244		-0.9	20
o-Xylene	A	10.0	9.34	1.416611	1.323671	0.3	-6.6	20
p- & m- Xylenes	A	20.0	17.7	1.611959	1.426335	0.1	-11.5	20
p-Isopropyltoluene	A	10.0	9.30	5.594491	5.202733		-7.0	20
sec-Butylbenzene	A	10.0	10.1	5.470855	5.514572		0.8	20
Styrene	A	10.0	9.06	1.094207	0.9917564	0.3	-9.4	20
tert-Butyl alcohol (TBA)	A	50.0	10.8	1.929988E-02	3.276455E-03		-83.0	20 *

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: VOA No. 8 Calibration: YC80010  
 Lab File ID: V804220.D Calibration Date: 03/08/18 14:07  
 Sequence: Y8C1201 Injection Date: 03/09/18  
 Lab Sample ID: Y8C1201-CCV1 Injection Time: 10:37

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
tert-Butylbenzene	A	10.0	10.2	4.010518	4.070491		1.5	20
Tetrachloroethylene	A	10.0	16.5	0.5093015	0.8415248	0.2	65.2	20 *
Toluene	A	10.0	9.32	1.751776	1.633098	0.4	-6.8	20
trans-1,2-Dichloroethylene	A	10.0	8.97	2.080522	1.866253	0.1	-10.3	20
trans-1,3-Dichloropropylene	A	10.0	8.64	0.3631378	0.3137991	0.1	-13.6	20
trans-1,4-dichloro-2-butene	A	10.0	9.93	0.6942787	0.6893056		-0.7	20
Trichloroethylene	A	10.0	10.2	0.4535489	0.4626325	0.2	2.0	20
Trichlorofluoromethane	A	10.0	9.16	3.585562	3.285919	0.1	-8.4	20
Vinyl Chloride	A	10.0	9.30	1.736393	1.614963	0.1	-7.0	20

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804220.D  
 Acq On : 9 Mar 2018 10:37 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8030918A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:58:47 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 09:45:59 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.918	70	27896	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	95832	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	31465	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.654	65	23496	9.00	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	90.00%		
51) Toluene-d8 (SURR)	6.399	98	142566	10.30	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	103.00%		
70) p-Bromofluorobenzene (...)	9.134	95	36453	10.67	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	106.70%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.160	85	47254	9.31	ppb	Qvalue 100
3) Chloromethane	1.304	50	47117	9.00	ppb	99
4) Vinyl Chloride	1.379	62	45051	9.30	ppb	# 100
5) Bromomethane	1.635	94	29664	9.68	ppb	99
6) Chloroethane	1.711	64	25511	9.26	ppb	99
7) Trichlorofluoromethane	1.891	101	91664	9.16	ppb	99
8) Ethanol	2.156	45	922m	575.85	ppb	
9) Freon-113	2.306	101	45816	9.35	ppb	# 69
10) 1,1-Dichloroethylene	2.334	61	61385	8.88	ppb	97
11) Acrolein	2.306	56	661	4.13	ppb	# 100
12) Acetone	2.448	43	3484	10.41	ppb	# 97
13) Iodomethane	2.484	142	54630	8.50	ppb	99
14) Methyl Acetate	2.701	43	9257	9.97	ppb	99
15) Carbon disulfide	2.520	76	89500	9.33	ppb	100
16) tert-Butyl Alcohol (TBA)	2.965	59	457m	10.76	ppb	
17) Methylene Chloride	2.796	49	45287	8.55	ppb	# 96
18) Acrylonitrile	3.060	53	3516	10.46	ppb	# 100
19) trans-1,2-Dichloroethy...	2.999	61	52061	8.97	ppb	100
20) tert-Butyl Methyl Ethe...	2.976	73	49898	9.13	ppb	# 100
21) 1,1-Dichloroethane	3.388	63	68037	9.05	ppb	# 96
22) Vinyl Acetate	3.427	43	16852m	6.21	ppb	
23) Diisopropyl ether (DIPE)	3.383	45	114369	9.48	ppb	# 100
24) Ethyl-tert-Butyl ether...	3.703	59	78934	9.72	ppb	# 86
25) cis-1,2-Dichloroethylene	3.909	61	54211	8.61	ppb	96
26) 2-Butanone	3.950	72	984m	10.03	ppb	
27) 2,2-Dichloropropane	3.870	77	34118	5.57	ppb	# 86
28) Tetrahydrofuran	4.156	71	917m	9.38	ppb	
29) Bromochloromethane	4.134	49	24715	9.41	ppb	# 71
30) Chloroform	4.206	83	67234	9.15	ppb	# 91
31) 1,1,1-Trichloroethane	4.312	97	69861	8.98	ppb	# 99
32) Cyclohexane	4.312	56	66554	9.99	ppb	98
33) 1,1-Dichloropropylene	4.457	75	53802	8.96	ppb	97
35) Carbon Tetrachloride	4.440	117	67743	9.02	ppb	100
36) tert-Amyl alcohol (TAA)	4.746	59	5807m	96.91	ppb	
37) 1,2-Dichloroethane	4.724	62	32141	8.89	ppb	100
38) Benzene	4.654	78	143737	9.12	ppb	# 99
39) tert-Amyl methyl ether...	4.721	73	58196	9.43	ppb	# 100
41) Trichloroethylene	5.247	95	44335	10.20	ppb	98
42) Methyl Cyclohexane	5.358	83	62149	10.39	ppb	100
43) Methyl Methacrylate	6.794	69	18477	9.84	ppb	# 100
44) Dibromomethane	5.625	93	13115	9.18	ppb	# 100
45) Bromodichloromethane	5.775	83	42203	9.52	ppb	99
46) 1,2-Dichloropropane	5.486	63	30815	9.43	ppb	100

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804220.D  
 Acq On : 9 Mar 2018 10:37 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8030918A  
 ALS Vial : 2 Sample Multiplier: 1

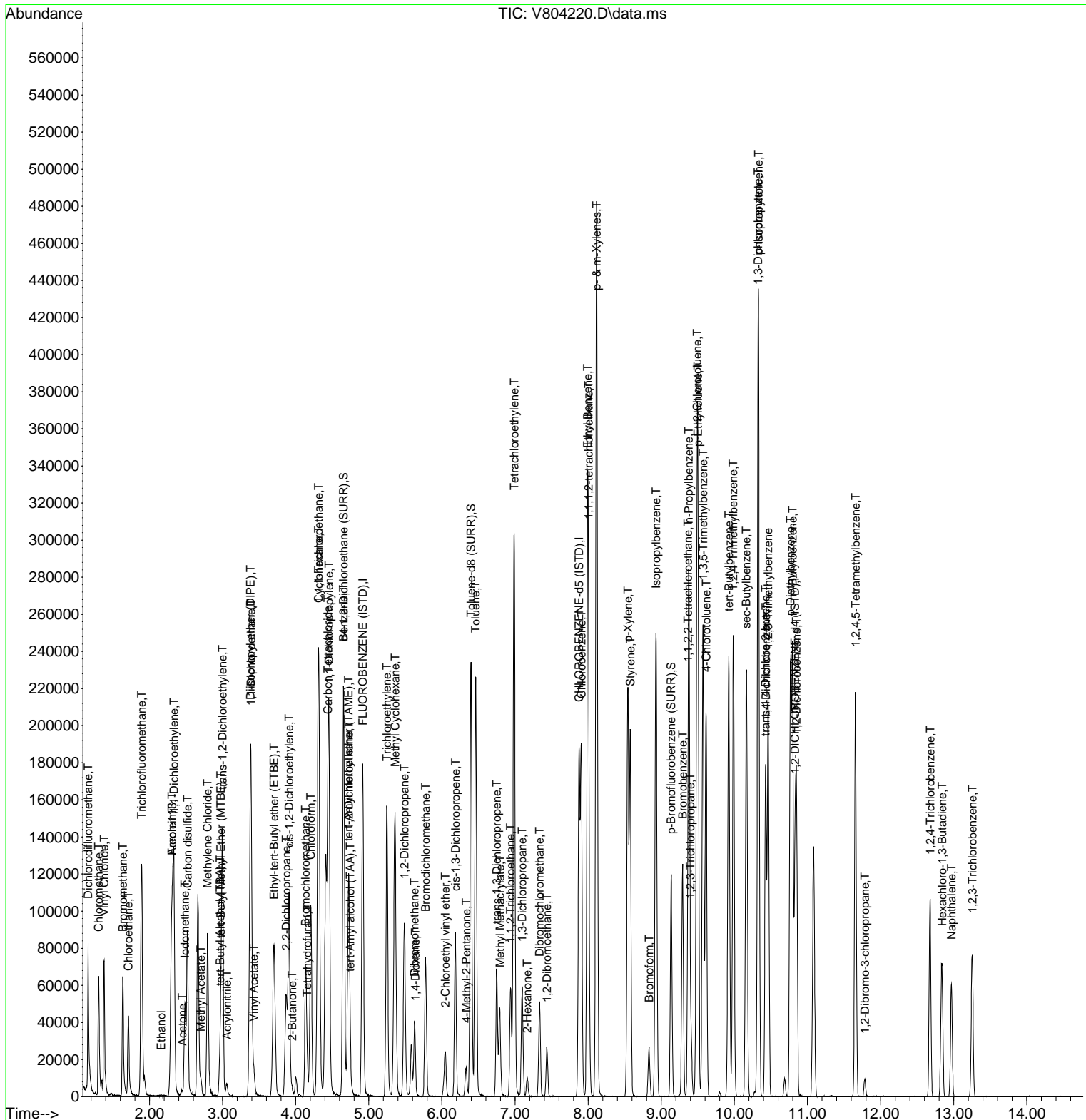
Quant Time: Mar 09 12:58:47 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 09:45:59 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	5.636	88	285m	200.71	ppb	
48) 2-Chloroethyl vinyl ether	6.045	63	8109	10.34	ppb	100
49) cis-1,3-Dichloropropene	6.184	75	40403	8.89	ppb	100
50) 4-Methyl-2-Pentanone	6.332	43	12150	10.29	ppb	# 91
52) Toluene	6.463	91	156503	9.32	ppb	100
53) trans-1,3-Dichloropropene	6.749	75	30072	8.64	ppb	# 91
54) 1,1,2-Trichloroethane	6.938	97	17530	9.17	ppb	99
55) 1,3-Dichloropropane	7.097	76	28957	9.69	ppb	# 100
56) Tetrachloroethylene	6.988	166	80645	16.52	ppb	100
57) 2-Hexanone	7.167	43	7289	10.04	ppb	# 76
58) Dibromochloromethane	7.336	129	26039	9.33	ppb	# 99
59) 1,2-Dibromoethane	7.436	107	17023	9.60	ppb	98
60) Chlorobenzene	7.907	112	95764	9.21	ppb	99
61) 1,1,1,2-tetrachloroethane	8.004	131	37644	8.93	ppb	97
62) Ethyl Benzene	7.993	91	177361	9.15	ppb	100
63) p- & m-Xylenes	8.115	91	273377	17.70	ppb	100
64) o-Xylene	8.544	91	126850	9.34	ppb	100
65) Styrene	8.577	104	95042	9.06	ppb	# 100
66) Bromoform	8.833	173	11484	8.99	ppb	# 99
68) p-Ethyltoluene	9.504	105	162660	9.65	ppb	# 100
69) Isopropylbenzene	8.928	105	174880	10.25	ppb	99
71) 1,1,2,2-Tetrachloroethane	9.367	83	15941	8.77	ppb	# 100
72) Bromobenzene	9.292	77	48084	9.94	ppb	99
73) trans-1,4-Dichloro-2-b...	10.425	75	21689	9.93	ppb	# 100
74) 1,2,3-Trichloropropane	9.398	110	4781	9.87	ppb	# 100
75) n-Propylbenzene	9.376	91	207834	9.91	ppb	100
76) 2-Chlorotoluene	9.490	91	129694	9.37	ppb	100
77) 4-Chlorotoluene	9.615	91	112284	9.76	ppb	100
78) 1,3,5-Trimethylbenzene	9.570	105	140014	9.71	ppb	99
79) tert-Butylbenzene	9.924	119	128078	10.15	ppb	100
80) 1,2,4-Trimethylbenzene	9.985	105	135173	9.34	ppb	99
81) sec-Butylbenzene	10.163	105	173516	10.08	ppb	100
82) 1,3-Dichlorobenzene	10.324	146	76590	8.99	ppb	99
83) p-Isopropyltoluene	10.330	119	163704	9.30	ppb	100
84) 1,4-Dichlorobenzene	10.430	147	5673	9.99	ppb	98
85) 1,2,3-Trimethylbenzene	10.461	105	122146	9.78	ppb	99
86) p-Diethylbenzene	10.767	105	79820	9.87	ppb	96
87) 1,2-Dichlorobenzene	10.850	146	62142	9.43	ppb	99
88) n-Butylbenzene	10.795	91	164935	9.55	ppb	99
89) 1,2-Dibromo-3-chloropr...	11.785	75	2300	10.26	ppb	# 69
90) 1,2,4,5-Tetramethylben...	11.657	119	121405	10.06	ppb	99
91) 1,2,4-Trichlorobenzene	12.678	180	32853	9.85	ppb	99
92) Hexachloro-1,3-Butadiene	12.842	225	14413	9.87	ppb	99
93) Naphthalene	12.970	128	50095	10.11	ppb	99
94) 1,2,3-Trichlorobenzene	13.257	181	2151	10.51	ppb	# 90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804220.D  
 Acq On : 9 Mar 2018 10:37 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : SEQ-CCV1  
 Misc : QBV8030918A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 09 12:58:47 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 09:45:59 2018  
 Response via : Initial Calibration



## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: MSVOA7 Calibration: YB80017  
 Lab File ID: V724446.D Calibration Date: 02/14/18 12:07  
 Sequence: Y8C1221 Injection Date: 03/09/18  
 Lab Sample ID: Y8C1221-CCV1 Injection Time: 13:41

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	10.0	11.3	0.3304625	0.3747048		13.4	20
1,1,1-Trichloroethane	A	10.0	11.6	1.830131	2.128957	0.1	16.3	20
1,1,2,2-Tetrachloroethane	A	10.0	11.0	0.7223946	0.7946805	0.3	10.0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	10.0	10.5	0.915864	0.9648179	0.1	5.3	20
1,1,2-Trichloroethane	A	10.0	11.4	0.2472018	0.2831332	0.1	14.5	20
1,1-Dichloroethane	A	10.0	10.3	2.718388	2.80856	0.2	3.3	20
1,1-Dichloroethylene	A	10.0	10.1	2.213583	2.23437	0.1	0.9	20
1,2,3-Trichlorobenzene	A	10.0	17.4	0.2712405	0.473201		74.5	20 *
1,2,3-Trichloropropane	A	10.0	11.1	0.206642	0.2290355		10.8	20
1,2,4-Trichlorobenzene	A	10.0	13.0	0.6106948	0.7928412	0.2	29.8	20 *
1,2,4-Trimethylbenzene	A	10.0	10.7	3.27992	3.497298		6.6	20
1,2-Dibromo-3-chloropropane	A	10.0	9.76	0.1219063	0.1189498	0.05	-2.4	20
1,2-Dibromoethane	A	10.0	11.4	0.2413048	0.2762238	0.1	14.5	20
1,2-Dichlorobenzene	A	10.0	10.9	1.608164	1.746927	0.4	8.6	20
1,2-Dichloroethane	A	10.0	10.4	1.726832	1.792512	0.1	3.8	20
1,2-Dichloropropane	A	10.0	10.1	0.4284787	0.4332103	0.1	1.1	20
1,3,5-Trimethylbenzene	A	10.0	10.9	3.264326	3.557073		9.0	20
1,3-Dichlorobenzene	A	10.0	11.1	1.773699	1.976111	0.6	11.4	20
1,4-Dichlorobenzene	A	10.0	11.0	1.809845	1.996176	0.5	10.3	20
1,4-Dioxane	A	210	126	5.093887E-04	3.03057E-04		-40.5	20 *
2-Butanone	A	10.0	9.79	0.1047988	0.1026064	0.1	-2.1	20
2-Hexanone	A	10.0	8.60	0.3049526	0.2622099	0.1	-14.0	20
4-Methyl-2-pentanone	A	10.0	8.66	0.4354706	0.3772932	0.1	-13.4	20
Acetone	A	10.0	7.79	0.370086	0.2884804	0.1	-22.1	20 *
Acrolein	A	10.0	8.44	0.1922137	0.1621333		-15.6	20
Acrylonitrile	A	10.0	8.58	0.4205229	0.3607818		-14.2	20
Benzene	A	10.0	11.2	4.964171	5.550756	0.5	11.8	20
Bromochloromethane	A	10.0	9.13	1.644967	1.502191		-8.7	20
Bromodichloromethane	A	10.0	11.3	0.4304731	0.4848762	0.2	12.6	20

## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: MSVOA7 Calibration: YB80017  
 Lab File ID: V724446.D Calibration Date: 02/14/18 12:07  
 Sequence: Y8C1221 Injection Date: 03/09/18  
 Lab Sample ID: Y8C1221-CCV1 Injection Time: 13:41

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Bromoform	A	10.0	10.9	0.172047	0.1874085	0.1	8.9	20
Bromomethane	A	10.0	3.97	0.6065482	0.2406648	0.1	-60.3	20 *
Carbon disulfide	A	10.0	11.0	3.30922	3.637406	0.1	9.9	20
Carbon tetrachloride	A	10.0	11.2	1.536276	1.722413	0.1	12.1	20
Chlorobenzene	A	10.0	11.6	0.9129019	1.054904	0.5	15.6	20
Chloroethane	A	10.0	10.7	0.8865645	0.9453099	0.1	6.6	20
Chloroform	A	10.0	11.3	2.089206	2.366899	0.2	13.3	20
Chloromethane	A	10.0	8.13	2.248057	1.828479	0.1	-18.7	20
cis-1,2-Dichloroethylene	A	10.0	10.0	2.613473	2.621011	0.1	0.3	20
cis-1,3-Dichloropropylene	A	10.0	10.7	0.5495836	0.5879398	0.2	7.0	20
Cyclohexane	A	10.0	9.53	2.730397	2.600943	0.1	-4.7	20
Dibromochloromethane	A	10.0	11.0	0.3071331	0.3374148	0.1	9.9	20
Dibromomethane	A	10.0	10.7	0.1737976	0.1858003		6.9	20
Dichlorodifluoromethane	A	10.0	13.4	0.7781172	1.039765	0.1	33.6	20 *
Ethyl Benzene	A	10.0	11.6	1.545672	1.792888	0.1	16.0	20
Hexachlorobutadiene	A	10.0	11.4	0.2422229	0.2762622		14.1	20
Isopropylbenzene	A	10.0	11.0	3.919381	4.297439	0.1	9.6	20
Methyl acetate	A	10.0	8.79	1.024356	0.9003375	0.1	-12.1	20
Methyl tert-butyl ether (MTBE)	A	10.0	10.7	3.397339	3.632561	0.1	6.9	20
Methylcyclohexane	A	10.0	11.4	0.4393944	0.4997678	0.1	13.7	20
Methylene chloride	A	10.0	8.13	2.86724	2.331419	0.1	-18.7	20
n-Butylbenzene	A	10.0	10.6	3.272811	3.480558		6.3	20
n-Propylbenzene	A	10.0	11.1	4.405093	4.891219		11.0	20
o-Xylene	A	10.0	11.4	1.234336	1.404632	0.3	13.8	20
p- & m- Xylenes	A	20.0	23.5	1.195893	1.406475	0.1	17.6	20
p-Isopropyltoluene	A	10.0	11.1	3.346513	3.725121		11.3	20
sec-Butylbenzene	A	10.0	10.7	3.602154	3.853445		7.0	20
Styrene	A	10.0	11.2	1.030177	1.151904	0.3	11.8	20
tert-Butyl alcohol (TBA)	A	50.0	16.7	0.1086504	3.629444E-02		-66.6	20 *

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: MSVOA7 Calibration: YB80017  
 Lab File ID: V724446.D Calibration Date: 02/14/18 12:07  
 Sequence: Y8C1221 Injection Date: 03/09/18  
 Lab Sample ID: Y8C1221-CCV1 Injection Time: 13:41

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
tert-Butylbenzene	A	10.0	11.0	2.730931	3.017242		10.5	20
Tetrachloroethylene	A	10.0	11.4	0.4057729	0.464135	0.2	14.4	20
Toluene	A	10.0	11.2	1.436372	1.613978	0.4	12.4	20
trans-1,2-Dichloroethylene	A	10.0	9.99	2.312492	2.30997	0.1	-0.1	20
trans-1,3-Dichloropropylene	A	10.0	10.7	0.4813329	0.5145852	0.1	6.9	20
trans-1,4-dichloro-2-butene	A	10.0	9.69	0.8442331	0.8177347		-3.1	20
Trichloroethylene	A	10.0	11.5	0.3476054	0.3992479	0.2	14.9	20
Trichlorofluoromethane	A	10.0	11.5	1.399188	1.614817	0.1	15.4	20
Vinyl Chloride	A	10.0	10.9	1.608291	1.751828	0.1	8.9	20

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits



Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724446.D  
 Acq On : 9 Mar 2018 1:41 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CCV1  
 Misc : QBV7030918A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 13:44:00 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) FLUOROBENZENE (ISTD)	5.828	70	248308	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	917162	10.00	ppb		0.00
67) 1,2-DICHLOROBENZENE-d4...	11.840	152	370257	10.00	ppb		0.00
<b>System Monitoring Compounds</b>							
34) d4-1,2-Dichloroethane ...	5.539	65	304626	9.78	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	97.80%		
51) Toluene-d8 (SURR)	7.355	98	1239851	10.35	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	103.50%		
70) p-Bromofluorobenzene (...)	10.124	95	446467	9.84	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	98.40%		
<b>Target Compounds</b>							
							<b>Qvalue</b>
2) Dichlorodifluoromethane	1.554	85	258182	13.36	ppb	#	100
3) Chloromethane	1.746	50	454026	8.13	ppb		99
4) Vinyl Chloride	1.852	62	434993	10.89	ppb		99
5) Bromomethane	2.200	94	59759	3.97	ppb		98
6) Chloroethane	2.303	64	234728	10.66	ppb		99
7) Trichlorofluoromethane	2.545	101	400972	11.54	ppb		100
8) Ethanol	2.787	45	31422	288.10	ppb		100
9) Freon-113	3.046	101	239572	10.53	ppb	#	60
10) 1,1-Dichloroethylene	3.068	61	554812	10.09	ppb	#	81
11) Acrolein	3.007	56	40259	8.44	ppb	#	1
12) Acetone	3.157	43	71632	7.79	ppb	#	1
13) Iodomethane	3.232	142	108805	4.32	ppb		99
14) Methyl Acetate	3.455	43	223561	8.79	ppb		96
15) Carbon disulfide	3.291	76	903197	10.99	ppb		100
16) tert-Butyl Alcohol (TBA)	3.677	59	45061	16.70	ppb	#	1
17) Methylene Chloride	3.563	49	578910	8.13	ppb		75
18) Acrylonitrile	3.825	53	89585	8.58	ppb	#	82
19) trans-1,2-Dichloroethy...	3.805	61	573584	9.99	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.780	73	901994	10.69	ppb	#	90
21) 1,1-Dichloroethane	4.214	63	697388	10.33	ppb		99
22) Vinyl Acetate	4.239	43	1235532	12.29	ppb	#	100
23) Diisopropyl ether (DIPE)	4.223	45	1597976	8.95	ppb	#	92
24) Ethyl-tert-Butyl ether...	4.562	59	1244764	9.16	ppb	#	86
25) cis-1,2-Dichloroethylene	4.762	61	650818	10.03	ppb		92
26) 2-Butanone	4.782	72	25478	9.79	ppb	#	1
27) 2,2-Dichloropropane	4.743	77	476828	11.70	ppb		94
28) Tetrahydrofuran	5.032	71	27758	9.75	ppb	#	78
29) Bromochloromethane	4.999	49	373006	9.13	ppb	#	90
30) Chloroform	5.063	83	587720	11.33	ppb	#	99
31) 1,1,1-Trichloroethane	5.213	97	528637	11.63	ppb	#	100
32) Cyclohexane	5.241	56	645835	9.53	ppb		84
33) 1,1-Dichloropropylene	5.363	75	473871	11.53	ppb		92
35) Carbon Tetrachloride	5.361	117	427689	11.21	ppb		98
36) tert-Amyl alcohol (TAA)	5.572	59	269409	85.02	ppb	#	84
37) 1,2-Dichloroethane	5.611	62	445095	10.38	ppb		100
38) Benzene	5.569	78	1378297	11.18	ppb	#	83
39) tert-Amyl methyl ether...	5.630	73	928988	10.08	ppb		97
41) Trichloroethylene	6.176	95	366175	11.49	ppb		97
42) Methyl Cyclohexane	6.323	83	458368	11.37	ppb	#	79
43) Methyl Methacrylate	6.482	69	191533	10.29	ppb	#	66
44) Dibromomethane	6.546	93	170409	10.69	ppb	#	94
45) Bromodichloromethane	6.685	83	444710	11.26	ppb	#	93
46) 1,2-Dichloropropane	6.409	63	397324	10.11	ppb	#	99
47) 1,4-Dioxane	6.549	88	5837	125.71	ppb		99
49) cis-1,3-Dichloropropene	7.108	75	539236	10.70	ppb		92
50) 4-Methyl-2-Pentanone	7.241	43	346039	8.66	ppb	#	92
52) Toluene	7.422	91	1480279	11.24	ppb		99
53) trans-1,3-Dichloropropene	7.670	75	471958	10.69	ppb	#	100

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724446.D  
 Acq On : 9 Mar 2018 1:41 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CCV1  
 Misc : QBV7030918A  
 ALS Vial : 2 Sample Multiplier: 1

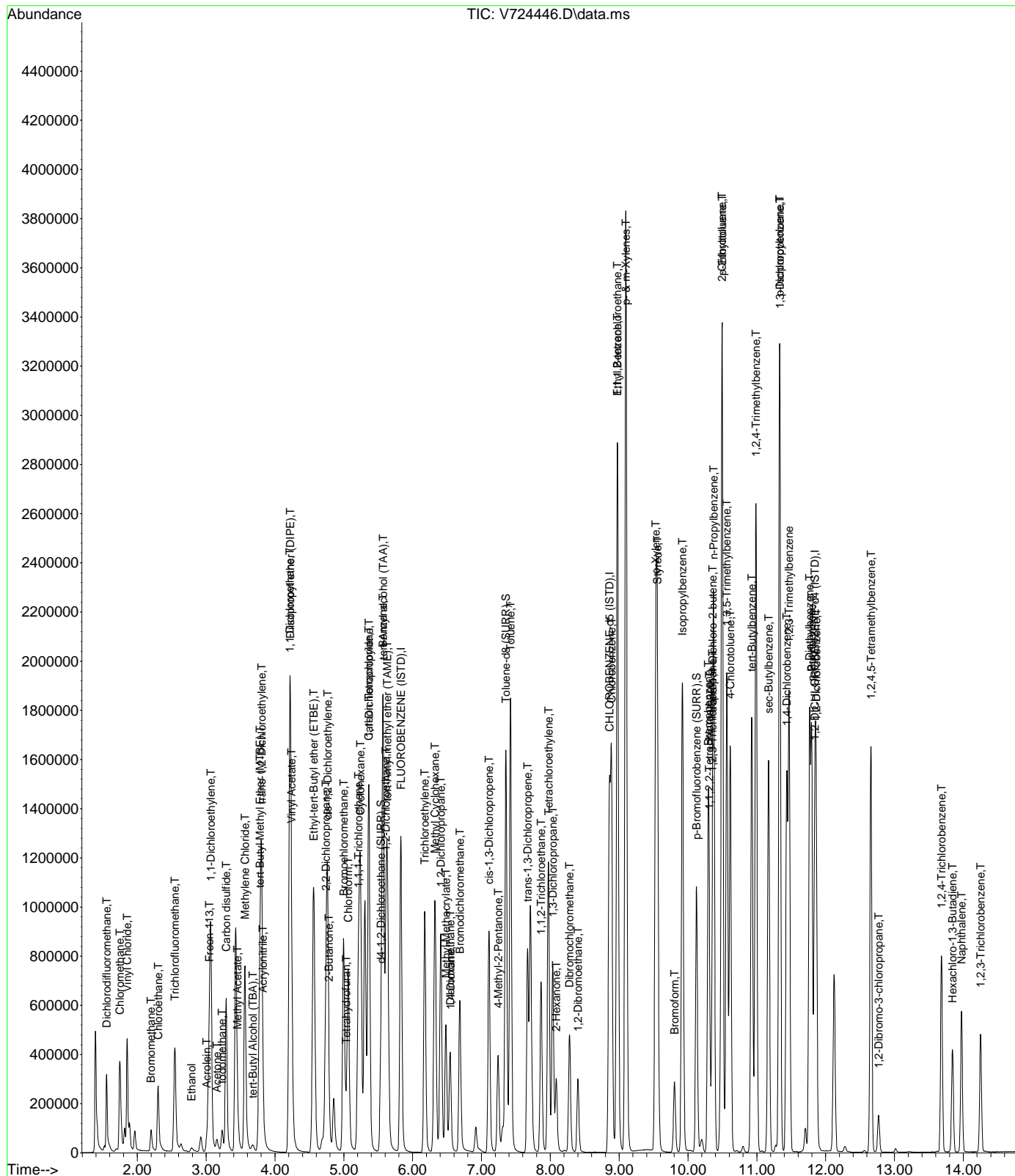
Quant Time: Mar 12 13:44:00 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
54) 1,1,2-Trichloroethane	7.865	97	259679	11.45	ppb	95
55) 1,3-Dichloropropane	8.034	76	446069	11.18	ppb #	100
56) Tetrachloroethylene	7.973	166	425687	11.44	ppb #	100
57) 2-Hexanone	8.087	43	240489	8.60	ppb #	96
58) Dibromochloromethane	8.279	129	309464	10.99	ppb	96
59) 1,2-Dibromoethane	8.402	107	253342	11.45	ppb	97
60) Chlorobenzene	8.888	112	967518	11.56	ppb	94
61) 1,1,1,2-tetrachloroethane	8.975	131	343665	11.34	ppb	97
62) Ethyl Benzene	8.975	91	1644369	11.60	ppb	97
63) p- & m-Xylenes	9.097	91	2579931	23.52	ppb	97
64) o-Xylene	9.531	91	1288275	11.38	ppb	99
65) Styrene	9.556	104	1056483	11.18	ppb #	100
66) Bromoform	9.804	173	171884	10.89	ppb #	80
68) p-Ethyltoluene	10.497	105	1499205	10.76	ppb #	89
69) Isopropylbenzene	9.918	105	1591157	10.96	ppb	97
71) 1,1,2,2-Tetrachloroethane	10.307	83	294236	11.00	ppb #	99
72) Bromobenzene	10.296	77	573689	10.49	ppb	92
73) trans-1,4-Dichloro-2-b...	10.357	75	302772	9.69	ppb	85
74) 1,2,3-Trichloropropane	10.355	110	84802	11.08	ppb	65
75) n-Propylbenzene	10.374	91	1811008	11.10	ppb	98
76) 2-Chlorotoluene	10.494	91	1231909	10.85	ppb	100
77) 4-Chlorotoluene	10.613	91	1147574	10.87	ppb	100
78) 1,3,5-Trimethylbenzene	10.563	105	1317031	10.90	ppb	98
79) tert-Butylbenzene	10.928	119	1117155	11.05	ppb	96
80) 1,2,4-Trimethylbenzene	10.986	105	1294899	10.66	ppb	96
81) sec-Butylbenzene	11.170	105	1426765	10.70	ppb	97
82) 1,3-Dichlorobenzene	11.334	146	731669	11.14	ppb	98
83) p-Isopropyltoluene	11.331	119	1379252	11.13	ppb	97
84) 1,4-Dichlorobenzene	11.434	146	739098	11.03	ppb	97
85) 1,2,3-Trimethylbenzene	11.468	105	1258506	10.70	ppb #	59
86) p-Diethylbenzene	11.765	105	666114	10.58	ppb	93
87) 1,2-Dichlorobenzene	11.863	146	646812	10.86	ppb #	100
88) n-Butylbenzene	11.796	91	1288701	10.63	ppb	97
89) 1,2-Dibromo-3-chloropr...	12.767	75	44042	9.76	ppb #	82
90) 1,2,4,5-Tetramethylben...	12.658	119	1116265	10.45	ppb	99
91) 1,2,4-Trichlorobenzene	13.682	180	293555	12.98	ppb #	95
92) Hexachloro-1,3-Butadiene	13.844	225	102288	11.41	ppb #	1
93) Naphthalene	13.974	128	510468	13.81	ppb #	83
94) 1,2,3-Trichlorobenzene	14.250	180	175206	17.45	ppb #	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724446.D  
 Acq On : 9 Mar 2018 1:41 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : SEQ-CCV1  
 Misc : QBV7030918A  
 ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 12 13:44:00 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration



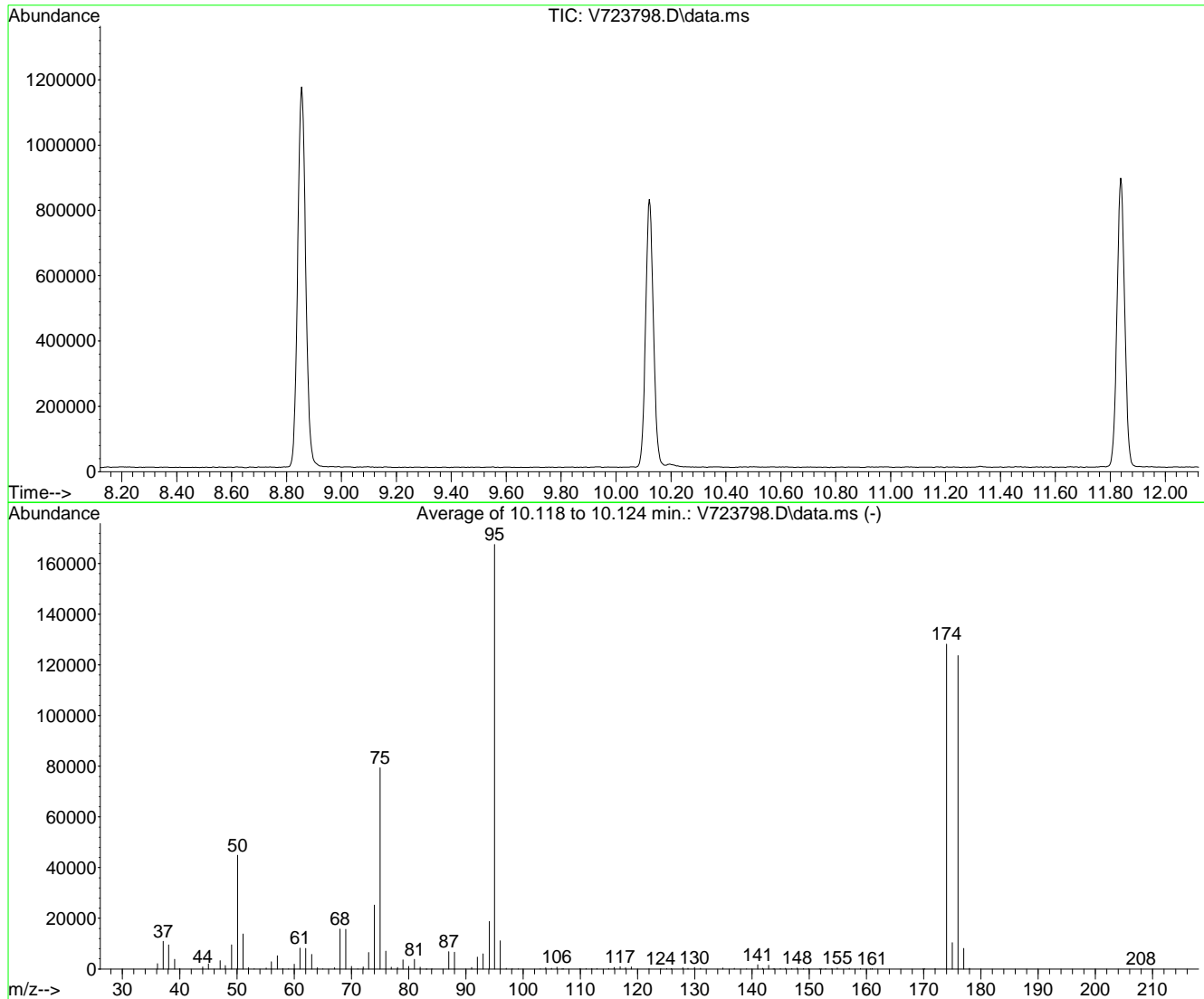
# VOA Raw QC Data

Data Path : C:\msdchem\1\data\V7021318\  
 Data File : V723798.D  
 Acq On : 14 Feb 2018 12:04 am  
 Operator : SS  
 Sample : SEQ-TUN1  
 Sample : SEQ-TUN1  
 Misc : QEV7021318A  
 ALS Vial : 16 Sample Multiplier: 1

Inst : MSVOA7

Integration File: rteint.p

Method : C:\msdchem\1\methods\V7L00114.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Wed Feb 14 10:37:32 2018



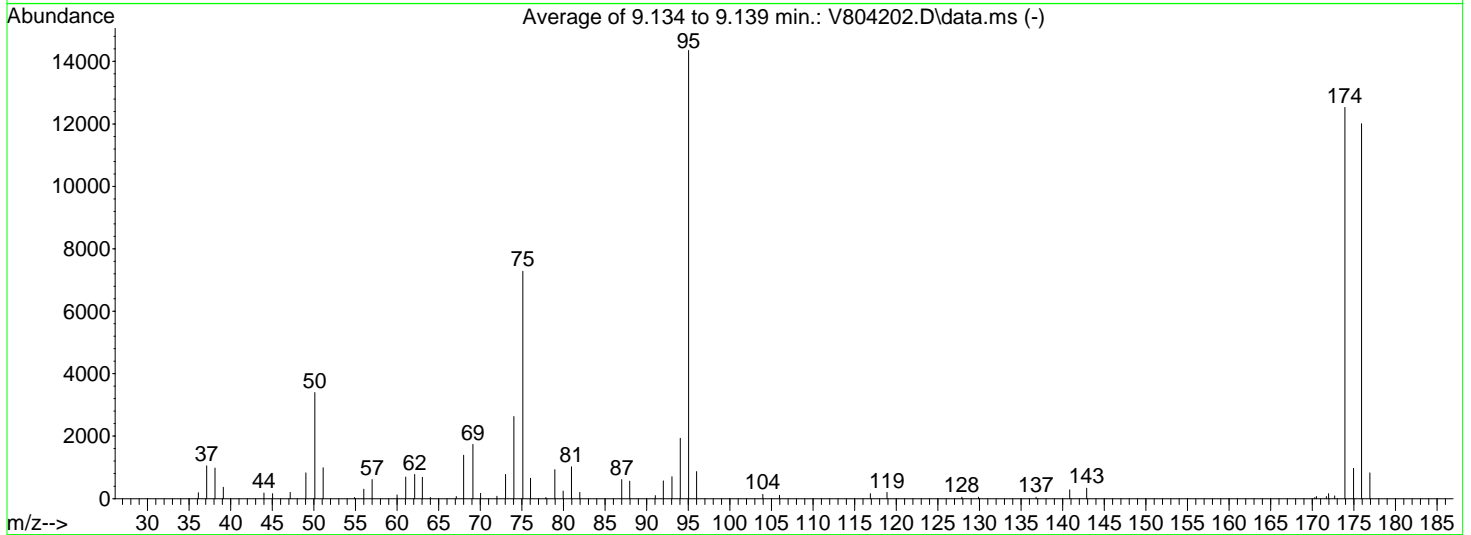
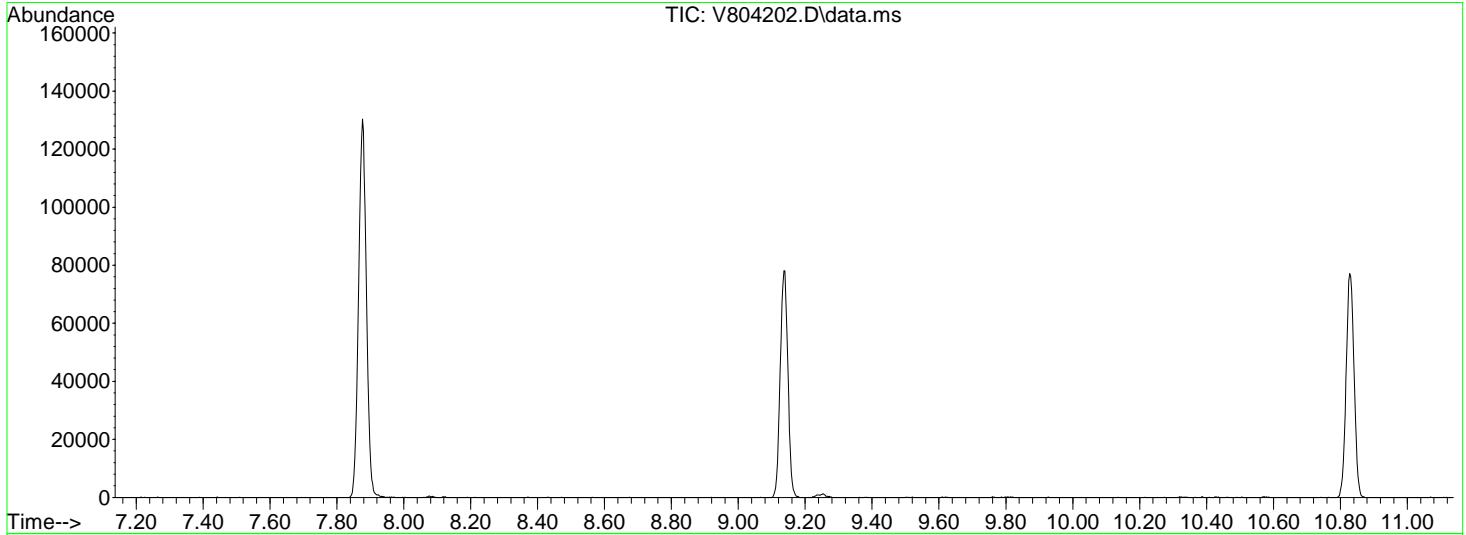
AutoFind: Scans 3209, 3210, 3211; Background Corrected with Scan 3192

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	26.8	44928	PASS
75	95	30	60	47.4	79421	PASS
95	95	100	100	100.0	167498	PASS
96	95	5	9	6.6	11094	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.6	128229	PASS
175	174	5	9	8.1	10353	PASS
176	174	95	101	96.4	123645	PASS
177	176	5	9	6.6	8121	PASS

Data Path : C:\msdchem\1\data\V8030818\  
 Data File : V804202.D  
 Acq On : 8 Mar 2018 2:07 pm  
 InstName : VOA No. 8  
 Operator : RDS  
 Sample : SEQ-TUN1  
 Misc : QBV8030818A  
 ALS Vial : 8 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\V8L00064.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Fri Mar 09 08:30:16 2018



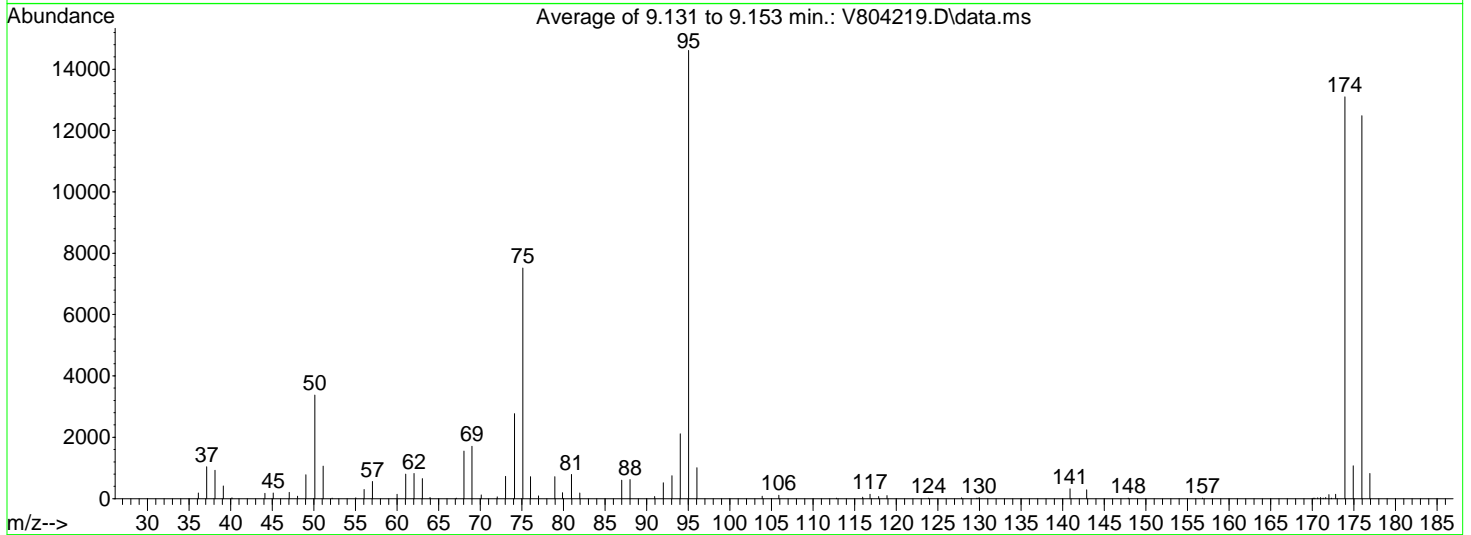
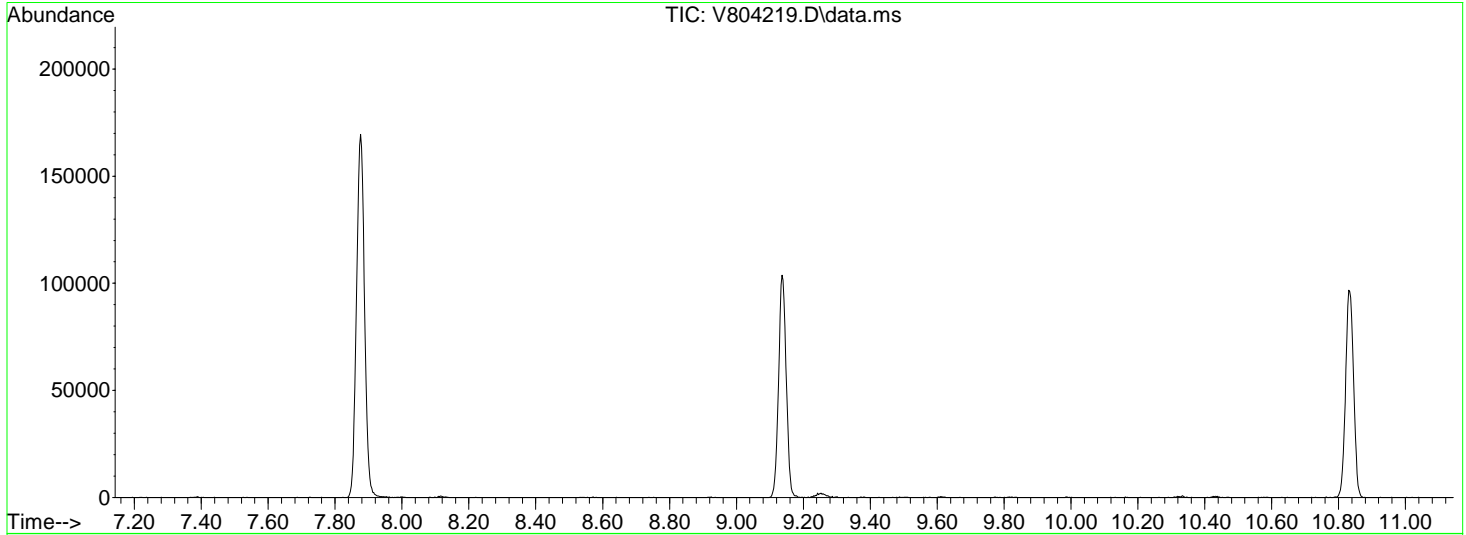
AutoFind: Scans 2893, 2894, 2895; Background Corrected with Scan 2879

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.7	3400	PASS
75	95	30	60	50.8	7282	PASS
95	95	100	100	100.0	14348	PASS
96	95	5	9	6.0	865	PASS
173	174	0.00	2	0.7	88	PASS
174	95	50	100	87.4	12533	PASS
175	174	5	9	7.7	971	PASS
176	174	95	101	95.8	12010	PASS
177	176	5	9	6.9	823	PASS

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804219.D  
 Acq On : 9 Mar 2018 10:10 am  
 InstName : VOA No. 8  
 Operator : RDS  
 Sample : SEQ-TUN1  
 Misc : QBV8030918A  
 ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\methods\V8L00064.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Fri Mar 09 11:57:48 2018



Spectrum Information: Average of 9.131 to 9.153 min.

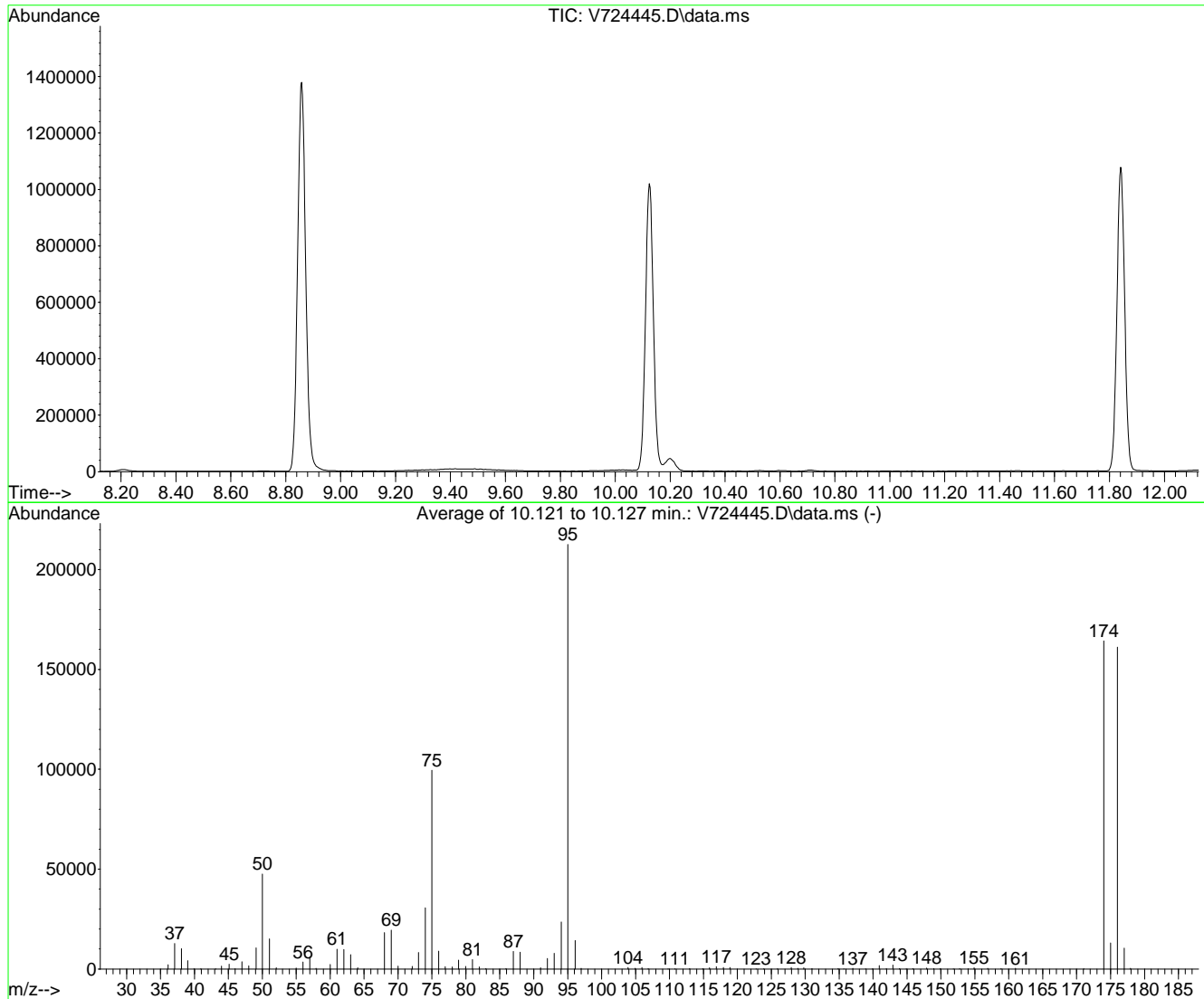
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.1	3378	PASS
75	95	30	60	51.5	7519	PASS
95	95	100	100	100.0	14607	PASS
96	95	5	9	6.9	1011	PASS
173	174	0.00	2	1.1	145	PASS
174	95	50	100	89.7	13104	PASS
175	174	5	9	8.1	1066	PASS
176	174	95	101	95.2	12480	PASS
177	176	5	9	6.6	818	PASS

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724445.D  
 Acq On : 9 Mar 2018 12:57 pm  
 Operator : SS  
 Sample : SEQ-TUN1  
 Sample : SEQ-TUN1  
 Misc : QEV7030918A  
 ALS Vial : 1 Sample Multiplier: 1

Inst : MSVOA7

Integration File: rteint.p

Method : C:\msdchem\1\methods\V7L00114.M  
 Title : Volatile Organics EPA 8260C  
 Last Update : Wed Feb 14 10:37:32 2018



AutoFind: Scans 3210, 3211, 3212; Background Corrected with Scan 3190

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	47507	PASS
75	95	30	60	46.8	99552	PASS
95	95	100	100	100.0	212523	PASS
96	95	5	9	6.7	14223	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.3	164331	PASS
175	174	5	9	7.9	13054	PASS
176	174	95	101	98.1	161216	PASS
177	176	5	9	6.4	10387	PASS



# METHOD BLANK RAW DATA

SDG: 18C0104  
CLASS: VOA  
METHOD: EPA 8260C

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80386-BLK1 File ID: V724451.D  
 Prepared: 03/09/18 07:17 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 16:21 Instrument: MSVOA7  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	0.50	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80386-BLK1 File ID: V724451.D  
 Prepared: 03/09/18 07:17 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 16:21 Instrument: MSVOA7  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U



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 InstName : MSVOA7  
 Operator : SS  
 Sample : BC80386-BLK1  
 Misc : QBV7030918A  
 ALS Vial : 7 Sample Multiplier: 1

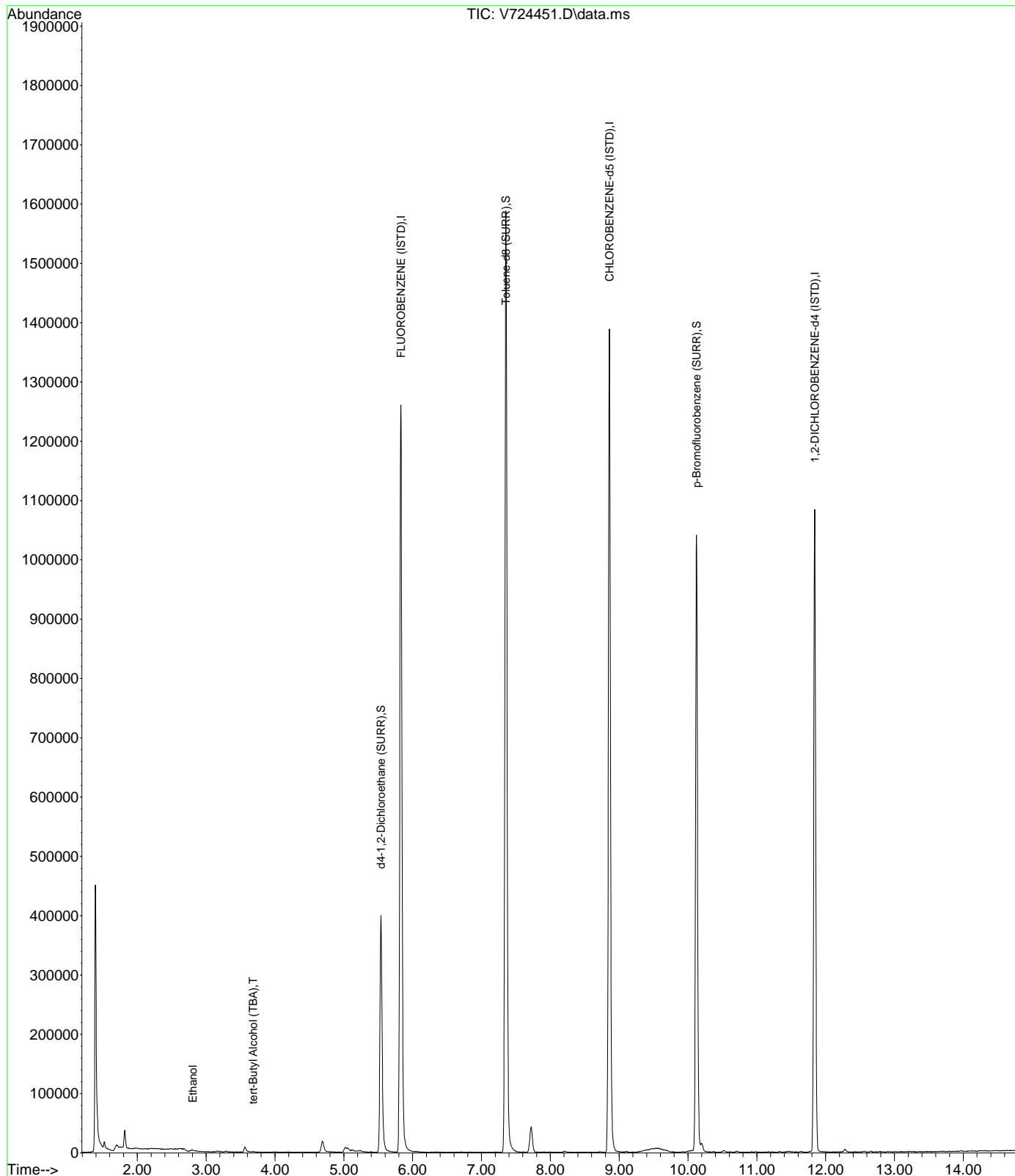
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 Response via : Initial Calibration

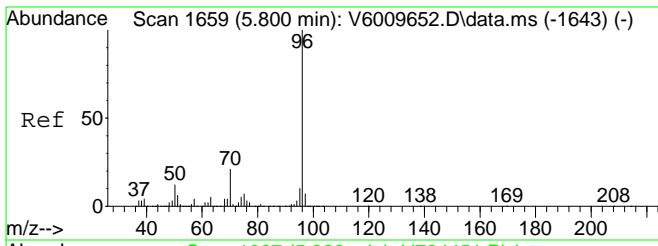
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	5.828	70	249881	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	904244	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	11.841	152	348060	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.539	65	301729	9.63	ppb	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	96.30%	
51) Toluene-d8 (SURR)	7.356	98	1236525	10.47	ppb	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	104.70%	
70) p-Bromofluorobenzene (...)	10.124	95	435424	10.21	ppb	0.00
Spiked Amount	10.000	Range 70 - 130	Recovery	=	102.10%	
Target Compounds						
8) Ethanol	2.804	45	5170	47.10	ppb	Qvalue 100
16) tert-Butyl Alcohol (TBA)	3.680	59	998m	0.37	ppb	
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724451.D  
 Acq On : 9 Mar 2018 4:21 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : BC80386-BLK1  
 Misc : QEV7030918A  
 ALS Vial : 7 Sample Multiplier: 1

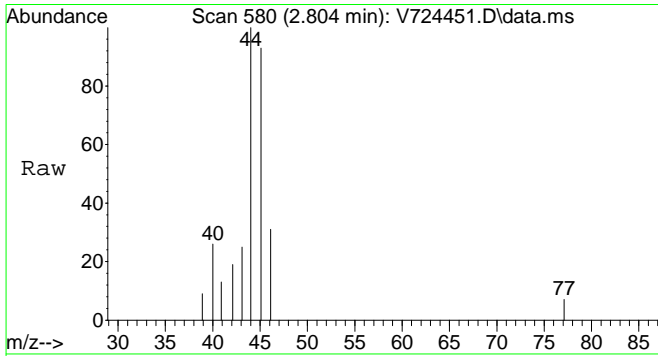
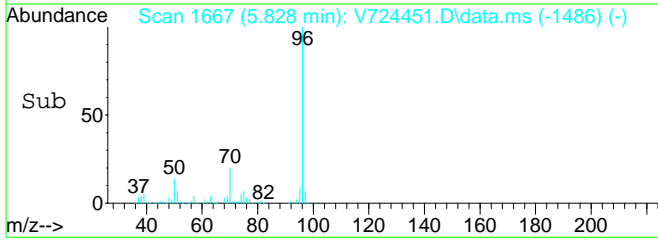
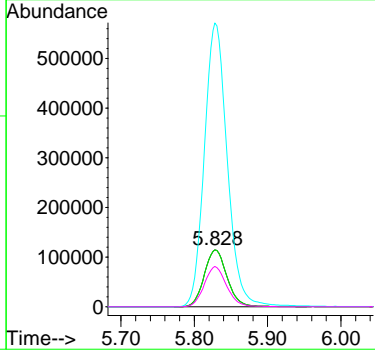
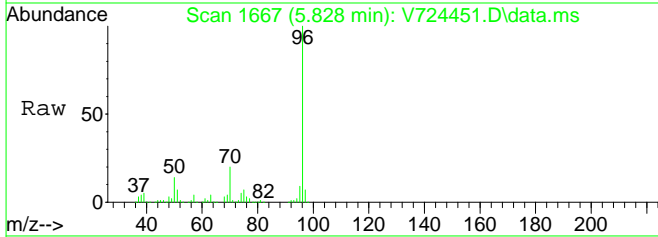
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 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration





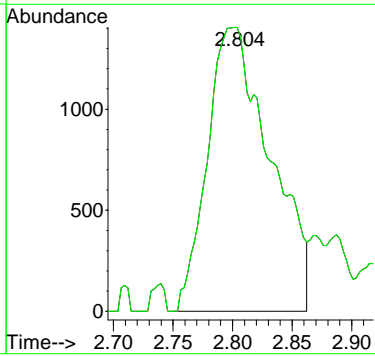
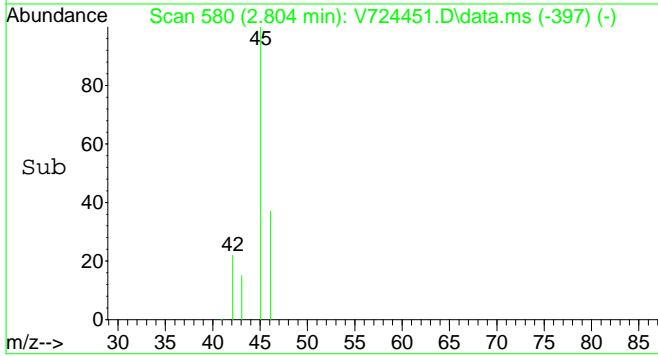
#1  
 FLUOROBENZENE (ISTD)  
 Concen: 10.00 ppb  
 RT: 5.828 min Scan# 1667  
 Delta R.T. 0.003 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

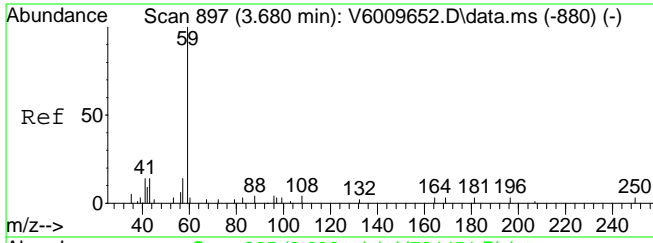
Tgt Ion	Resp	Ion Ratio	Lower	Upper
70	249881	100		
70	100.0	65.0	135.0	
96	498.4	341.4	709.0	
50	0.0	0.0	0.0	



#8  
 Ethanol  
 Concen: 47.10 ppb  
 RT: 2.804 min Scan# 580  
 Delta R.T. 0.008 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

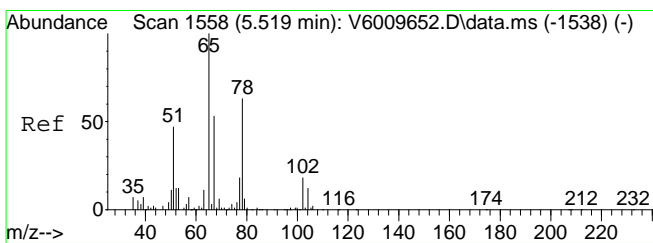
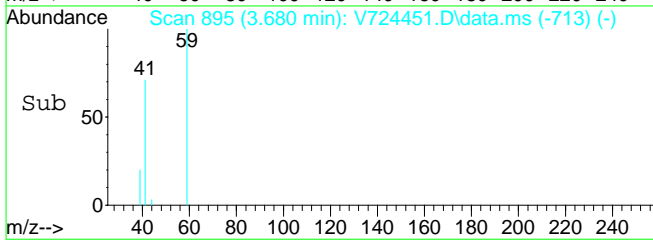
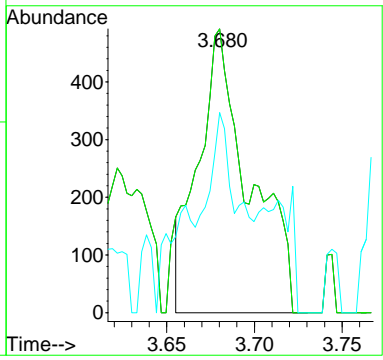
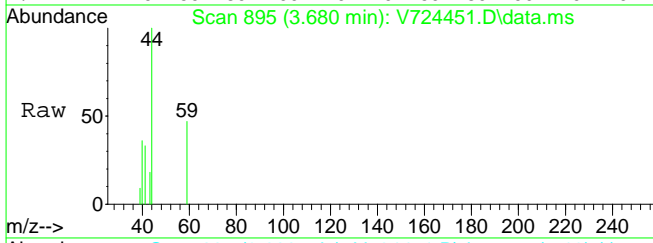
Tgt Ion	Resp	Ion Ratio	Lower	Upper
45	5170	100		
45	100.0	50.0	150.0	





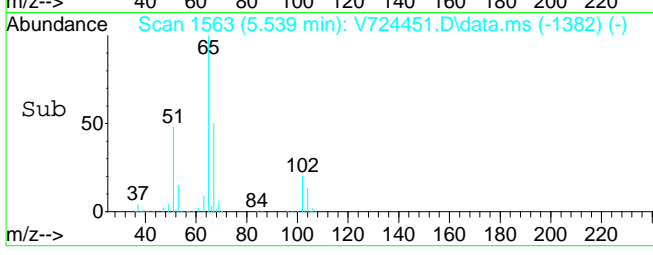
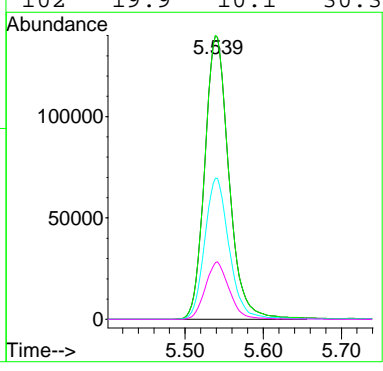
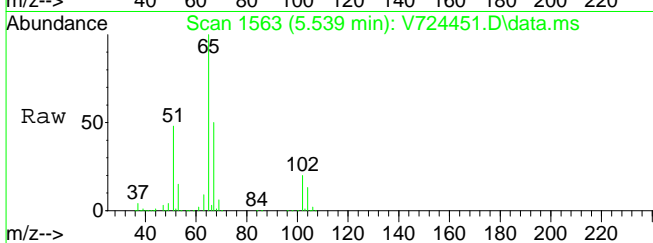
#16  
 tert-Butyl Alcohol (TBA)  
 Concen: 0.37 ppb m  
 RT: 3.680 min Scan# 895  
 Delta R.T. 0.006 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
59	998	100		
59		79.6	37.8	78.6#
41		0.0	338.1	1014.3#

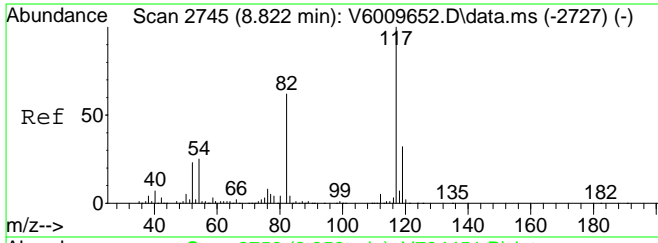


#34  
 d4-1,2-Dichloroethane (SURR)  
 Concen: 9.63 ppb  
 RT: 5.539 min Scan# 1563  
 Delta R.T. 0.003 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

Tgt Ion	Resp	Ion Ratio	Lower	Upper
65	301729	100		
65		100.0	65.0	135.0
67		50.0	33.9	70.5
102		19.9	10.1	30.3

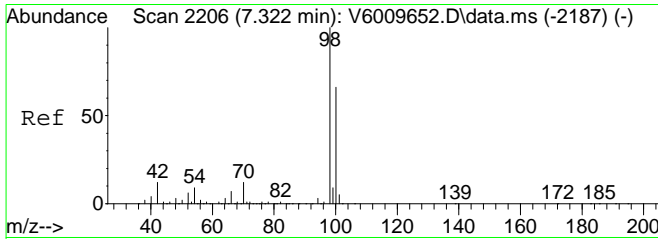
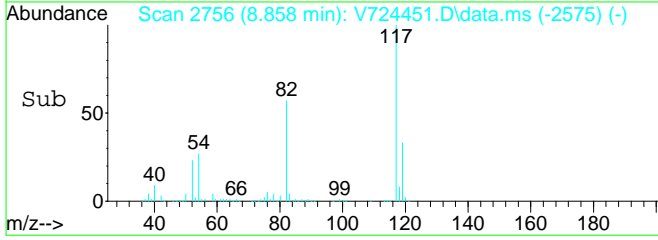
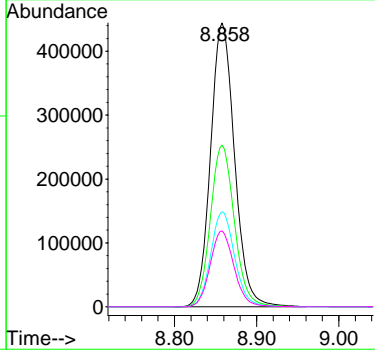
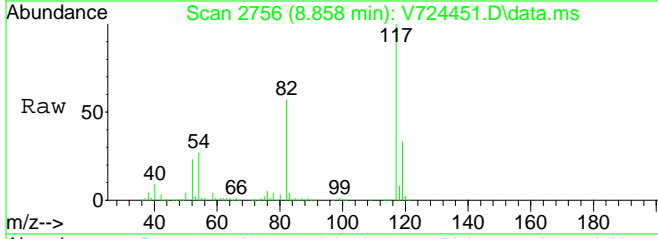






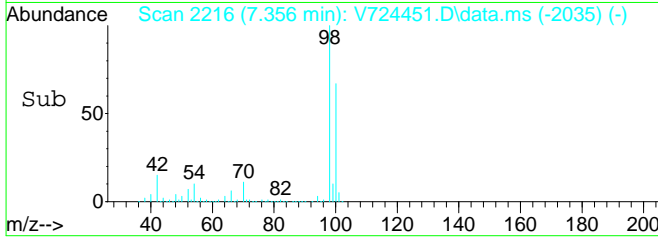
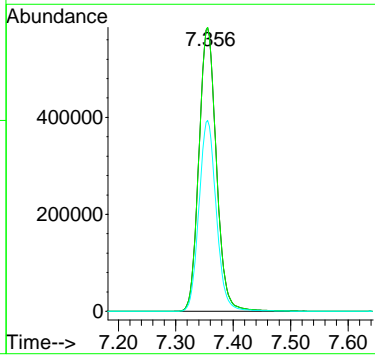
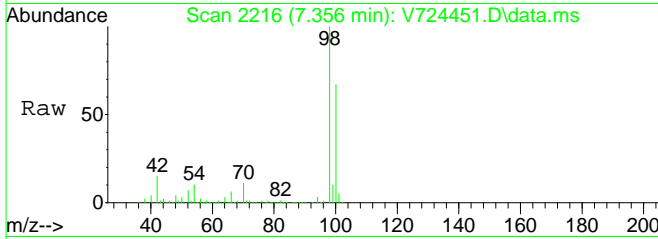
#40  
 CHLOROBENZENE-d5 (ISTD)  
 Concen: 10.00 ppb  
 RT: 8.858 min Scan# 2756  
 Delta R.T. 0.003 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

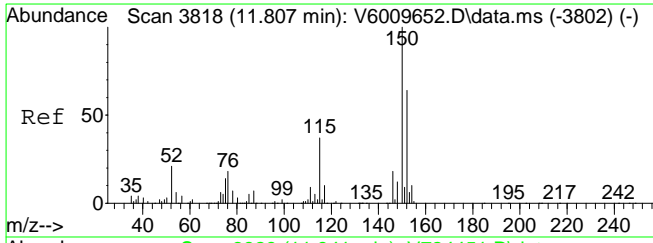
Tgt Ion	Resp	Ion Ratio	Lower	Upper
117	904244	100		
82	57.0	57.0	35.7	74.1
119	33.5	33.5	20.8	43.2
54	26.6	26.6	13.8	28.8



#51  
 Toluene-d8 (SURR)  
 Concen: 10.47 ppb  
 RT: 7.356 min Scan# 2216  
 Delta R.T. 0.003 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

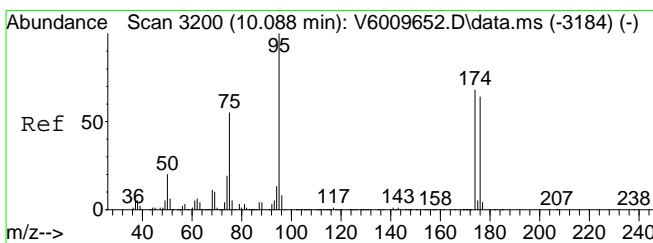
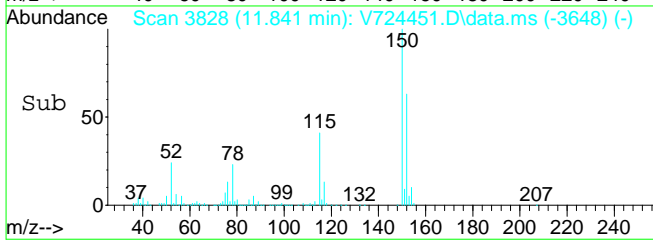
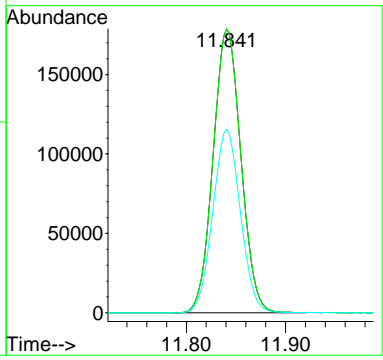
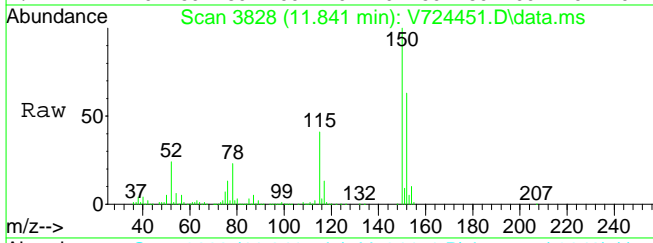
Tgt Ion	Resp	Ion Ratio	Lower	Upper
98	1236525	100		
98	100.0	100.0	65.0	135.0
100	66.8	66.8	42.5	88.3





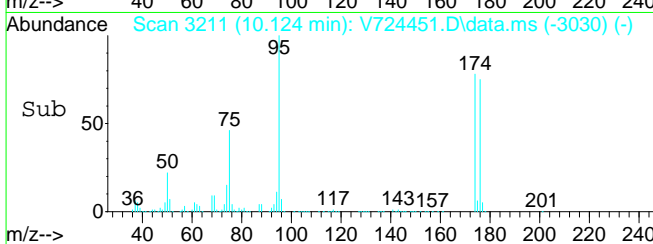
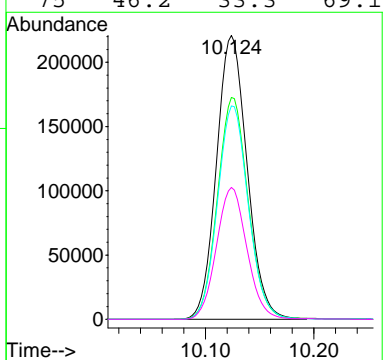
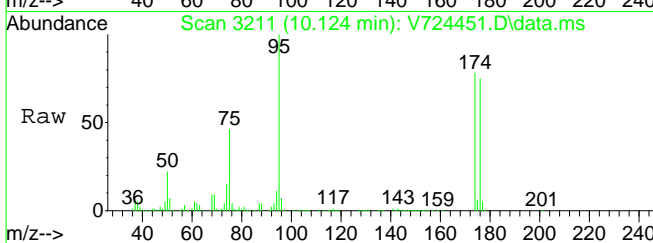
#67  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 10.00 ppb  
 RT: 11.841 min Scan# 3828  
 Delta R.T. -0.000 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

Tgt Ion	Resp	Lower	Upper
152	348060		
152	100		
152	100.0	50.0	150.0
115	64.2	32.6	97.7



#70  
 p-Bromofluorobenzene (SURR)  
 Concen: 10.21 ppb  
 RT: 10.124 min Scan# 3211  
 Delta R.T. 0.003 min  
 Lab File: V724451.D  
 Acq: 9 Mar 2018 4:21 pm

Tgt Ion	Resp	Lower	Upper
95	435424		
95	100		
174	78.3	51.4	106.8
176	75.6	49.9	103.5
75	46.2	33.3	69.1



# METHOD BLANK RAW DATA

SDG: 18C0104  
CLASS: VOA  
METHOD: EPA 8260C

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	2.0	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	2.0	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U

**FORM I**

**METHOD BLANK DATA SHEET  
EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.17	91.7	69 - 130	
Toluene-d8	10.0	10.3	103	81 - 117	
p-Bromofluorobenzene	10.0	11.3	113	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	26513	4.916	27896	4.918	
Chlorobenzene-d5	90737	7.876	95832	7.876	
1,2-Dichlorobenzene-d4	26377	10.831	31465	10.831	

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804224.D  
 Acq On : 9 Mar 2018 12:37 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : BC80387-BLK1  
 Misc : QBV8030918A  
 ALS Vial : 6 Sample Multiplier: 1

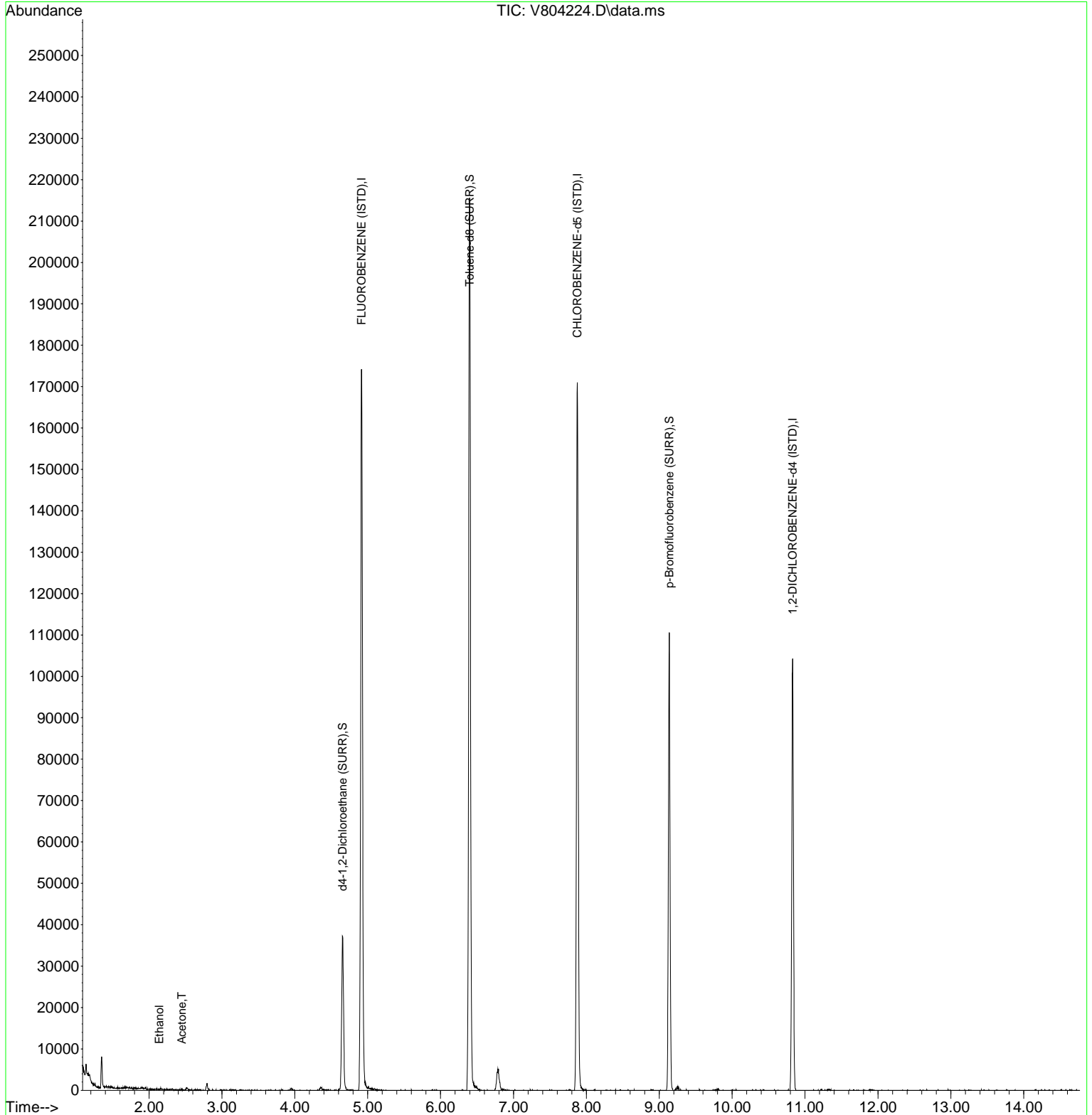
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 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	4.916	70	26513	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	90737	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	26377	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	4.654	65	22752	9.17	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	91.70%
51) Toluene-d8 (SURR)	6.399	98	135020	10.30	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	103.00%
70) p-Bromofluorobenzene (...)	9.136	95	32425	11.32	ppb	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	113.20%
Target Compounds						
8) Ethanol	2.139	45	27	17.74	ppb	Qvalue 85
12) Acetone	2.448	43	101	0.32	ppb	# 96
-----						

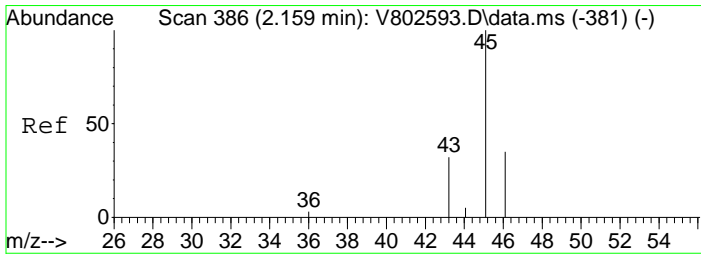
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804224.D  
 Acq On : 9 Mar 2018 12:37 pm  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : BC80387-BLK1  
 Misc : QBV8030918A  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 09 14:22:08 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration

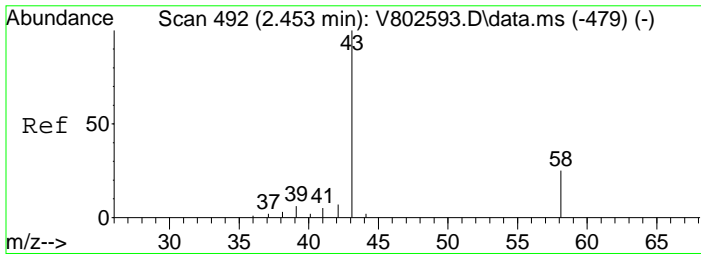
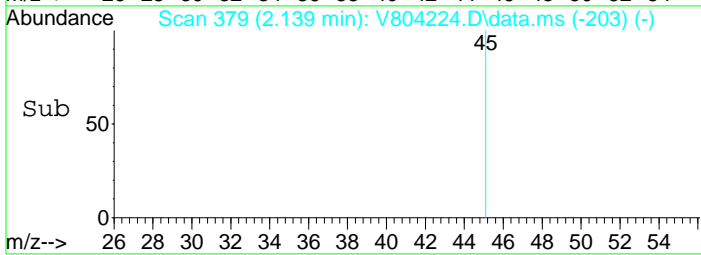
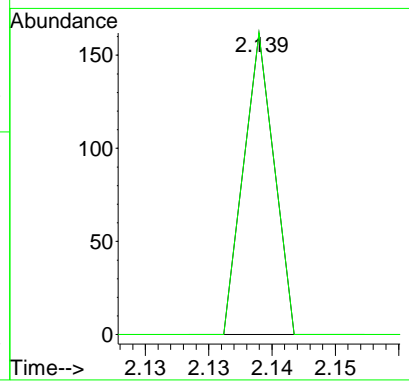
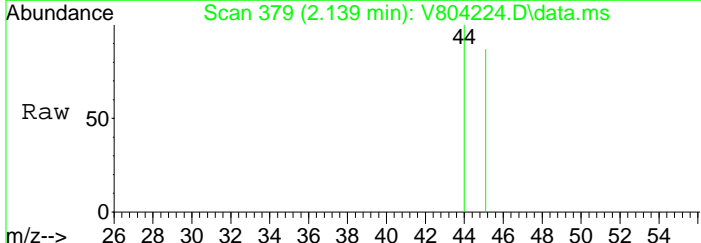






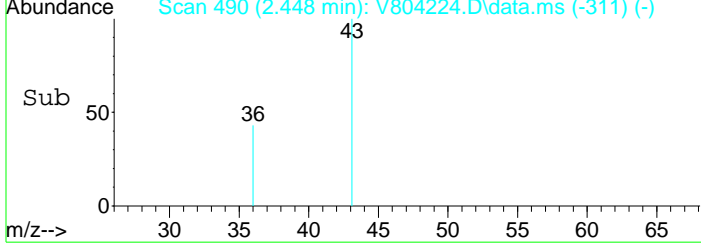
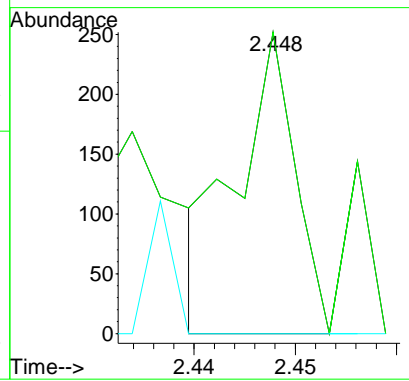
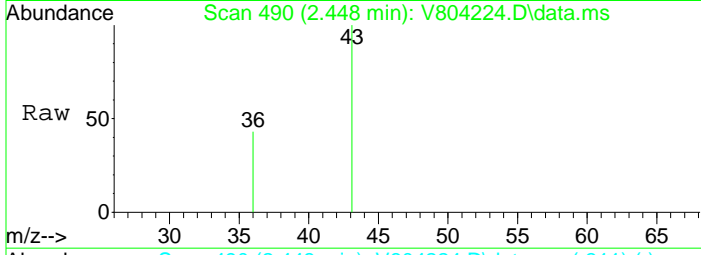
#8  
 Ethanol  
 Concen: 17.74 ppb  
 RT: 2.139 min Scan# 379  
 Delta R.T. -0.011 min  
 Lab File: V804224.D  
 Acq: 9 Mar 2018 12:37 pm

Tgt Ion	Resp	Lower	Upper
45	100		
45	100.0	43.2	129.6



#12  
 Acetone  
 Concen: 0.32 ppb  
 RT: 2.448 min Scan# 490  
 Delta R.T. -0.003 min  
 Lab File: V804224.D  
 Acq: 9 Mar 2018 12:37 pm

Tgt Ion	Resp	Lower	Upper
43	100		
43	100.0	80.0	120.0
58	0.0	7.1	21.3#



## LCS RAW DATA

SDG: 18C0104  
CLASS: VOA  
METHOD: EPA 8260C

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724447.D  
 Acq On : 9 Mar 2018 2:13 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : BC80386-BS1  
 Misc : QBV7030918A  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 13:45:53 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
1) FLUOROBENZENE (ISTD)	5.828	70	249742	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	910116	10.00	ppb		0.00
67) 1,2-DICHLOROBENZENE-d4...	11.840	152	368098	10.00	ppb		0.00
System Monitoring Compounds							
34) d4-1,2-Dichloroethane ...	5.539	65	298534	9.53	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.30%			
51) Toluene-d8 (SURR)	7.355	98	1249726	10.51	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	105.10%			
70) p-Bromofluorobenzene (...)	10.124	95	445216	9.87	ppb		0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.70%			
Target Compounds							
						Qvalue	
2) Dichlorodifluoromethane	1.554	85	311654	16.04	ppb	#	100
3) Chloromethane	1.744	50	510768	9.10	ppb		99
4) Vinyl Chloride	1.852	62	460780	11.47	ppb		99
5) Bromomethane	2.200	94	83536	5.51	ppb		95
6) Chloroethane	2.303	64	247779	11.19	ppb		99
7) Trichlorofluoromethane	2.545	101	438797	12.56	ppb		100
9) Freon-113	3.046	101	270879	11.84	ppb	#	60
10) 1,1-Dichloroethylene	3.068	61	610797	11.05	ppb	#	81
11) Acrolein	3.007	56	31247	6.51	ppb	#	1
12) Acetone	3.157	43	67499	7.30	ppb	#	1
13) Iodomethane	3.232	142	165441	6.53	ppb		99
14) Methyl Acetate	3.455	43	206312	8.06	ppb		96
15) Carbon disulfide	3.291	76	1049163	12.69	ppb		100
16) tert-Butyl Alcohol (TBA)	3.675	59	147527	54.37	ppb	#	1
17) Methylene Chloride	3.563	49	615989	8.60	ppb	#	75
18) Acrylonitrile	3.825	53	87326	8.32	ppb	#	82
19) trans-1,2-Dichloroethy...	3.805	61	610330	10.57	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.780	73	894387	10.54	ppb		97
21) 1,1-Dichloroethane	4.214	63	746406	10.99	ppb		99
22) Vinyl Acetate	4.237	43	1194170	11.81	ppb	#	100
23) Diisopropyl ether (DIPE)	4.220	45	1591759	8.87	ppb		95
24) Ethyl-tert-Butyl ether...	4.562	59	1204779	8.81	ppb	#	86
25) cis-1,2-Dichloroethylene	4.762	61	689127	10.56	ppb		92
26) 2-Butanone	4.779	72	27213	10.40	ppb	#	1
27) 2,2-Dichloropropane	4.743	77	503358	12.29	ppb	#	75
28) Tetrahydrofuran	5.035	71	28337	9.89	ppb	#	67
29) Bromochloromethane	4.999	49	388273	9.45	ppb	#	90
30) Chloroform	5.063	83	626745	12.01	ppb	#	99
31) 1,1,1-Trichloroethane	5.213	97	560656	12.27	ppb	#	100
32) Cyclohexane	5.241	56	709061	10.40	ppb		82
33) 1,1-Dichloropropylene	5.363	75	510471	12.35	ppb		92
35) Carbon Tetrachloride	5.361	117	468784	12.22	ppb	#	90
36) tert-Amyl alcohol (TAA)	5.572	59	279112	87.57	ppb	#	84
37) 1,2-Dichloroethane	5.611	62	463925	10.76	ppb		99
38) Benzene	5.569	78	1481644	11.95	ppb		83
39) tert-Amyl methyl ether...	5.633	73	896803	9.67	ppb	#	93
41) Trichloroethylene	6.176	95	384842	12.16	ppb		97
42) Methyl Cyclohexane	6.323	83	480027	12.00	ppb	#	79
43) Methyl Methacrylate	6.485	69	201081	10.89	ppb	#	67
44) Dibromomethane	6.543	93	172520	10.91	ppb	#	94
45) Bromodichloromethane	6.685	83	467483	11.93	ppb	#	92
46) 1,2-Dichloropropane	6.409	63	425359	10.91	ppb	#	99
47) 1,4-Dioxane	6.549	88	11544	250.54	ppb		96
49) cis-1,3-Dichloropropene	7.111	75	553213	11.06	ppb		92
50) 4-Methyl-2-Pentanone	7.241	43	331976	8.38	ppb	#	92
52) Toluene	7.422	91	1569544	12.01	ppb		99
53) trans-1,3-Dichloropropene	7.670	75	467006	10.66	ppb	#	100
54) 1,1,2-Trichloroethane	7.867	97	258245	11.48	ppb		95

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724447.D  
 Acq On : 9 Mar 2018 2:13 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : BC80386-BS1  
 Misc : QBV7030918A  
 ALS Vial : 3 Sample Multiplier: 1

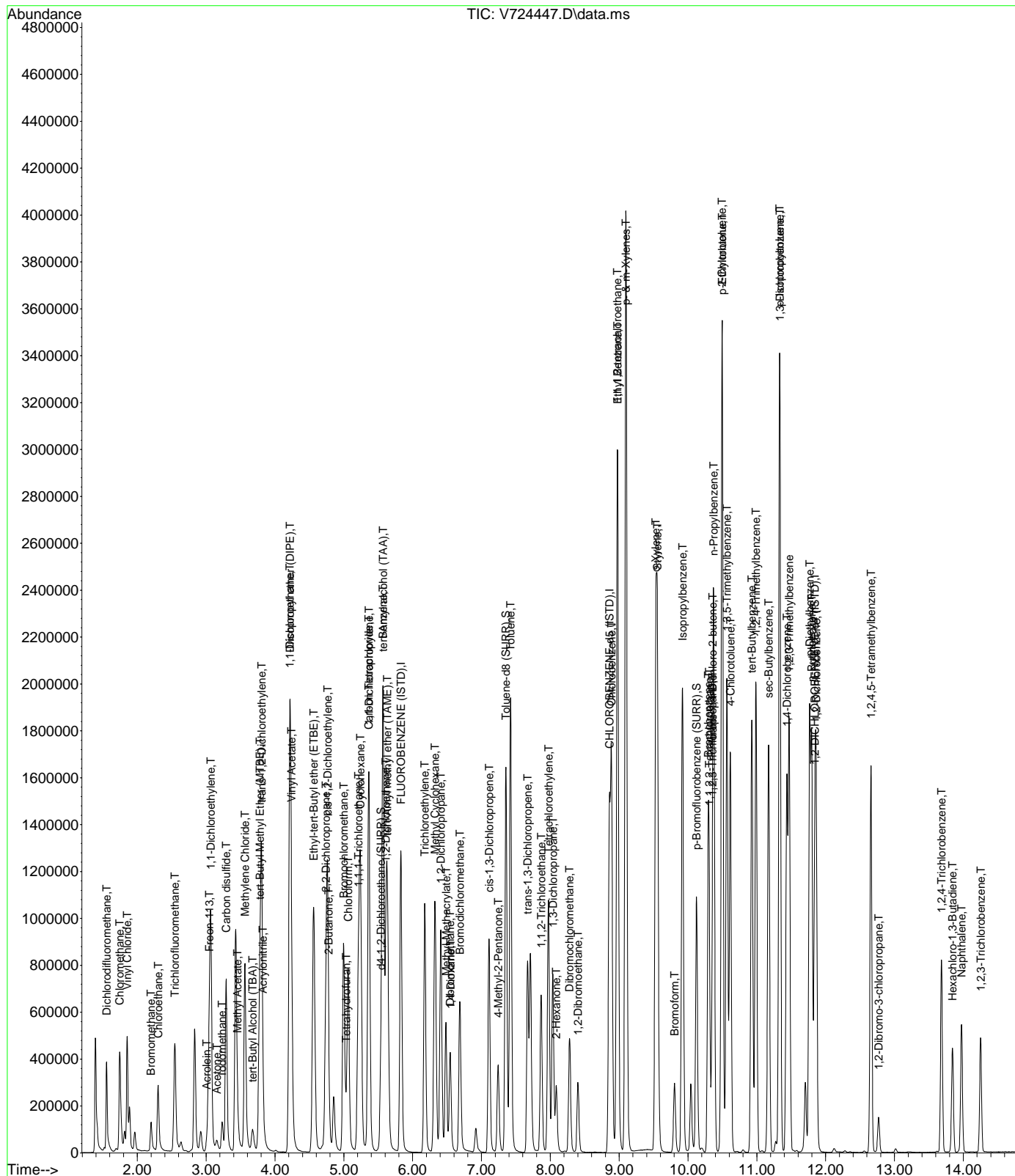
Quant Time: Mar 12 13:45:53 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
55) 1,3-Dichloropropane	8.037	76	452801	11.44	ppb	# 100
56) Tetrachloroethylene	7.973	166	389643	10.55	ppb	# 100
57) 2-Hexanone	8.087	43	228632	8.24	ppb	# 96
58) Dibromochloromethane	8.279	129	320394	11.46	ppb	# 97
59) 1,2-Dibromoethane	8.402	107	254925	11.61	ppb	98
60) Chlorobenzene	8.888	112	1014820	12.21	ppb	94
61) 1,1,1,2-tetrachloroethane	8.975	131	359338	11.95	ppb	97
62) Ethyl Benzene	8.977	91	1734503	12.33	ppb	96
63) p- & m-Xylenes	9.097	91	2708373	24.88	ppb	97
64) o-Xylene	9.531	91	1361781	12.12	ppb	99
65) Styrene	9.556	104	1083733	11.56	ppb	# 100
66) Bromoform	9.804	173	176345	11.26	ppb	# 80
68) p-Ethyltoluene	10.499	105	1520484	10.98	ppb	# 64
69) Isopropylbenzene	9.921	105	1649143	11.43	ppb	97
71) 1,1,2,2-Tetrachloroethane	10.307	83	302216	11.37	ppb	# 99
72) Bromobenzene	10.296	77	592679	10.90	ppb	92
73) trans-1,4-Dichloro-2-b...	10.357	75	309951	9.97	ppb	85
74) 1,2,3-Trichloropropane	10.355	110	84128	11.06	ppb	68
75) n-Propylbenzene	10.374	91	1881834	11.61	ppb	98
76) 2-Chlorotoluene	10.494	91	1280273	11.34	ppb	100
77) 4-Chlorotoluene	10.616	91	1184419	11.29	ppb	100
78) 1,3,5-Trimethylbenzene	10.566	105	1354894	11.28	ppb	98
79) tert-Butylbenzene	10.928	119	1177127	11.71	ppb	95
80) 1,2,4-Trimethylbenzene	10.986	105	1347092	11.16	ppb	96
81) sec-Butylbenzene	11.173	105	1551690	11.70	ppb	97
82) 1,3-Dichlorobenzene	11.334	146	748852	11.47	ppb	98
83) p-Isopropyltoluene	11.331	119	1446884	11.75	ppb	97
84) 1,4-Dichlorobenzene	11.437	146	754376	11.32	ppb	97
85) 1,2,3-Trimethylbenzene	11.470	105	1264243	10.81	ppb	# 58
86) p-Diethylbenzene	11.768	105	697096	11.13	ppb	92
87) 1,2-Dichlorobenzene	11.863	146	671334	11.34	ppb	# 100
88) n-Butylbenzene	11.796	91	1340068	11.12	ppb	97
89) 1,2-Dibromo-3-chloropr...	12.770	75	42624	9.50	ppb	# 77
90) 1,2,4,5-Tetramethylben...	12.658	119	1086187	10.23	ppb	99
91) 1,2,4-Trichlorobenzene	13.682	180	294747	13.11	ppb	# 95
92) Hexachloro-1,3-Butadiene	13.844	225	110152	12.35	ppb	# 1
93) Naphthalene	13.974	128	508518	13.83	ppb	# 83
94) 1,2,3-Trichlorobenzene	14.253	180	178924	17.92	ppb	# 84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724447.D  
 Acq On : 9 Mar 2018 2:13 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : BC80386-BS1  
 Misc : QEV7030918A  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 12 13:45:53 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724448.D  
 Acq On : 9 Mar 2018 2:45 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : BC80386-BSD1  
 Misc : QBV7030918A  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 13:46:49 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
1) FLUOROBENZENE (ISTD)	5.828	70	252785	10.00	ppb	#	0.00
40) CHLOROBENZENE-d5 (ISTD)	8.858	117	909122	10.00	ppb		0.00
67) 1,2-DICHLOROBENZENE-d4...	11.841	152	369119	10.00	ppb		0.00
System Monitoring Compounds							
34) d4-1,2-Dichloroethane ...	5.539	65	294665	9.29	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	92.90%		
51) Toluene-d8 (SURR)	7.356	98	1256085	10.58	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	105.80%		
70) p-Bromofluorobenzene (...)	10.124	95	447435	9.89	ppb		0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	98.90%		
Target Compounds							
						Qvalue	
2) Dichlorodifluoromethane	1.555	85	260586	13.25	ppb	#	100
3) Chloromethane	1.744	50	479945	8.45	ppb		98
4) Vinyl Chloride	1.852	62	430383	10.59	ppb		99
5) Bromomethane	2.200	94	88846	5.79	ppb		96
6) Chloroethane	2.300	64	233822	10.43	ppb		99
7) Trichlorofluoromethane	2.545	101	390243	11.03	ppb		100
9) Freon-113	3.046	101	225643	9.75	ppb	#	87
10) 1,1-Dichloroethylene	3.068	61	572503	10.23	ppb	#	79
11) Acrolein	3.007	56	30421	6.26	ppb	#	1
12) Acetone	3.157	43	67305	7.19	ppb	#	1
13) Iodomethane	3.232	142	168055	6.55	ppb		99
14) Methyl Acetate	3.455	43	199664	7.71	ppb		96
15) Carbon disulfide	3.291	76	983960	11.76	ppb		100
16) tert-Butyl Alcohol (TBA)	3.675	59	155078	56.46	ppb	#	1
17) Methylene Chloride	3.563	49	593421	8.19	ppb	#	75
18) Acrylonitrile	3.825	53	81366	7.65	ppb	#	82
19) trans-1,2-Dichloroethy...	3.805	61	585072	10.01	ppb	#	100
20) tert-Butyl Methyl Ethe...	3.783	73	879050	10.24	ppb		97
21) 1,1-Dichloroethane	4.214	63	718946	10.46	ppb		99
22) Vinyl Acetate	4.237	43	1167658	11.41	ppb	#	100
23) Diisopropyl ether (DIPE)	4.220	45	1553947	8.55	ppb		95
24) Ethyl-tert-Butyl ether...	4.562	59	1191034	8.61	ppb	#	86
25) cis-1,2-Dichloroethylene	4.762	61	650876	9.85	ppb		93
26) 2-Butanone	4.782	72	26850	10.14	ppb	#	1
27) 2,2-Dichloropropane	4.743	77	475173	11.46	ppb	#	75
28) Tetrahydrofuran	5.035	71	26785	9.24	ppb	#	78
29) Bromochloromethane	4.999	49	375297	9.03	ppb	#	90
30) Chloroform	5.063	83	606650	11.49	ppb	#	99
31) 1,1,1-Trichloroethane	5.210	97	527641	11.41	ppb	#	100
32) Cyclohexane	5.241	56	611562	8.86	ppb		83
33) 1,1-Dichloropropylene	5.363	75	482237	11.52	ppb		92
35) Carbon Tetrachloride	5.361	117	439736	11.32	ppb		97
36) tert-Amyl alcohol (TAA)	5.569	59	283642	87.92	ppb	#	84
37) 1,2-Dichloroethane	5.611	62	447572	10.25	ppb		99
38) Benzene	5.569	78	1414500	11.27	ppb		83
39) tert-Amyl methyl ether...	5.633	73	875912	9.33	ppb	#	93
41) Trichloroethylene	6.176	95	370623	11.73	ppb		97
42) Methyl Cyclohexane	6.323	83	408219	10.22	ppb	#	79
43) Methyl Methacrylate	6.482	69	197361	10.70	ppb	#	46
44) Dibromomethane	6.543	93	167385	10.59	ppb	#	94
45) Bromodichloromethane	6.685	83	453004	11.58	ppb	#	93
46) 1,2-Dichloropropane	6.410	63	412009	10.58	ppb	#	99
47) 1,4-Dioxane	6.549	88	12884	279.93	ppb		89
49) cis-1,3-Dichloropropene	7.108	75	535653	10.72	ppb		92
50) 4-Methyl-2-Pentanone	7.241	43	324097	8.19	ppb	#	91
52) Toluene	7.422	91	1510147	11.56	ppb		99
53) trans-1,3-Dichloropropene	7.670	75	454730	10.39	ppb	#	100
54) 1,1,2-Trichloroethane	7.865	97	251748	11.20	ppb		96

Data Path : C:\msdchem\1\data\V7030918\  
 Data File : V724448.D  
 Acq On : 9 Mar 2018 2:45 pm  
 InstName : MSVOA7  
 Operator : SS  
 Sample : BC80386-BSD1  
 Misc : QBV7030918A  
 ALS Vial : 4 Sample Multiplier: 1

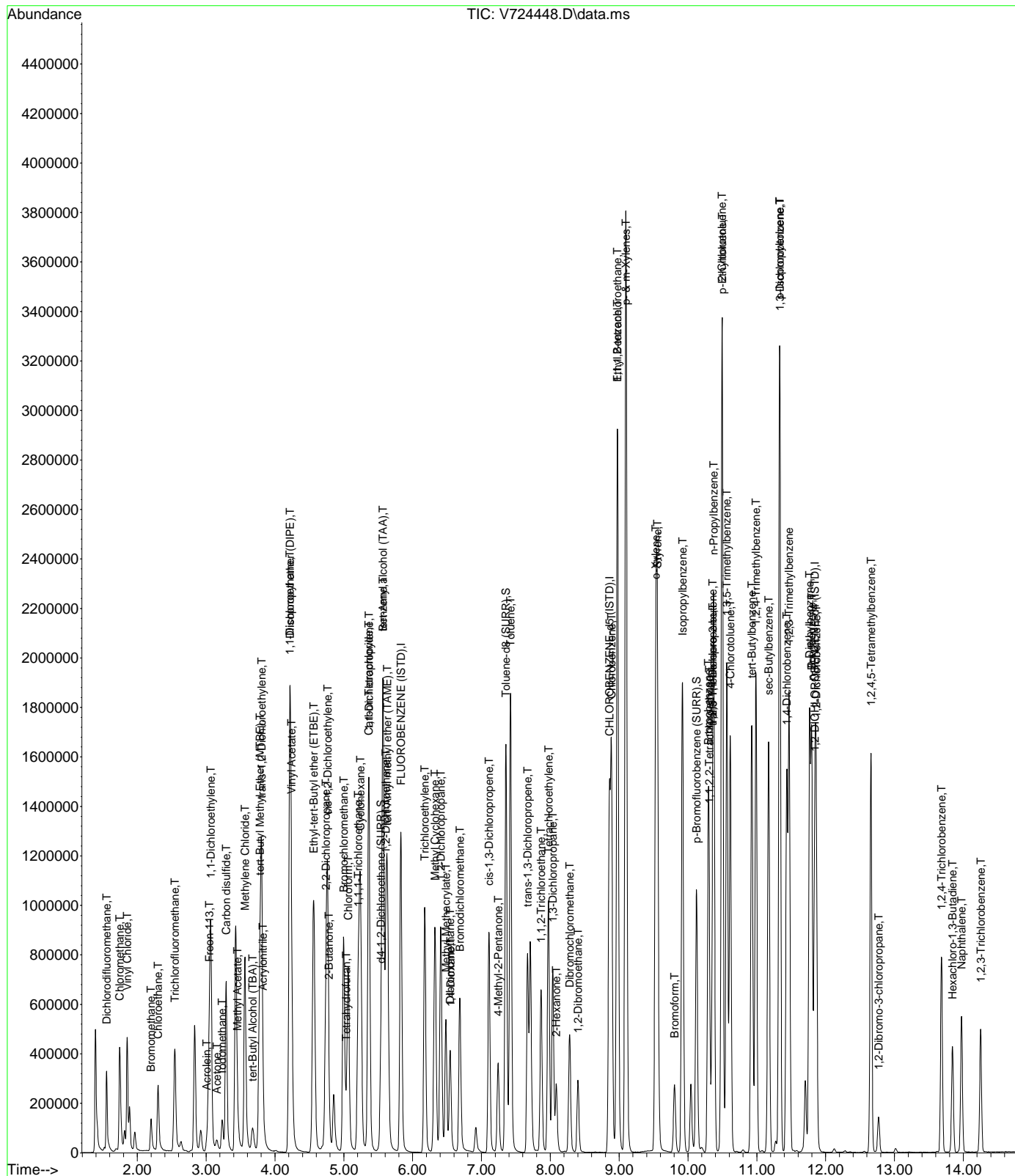
Quant Time: Mar 12 13:46:49 2018  
 Quant Method : C:\msdchem\1\methods\V7L00114.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Wed Feb 14 10:37:32 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev	(Min)
55) 1,3-Dichloropropane	8.034	76	436149	11.03	ppb	#	100
56) Tetrachloroethylene	7.973	166	365960	9.92	ppb	#	100
57) 2-Hexanone	8.087	43	220809	7.96	ppb	#	96
58) Dibromochloromethane	8.282	129	312280	11.18	ppb		96
59) 1,2-Dibromoethane	8.402	107	247538	11.28	ppb		98
60) Chlorobenzene	8.889	112	971716	11.71	ppb		94
61) 1,1,1,2-tetrachloroethane	8.975	131	349095	11.62	ppb		97
62) Ethyl Benzene	8.975	91	1659567	11.81	ppb		96
63) p- & m-Xylenes	9.097	91	2593919	23.86	ppb		97
64) o-Xylene	9.531	91	1312555	11.70	ppb		99
65) Styrene	9.556	104	1048177	11.19	ppb	#	100
66) Bromoform	9.804	173	169598	10.84	ppb	#	80
68) p-Ethyltoluene	10.499	105	1452828	10.46	ppb	#	78
69) Isopropylbenzene	9.921	105	1571803	10.86	ppb		97
71) 1,1,2,2-Tetrachloroethane	10.307	83	294457	11.04	ppb	#	99
72) Bromobenzene	10.296	77	573678	10.52	ppb		92
73) trans-1,4-Dichloro-2-b...	10.358	75	300965	9.66	ppb		85
74) 1,2,3-Trichloropropane	10.358	110	83353	10.93	ppb		65
75) n-Propylbenzene	10.374	91	1809363	11.13	ppb		98
76) 2-Chlorotoluene	10.494	91	1224674	10.82	ppb		100
77) 4-Chlorotoluene	10.614	91	1142502	10.86	ppb		100
78) 1,3,5-Trimethylbenzene	10.563	105	1300696	10.79	ppb		97
79) tert-Butylbenzene	10.928	119	1116141	11.07	ppb		96
80) 1,2,4-Trimethylbenzene	10.986	105	1292410	10.68	ppb		96
81) sec-Butylbenzene	11.173	105	1485093	11.17	ppb		97
82) 1,3-Dichlorobenzene	11.334	146	727959	11.12	ppb		98
83) p-Isopropyltoluene	11.331	119	1383939	11.20	ppb		97
84) 1,4-Dichlorobenzene	11.434	146	733363	10.98	ppb		97
85) 1,2,3-Trimethylbenzene	11.468	105	1226028	10.46	ppb	#	58
86) p-Diethylbenzene	11.765	105	664987	10.59	ppb		92
87) 1,2-Dichlorobenzene	11.863	146	646783	10.90	ppb	#	100
88) n-Butylbenzene	11.796	91	1273367	10.54	ppb		97
89) 1,2-Dibromo-3-chloropr...	12.770	75	41802	9.29	ppb	#	77
90) 1,2,4,5-Tetramethylben...	12.658	119	1051179	9.87	ppb		99
91) 1,2,4-Trichlorobenzene	13.682	180	289154	12.83	ppb	#	94
92) Hexachloro-1,3-Butadiene	13.844	225	105896	11.84	ppb	#	1
93) Naphthalene	13.974	128	508304	13.79	ppb	#	83
94) 1,2,3-Trichlorobenzene	14.253	180	177461	17.72	ppb	#	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V7030918\  
Data File : V724448.D  
Acq On : 9 Mar 2018 2:45 pm  
InstName : MSVOA7  
Operator : SS  
Sample : BC80386-BSD1  
Misc : QEV7030918A  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 12 13:46:49 2018  
Quant Method : C:\msdchem\1\methods\V7L00114.M  
Quant Title : Volatile Organics EPA 8260C  
QLast Update : Wed Feb 14 10:37:32 2018  
Response via : Initial Calibration





## LCS RAW DATA

SDG: 18C0104  
CLASS: VOA  
METHOD: EPA 8260C

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804221.D  
 Acq On : 9 Mar 2018 11:16 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : BC80387-BS1  
 Misc : QBV8030918A  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 12:59:50 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.913	70	26692	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	89831	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.831	152	30706	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.660	65	22477	8.99	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	89.90%	
51) Toluene-d8 (SURR)	6.396	98	135201	10.42	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	104.20%	
70) p-Bromofluorobenzene (...)	9.136	95	35015	10.50	ppb	0.00
Spiked Amount 10.000	Range	70 - 130	Recovery	=	105.00%	
<b>Target Compounds</b>						
						Qvalue
2) Dichlorodifluoromethane	1.160	85	57620	11.86	ppb	100
3) Chloromethane	1.304	50	53953	10.77	ppb	99
4) Vinyl Chloride	1.377	62	49243	10.62	ppb	# 100
5) Bromomethane	1.635	94	33939	11.57	ppb	100
6) Chloroethane	1.710	64	27179	10.31	ppb	99
7) Trichlorofluoromethane	1.889	101	98588	10.30	ppb	100
9) Freon-113	2.300	101	46130	9.84	ppb	# 69
10) 1,1-Dichloroethylene	2.331	61	65654	9.92	ppb	99
11) Acrolein	2.303	56	482m	3.15	ppb	
12) Acetone	2.448	43	3027	9.46	ppb	# 96
13) Iodomethane	2.484	142	58255	9.47	ppb	99
14) Methyl Acetate	2.701	43	9266	10.43	ppb	100
15) Carbon disulfide	2.517	76	105124	11.45	ppb	100
16) tert-Butyl Alcohol (TBA)	2.949	59	1623	39.94	ppb	# 1
17) Methylene Chloride	2.793	49	48962	9.66	ppb	# 98
18) Acrylonitrile	3.057	53	3465	10.77	ppb	# 100
19) trans-1,2-Dichloroethy...	2.999	61	56182	10.12	ppb	100
20) tert-Butyl Methyl Ethe...	2.976	73	46922	8.98	ppb	# 100
21) 1,1-Dichloroethane	3.385	63	72268	10.04	ppb	# 100
22) Vinyl Acetate	3.422	43	17235m	6.64	ppb	
23) Diisopropyl ether (DIPE)	3.383	45	110883	9.61	ppb	# 100
24) Ethyl-tert-Butyl ether...	3.703	59	72251	9.30	ppb	# 100
25) cis-1,2-Dichloroethylene	3.906	61	58548	9.71	ppb	97
26) 2-Butanone	3.942	72	963m	10.26	ppb	
27) 2,2-Dichloropropane	3.869	77	36648	6.25	ppb	# 100
28) Tetrahydrofuran	4.151	71	910	9.73	ppb	93
29) Bromochloromethane	4.134	49	25188	10.02	ppb	98
30) Chloroform	4.206	83	70308	10.00	ppb	# 91
31) 1,1,1-Trichloroethane	4.312	97	74335	9.98	ppb	# 69
32) Cyclohexane	4.312	56	68877	10.81	ppb	99
33) 1,1-Dichloropropylene	4.457	75	59389	10.34	ppb	99
35) Carbon Tetrachloride	4.440	117	73467	10.22	ppb	100
36) tert-Amyl alcohol (TAA)	4.743	59	4507	78.61	ppb	# 100
37) 1,2-Dichloroethane	4.724	62	32310	9.34	ppb	100
38) Benzene	4.654	78	155076	10.28	ppb	98
39) tert-Amyl methyl ether...	4.726	73	53317	9.03	ppb	# 100
41) Trichloroethylene	5.247	95	46805	11.49	ppb	99
42) Methyl Cyclohexane	5.358	83	62583	11.16	ppb	100
43) Methyl Methacrylate	6.791	69	17257	9.80	ppb	# 100
44) Dibromomethane	5.628	93	12863	9.61	ppb	# 100
45) Bromodichloromethane	5.775	83	43955	10.58	ppb	100
46) 1,2-Dichloropropane	5.489	63	32872	10.73	ppb	# 90
47) 1,4-Dioxane	5.628	88	197m	148.01	ppb	

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804221.D  
 Acq On : 9 Mar 2018 11:16 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : BC80387-BS1  
 Misc : QBV8030918A  
 ALS Vial : 3 Sample Multiplier: 1

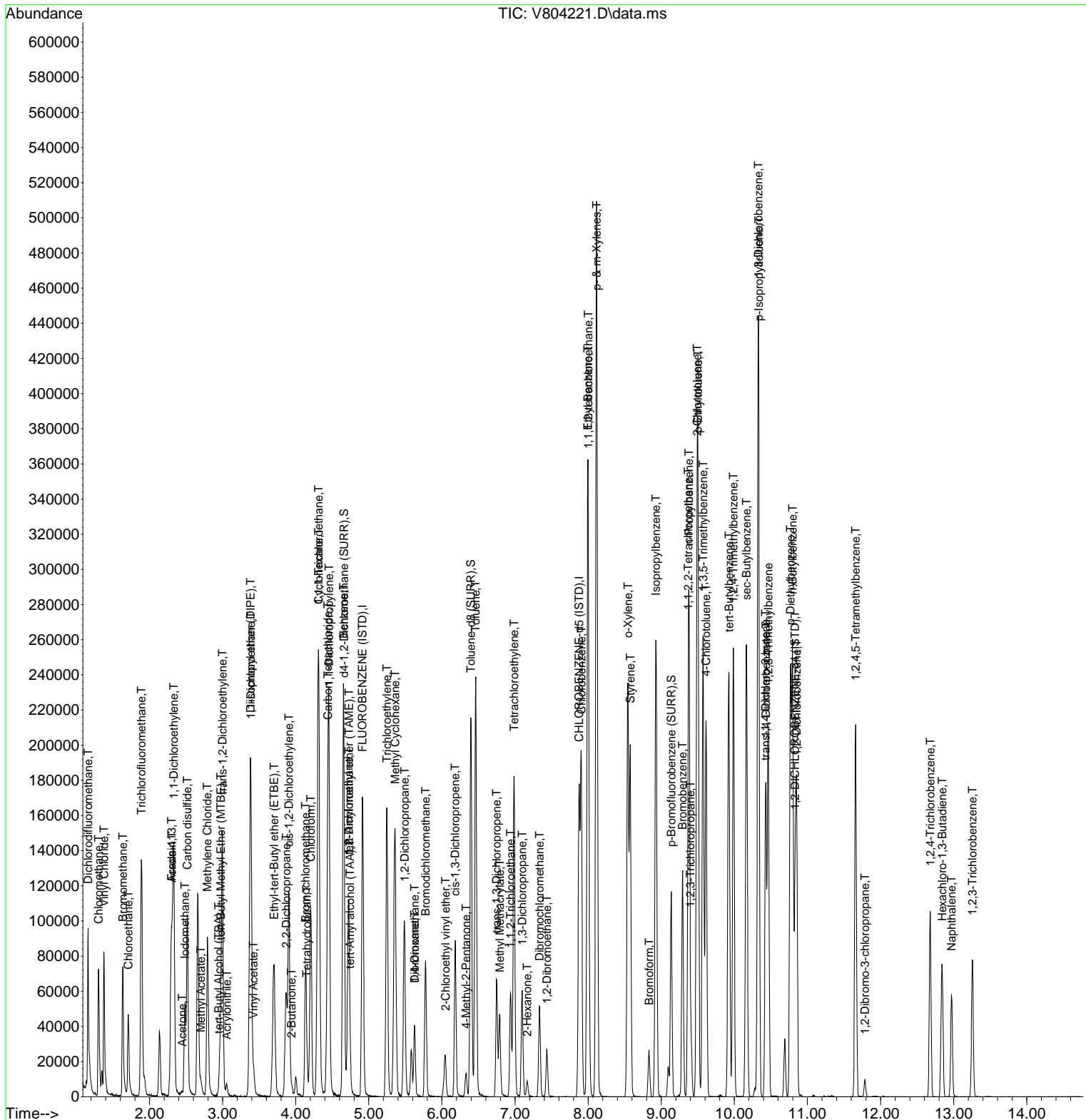
Quant Time: Mar 09 12:59:50 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 2-Chloroethyl vinyl ether	6.048	63	8037	10.94	ppb	100
49) cis-1,3-Dichloropropene	6.182	75	40292	9.46	ppb	100
50) 4-Methyl-2-Pentanone	6.329	43	10560	9.54	ppb #	97
52) Toluene	6.463	91	164740	10.47	ppb	100
53) trans-1,3-Dichloropropene	6.746	75	29980	9.19	ppb	100
54) 1,1,2-Trichloroethane	6.938	97	17301	9.65	ppb	98
55) 1,3-Dichloropropane	7.097	76	28656	10.23	ppb #	100
56) Tetrachloroethylene	6.986	166	46524	10.17	ppb	100
57) 2-Hexanone	7.166	43	6587	9.68	ppb #	79
58) Dibromochloromethane	7.336	129	26130	9.99	ppb #	99
59) 1,2-Dibromoethane	7.436	107	17132	10.31	ppb	98
60) Chlorobenzene	7.907	112	98788	10.14	ppb	99
61) 1,1,1,2-tetrachloroethane	8.001	131	37699	9.54	ppb	99
62) Ethyl Benzene	7.996	91	186799	10.28	ppb	100
63) p- & m-Xylenes	8.115	91	287406	19.85	ppb	100
64) o-Xylene	8.544	91	133861	10.52	ppb	100
65) Styrene	8.577	104	97831	9.95	ppb #	100
66) Bromoform	8.833	173	11295	9.44	ppb #	75
68) p-Ethyltoluene	9.504	105	167781	10.20	ppb #	100
69) Isopropyltoluene	8.925	105	181226	10.89	ppb	100
71) 1,1,2,2-Tetrachloroethane	9.370	83	15862	8.94	ppb #	100
72) Bromobenzene	9.289	77	48557	10.28	ppb	100
73) trans-1,4-Dichloro-2-b...	10.424	75	21440	10.06	ppb #	99
74) 1,2,3-Trichloropropane	9.398	110	4602	9.74	ppb #	100
75) n-Propylbenzene	9.378	91	215904	10.55	ppb	100
76) 2-Chlorotoluene	9.490	91	136470	10.10	ppb	100
77) 4-Chlorotoluene	9.612	91	115939	10.32	ppb	100
78) 1,3,5-Trimethylbenzene	9.573	105	145414	10.33	ppb	99
79) tert-Butylbenzene	9.926	119	134196	10.90	ppb	99
80) 1,2,4-Trimethylbenzene	9.988	105	140161	9.92	ppb	100
81) sec-Butylbenzene	10.166	105	192758	11.47	ppb	99
82) 1,3-Dichlorobenzene	10.327	146	78483	9.44	ppb	99
83) p-Isopropyltoluene	10.333	119	173074	10.08	ppb	99
84) 1,4-Dichlorobenzene	10.430	147	5409	9.76	ppb	97
85) 1,2,3-Trimethylbenzene	10.463	105	123752	10.15	ppb	100
86) p-Diethylbenzene	10.767	105	84985	10.77	ppb	92
87) 1,2-Dichlorobenzene	10.853	146	63057	9.81	ppb #	87
88) n-Butyltoluene	10.794	91	170938	10.15	ppb	96
89) 1,2-Dibromo-3-chloropr...	11.785	75	2237	10.23	ppb	97
90) 1,2,4,5-Tetramethylben...	11.657	119	117947	10.02	ppb	99
91) 1,2,4-Trichlorobenzene	12.678	180	31980	9.82	ppb	98
92) Hexachloro-1,3-Butadiene	12.842	225	15343	10.76	ppb	97
93) Naphthalene	12.970	128	48543	10.04	ppb	99
94) 1,2,3-Trichlorobenzene	13.257	181	1949	9.76	ppb #	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804221.D  
 Acq On : 9 Mar 2018 11:16 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : BC80387-BS1  
 Misc : QBV8030918A  
 ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 09 12:59:50 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804222.D  
 Acq On : 9 Mar 2018 11:43 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : BC80387-BSD1  
 Misc : QBV8030918A  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 13:01:07 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	4.913	70	28321	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	7.876	117	97892	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	10.828	152	31860	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	4.657	65	23663	8.92	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	89.20%		
51) Toluene-d8 (SURR)	6.399	98	142263	10.06	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	100.60%		
70) p-Bromofluorobenzene (...)	9.139	95	37908	10.95	ppb	0.00
Spiked Amount 10.000	Range 70	- 130	Recovery =	109.50%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	1.160	85	55721	10.81	ppb	Qvalue 100
3) Chloromethane	1.304	50	52608	9.89	ppb	99
4) Vinyl Chloride	1.377	62	48446	9.85	ppb	# 100
5) Bromomethane	1.635	94	34478	11.08	ppb	99
6) Chloroethane	1.711	64	26577	9.50	ppb	99
7) Trichlorofluoromethane	1.891	101	95556	9.41	ppb	100
9) Freon-113	2.303	101	46826	9.42	ppb	99
10) 1,1-Dichloroethylene	2.331	61	63963	9.11	ppb	98
11) Acrolein	2.306	56	520m	3.20	ppb	
12) Acetone	2.448	43	3015	8.88	ppb	# 96
13) Iodomethane	2.487	142	56114	8.60	ppb	99
14) Methyl Acetate	2.704	43	9574	10.16	ppb	100
15) Carbon disulfide	2.517	76	103517	10.63	ppb	100
16) tert-Butyl Alcohol (TBA)	2.957	59	2171m	50.36	ppb	
17) Methylene Chloride	2.793	49	49079	9.12	ppb	# 97
18) Acrylonitrile	3.054	53	3608	10.57	ppb	# 58
19) trans-1,2-Dichloroethy...	2.996	61	56132	9.53	ppb	99
20) tert-Butyl Methyl Ethe...	2.979	73	51135	9.22	ppb	# 100
21) 1,1-Dichloroethane	3.386	63	70882	9.28	ppb	# 100
22) Vinyl Acetate	3.427	43	17706m	6.43	ppb	
23) Diisopropyl ether (DIPE)	3.383	45	114390	9.34	ppb	# 100
24) Ethyl-tert-Butyl ether...	3.703	59	78611	9.54	ppb	# 86
25) cis-1,2-Dichloroethylene	3.909	61	57850	9.05	ppb	98
26) 2-Butanone	3.950	72	1114m	11.19	ppb	
27) 2,2-Dichloropropane	3.867	77	35266	5.67	ppb	# 86
28) Tetrahydrofuran	4.153	71	1053	10.61	ppb	# 81
29) Bromochloromethane	4.134	49	25672	9.62	ppb	97
30) Chloroform	4.206	83	70162	9.41	ppb	# 91
31) 1,1,1-Trichloroethane	4.309	97	73360	9.28	ppb	# 69
32) Cyclohexane	4.312	56	68418	10.12	ppb	97
33) 1,1-Dichloropropylene	4.457	75	58244	9.55	ppb	99
35) Carbon Tetrachloride	4.443	117	71936	9.43	ppb	100
36) tert-Amyl alcohol (TAA)	4.743	59	5208	85.61	ppb	# 100
37) 1,2-Dichloroethane	4.724	62	33023	9.00	ppb	99
38) Benzene	4.654	78	151888	9.49	ppb	99
39) tert-Amyl methyl ether...	4.724	73	58297	9.30	ppb	# 100
41) Trichloroethylene	5.247	95	45667	10.29	ppb	100
42) Methyl Cyclohexane	5.358	83	62035	10.15	ppb	98
43) Methyl Methacrylate	6.791	69	18735	9.76	ppb	# 100
44) Dibromomethane	5.628	93	13646	9.35	ppb	# 100
45) Bromodichloromethane	5.775	83	44591	9.85	ppb	99
46) 1,2-Dichloropropane	5.486	63	33766	10.11	ppb	99
47) 1,4-Dioxane	5.628	88	163	112.38	ppb	# 21

Data Path : C:\msdchem\1\data\V8030918\  
 Data File : V804222.D  
 Acq On : 9 Mar 2018 11:43 am  
 Operator : RDS  
 InstName : VOA No. 8  
 Sample : BC80387-BSD1  
 Misc : QBV8030918A  
 ALS Vial : 4 Sample Multiplier: 1

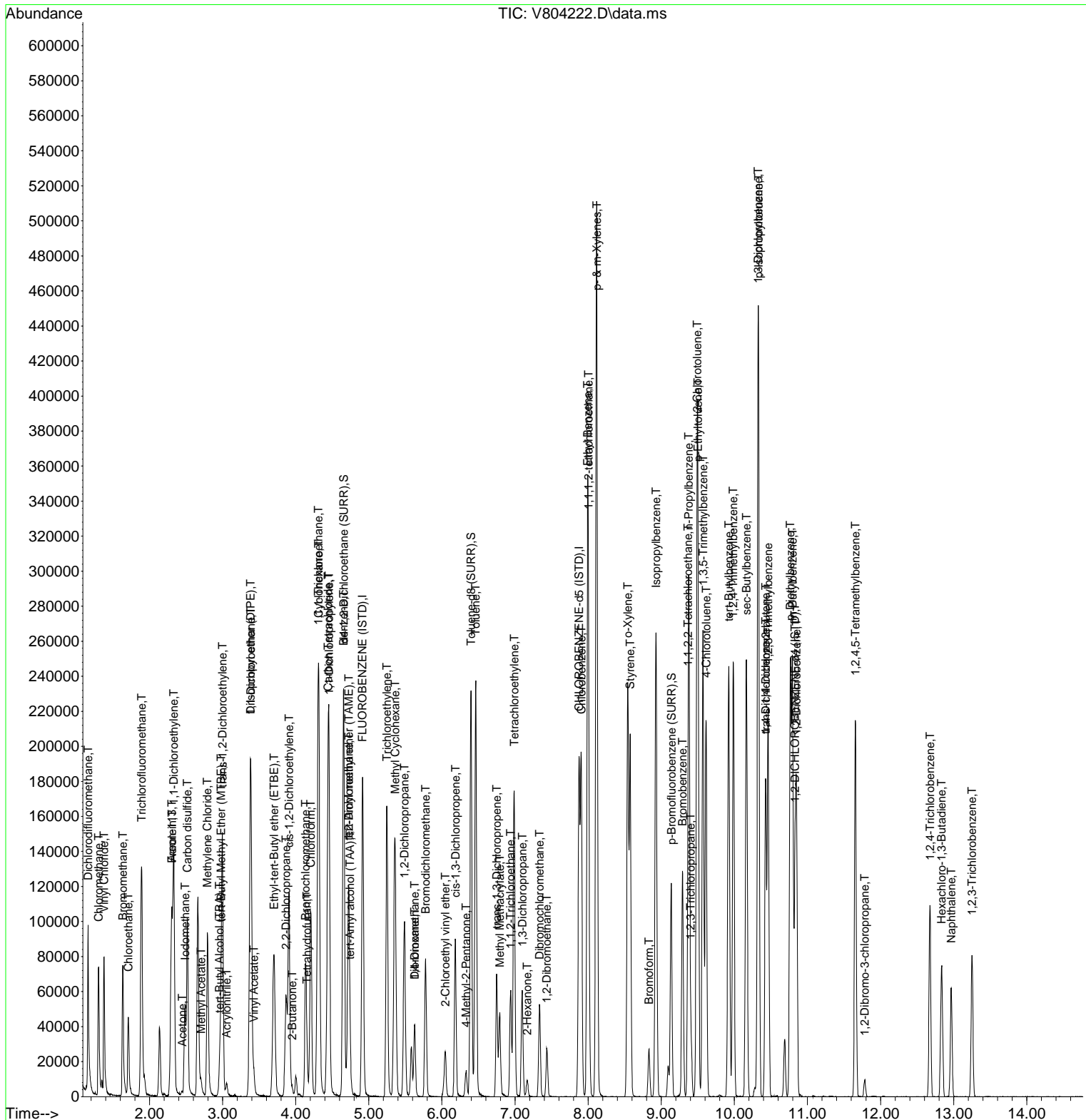
Quant Time: Mar 09 13:01:07 2018  
 Quant Method : C:\msdchem\1\methods\V8L00064.M  
 Quant Title : Volatile Organics EPA 8260C  
 QLast Update : Fri Mar 09 11:57:48 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 2-Chloroethyl vinyl ether	6.045	63	8771	10.95	ppb	99
49) cis-1,3-Dichloropropene	6.184	75	41047	8.84	ppb	100
50) 4-Methyl-2-Pentanone	6.329	43	11241	9.32	ppb #	94
52) Toluene	6.463	91	163848	9.55	ppb	100
53) trans-1,3-Dichloropropene	6.749	75	30634	8.62	ppb	100
54) 1,1,2-Trichloroethane	6.938	97	17945	9.18	ppb	98
55) 1,3-Dichloropropane	7.100	76	30052	9.85	ppb #	100
56) Tetrachloroethylene	6.989	166	45939	9.21	ppb	100
57) 2-Hexanone	7.167	43	7003	9.44	ppb #	75
58) Dibromochloromethane	7.336	129	27123	9.52	ppb #	99
59) 1,2-Dibromoethane	7.434	107	17836	9.85	ppb	97
60) Chlorobenzene	7.907	112	99936	9.41	ppb	99
61) 1,1,1,2-tetrachloroethane	8.004	131	38349	8.90	ppb	99
62) Ethyl Benzene	7.993	91	185351	9.36	ppb	100
63) p- & m-Xylenes	8.118	91	284126	18.01	ppb	100
64) o-Xylene	8.541	91	133627	9.64	ppb	100
65) Styrene	8.574	104	96840	9.04	ppb #	100
66) Bromoform	8.830	173	12241	9.39	ppb #	97
68) p-Ethyltoluene	9.504	105	166477	9.75	ppb #	100
69) Isopropyltoluene	8.928	105	179832	10.41	ppb	100
71) 1,1,2,2-Tetrachloroethane	9.367	83	16851	9.15	ppb #	100
72) Bromobenzene	9.289	77	50524	10.31	ppb	98
73) trans-1,4-Dichloro-2-b...	10.427	75	21381	9.67	ppb #	100
74) 1,2,3-Trichloropropane	9.401	110	5095	10.39	ppb #	100
75) n-Propylbenzene	9.376	91	213158	10.04	ppb	100
76) 2-Chlorotoluene	9.490	91	135867	9.69	ppb	100
77) 4-Chlorotoluene	9.615	91	114796	9.85	ppb	100
78) 1,3,5-Trimethylbenzene	9.570	105	144682	9.91	ppb	99
79) tert-Butylbenzene	9.924	119	132249	10.35	ppb	100
80) 1,2,4-Trimethylbenzene	9.985	105	140730	9.60	ppb	99
81) sec-Butylbenzene	10.166	105	189130	10.85	ppb	99
82) 1,3-Dichlorobenzene	10.324	146	78728	9.13	ppb	100
83) p-Isopropyltoluene	10.330	119	172888	9.70	ppb	99
84) 1,4-Dichlorobenzene	10.427	147	5686m	9.89	ppb	
85) 1,2,3-Trimethylbenzene	10.461	105	124345	9.83	ppb	100
86) p-Diethylbenzene	10.764	105	84886	10.37	ppb	93
87) 1,2-Dichlorobenzene	10.850	146	64941	9.74	ppb #	87
88) n-Butyltoluene	10.795	91	169237	9.68	ppb	99
89) 1,2-Dibromo-3-chloropr...	11.782	75	2333	10.28	ppb #	67
90) 1,2,4,5-Tetramethylben...	11.654	119	119266	9.76	ppb	100
91) 1,2,4-Trichlorobenzene	12.675	180	34110	10.10	ppb	98
92) Hexachloro-1,3-Butadiene	12.834	225	15201	10.28	ppb	98
93) Naphthalene	12.968	128	52135	10.39	ppb	100
94) 1,2,3-Trichlorobenzene	13.249	181	2153	10.39	ppb #	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\V8030918\  
Data File : V804222.D  
Acq On : 9 Mar 2018 11:43 am  
Operator : RDS  
InstName : VOA No. 8  
Sample : BC80387-BSD1  
Misc : QBV8030918A  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 09 13:01:07 2018  
Quant Method : C:\msdchem\1\methods\V8L00064.M  
Quant Title : Volatile Organics EPA 8260C  
QLast Update : Fri Mar 09 11:57:48 2018  
Response via : Initial Calibration



# BENCHSHEETS

SDG: 18C0104

CLASS: VOA

METHOD: EPA 8260C



**PREPARATION BENCH SHEET-AQUEOUS: BC80386**

Prepared: **03/09/2018 07:17**

York Analytical Laboratories, Inc.

Printed: 4/17/2018 1:59:08PM

Matrix: Water

Preparation EPA 5030B

Surrogate used: Y15L025

1 ul

Lab Number	Analysis	Initial (mL)	Final (mL)	Spike 1 ID	ul Spike 1	Spike 2 ID	ul Spike 2	Source ID	pH Data			Decanted Y/N	Comments
									Initial	Acid	Basic		
18C0100-01 A	Volatile Organics, 8	25	25							<-2			
18C0100-02 A	Volatile Organics, 8	25	25							<-2			
18C0100-03 A	Volatile Organics, 8	25	25							<-2			
18C0104-04 A	Volatile Organics, 8	25	25							<-2			
18C0104-05 A	Volatile Organics, 8	25	25							<-2			
18C0104-06 A	Volatile Organics, 8	25	25							<-2			
18C0104-07 A	Volatile Organics, 8	25	25							<-2			
18C0110-14 B	Volatile Organics, C	25	25							<-2			
18C0110-14 B	Volatile Organics, I	25	25							<-2			
18C0110-16 B	Volatile Organics, I	25	25							<-2			
18C0110-16 B	Volatile Organics, C	25	25							<-2			
18C0110-17 B	Volatile Organics, I	25	25							<-2			
18C0110-17 B	Volatile Organics, C	25	25							<-2			
18C0110-18 B	Volatile Organics, C	25	25							<-2			
18C0110-18 B	Volatile Organics, I	25	25							<-2			
18C0131-08 A	Volatile Organics, 8	25	25							7			
18C0131-09 A	Volatile Organics, 8	25	25							<-2			
BC80386-BLK1	QC	25	25								NA		
BC80386-BS1	QC	25	25	Y18B194	5						NA		
BC80386-BS2	QC	25	25		5								
BC80386-BSD1	QC	25	25	Y18B194	5						NA		
BC80386-BSD2	QC	25	25		5								

**Reagents:**

ID Number	Description	Lot Number	ID Number	Description	Lot Number
Y18B221	Antifoam B Silicone Emulsion	0000171560			

# BENCHSHEETS

SDG: 18C0104

CLASS: VOA

METHOD: EPA 8260C

**PREPARATION BENCH SHEET-AQUEOUS: BC80387**

Prepared: **03/09/2018 07:30**

York Analytical Laboratories, Inc.

Printed: 3/28/2018 3:30:01PM

Matrix: Water

Preparation EPA 5030B

Surrogate used: Y15L025

1 ul

Lab Number	Analysis	Initial (mL)	Final (mL)	Spike 1 ID	ul Spike 1	Spike 2 ID	ul Spike 2	Source ID	pH Data			Decanted Y/N	Comments
									Initial	Acid	Basic		
18C0104-03 A	Volatile Organics, 8	25	25							<-2	NA		
18C0139-05 A	Volatile Organics, C	25	25							<-2	NA		Log for SOIL
18C0141-01 A	Volatile Organics, C	25	25							<-2	NA		Log for WATER
18C0141-02 A	Volatile Organics, C	25	25							<-2	NA		Log for WATER
18C0150-01 D	Volatile Organics, 7	25	25							<-2	NA		
18C0150-01 D	Volatile Organics, 7	25	25							<-2	NA		
18C0180-01 A	Volatile Organics, 8	25	25							<-2	NA		
18C0195-01 H	Volatile Organics, 8	25	25							<-2	NA		
18C0206-01 D	VOA, 8260 LOW 7	25	25							<-2	NA		Use for GW/AQ
18C0206-02 D	VOA, 8260 LOW 7	25	25							<-2	NA		Use for GW/AQ
18C0206-03 D	VOA, 8260 LOW 7	25	25							<-2	NA		Use for GW/AQ
18C0206-04 D	VOA, 8260 LOW 7	25	25							<-2	NA		Use for GW/AQ
18C0206-05 D	VOA, 8260 LOW 7	25	25							<-2	NA		Use for GW/AQ
18C0206-06 A	VOA, 8260 LOW 7	25	25							<-2	NA		Use for GW/AQ
18C0210-22 A	VOA, 8260 LOW 7	25	25							<-2	NA		Use for waters
18C0210-23 A	VOA, 8260 LOW 7	25	25							<-2	NA		Use for waters
BC80387-BLK1	QC	25	25								NA		
BC80387-BS1	QC	25	25	Y18B194	5						NA		
BC80387-BSD1	QC	25	25	Y18B194	5						NA		

**Reagents:**

ID Number	Description	Lot Number	ID Number	Description	Lot Number
Y18B221	Antifoam B Silicone Emulsion	0000171560			

York Analytical Laboratories, Inc.

SDG: 18C0104

CLASS: VOA

METHOD: EPA 8260C

**DATA PACKAGE COVER PAGE**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

---

**Client Sample Id:**

KC-CB-01 (25-30')

KC-CB-02 (25-30')

**Lab Sample Id:**

18C0104-01

18C0104-02

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the project narrative. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the

Signature:



Name:

Benjamin Gulizia

Date:

4/17/2018

Title:

Laboratory Director

# VOA QC Summary



## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	51	103	75 - 129
1,1,1-Trichloroethane	50.0	52	104	71 - 137
1,1,2,2-Tetrachloroethane	50.0	53	107	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50.0	56	113	58 - 146
1,1,2-Trichloroethane	50.0	54	108	83 - 123
1,1-Dichloroethane	50.0	55	110	75 - 130
1,1-Dichloroethylene	50.0	55	111	64 - 137
1,2,3-Trichlorobenzene	50.0	53	105	81 - 140
1,2,3-Trichloropropane	50.0	50	100	81 - 126
1,2,4-Trichlorobenzene	50.0	52	104	80 - 141
1,2,4-Trimethylbenzene	50.0	51	103	84 - 125
1,2-Dibromo-3-chloropropane	50.0	52	104	74 - 142
1,2-Dibromoethane	50.0	53	106	86 - 123
1,2-Dichlorobenzene	50.0	49	98.6	85 - 122
1,2-Dichloroethane	50.0	53	106	71 - 133
1,2-Dichloropropane	50.0	56	112	81 - 122
1,3,5-Trimethylbenzene	50.0	51	102	82 - 126
1,3-Dichlorobenzene	50.0	50	100	84 - 124
1,4-Dichlorobenzene	50.0	49	98.8	84 - 124
1,4-Dioxane	1050	1300	127	10 - 228
2-Butanone	50.0	52	104	58 - 147
2-Hexanone	50.0	51	103	70 - 139
4-Methyl-2-pentanone	50.0	52	104	72 - 132
Acetone	50.0	39	78.9	36 - 155
Acrolein	50.0	49	97.9	10 - 238
Acrylonitrile	50.0	58	116	66 - 141
Benzene	50.0	55	110	77 - 127
Bromochloromethane	50.0	55	109	74 - 129
Bromodichloromethane	50.0	55	111	81 - 124
Bromoform	50.0	52	104	80 - 136



## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Bromomethane	50.0	59	118	32 - 177
Carbon disulfide	50.0	58	115	10 - 136
Carbon tetrachloride	50.0	54	109	66 - 143
Chlorobenzene	50.0	52	105	86 - 120
Chloroethane	50.0	58	117	51 - 142
Chloroform	50.0	55	109	76 - 131
Chloromethane	50.0	60	121	49 - 132
cis-1,2-Dichloroethylene	50.0	54	107	74 - 132
cis-1,3-Dichloropropylene	50.0	54	107	81 - 129
Cyclohexane	50.0	53	106	70 - 130
Dibromochloromethane	50.0	54	109	10 - 200
Dibromomethane	50.0	52	105	83 - 124
Dichlorodifluoromethane	50.0	60	121	28 - 158
Ethyl Benzene	50.0	55	110	84 - 125
Hexachlorobutadiene	50.0	55	109	83 - 133
Isopropylbenzene	50.0	50	100	81 - 127
Methyl acetate	50.0	49	97.3	41 - 143
Methyl tert-butyl ether (MTBE)	50.0	52	104	74 - 131
Methylcyclohexane	50.0	53	106	70 - 130
Methylene chloride	50.0	45	90.1	57 - 141
n-Butylbenzene	50.0	53	105	80 - 130
n-Propylbenzene	50.0	52	104	74 - 136
o-Xylene	50.0	55	110	83 - 123
p- & m- Xylenes	100	110	109	82 - 128
p-Isopropyltoluene	50.0	52	103	85 - 125
sec-Butylbenzene	50.0	54	108	83 - 125
Styrene	50.0	53	105	86 - 126
tert-Butyl alcohol (TBA)	250	270	109	70 - 130
tert-Butylbenzene	50.0	50	101	80 - 127
Tetrachloroethylene	50.0	50	100	80 - 129

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil  
 Batch: BC80462 Laboratory ID: BC80462-BS1  
 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Toluene	50.0	54	108	85 - 121
trans-1,2-Dichloroethylene	50.0	55	110	72 - 132
trans-1,3-Dichloropropylene	50.0	53	106	78 - 132
trans-1,4-dichloro-2-butene	50.0	54	107	75 - 135
Trichloroethylene	50.0	54	108	84 - 123
Trichlorofluoromethane	50.0	54	108	62 - 140
Vinyl Chloride	50.0	59	117	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	50.0	51	102	1.33	30	75 - 129
1,1,1-Trichloroethane	50.0	51	103	1.58	30	71 - 137
1,1,2,2-Tetrachloroethane	50.0	52	104	2.98	30	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53	107	5.76	30	58 - 146
1,1,2-Trichloroethane	50.0	52	104	3.79	30	83 - 123
1,1-Dichloroethane	50.0	53	107	2.72	30	75 - 130
1,1-Dichloroethylene	50.0	53	106	4.10	30	64 - 137
1,2,3-Trichlorobenzene	50.0	50	99.1	5.86	30	81 - 140
1,2,3-Trichloropropane	50.0	49	97.2	3.04	30	81 - 126
1,2,4-Trichlorobenzene	50.0	49	98.6	5.70	30	80 - 141
1,2,4-Trimethylbenzene	50.0	50	100	2.59	30	84 - 125
1,2-Dibromo-3-chloropropane	50.0	51	102	1.91	30	74 - 142
1,2-Dibromoethane	50.0	51	102	3.80	30	86 - 123
1,2-Dichlorobenzene	50.0	48	96.8	1.84	30	85 - 122
1,2-Dichloroethane	50.0	51	102	4.16	30	71 - 133
1,2-Dichloropropane	50.0	55	110	1.88	30	81 - 122
1,3,5-Trimethylbenzene	50.0	49	98.6	3.59	30	82 - 126
1,3-Dichlorobenzene	50.0	48	95.5	4.56	30	84 - 124
1,4-Dichlorobenzene	50.0	48	95.6	3.33	30	84 - 124
1,4-Dioxane	1050	1200	115	9.65	30	10 - 228
2-Butanone	50.0	49	98.0	6.00	30	58 - 147
2-Hexanone	50.0	50	99.1	3.43	30	70 - 139
4-Methyl-2-pentanone	50.0	50	99.2	4.47	30	72 - 132
Acetone	50.0	38	75.6	4.27	30	36 - 155
Acrolein	50.0	45	90.7	7.61	30	10 - 238
Acrylonitrile	50.0	55	110	4.76	30	66 - 141
Benzene	50.0	53	106	3.13	30	77 - 127
Bromochloromethane	50.0	53	107	2.37	30	74 - 129
Bromodichloromethane	50.0	53	106	4.25	30	81 - 124
Bromoform	50.0	51	102	2.31	30	80 - 136

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	50.0	54	107	9.65	30	32 - 177
Carbon disulfide	50.0	58	115	0.104	30	10 - 136
Carbon tetrachloride	50.0	52	105	3.49	30	66 - 143
Chlorobenzene	50.0	50	99.0	5.71	30	86 - 120
Chloroethane	50.0	56	112	3.70	30	51 - 142
Chloroform	50.0	52	104	5.07	30	76 - 131
Chloromethane	50.0	56	112	7.67	30	49 - 132
cis-1,2-Dichloroethylene	50.0	52	104	3.50	30	74 - 132
cis-1,3-Dichloropropylene	50.0	52	104	3.02	30	81 - 129
Cyclohexane	50.0	52	104	1.64	30	70 - 130
Dibromochloromethane	50.0	51	102	6.34	30	10 - 200
Dibromomethane	50.0	51	102	2.80	30	83 - 124
Dichlorodifluoromethane	50.0	56	113	6.77	30	28 - 158
Ethyl Benzene	50.0	53	106	3.85	30	84 - 125
Hexachlorobutadiene	50.0	51	101	7.37	30	83 - 133
Isopropylbenzene	50.0	49	97.9	2.38	30	81 - 127
Methyl acetate	50.0	44	87.5	10.5	30	41 - 143
Methyl tert-butyl ether (MTBE)	50.0	51	101	2.46	30	74 - 131
Methylcyclohexane	50.0	51	102	2.94	30	70 - 130
Methylene chloride	50.0	42	84.0	7.03	30	57 - 141
n-Butylbenzene	50.0	50	101	4.29	30	80 - 130
n-Propylbenzene	50.0	51	101	2.63	30	74 - 136
o-Xylene	50.0	53	106	3.60	30	83 - 123
p- & m- Xylenes	100	100	105	4.04	30	82 - 128
p-Isopropyltoluene	50.0	50	99.3	3.73	30	85 - 125
sec-Butylbenzene	50.0	51	102	5.65	30	83 - 125
Styrene	50.0	51	102	3.04	30	86 - 126
tert-Butyl alcohol (TBA)	250	260	103	6.15	30	70 - 130
tert-Butylbenzene	50.0	49	97.7	2.91	30	80 - 127
Tetrachloroethylene	50.0	49	97.9	2.34	30	80 - 129

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil  
 Batch: BC80462 Laboratory ID: BC80462-BSD1  
 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	50.0	52	105	2.90	30	85 - 121
trans-1,2-Dichloroethylene	50.0	53	106	3.44	30	72 - 132
trans-1,3-Dichloropropylene	50.0	51	103	3.67	30	78 - 132
trans-1,4-dichloro-2-butene	50.0	52	104	3.43	30	75 - 135
Trichloroethylene	50.0	53	106	1.87	30	84 - 123
Trichlorofluoromethane	50.0	52	104	4.07	30	62 - 140
Vinyl Chloride	50.0	56	111	5.50	30	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Batch: BC80462 Batch Matrix: Soil Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-CB-01 (25-30')	18C0104-01	V4781875.D	03/12/18 07:30	From BC80384 by TAB on 03/12/2018
KC-CB-02 (25-30')	18C0104-02	V4781876.D	03/12/18 07:30	From BC80384 by TAB on 03/12/2018
Blank	BC80462-BLK1	V4781868.D	03/12/18 07:30	
Blank	BC80462-BLK2	V4781869.D	03/12/18 07:30	
LCS	BC80462-BS1	V4781866.D	03/12/18 07:30	
LCS Dup	BC80462-BSD1	V4781867.D	03/12/18 07:30	

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK1 File ID: V4781868.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.0050	U
71-55-6	1,1,1-Trichloroethane	0.0050	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0050	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0050	U
79-00-5	1,1,2-Trichloroethane	0.0050	U
75-34-3	1,1-Dichloroethane	0.0050	U
75-35-4	1,1-Dichloroethylene	0.0050	U
87-61-6	1,2,3-Trichlorobenzene	0.0050	U
96-18-4	1,2,3-Trichloropropane	0.0050	U
120-82-1	1,2,4-Trichlorobenzene	0.0050	U
95-63-6	1,2,4-Trimethylbenzene	0.0050	U
96-12-8	1,2-Dibromo-3-chloropropane	0.0050	U
106-93-4	1,2-Dibromoethane	0.0050	U
95-50-1	1,2-Dichlorobenzene	0.0050	U
107-06-2	1,2-Dichloroethane	0.0050	U
78-87-5	1,2-Dichloropropane	0.0050	U
108-67-8	1,3,5-Trimethylbenzene	0.0050	U
541-73-1	1,3-Dichlorobenzene	0.0050	U
106-46-7	1,4-Dichlorobenzene	0.0050	U
123-91-1	1,4-Dioxane	0.10	U
78-93-3	2-Butanone	0.0050	U
591-78-6	2-Hexanone	0.0050	U
108-10-1	4-Methyl-2-pentanone	0.0050	U
67-64-1	Acetone	0.010	U
107-02-8	Acrolein	0.010	U
107-13-1	Acrylonitrile	0.0050	U
71-43-2	Benzene	0.0050	U
74-97-5	Bromochloromethane	0.0050	U
75-27-4	Bromodichloromethane	0.0050	U
75-25-2	Bromoform	0.0050	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK1 File ID: V4781868.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
74-83-9	Bromomethane	0.0050	U
75-15-0	Carbon disulfide	0.0050	U
56-23-5	Carbon tetrachloride	0.0050	U
108-90-7	Chlorobenzene	0.0050	U
75-00-3	Chloroethane	0.0050	U
67-66-3	Chloroform	0.0050	U
74-87-3	Chloromethane	0.0050	U
156-59-2	cis-1,2-Dichloroethylene	0.0050	U
10061-01-5	cis-1,3-Dichloropropylene	0.0050	U
110-82-7	Cyclohexane	0.0050	U
124-48-1	Dibromochloromethane	0.0050	U
74-95-3	Dibromomethane	0.0050	U
75-71-8	Dichlorodifluoromethane	0.0050	U
100-41-4	Ethyl Benzene	0.0050	U
87-68-3	Hexachlorobutadiene	0.0050	U
98-82-8	Isopropylbenzene	0.0050	U
79-20-9	Methyl acetate	0.0050	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.0050	U
108-87-2	Methylcyclohexane	0.0050	U
75-09-2	Methylene chloride	0.010	U
104-51-8	n-Butylbenzene	0.0050	U
103-65-1	n-Propylbenzene	0.0050	U
95-47-6	o-Xylene	0.0050	U
179601-23-1	p- & m- Xylenes	0.010	U
99-87-6	p-Isopropyltoluene	0.0050	U
135-98-8	sec-Butylbenzene	0.0050	U
100-42-5	Styrene	0.0050	U
75-65-0	tert-Butyl alcohol (TBA)	0.010	U
98-06-6	tert-Butylbenzene	0.0050	U
127-18-4	Tetrachloroethylene	0.0050	U



**FORM I****METHOD BLANK DATA SHEET  
EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK1 File ID: V4781868.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
108-88-3	Toluene	0.0050	U
156-60-5	trans-1,2-Dichloroethylene	0.0050	U
10061-02-6	trans-1,3-Dichloropropylene	0.0050	U
110-57-6	trans-1,4-dichloro-2-butene	0.0050	U
79-01-6	Trichloroethylene	0.0050	U
75-69-4	Trichlorofluoromethane	0.0050	U
75-01-4	Vinyl Chloride	0.0050	U
1330-20-7	Xylenes, Total	0.015	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	44.6	89.2	77 - 125	
p-Bromofluorobenzene	50.0	49.2	98.3	76 - 130	
Toluene-d8	50.0	49.4	98.8	85 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,2-Dichlorobenzene-d4	245938	11.8	260151	11.8	
Chlorobenzene-d5	521067	8.83	541028	8.82	
Fluorobenzene	112394	5.81	115822	5.8	

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	10	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	1.0	U
107-02-8	Acrolein	1.0	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	0.97	JD
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	47.2	94.4	77 - 125	D
p-Bromofluorobenzene	50.0	48.1	96.3	76 - 130	D
Toluene-d8	50.0	49.0	98.1	85 - 120	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,2-Dichlorobenzene-d4	251170	11.8	260151	11.8	
Chlorobenzene-d5	508640	8.82	541028	8.82	
Fluorobenzene	105574	5.8	115822	5.8	

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationLab File ID: V4781550.DInjection Date: 03/01/18Instrument ID: GCMS-VOA4Injection Time: 11:55Sequence: Y8C0202Lab Sample ID: Y8C0202-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.3	PASS
75	30 - 60% of 95	41.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.05	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	95.7	PASS
175	5 - 9% of 174	8.14	PASS
176	95 - 101% of 174	99.2	PASS
177	5 - 9% of 176	6.63	PASS

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationLab File ID: V4781864.DInjection Date: 03/12/18Instrument ID: GCMS-VOA4Injection Time: 08:23Sequence: Y8C1237Lab Sample ID: Y8C1237-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.6	PASS
75	30 - 60% of 95	41	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.06	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	91.8	PASS
175	5 - 9% of 174	7.96	PASS
176	95 - 101% of 174	97.2	PASS
177	5 - 9% of 176	6.49	PASS

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C0202 Instrument: GCMS-VOA4  
Matrix: Soil Calibration: YC80003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C0202-TUN1	V4781550.D	03/01/18 11:55
Cal Standard	Y8C0202-CAL1	V4781551.D	03/01/18 12:26
Cal Standard	Y8C0202-CAL2	V4781552.D	03/01/18 12:58
Cal Standard	Y8C0202-CAL3	V4781553.D	03/01/18 13:30
Cal Standard	Y8C0202-CAL4	V4781554.D	03/01/18 14:01
Cal Standard	Y8C0202-CAL5	V4781555.D	03/01/18 14:33
Cal Standard	Y8C0202-CAL6	V4781556.D	03/01/18 15:05
Secondary Cal Check	Y8C0202-SCV1	V4781558.D	03/01/18 16:08

**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C1237 Instrument: GCMS-VOA4  
Matrix: Soil Calibration: YC80003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1237-TUN1	V4781864.D	03/12/18 08:23
Calibration Check	Y8C1237-CCV1	V4781865.D	03/12/18 08:55
LCS	BC80462-BS1	V4781866.D	03/12/18 09:32
LCS Dup	BC80462-BSD1	V4781867.D	03/12/18 10:04
Blank	BC80462-BLK1	V4781868.D	03/12/18 10:36
Blank	BC80462-BLK2	V4781869.D	03/12/18 11:07
KC-CB-01 (25-30')	18C0104-01	V4781875.D	03/12/18 14:17
KC-CB-02 (25-30')	18C0104-02	V4781876.D	03/12/18 14:49



**FORM VIII**

**INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>18C0104</u>
Client:	<u>Chazen Environmental Services (Poughkeepsie)</u>	Project:	<u>41103.00 Task 0900-Kingston CVS Investigation</u>
Sequence:	<u>Y8C0202</u>	Instrument:	<u>GCMS-VOA4</u>
Matrix:	<u>Soil</u>	Calibration:	<u>YC80003</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8C0202-CAL1)</b> Lab File ID: V4781551.D Analyzed: 03/01/18 12:26									
Fluorobenzene	95671	5.81	93318	5.82	103	50 - 200	-0.0100	+/-0.17	
Chlorobenzene-d5	447838	8.83	447140	8.84	100	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	204085	11.8	202922	11.81	101	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL2)</b> Lab File ID: V4781552.D Analyzed: 03/01/18 12:58									
Fluorobenzene	97713	5.81	93318	5.82	105	50 - 200	-0.0100	+/-0.17	
Chlorobenzene-d5	456166	8.83	447140	8.84	102	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	207461	11.8	202922	11.81	102	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL3)</b> Lab File ID: V4781553.D Analyzed: 03/01/18 13:30									
Fluorobenzene	92372	5.82	93318	5.82	99	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	449305	8.84	447140	8.84	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	205202	11.8	202922	11.81	101	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL4)</b> Lab File ID: V4781554.D Analyzed: 03/01/18 14:01									
Fluorobenzene	93318	5.82	93318	5.82	100	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	447140	8.84	447140	8.84	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	202922	11.81	202922	11.81	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0202-CAL5)</b> Lab File ID: V4781555.D Analyzed: 03/01/18 14:33									
Fluorobenzene	97402	5.82	93318	5.82	104	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	457090	8.83	447140	8.84	102	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	205738	11.8	202922	11.81	101	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL6)</b> Lab File ID: V4781556.D Analyzed: 03/01/18 15:05									
Fluorobenzene	100172	5.82	93318	5.82	107	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	463121	8.83	447140	8.84	104	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	207492	11.8	202922	11.81	102	50 - 200	-0.0100	+/-0.17	
<b>Secondary Cal Check (Y8C0202-SCV1)</b> Lab File ID: V4781558.D Analyzed: 03/01/18 16:08									
Fluorobenzene	97865	5.82	93318	5.82	105	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	464642	8.83	447140	8.84	104	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	211426	11.8	202922	11.81	104	50 - 200	-0.0100	+/-0.17	

FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C1237 Instrument: GCMS-VOA4  
 Matrix: Soil Calibration: YC80003

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1237-CCV1)</b> Lab File ID: V4781865.D Analyzed: 03/12/18 08:55									
Fluorobenzene	115822	5.8				50 - 200		+/-0.17	
Chlorobenzene-d5	541028	8.82				50 - 200		+/-0.17	
1,2-Dichlorobenzene-d4	260151	11.8				50 - 200		+/-0.17	
<b>LCS (BC80462-BS1)</b> Lab File ID: V4781866.D Analyzed: 03/12/18 09:32									
Fluorobenzene	112799	5.8	115822	5.8	97	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	534334	8.82	541028	8.82	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	257428	11.8	260151	11.8	99	50 - 200	0.0000	+/-0.17	
<b>LCS Dup (BC80462-BSD1)</b> Lab File ID: V4781867.D Analyzed: 03/12/18 10:04									
Fluorobenzene	118013	5.8	115822	5.8	102	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	556848	8.82	541028	8.82	103	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	262372	11.79	260151	11.8	101	50 - 200	-0.0100	+/-0.17	
<b>Blank (BC80462-BLK1)</b> Lab File ID: V4781868.D Analyzed: 03/12/18 10:36									
Fluorobenzene	112394	5.81	115822	5.8	97	50 - 200	0.0100	+/-0.17	
Chlorobenzene-d5	521067	8.83	541028	8.82	96	50 - 200	0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	245938	11.8	260151	11.8	95	50 - 200	0.0000	+/-0.17	
<b>Blank (BC80462-BLK2)</b> Lab File ID: V4781869.D Analyzed: 03/12/18 11:07									
Fluorobenzene	105574	5.8	115822	5.8	91	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	508640	8.82	541028	8.82	94	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	251170	11.8	260151	11.8	97	50 - 200	0.0000	+/-0.17	
<b>KC-CB-01 (25-30') (18C0104-01)</b> Lab File ID: V4781875.D Analyzed: 03/12/18 14:17									
Fluorobenzene	104629	5.81	115822	5.8	90	50 - 200	0.0100	+/-0.17	
Chlorobenzene-d5	331206	8.82	541028	8.82	61	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	65650	11.8	260151	11.8	25	50 - 200	0.0000	+/-0.17	*
<b>KC-CB-02 (25-30') (18C0104-02)</b> Lab File ID: V4781876.D Analyzed: 03/12/18 14:49									
Fluorobenzene	106287	5.81	115822	5.8	92	50 - 200	0.0100	+/-0.17	
Chlorobenzene-d5	286110	8.82	541028	8.82	53	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	42335	11.8	260151	11.8	16	50 - 200	0.0000	+/-0.17	*

# HOLDING TIME SUMMARY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KC-CB-01 (25-30')	03/01/18 09:00	03/05/18 15:15	03/12/18 07:30	10.94	14.00	03/12/18 14:17	11.22	14.00	
KC-CB-02 (25-30')	03/01/18 10:00	03/05/18 15:15	03/12/18 07:30	10.90	14.00	03/12/18 14:49	11.20	14.00	

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investis

Matrix: Soil

Instrument: GCMS-VOA4

Analyte	LOD	LOQ	Units
1,1,1,2-Tetrachloroethane	0.0025	0.0050	mg/kg
1,1,1-Trichloroethane	0.0025	0.0050	mg/kg
1,1,2,2-Tetrachloroethane	0.0025	0.0050	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane (Fr	0.0025	0.0050	mg/kg
1,1,2-Trichloroethane	0.0025	0.0050	mg/kg
1,1-Dichloroethane	0.0025	0.0050	mg/kg
1,1-Dichloroethylene	0.0025	0.0050	mg/kg
1,2,3-Trichlorobenzene	0.0025	0.0050	mg/kg
1,2,3-Trichloropropane	0.0025	0.0050	mg/kg
1,2,4-Trichlorobenzene	0.0025	0.0050	mg/kg
1,2,4-Trimethylbenzene	0.0025	0.0050	mg/kg
1,2-Dibromo-3-chloropropane	0.0025	0.0050	mg/kg
1,2-Dibromoethane	0.0025	0.0050	mg/kg
1,2-Dichlorobenzene	0.0025	0.0050	mg/kg
1,2-Dichloroethane	0.0025	0.0050	mg/kg
1,2-Dichloropropane	0.0025	0.0050	mg/kg
1,3,5-Trimethylbenzene	0.0025	0.0050	mg/kg
1,3-Dichlorobenzene	0.0025	0.0050	mg/kg
1,4-Dichlorobenzene	0.0025	0.0050	mg/kg
1,4-Dioxane	0.050	0.10	mg/kg
2-Butanone	0.0025	0.0050	mg/kg
2-Hexanone	0.0025	0.0050	mg/kg
4-Methyl-2-pentanone	0.0025	0.0050	mg/kg
Acetone	0.0050	0.010	mg/kg
Acrolein	0.0050	0.010	mg/kg
Acrylonitrile	0.0025	0.0050	mg/kg
Benzene	0.0025	0.0050	mg/kg
Bromochloromethane	0.0025	0.0050	mg/kg
Bromodichloromethane	0.0025	0.0050	mg/kg
Bromoform	0.0025	0.0050	mg/kg
Bromomethane	0.0025	0.0050	mg/kg
Carbon disulfide	0.0025	0.0050	mg/kg
Carbon tetrachloride	0.0025	0.0050	mg/kg
Chlorobenzene	0.0025	0.0050	mg/kg
Chloroethane	0.0025	0.0050	mg/kg
Chloroform	0.0025	0.0050	mg/kg
Chloromethane	0.0025	0.0050	mg/kg

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investis

Matrix: Soil

Instrument: GCMS-VOA4

Analyte	LOD	LOQ	Units
cis-1,2-Dichloroethylene	0.0025	0.0050	mg/kg
cis-1,3-Dichloropropylene	0.0025	0.0050	mg/kg
Cyclohexane	0.0025	0.0050	mg/kg
Dibromochloromethane	0.0025	0.0050	mg/kg
Dibromomethane	0.0025	0.0050	mg/kg
Dichlorodifluoromethane	0.0025	0.0050	mg/kg
Ethyl Benzene	0.0025	0.0050	mg/kg
Hexachlorobutadiene	0.0025	0.0050	mg/kg
Isopropylbenzene	0.0025	0.0050	mg/kg
Methyl acetate	0.0025	0.0050	mg/kg
Methyl tert-butyl ether (MTBE)	0.0025	0.0050	mg/kg
Methylcyclohexane	0.0025	0.0050	mg/kg
Methylene chloride	0.0050	0.010	mg/kg
n-Butylbenzene	0.0025	0.0050	mg/kg
n-Propylbenzene	0.0025	0.0050	mg/kg
o-Xylene	0.0025	0.0050	mg/kg
p- & m- Xylenes	0.0050	0.010	mg/kg
p-Isopropyltoluene	0.0025	0.0050	mg/kg
sec-Butylbenzene	0.0025	0.0050	mg/kg
Styrene	0.0025	0.0050	mg/kg
tert-Butyl alcohol (TBA)	0.0025	0.0050	mg/kg
tert-Butylbenzene	0.0025	0.0050	mg/kg
Tetrachloroethylene	0.0025	0.0050	mg/kg
Toluene	0.0025	0.0050	mg/kg
trans-1,2-Dichloroethylene	0.0025	0.0050	mg/kg
trans-1,3-Dichloropropylene	0.0025	0.0050	mg/kg
trans-1,4-dichloro-2-butene	0.0025	0.0050	mg/kg
Trichloroethylene	0.0025	0.0050	mg/kg
Trichlorofluoromethane	0.0025	0.0050	mg/kg
Vinyl Chloride	0.0025	0.0050	mg/kg
Xylenes, Total	0.0075	0.015	mg/kg

# VOA Sample Data

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: 18C0104-01 File ID: V4781875.D  
 Sampled: 03/01/18 09:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:17  
 Solids: 77.06 Preparation: EPA 5035A Initial/Final: 6.56 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0049	U
71-55-6	1,1,1-Trichloroethane	1	0.0049	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0049	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.0049	U
79-00-5	1,1,2-Trichloroethane	1	0.0049	U
75-34-3	1,1-Dichloroethane	1	0.0049	U
75-35-4	1,1-Dichloroethylene	1	0.0049	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0049	U
96-18-4	1,2,3-Trichloropropane	1	0.0049	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0049	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0049	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.0049	U
106-93-4	1,2-Dibromoethane	1	0.0049	U
95-50-1	1,2-Dichlorobenzene	1	0.0049	U
107-06-2	1,2-Dichloroethane	1	0.0049	U
78-87-5	1,2-Dichloropropane	1	0.0049	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0049	U
541-73-1	1,3-Dichlorobenzene	1	0.0049	U
106-46-7	1,4-Dichlorobenzene	1	0.0049	U
123-91-1	1,4-Dioxane	1	0.099	U
78-93-3	2-Butanone	1	0.0049	U
591-78-6	2-Hexanone	1	0.0049	U
108-10-1	4-Methyl-2-pentanone	1	0.0049	U
67-64-1	Acetone	1	0.010	
107-02-8	Acrolein	1	0.0099	U
107-13-1	Acrylonitrile	1	0.0049	U
71-43-2	Benzene	1	0.0049	U
74-97-5	Bromochloromethane	1	0.0049	U
75-27-4	Bromodichloromethane	1	0.0049	U
75-25-2	Bromoform	1	0.0049	U
74-83-9	Bromomethane	1	0.0049	U
75-15-0	Carbon disulfide	1	0.0049	U
56-23-5	Carbon tetrachloride	1	0.0049	U
108-90-7	Chlorobenzene	1	0.0049	U
75-00-3	Chloroethane	1	0.0049	U
67-66-3	Chloroform	1	0.0049	U
74-87-3	Chloromethane	1	0.0049	U
156-59-2	cis-1,2-Dichloroethylene	1	0.0049	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.0049	U
110-82-7	Cyclohexane	1	0.0049	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
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 Sampled: 03/01/18 09:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:17  
 Solids: 77.06 Preparation: EPA 5035A Initial/Final: 6.56 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
124-48-1	Dibromochloromethane	1	0.0049	U
74-95-3	Dibromomethane	1	0.0049	U
75-71-8	Dichlorodifluoromethane	1	0.0049	U
100-41-4	Ethyl Benzene	1	0.0049	U
87-68-3	Hexachlorobutadiene	1	0.0049	U
98-82-8	Isopropylbenzene	1	0.0049	U
79-20-9	Methyl acetate	1	0.0049	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.0049	U
108-87-2	Methylcyclohexane	1	0.0049	U
75-09-2	Methylene chloride	1	0.0073	JB
104-51-8	n-Butylbenzene	1	0.0049	U
103-65-1	n-Propylbenzene	1	0.0049	U
95-47-6	o-Xylene	1	0.0049	U
179601-23-1	p- & m- Xylenes	1	0.0099	U
99-87-6	p-Isopropyltoluene	1	0.0049	U
135-98-8	sec-Butylbenzene	1	0.0049	U
100-42-5	Styrene	1	0.0049	U
75-65-0	tert-Butyl alcohol (TBA)	1	0.0099	U
98-06-6	tert-Butylbenzene	1	0.0049	U
127-18-4	Tetrachloroethylene	1	0.0049	U
108-88-3	Toluene	1	0.0049	U
156-60-5	trans-1,2-Dichloroethylene	1	0.0049	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.0049	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.0049	U
79-01-6	Trichloroethylene	1	0.0049	U
75-69-4	Trichlorofluoromethane	1	0.0049	U
75-01-4	Vinyl Chloride	1	0.0049	U
1330-20-7	Xylenes, Total	1	0.015	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	45.8	91.7	77 - 125	
Toluene-d8	50.0	62.4	125	85 - 120	*
p-Bromofluorobenzene	50.0	65.6	131	76 - 130	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	104629	5.81	115822	5.8	
Chlorobenzene-d5	331206	8.82	541028	8.82	
1,2-Dichlorobenzene-d4	65650	11.8	260151	11.8	*

\* Values outside of QC limits



Data File : C:\HPCHEM\1\DATA\V4031218\V4781875.D Vial: 14  
 Acq On : 12 Mar 2018 2:17 pm Operator: SS  
 Sample : 18C0104-01 Inst : GCMS-VOA4  
 Misc : QBV4031218A COMP 6.56G B RE Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Mar 12 14:45 2018 Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.81	70	104629	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.82	117	331206	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(ISTD)	11.80	152	65650	50.00	ppb	0.00

System Monitoring Compounds

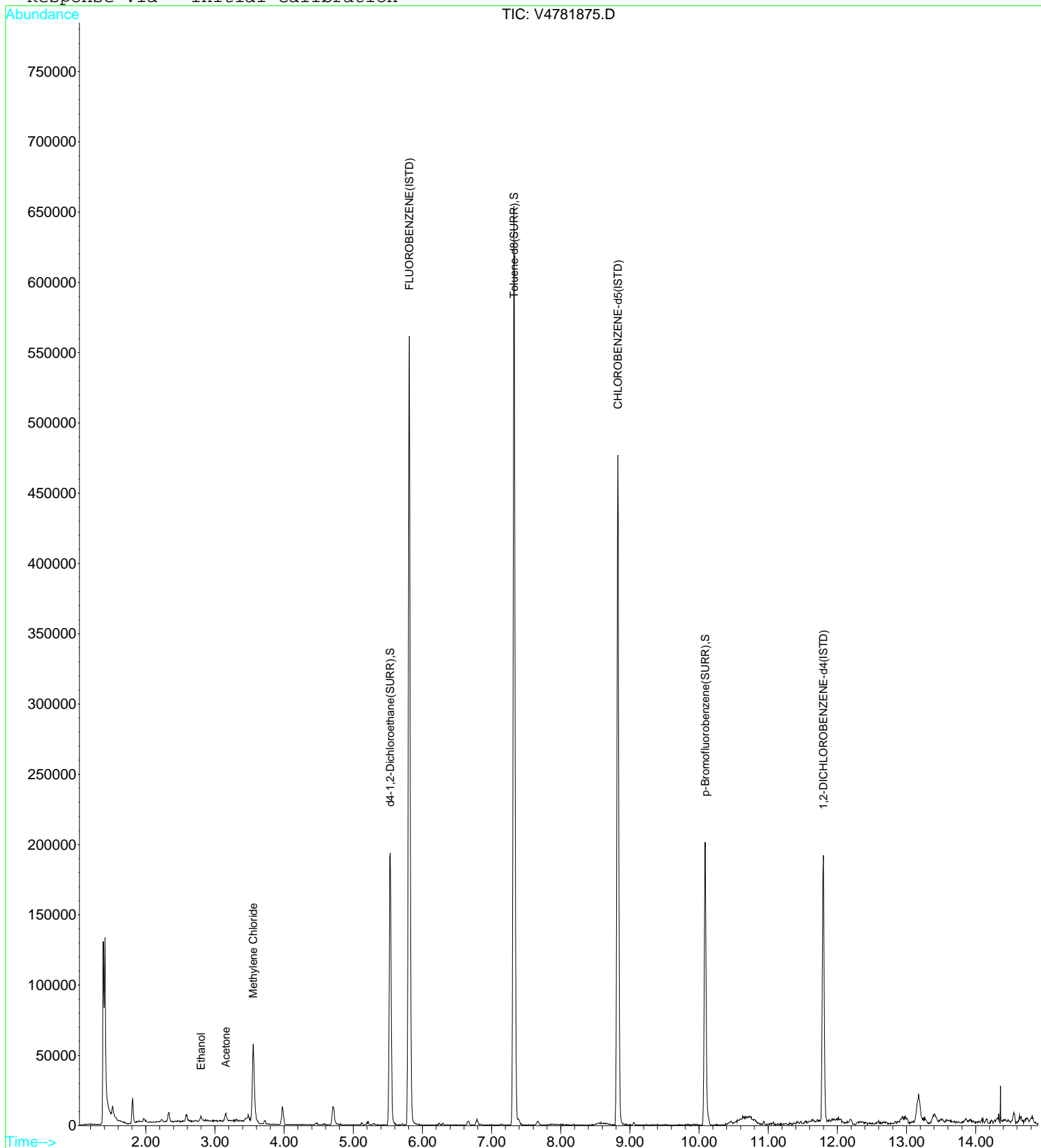
31) d4-1,2-Dichloroethane(SURR)	5.53	65	106704	45.83	ppb	0.00
Spiked Amount	50.000	Range	67 - 128	Recovery	=	91.66%
47) Toluene-d8(SURR)	7.32	98	448207	62.42	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	124.84%#
66) p-Bromofluorobenzene(SURR)	10.09	174	74967	65.56	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	131.12%

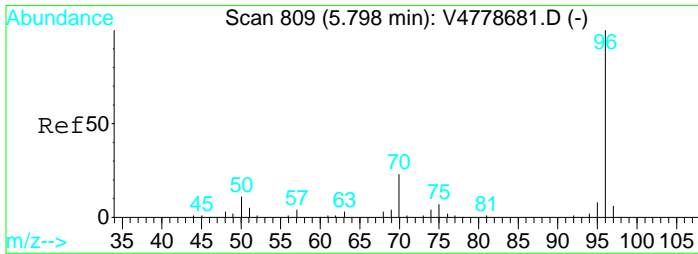
Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
8) Ethanol	2.80	45	3555	132.93	ppb	97
18) Methylene Chloride	3.55	49	26202	7.33	ppb	99
20) Acetone	3.16	43	8069	10.11	ppb	100

Data File : C:\HPCHEM\1\DATA\V4031218\V4781875.D Vial: 14  
 Acq On : 12 Mar 2018 2:17 pm Operator: SS  
 Sample : 18C0104-01 Inst : GCMS-VOA4  
 Misc : QBV4031218A COMP 6.56G B RE Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Mar 12 14:45 2018 Quant Results File: V4C00339.RES

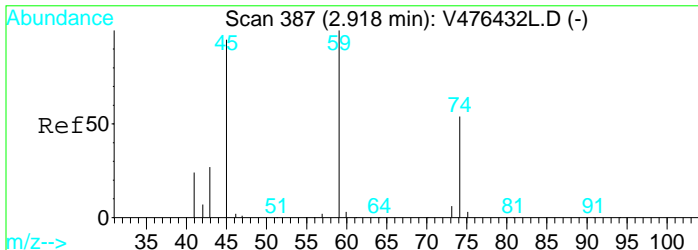
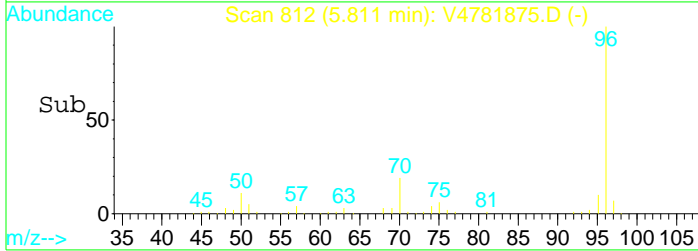
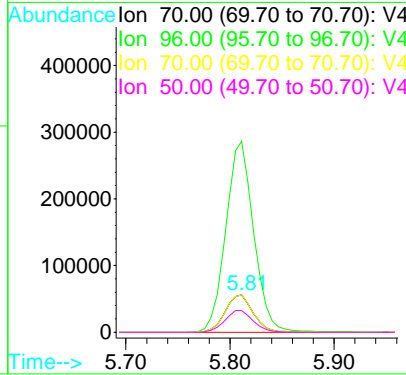
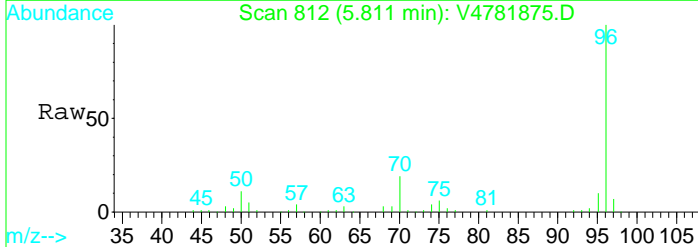
Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration





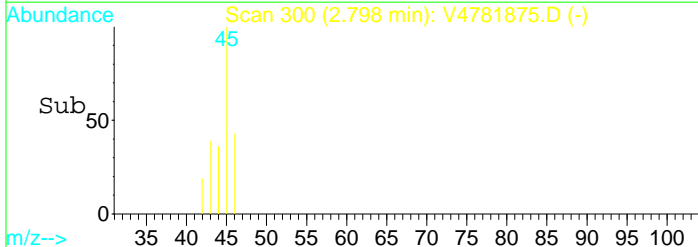
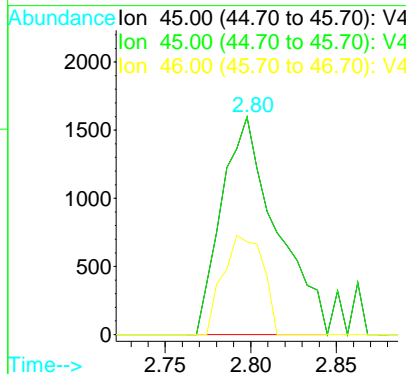
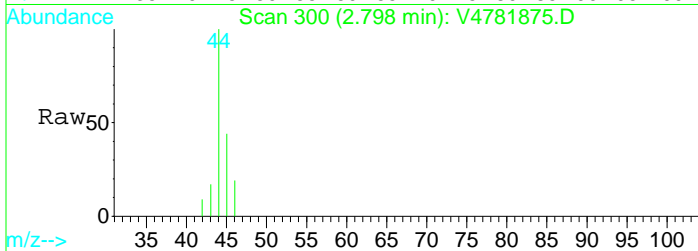
#1  
 FLUOROBENZENE (ISTD)  
 Concen: 50.00 ppb  
 RT: 5.81 min Scan# 812  
 Delta R.T. -0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

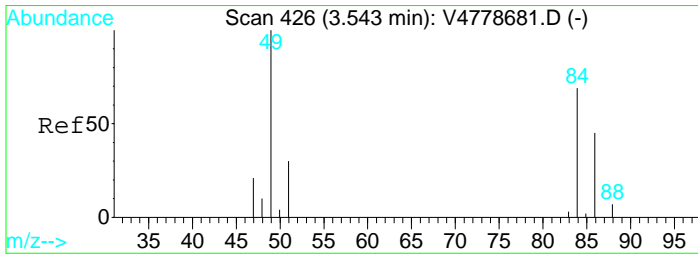
Tgt Ion	Resp	Lower	Upper
70	104629		
96	510.7	0.0	0.0#
70	100.0	80.0	120.0
50	0.0	48.7	73.1#



#8  
 Ethanol  
 Concen: 132.93 ppb  
 RT: 2.80 min Scan# 300  
 Delta R.T. 0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

Tgt Ion	Resp	Lower	Upper
45	3555		
45	100.0	70.0	130.0
46	33.3	0.0	80.2

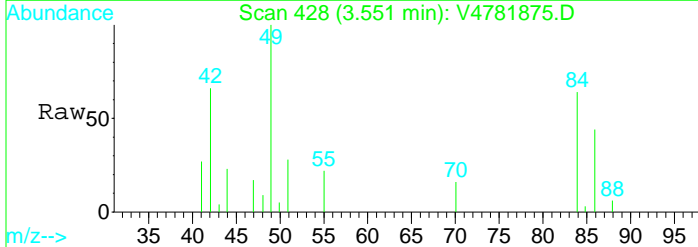




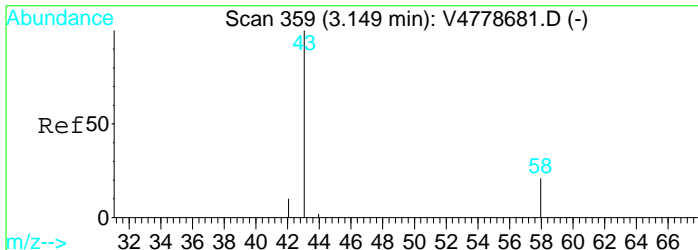
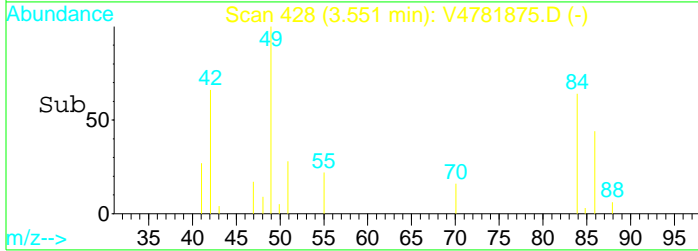
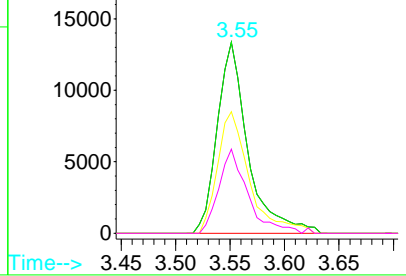
#18  
 Methylene Chloride  
 Concen: 7.33 ppb  
 RT: 3.55 min Scan# 428  
 Delta R.T. -0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

Tgt Ion: 49 Resp: 26202

Ion	Ratio	Lower	Upper
49	100		
49	100.0	80.0	120.0
84	66.0	52.0	78.0
86	41.4	33.5	50.3



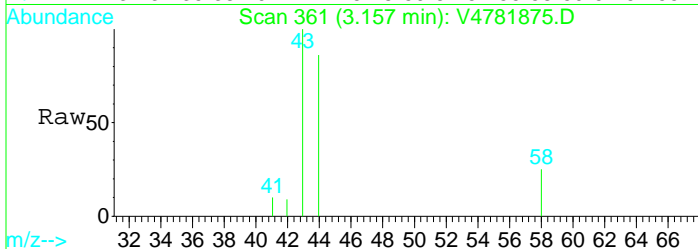
Abundance Ion 48.95 (48.65 to 49.65): V4  
 Ion 48.95 (48.65 to 49.65): V4  
 Ion 83.95 (83.65 to 84.65): V4  
 Ion 85.90 (85.60 to 86.60): V4



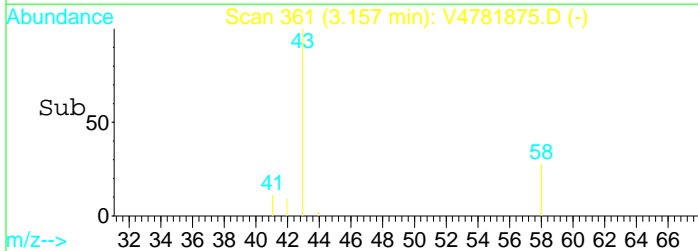
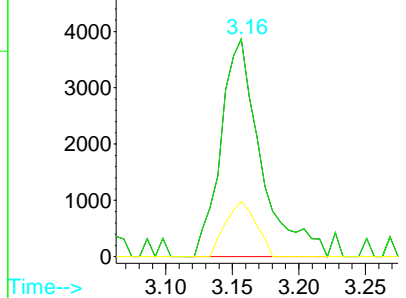
#20  
 Acetone  
 Concen: 10.11 ppb  
 RT: 3.16 min Scan# 361  
 Delta R.T. 0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

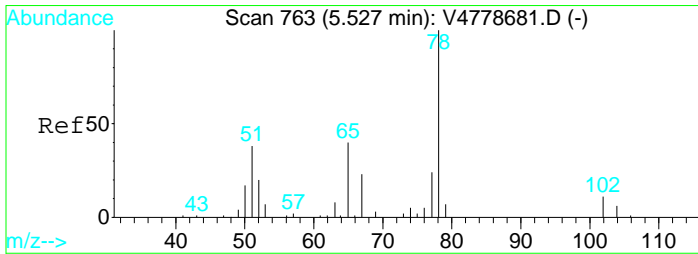
Tgt Ion: 43 Resp: 8069

Ion	Ratio	Lower	Upper
43	100		
43	100.0	0.0	200.0
58	25.3	0.0	49.2



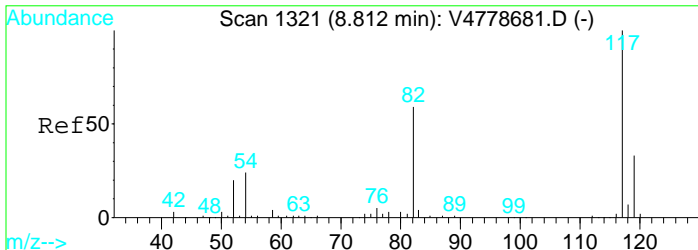
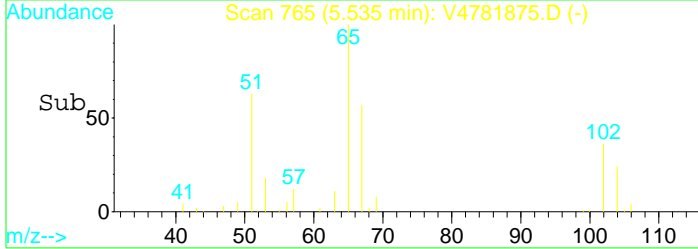
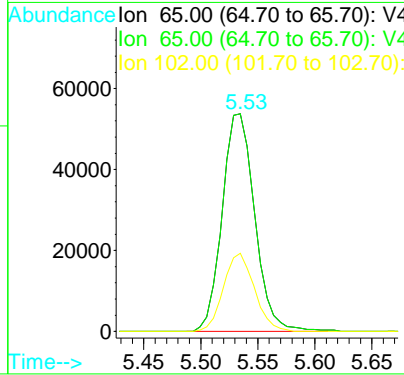
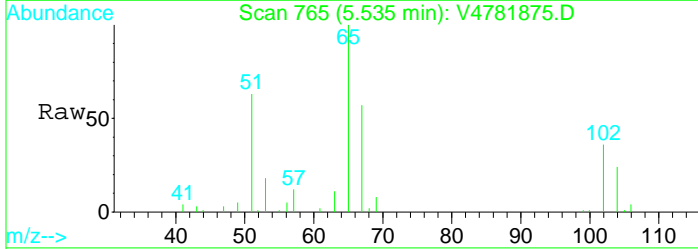
Abundance Ion 43.00 (42.70 to 43.70): V4  
 Ion 43.00 (42.70 to 43.70): V4  
 Ion 58.00 (57.70 to 58.70): V4





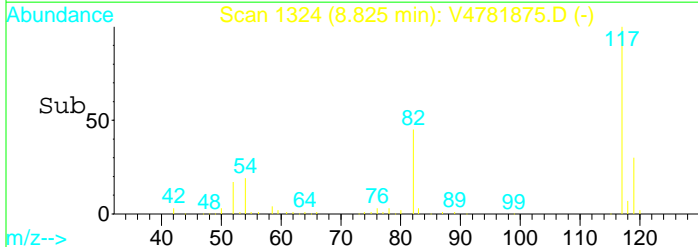
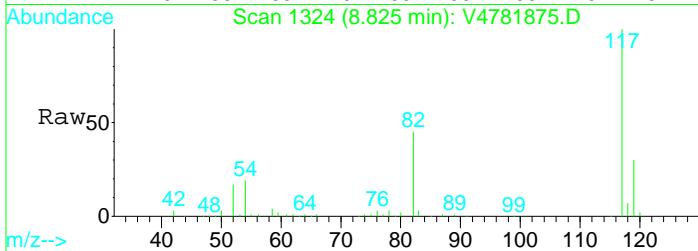
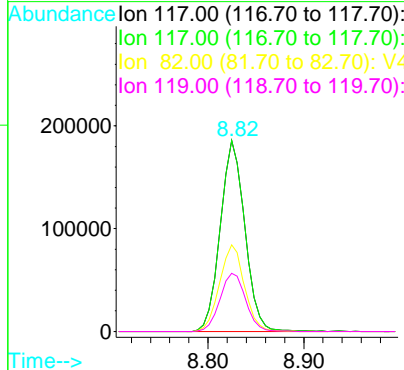
#31  
 d4-1,2-Dichloroethane (SURR)  
 Concen: N.D. ppb  
 RT: 5.53 min Scan# 765  
 Delta R.T. -0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

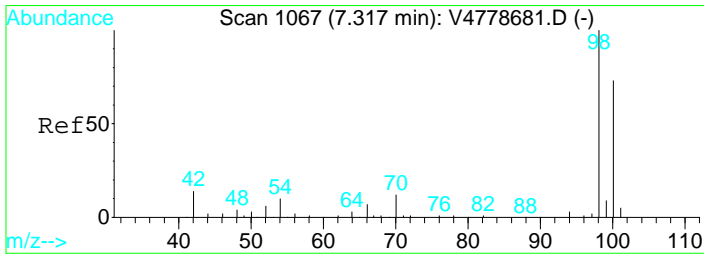
Tgt Ion	Resp	Lower	Upper
65	106704		
65	100		
65	100.0	80.0	120.0
102	34.1	28.0	42.0



#35  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 50.00 ppb  
 RT: 8.82 min Scan# 1324  
 Delta R.T. -0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

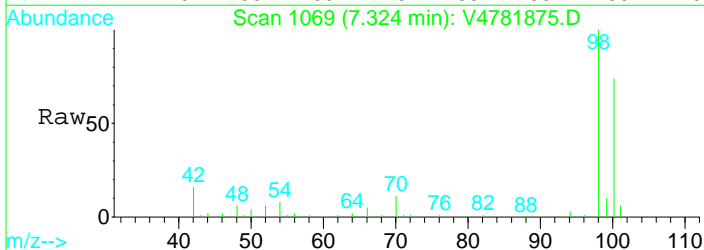
Tgt Ion	Resp	Lower	Upper
117	331206		
117	100		
117	100.0	80.0	120.0
82	0.0	0.0	0.0
119	31.9	25.7	38.5



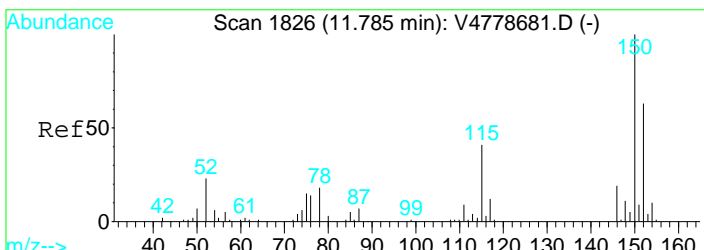
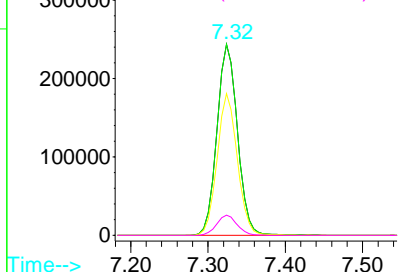
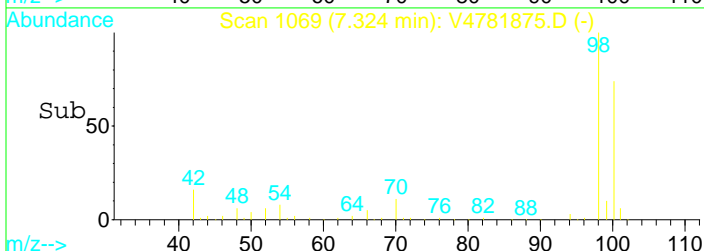


#47  
 Toluene-d8 (SURR)  
 Concen: Below ppb  
 RT: 7.32 min Scan# 1069  
 Delta R.T. -0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

Tgt Ion	Resp	Lower	Upper
98	448207		
98	100		
98	100.0	80.0	120.0
100	72.8	57.0	85.6
70	0.0	0.0	0.0

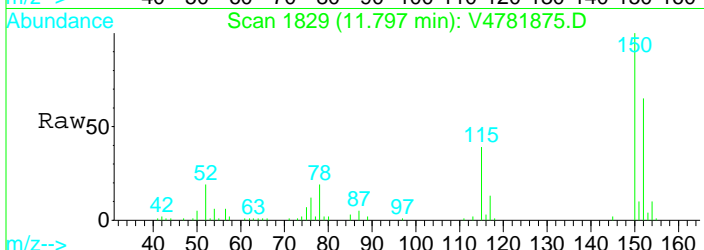


Abundance Ion 98.00 (97.70 to 98.70): V4  
 Ion 98.00 (97.70 to 98.70): V4  
 Ion 100.00 (99.70 to 100.70): V4  
 Ion 70.00 (69.70 to 70.70): V4

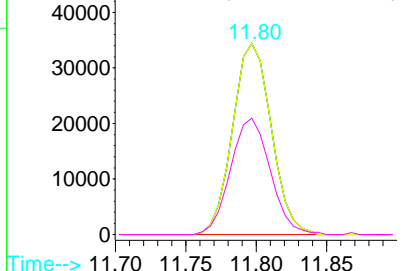
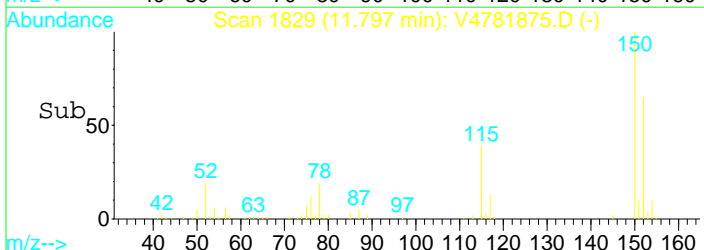


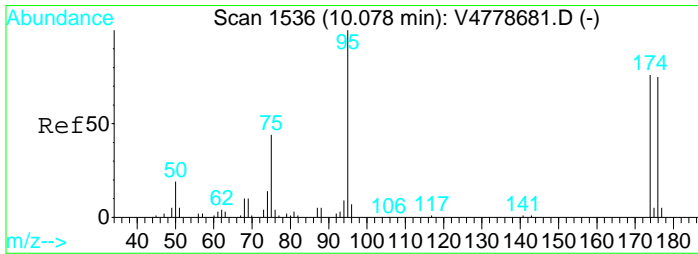
#64  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 50.00 ppb  
 RT: 11.80 min Scan# 1829  
 Delta R.T. -0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm

Tgt Ion	Resp	Lower	Upper
152	65650		
152	100		
152	100.0	80.0	120.0
152	100.0	80.0	120.0
115	0.0	0.0	0.0

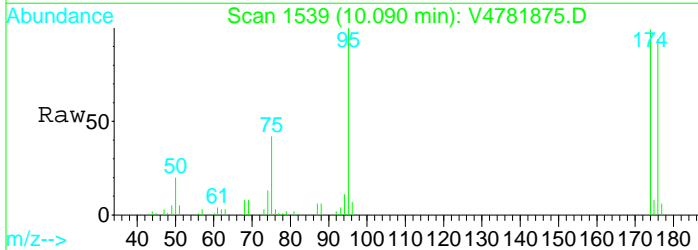


Abundance Ion 152.00 (151.70 to 152.70):  
 Ion 152.00 (151.70 to 152.70):  
 Ion 152.00 (151.70 to 152.70):  
 Ion 115.00 (114.70 to 115.70):

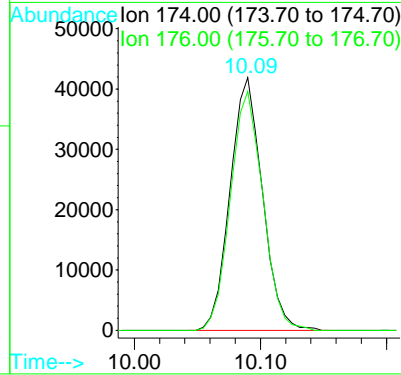
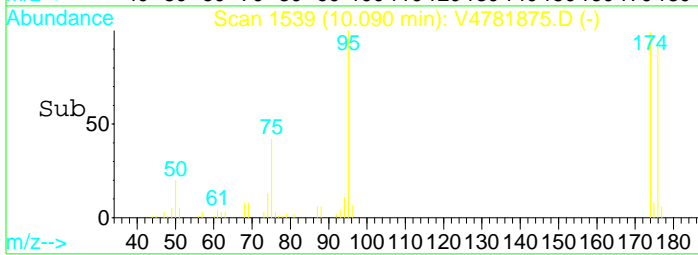




#66  
 p-Bromofluorobenzene (SURR)  
 Concen: N.D. ppb  
 RT: 10.09 min Scan# 1539  
 Delta R.T. -0.00 min  
 Lab File: V4781875.D  
 Acq: 12 Mar 2018 2:17 pm



Tgt Ion: 174 Resp: 74967  
 Ion Ratio Lower Upper  
 174 100  
 176 94.5 78.9 118.3



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: 18C0104-02 File ID: V4781876.D  
 Sampled: 03/01/18 10:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:49  
 Solids: 75.23 Preparation: EPA 5035A Initial/Final: 6.66 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0050	U
71-55-6	1,1,1-Trichloroethane	1	0.0050	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0050	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.0050	U
79-00-5	1,1,2-Trichloroethane	1	0.0050	U
75-34-3	1,1-Dichloroethane	1	0.0050	U
75-35-4	1,1-Dichloroethylene	1	0.0050	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0050	U
96-18-4	1,2,3-Trichloropropane	1	0.0050	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0050	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0050	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0050	U
95-50-1	1,2-Dichlorobenzene	1	0.0050	U
107-06-2	1,2-Dichloroethane	1	0.0050	U
78-87-5	1,2-Dichloropropane	1	0.0050	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0050	U
541-73-1	1,3-Dichlorobenzene	1	0.0050	U
106-46-7	1,4-Dichlorobenzene	1	0.0050	U
123-91-1	1,4-Dioxane	1	0.10	U
78-93-3	2-Butanone	1	0.0050	U
591-78-6	2-Hexanone	1	0.0050	U
108-10-1	4-Methyl-2-pentanone	1	0.0050	U
67-64-1	Acetone	1	0.0061	J
107-02-8	Acrolein	1	0.010	U
107-13-1	Acrylonitrile	1	0.0050	U
71-43-2	Benzene	1	0.0050	U
74-97-5	Bromochloromethane	1	0.0050	U
75-27-4	Bromodichloromethane	1	0.0050	U
75-25-2	Bromoform	1	0.0050	U
74-83-9	Bromomethane	1	0.0050	U
75-15-0	Carbon disulfide	1	0.0050	U
56-23-5	Carbon tetrachloride	1	0.0050	U
108-90-7	Chlorobenzene	1	0.0050	U
75-00-3	Chloroethane	1	0.0050	U
67-66-3	Chloroform	1	0.0050	U
74-87-3	Chloromethane	1	0.0050	U
156-59-2	cis-1,2-Dichloroethylene	1	0.0050	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.0050	U
110-82-7	Cyclohexane	1	0.0050	U



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: 18C0104-02 File ID: V4781876.D  
 Sampled: 03/01/18 10:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:49  
 Solids: 75.23 Preparation: EPA 5035A Initial/Final: 6.66 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
124-48-1	Dibromochloromethane	1	0.0050	U
74-95-3	Dibromomethane	1	0.0050	U
75-71-8	Dichlorodifluoromethane	1	0.0050	U
100-41-4	Ethyl Benzene	1	0.0050	U
87-68-3	Hexachlorobutadiene	1	0.0050	U
98-82-8	Isopropylbenzene	1	0.0050	U
79-20-9	Methyl acetate	1	0.0050	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.0050	U
108-87-2	Methylcyclohexane	1	0.0050	U
75-09-2	Methylene chloride	1	0.010	U
104-51-8	n-Butylbenzene	1	0.0050	U
103-65-1	n-Propylbenzene	1	0.0050	U
95-47-6	o-Xylene	1	0.0050	U
179601-23-1	p- & m- Xylenes	1	0.010	U
99-87-6	p-Isopropyltoluene	1	0.0050	U
135-98-8	sec-Butylbenzene	1	0.0050	U
100-42-5	Styrene	1	0.0050	U
75-65-0	tert-Butyl alcohol (TBA)	1	0.010	U
98-06-6	tert-Butylbenzene	1	0.0050	U
127-18-4	Tetrachloroethylene	1	0.0050	U
108-88-3	Toluene	1	0.0050	U
156-60-5	trans-1,2-Dichloroethylene	1	0.0050	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.0050	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.0050	U
79-01-6	Trichloroethylene	1	0.0050	U
75-69-4	Trichlorofluoromethane	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0050	U
1330-20-7	Xylenes, Total	1	0.015	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	45.4	90.7	77 - 125	
Toluene-d8	50.0	68.8	138	85 - 120	*
p-Bromofluorobenzene	50.0	73.4	147	76 - 130	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	106287	5.81	115822	5.8	
Chlorobenzene-d5	286110	8.82	541028	8.82	
1,2-Dichlorobenzene-d4	42335	11.8	260151	11.8	*

\* Values outside of QC limits

Data File : C:\HPCHEM\1\DATA\V4031218\V4781876.D Vial: 15  
 Acq On : 12 Mar 2018 2:49 pm Operator: SS  
 Sample : 18C0104-02 Inst : GCMS-VOA4  
 Misc : QBV4031218A COMP 6.66G B RE Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Mar 12 15:16 2018 Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.81	70	106287	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.82	117	286110	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(ISTD)	11.80	152	42335	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.53	65	107277	45.36	ppb	0.00
Spiked Amount	50.000	Range	67 - 128	Recovery	=	90.72%
47) Toluene-d8(SURR)	7.32	98	426646	68.78	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	137.56%#
66) p-Bromofluorobenzene(SURR)	10.09	174	54089	73.35	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	146.70%

Target Compounds

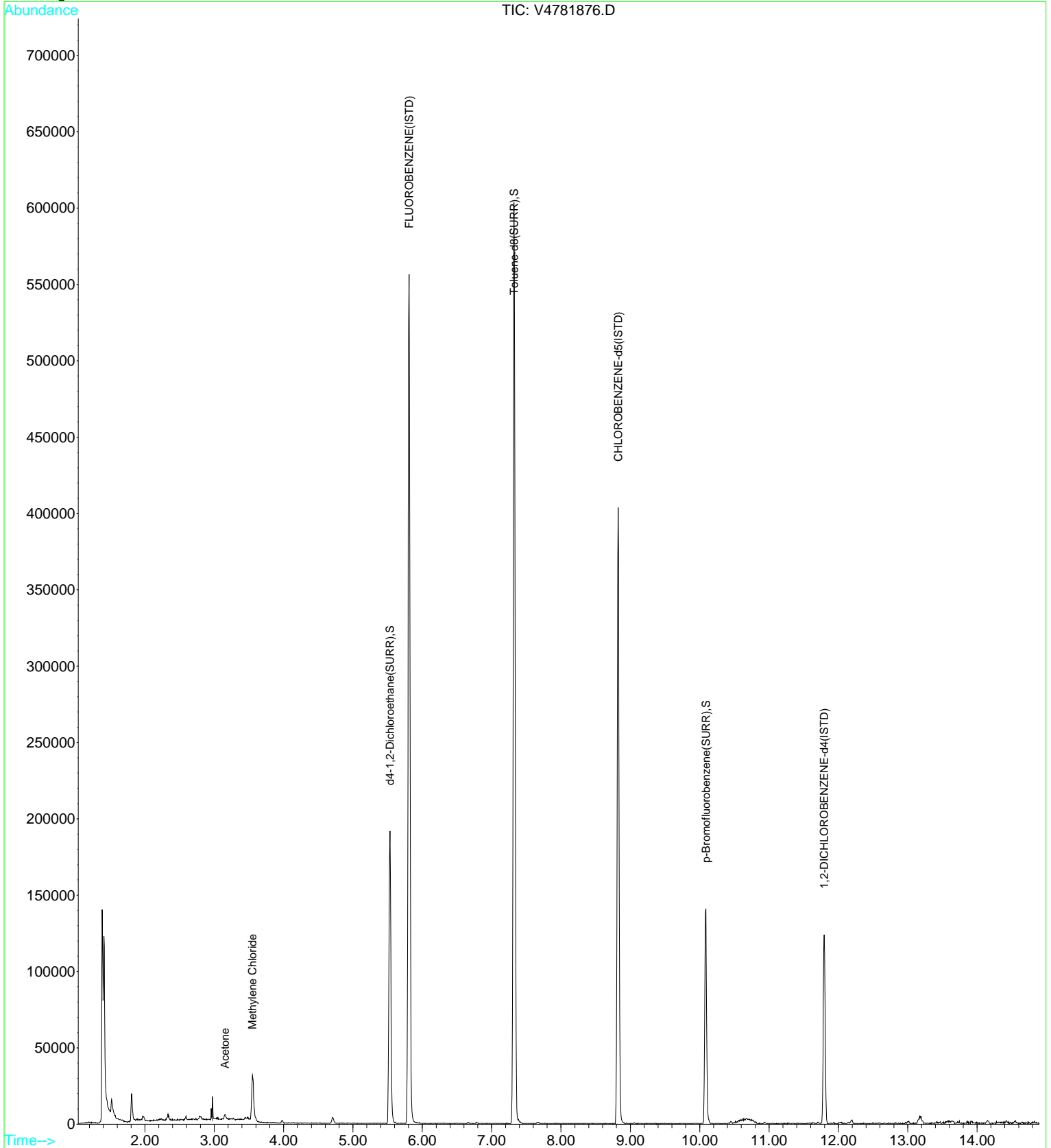
	R.T.	QIon	Response	Conc	Units	Qvalue
18) Methylene Chloride	3.55	49	16346	4.50	ppb	99
20) Acetone	3.16	43	4921	6.07	ppb	96

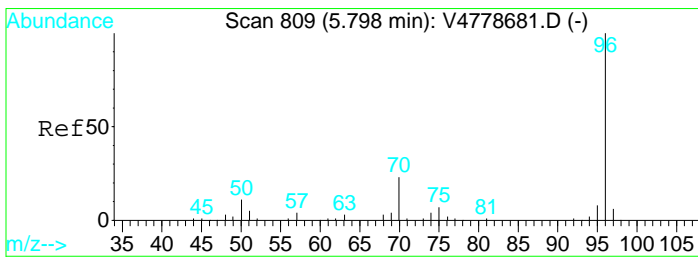
Data File : C:\HPCHEM\1\DATA\V4031218\V4781876.D  
Acq On : 12 Mar 2018 2:49 pm  
Sample : 18C0104-02  
Misc : QBV4031218A COMP 6.66G B RE  
MS Integration Params: rteint.p  
Quant Time: Mar 12 15:16 2018

Vial: 15  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00339.RES

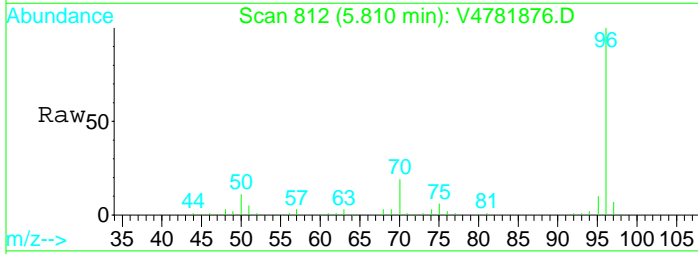
Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Thu Mar 01 15:31:22 2018  
Response via : Initial Calibration



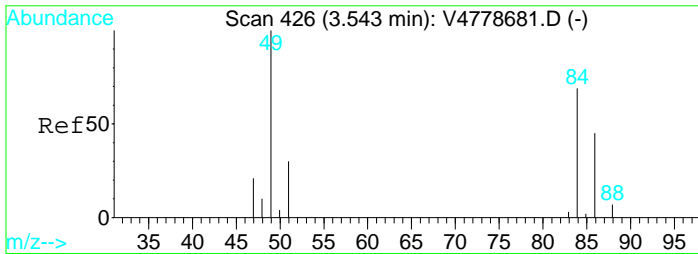
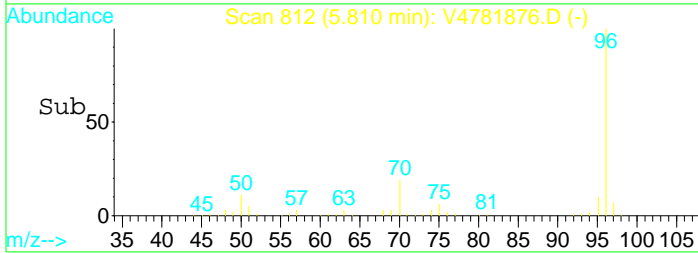
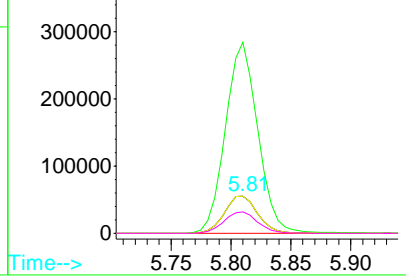


#1  
 FLUOROBENZENE (ISTD)  
 Concen: 50.00 ppb  
 RT: 5.81 min Scan# 812  
 Delta R.T. -0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

Tgt Ion	Resp	Lower	Upper
70	106287		
70	100		
96	504.3	0.0	0.0#
70	100.0	80.0	120.0
50	0.0	48.7	73.1#

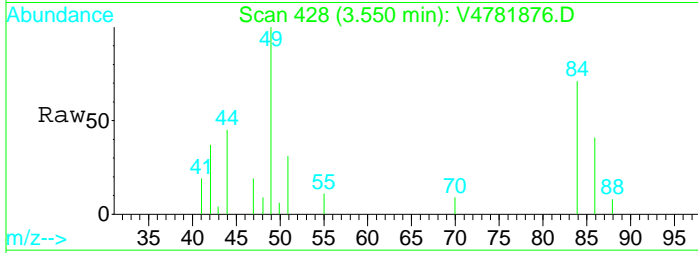


Abundance Ion 70.00 (69.70 to 70.70): V4  
 Ion 96.00 (95.70 to 96.70): V4  
 Ion 70.00 (69.70 to 70.70): V4  
 Ion 50.00 (49.70 to 50.70): V4

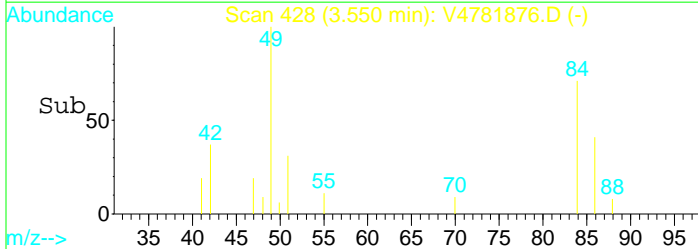
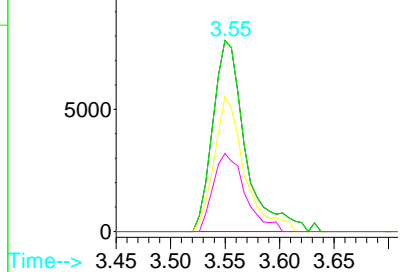


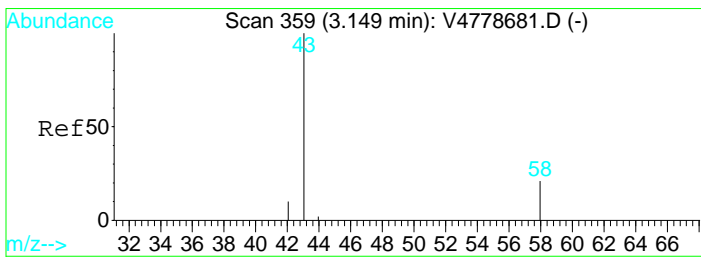
#18  
 Methylene Chloride  
 Concen: 4.50 ppb  
 RT: 3.55 min Scan# 428  
 Delta R.T. -0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

Tgt Ion	Resp	Lower	Upper
49	16346		
49	100		
49	100.0	80.0	120.0
84	65.5	52.0	78.0
86	39.8	33.5	50.3



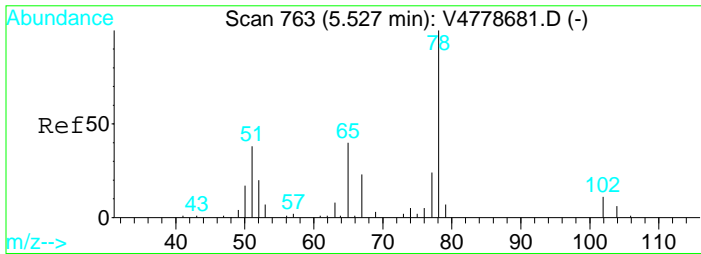
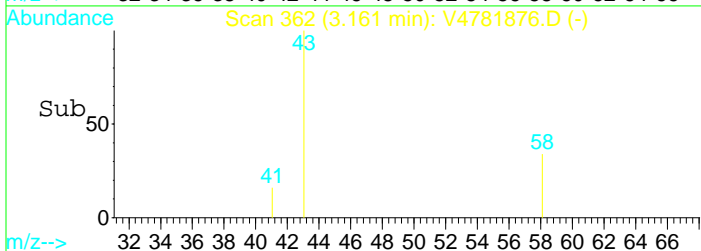
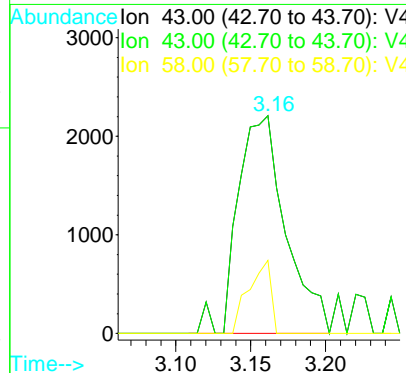
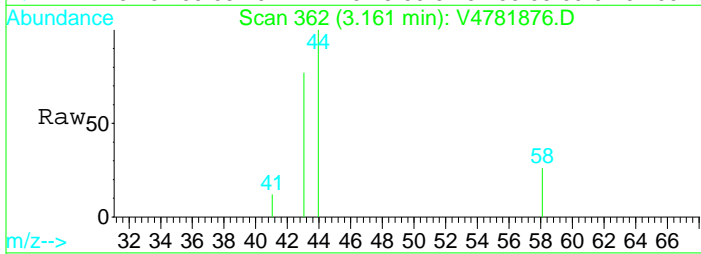
Abundance Ion 48.95 (48.65 to 49.65): V4  
 Ion 48.95 (48.65 to 49.65): V4  
 Ion 83.95 (83.65 to 84.65): V4  
 Ion 85.90 (85.60 to 86.60): V4





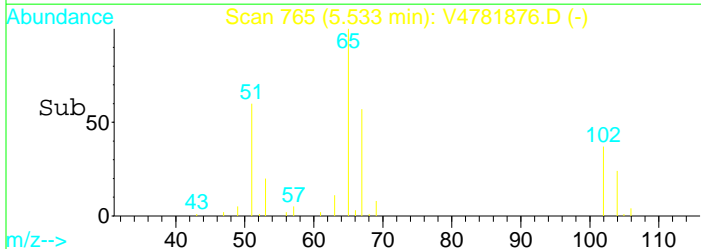
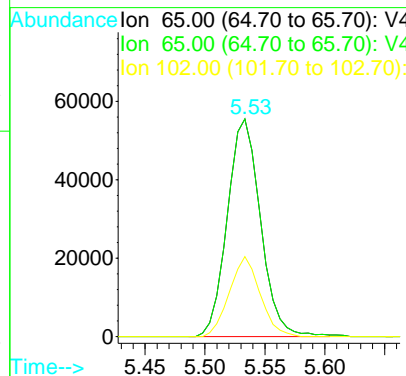
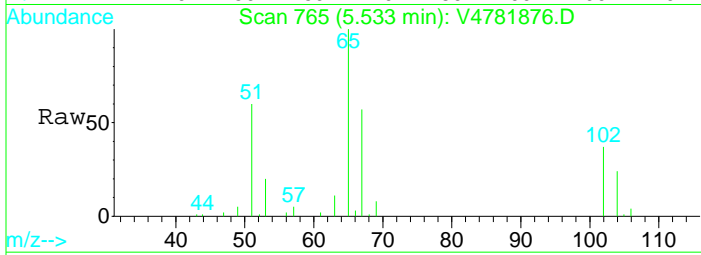
#20  
 Acetone  
 Concen: 6.07 ppb  
 RT: 3.16 min Scan# 362  
 Delta R.T. 0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

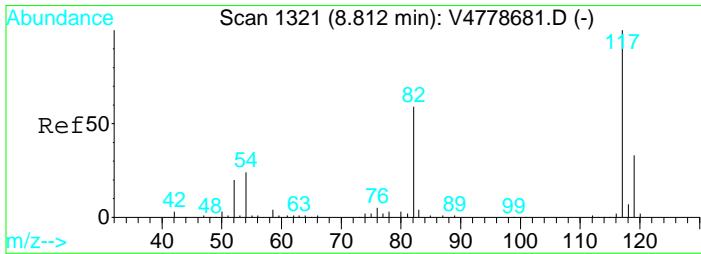
Tgt Ion	Resp	Lower	Upper
43	4921		
43	100		
43	100.0	0.0	200.0
58	33.6	0.0	49.2



#31  
 d4-1,2-Dichloroethane(SURR)  
 Concen: N.D. ppb  
 RT: 5.53 min Scan# 765  
 Delta R.T. -0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

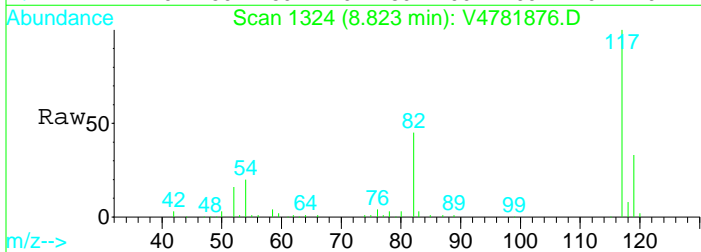
Tgt Ion	Resp	Lower	Upper
65	107277		
65	100		
65	100.0	80.0	120.0
102	34.0	28.0	42.0



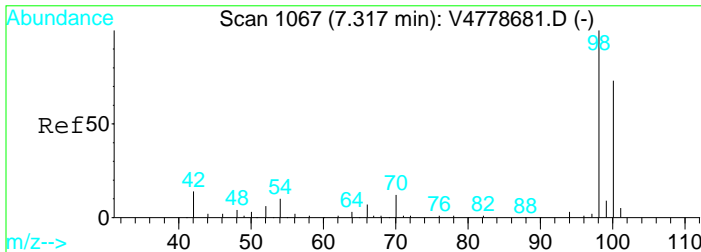
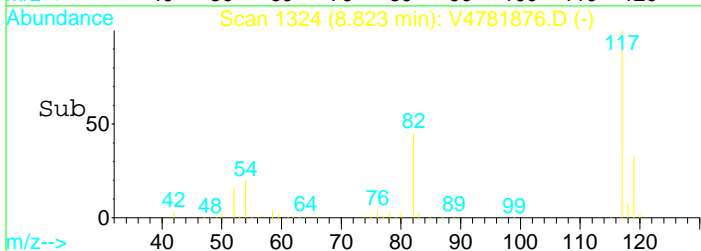
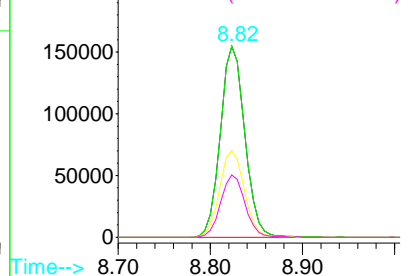


#35  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 50.00 ppb  
 RT: 8.82 min Scan# 1324  
 Delta R.T. -0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

Tgt Ion	Resp	Lower	Upper
117	286110		
117	100		
117	100.0	80.0	120.0
82	0.0	0.0	0.0
119	32.3	25.7	38.5

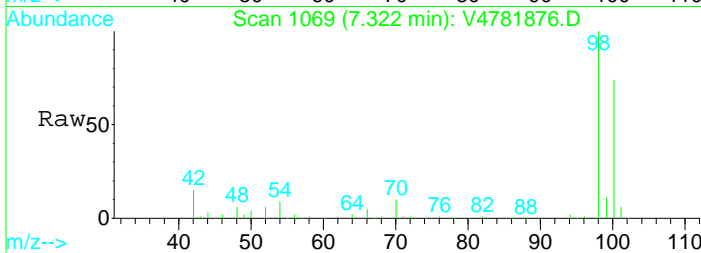


Abundance  
 Ion 117.00 (116.70 to 117.70):  
 Ion 117.00 (116.70 to 117.70):  
 Ion 82.00 (81.70 to 82.70): V4  
 Ion 119.00 (118.70 to 119.70):

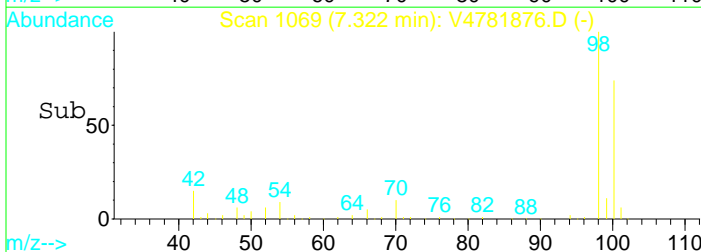
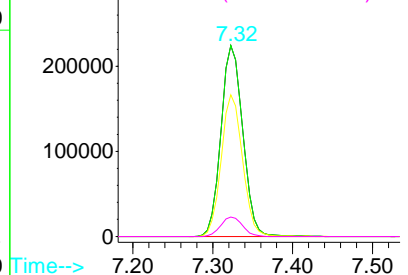


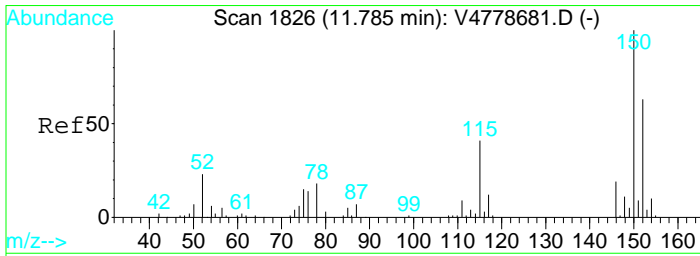
#47  
 Toluene-d8 (SURR)  
 Concen: N.D. ppb  
 RT: 7.32 min Scan# 1069  
 Delta R.T. -0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

Tgt Ion	Resp	Lower	Upper
98	426646		
98	100		
98	100.0	80.0	120.0
100	72.6	57.0	85.6
70	0.0	0.0	0.0



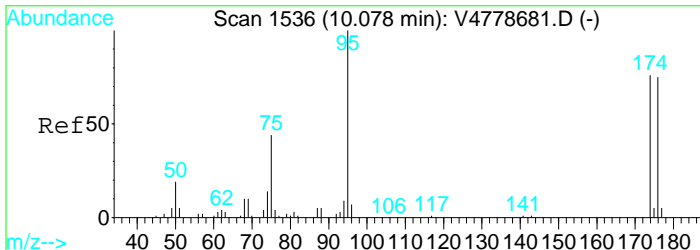
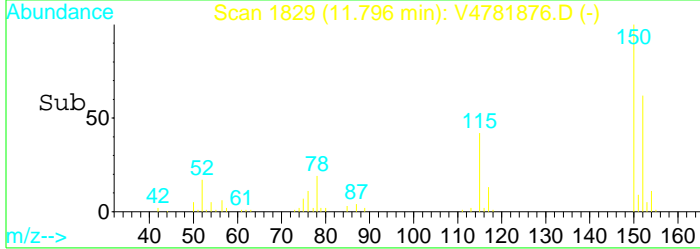
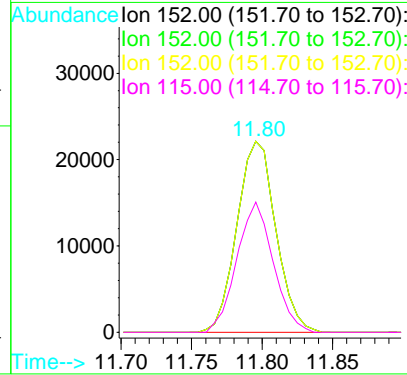
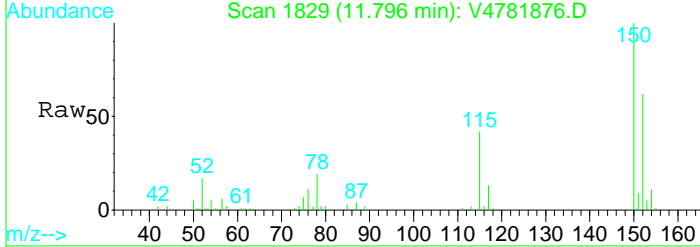
Abundance  
 Ion 98.00 (97.70 to 98.70): V4  
 Ion 98.00 (97.70 to 98.70): V4  
 Ion 100.00 (99.70 to 100.70): V4  
 Ion 70.00 (69.70 to 70.70): V4





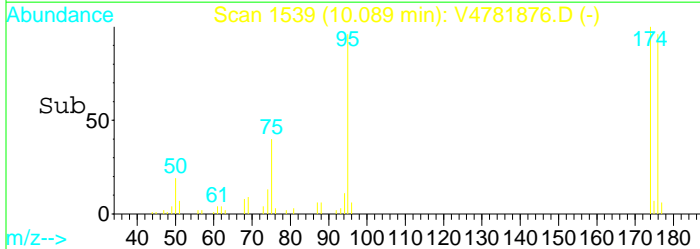
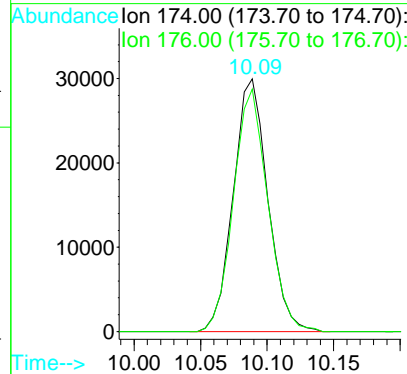
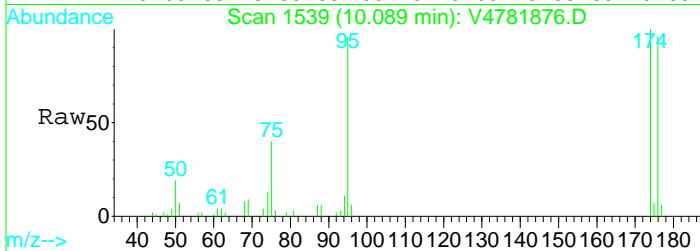
#64  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 50.00 ppb  
 RT: 11.80 min Scan# 1829  
 Delta R.T. -0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

Tgt Ion	Resp	Lower	Upper
152	42335		
152	100	80.0	120.0
152	100.0	80.0	120.0
115	0.0	0.0	0.0



#66  
 p-Bromofluorobenzene (SURR)  
 Concen: N.D. ppb  
 RT: 10.09 min Scan# 1539  
 Delta R.T. -0.01 min  
 Lab File: V4781876.D  
 Acq: 12 Mar 2018 2:49 pm

Tgt Ion	Resp	Lower	Upper
174	54089		
174	100		
176	95.9	78.9	118.3



# VOA Standards Data



FORM VI

INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigat

Calibration: YC80003

Instrument: GCMS-VOA4

Matrix: Soil

Calibration Date: 03/02/18 09:51

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	5	0.2009432	10	0.2075451	20	0.1916293	50	0.1968578	100	0.1933602	200	0.1919126
1,1,1-Trichloroethane	5	1.277608	10	1.314411	20	1.191514	50	1.199704	100	1.192327	200	1.15273
1,1,2,2-Tetrachloroethane	5	0.4623074	10	0.4937314	20	0.48568	50	0.4814559	100	0.4676968	200	0.4646878
1,1,2-Trichloro-1,2,2-trifluoroethane	5	0.8508325	10	0.7949812	20	0.8438163	50	0.8357552	100	0.8450545	200	0.8028416
1,1,2-Trichloroethane	5	0.1462359	10	0.1422728	20	0.1362215	50	0.1397773	100	0.1407119	200	0.1362959
1,1-Dichloroethane	5	1.745566	10	1.83036	20	1.701354	50	1.740993	100	1.675674	200	1.64513
1,1-Dichloroethylene	5	1.18688	10	1.190937	20	1.113622	50	1.154558	100	1.123786	200	1.087524
1,1-Dichloropropylene	5	1.306875	10	1.33232	20	1.229702	50	1.248366	100	1.214097	200	1.173172
1,2,3-Trichlorobenzene	5	0.5420781	10	0.5412825	20	0.5261523	50	0.5149861	100	0.5070065	200	0.4978011
1,2,3-Trichloropropane	5	0.1408237	10	0.1500041	20	0.1368895	50	0.1379594	100	0.1374248	200	0.1311159
1,2,4,5-Tetramethylbenzene	5	1.557978	10	1.442343	20	1.536547	50	1.507234	100	1.491844	200	1.4277
1,2,4-Trichlorobenzene	5	0.6615381	10	0.6623173	20	0.6157104	50	0.5990676	100	0.588671	200	0.5660182
1,2,4-Trimethylbenzene	5	1.60296	10	1.633199	20	1.517761	50	1.504854	100	1.479403	200	1.433082
1,2-Dibromo-3-chloropropane	5	4.757821E-02	10	6.244547E-02	20	0.0583084	50	6.358601E-02	100	0.0594494	200	5.815646E-02
1,2-Dibromoethane	5	0.1875902	10	0.2052542	20	0.1881962	50	0.1938341	100	0.1940362	200	0.1925992
1,2-Dichlorobenzene	5	0.9543083	10	0.9616747	20	0.8818749	50	0.8755236	100	0.8510168	200	0.8363142
1,2-Dichloroethane	5	0.9842063	10	1.03103	20	0.9906411	50	0.9932382	100	0.9800517	200	0.9514859
1,2-Dichloroethane-d4	50	1.117737	50	1.10057	50	1.118066	50	1.116655	50	1.11124	50	1.111498
1,2-Dichloropropane	5	0.2182262	10	0.2198432	20	0.1986679	50	0.2065885	100	0.2071321	200	0.2056703
1,3,5-Trimethylbenzene	5	1.65338	10	1.654793	20	1.528506	50	1.549393	100	1.493071	200	1.437194
1,3-Dichlorobenzene	5	1.013303	10	1.031061	20	0.9699832	50	0.9641685	100	0.9285548	200	0.9079133
1,3-Dichloropropane	5	0.268222	10	0.2892149	20	0.2684034	50	0.2755848	100	0.2743694	200	0.2699068
1,4-Dichlorobenzene	5	1.023936	10	1.033495	20	0.9843228	50	0.9785139	100	0.9488792	200	0.9104387
1,4-Dioxane	100	9.791487E-04	200	1.295033E-03	400	1.784144E-03	1000	1.87883E-03	2000	1.859699E-03	4000	1.856334E-03
2,2-Dichloropropane	5	1.22984	10	1.220411	20	1.15568	50	1.15803	100	1.119746	200	1.114104
2-Butanone	5	0.5742597	10	0.6416239	20	0.5366886	50	0.5475471	100	0.5081004	200	0.5227758
2-Chlorotoluene	5	1.488889	10	1.504379	20	1.40637	50	1.402293	100	1.376702	200	1.300283
2-Hexanone	5	0.1702178	10	0.1849656	20	0.1755545	50	0.1805743	100	0.1750957	200	0.172097
4-Chlorotoluene	5	1.367273	10	1.407783	20	1.299646	50	1.316969	100	1.277299	200	1.233757
4-Methyl-2-pentanone	5	0.2537301	10	0.2649803	20	0.2449505	50	0.2522454	100	0.2502866	200	0.2478526
Acetone	5	0.5927606	10	0.4741437	20	0.3834495	50	0.2994278	100	0.27733	200	0.2604495

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigatCalibration: YC80003Instrument: GCMS-VOA4Matrix: SoilCalibration Date: 03/02/18 09:51

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acrolein	5	0.1014937	10	9.374392E-02	20	0.1308838	50	0.1326539	100	0.1261422	200	0.1267295
Acrylonitrile	5	0.3301941	10	0.3689376	20	0.3551942	50	0.3688677	100	0.3716813	200	0.3679122
Benzene	5	3.952608	10	3.862127	20	3.620226	50	3.67465	100	3.599521	200	3.478914
Bromobenzene	5	0.6739839	10	0.7009751	20	0.6596914	50	0.6571737	100	0.6495567	200	0.6306894
Bromochloromethane	5	1.052252	10	1.094634	20	1.022144	50	1.03247	100	1.005061	200	0.9698094
Bromodichloromethane	5	0.2293017	10	0.2426748	20	0.2225437	50	0.2398667	100	0.2450765	200	0.2432469
Bromoform	5	0.1133669	10	0.1311584	20	0.1287767	50	0.1359261	100	0.1341716	200	0.1372357
Bromomethane	5	0.9571343	10	0.8890322	20	0.7751537	50	0.7390964	100	0.7233681	200	0.7320808
Carbon disulfide	5	2.446196	10	2.534975	20	2.392825	50	2.456632	100	2.407589	200	2.320067
Carbon tetrachloride	5	1.006679	10	1.047609	20	1.006582	50	1.036756	100	1.035569	200	1.01613
Chlorobenzene	5	0.6307191	10	0.6441844	20	0.5853151	50	0.5859664	100	0.5868078	200	0.5604604
Chloroethane	5	0.5432158	10	0.5368272	20	0.5753637	50	0.5872393	100	0.5788228	200	0.5740826
Chloroform	5	1.586897	10	1.569546	20	1.519887	50	1.535856	100	1.507798	200	1.41574
Chloromethane	5	1.536307	10	1.527535	20	1.435798	50	1.4373	100	1.416018	200	1.418907
cis-1,2-Dichloroethylene	5	1.16169	10	1.227063	20	1.136492	50	1.161823	100	1.130239	200	1.12635
cis-1,3-Dichloropropylene	5	0.3154042	10	0.3301211	20	0.3073747	50	0.3164579	100	0.3187665	200	0.3125576
Cyclohexane	5	1.913223	10	1.880968	20	1.847015	50	1.836366	100	1.830019	200	1.724047
Dibromochloromethane	5	0.2004743	10	0.2108553	20	0.1987013	50	0.2060429	100	0.2130434	200	0.2120304
Dibromomethane	5	0.1312082	10	0.1361895	20	0.1230567	50	0.1285682	100	0.1290348	200	0.1289712
Dichlorodifluoromethane	5	0.7175633	10	0.7142345	20	0.6983989	50	0.7488159	100	0.7383883	200	0.7206605
Ethyl Benzene	5	0.9277909	10	0.9415761	20	0.8666051	50	0.878074	100	0.8579634	200	0.8231434
Hexachlorobutadiene	5	0.2873803	10	0.2822458	20	0.2643371	50	0.2663585	100	0.254112	200	0.2436745
Isopropylbenzene	5	2.031996	10	2.13163	20	1.938249	50	1.967692	100	1.944198	200	1.867842
Methyl acetate	5	1.095212	10	0.9246978	20	0.848742	50	0.7959879	100	0.8120008	200	0.7760652
Methyl tert-butyl ether (MTBE)	5	2.127709	10	2.219561	20	2.119257	50	2.122731	100	2.09199	200	2.052208
Methylcyclohexane	5	0.3360367	10	0.3261642	20	0.3173401	50	0.3310596	100	0.3377847	200	0.3194727
Methylene chloride	5	2.608837	10	2.01662	20	1.698323	50	1.353404	100	1.305943	200	1.268783
Naphthalene	5	1.435529	10	1.45114	20	1.353751	50	1.36723	100	1.346613	200	1.32951
n-Butylbenzene	5	2.002401	10	1.992567	20	1.851834	50	1.834207	100	1.760822	200	1.701644
n-Propylbenzene	5	2.41762	10	2.432554	20	2.284395	50	2.272208	100	2.221269	200	2.126604
o-Xylene	5	0.6963902	10	0.7006989	20	0.6561245	50	0.6600863	100	0.6474152	200	0.6201452

**FORM VI**

**INITIAL CALIBRATION DATA**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigat

Calibration: YC80003

Instrument: GCMS-VOA4

Matrix: Soil

Calibration Date: 03/02/18 09:51

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p- & m- Xylenes	10	0.7154708	20	0.7064643	40	0.6514867	100	0.6527128	200	0.6414962	400	0.6121629
p-Bromofluorobenzene	50	0.8651003	50	0.8696285	50	0.8611709	50	0.8792837	50	0.8696741	50	0.880487
p-Diethylbenzene	5	1.011147	10	1.018673	20	1.021006	50	1.001109	100	1.006413	200	0.9427918
p-Ethyltoluene	5	1.876032	10	1.796338	20	1.834668	50	1.823647	100	1.837633	200	1.733019
p-Isopropyltoluene	5	1.955901	10	1.996785	20	1.855294	50	1.856915	100	1.778996	200	1.709082
sec-Butylbenzene	5	2.195948	10	2.165395	20	2.032595	50	2.016361	100	2.007439	200	1.909711
Styrene	5	0.637619	10	0.6503882	20	0.6166579	50	0.6251331	100	0.6159826	200	0.5949806
tert-Butyl alcohol (TBA)	5		10	6.534443E-02	20	0.0828173	50	8.563193E-02	100	8.296544E-02	200	8.042916E-02
tert-Butylbenzene	5	1.449151	10	1.474036	20	1.357309	50	1.392604	100	1.355902	200	1.310231
Tetrachloroethylene	5	0.2648056	10	0.2719734	20	0.2483335	50	0.2487744	100	0.2433306	200	0.2387465
Toluene	5	0.8616509	10	0.8595007	20	0.7962909	50	0.7931587	100	0.7806734	200	0.7662549
Toluene-d8	50	1.075686	50	1.072739	50	1.048875	50	1.095977	50	1.098274	50	1.11231
trans-1,2-Dichloroethylene	5	1.462094	10	1.506913	20	1.374361	50	1.425909	100	1.386743	200	1.343352
trans-1,3-Dichloropropylene	5	0.2636668	10	0.2846003	20	0.2540424	50	0.2670014	100	0.2676048	200	0.2640725
trans-1,4-dichloro-2-butene	5	0.4932749	10	0.5099513	20	0.4874343	50	0.4847331	100	0.4807474	200	0.4653071
Trichloroethylene	5	0.2216203	10	0.2131899	20	0.2019118	50	0.2050096	100	0.2030147	200	0.2037281
Trichlorofluoromethane	5	1.0164	10	1.012404	20	0.9857966	50	1.004779	100	1.001817	200	0.9878908
Vinyl acetate	5	1.88312	10	1.741375	20	1.820465	50	2.10955	100	1.853632	200	1.874181
Vinyl Chloride	5	1.002603	10	1.004984	20	0.984308	50	1.019814	100	1.017197	200	0.9978612

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationCalibration: YC80003Instrument: GCMS-VOA4Matrix: SoilCalibration Date: 03/02/18 09:51

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1,2-Tetrachloroethane	0.1970414	3.167222	8.95	2.223339E-02			20	
1,1,1-Trichloroethane	1.221382	5.011758	5.2	2.015686E-02			SPCC (0.1)	
1,1,2,2-Tetrachloroethane	0.4759265	2.694486	10.28167	4.437936E-02			SPCC (0.3)	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.8288802	2.875814	3.023333	0.1694846			SPCC (0.1)	
1,1,2-Trichloroethane	0.1402526	2.709819	7.853333	6.479479E-02			SPCC (0.1)	
1,1-Dichloroethane	1.72318	3.772624	4.206667	0.1215272			SPCC (0.2)	
1,1-Dichloroethylene	1.142884	3.642827	3.053333	0.1694443			SPCC (0.1)	
1,1-Dichloropropylene	1.250755	4.745402	5.348333	7.765316E-02			20	
1,2,3-Trichlorobenzene	0.5215511	3.483622	14.20333	3.932208E-02			20	
1,2,3-Trichloropropane	0.1390362	4.486838	10.33667	5.106781E-02			20	
1,2,4,5-Tetramethylbenzene	1.493941	3.432411	12.6	3.396095E-03			20	
1,2,4-Trichlorobenzene	0.6155538	6.39572	13.63167	2.762841E-02			SPCC (0.2)	
1,2,4-Trimethylbenzene	1.528543	4.956157	10.94167	0.0405665			20	
1,2-Dibromo-3-chloropropane	5.825399E-02	9.753452	12.735	3.900426E-02			SPCC (0.05)	
1,2-Dibromoethane	0.193585	3.286532	8.388334	4.813272E-02			SPCC (0.1)	
1,2-Dichlorobenzene	0.8934521	5.896827	11.825	4.365905E-02			SPCC (0.4)	
1,2-Dichloroethane	0.9884422	2.597357	5.613333	9.128817E-02			SPCC (0.1)	
1,2-Dichloroethane-d4	1.112628	0.5969866	5.538333	7.208054E-02			20	
1,2-Dichloropropane	0.2093547	3.87514	6.4	2.217517E-02			SPCC (0.1)	
1,3,5-Trimethylbenzene	1.552723	5.618414	10.52	7.544215E-03			20	
1,3-Dichlorobenzene	0.969164	4.884729	11.29833	3.333425E-02			SPCC (0.6)	
1,3-Dichloropropane	0.2742835	2.894352	8.023334	6.124307E-02			20	
1,4-Dichlorobenzene	0.9799309	4.703114	11.4	3.753579E-03			SPCC (0.5)	
1,4-Dioxane	1.608898E-03	23.63328	6.548333	0.1156928			20	*
2,2-Dichloropropane	1.166302	4.207103	4.73	9.584792E-03			20	
2-Butanone	0.5551659	8.639786	4.79	1.043714E-02			SPCC (0.1)	
2-Chlorotoluene	1.413153	5.322857	10.45833	3.672282E-02			20	
2-Hexanone	0.1764175	3.104143	8.073333	6.265734E-02			SPCC (0.1)	
4-Chlorotoluene	1.317121	4.75057	10.58	1.787834E-02			20	
4-Methyl-2-pentanone	0.2523409	2.749438	7.23	1.219773E-02			SPCC (0.1)	
Acetone	0.3812602	34.29015	3.16	9.234004E-03			SPCC (0.1)	
Acrolein	0.1186078	14.01614	3.001667	0.1357286			20	

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Calibration: YC80003 Instrument: GCMS-VOA4  
 Matrix: Soil Calibration Date: 03/02/18 09:51

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acrylonitrile	0.3604645	4.417467	3.833333	0.1353644			20	
Benzene	3.698008	4.777304	5.558333	7.247646E-02			SPCC (0.5)	
Bromobenzene	0.6620117	3.591475	10.26833	0.0371455			20	
Bromochloromethane	1.029395	4.117623	4.995	0.1087511			20	
Bromodichloromethane	0.2371184	3.832142	6.678333	0.0616992			SPCC (0.2)	
Bromoform	0.1301059	6.738401	9.786667	5.290294E-02			SPCC (0.1)	
Bromomethane	0.8026443	12.12904	2.19	1.666568E-02			SPCC (0.1)	
Carbon disulfide	2.426381	2.965193	3.275	0.1672095			SPCC (0.1)	
Carbon tetrachloride	1.024888	1.698182	5.341667	7.774249E-02			SPCC (0.1)	
Chlorobenzene	0.5989089	5.300527	8.861666	4.764645E-02			SPCC (0.5)	
Chloroethane	0.5659252	3.654528	2.29	0.0218314			SPCC (0.1)	
Chloroform	1.522621	3.957938	5.06	7.727578E-03			SPCC (0.2)	
Chloromethane	1.461978	3.756958	1.75	0.3614331			SPCC (0.1)	
cis-1,2-Dichloroethylene	1.157276	3.240019	4.76	8.336674E-03			SPCC (0.1)	
cis-1,3-Dichloropropylene	0.3167803	2.405018	7.095	7.702371E-02			SPCC (0.2)	
Cyclohexane	1.838606	3.494092	5.22	2.779896E-03			SPCC (0.1)	
Dibromochloromethane	0.2068579	2.971694	8.268334	4.613047E-02			SPCC (0.1)	
Dibromomethane	0.1295048	3.286	6.54	1.386424E-02			20	
Dichlorodifluoromethane	0.7230102	2.489863	1.55	1.759607E-02			SPCC (0.1)	
Ethyl Benzene	0.8825255	5.051866	8.943333	5.550494E-02			SPCC (0.1)	
Hexachlorobutadiene	0.2663514	6.198706	13.78167	3.249648E-02			20	
Isopropylbenzene	1.980268	4.597868	9.881667	0.0410732			SPCC (0.1)	
Methyl acetate	0.8754509	13.67399	3.45	1.333698E-02			SPCC (0.1)	
Methyl tert-butyl ether (MTBE)	2.122243	2.609096	3.77	1.606185E-02			SPCC (0.1)	
Methylcyclohexane	0.3279763	2.585049	6.291667	6.260134E-02			SPCC (0.1)	
Methylene chloride	1.708652	30.82635	3.558333	0.1137298			SPCC (0.1)	
Naphthalene	1.380629	3.644364	13.93	1.079963E-02			20	
n-Butylbenzene	1.857246	6.525984	11.74333	4.147403E-02			20	
n-Propylbenzene	2.292442	5.099907	10.33167	4.195785E-02			20	
o-Xylene	0.6634767	4.606221	9.5	0			SPCC (0.3)	
p- & m- Xylenes	0.6632989	6.00289	9.065	6.104563E-02			SPCC (0.1)	
p-Bromofluorobenzene	0.8708908	0.8798848	10.09667	5.358527E-02			20	



Data File : C:\HPCHEM\1\DATA\V4030118\V4781551.D  
 Acq On : 1 Mar 2018 12:26 pm  
 Sample : SEQ-CAL1  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 12:43 2018

Vial: 2  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.81	70	95671	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.83	117	447838	50.00	ppb	0.01
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	204085	50.00	ppb	0.01

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.54	65	106935	49.65	ppb	0.01
Spiked Amount	50.000	Range	67 - 128	Recovery	=	99.30%
47) Toluene-d8(SURR)	7.33	98	481733	47.00	ppb	0.01
Spiked Amount	50.000	Range	87 - 113	Recovery	=	94.00%
66) p-Bromofluorobenzene(SURR)	10.10	174	176554	50.62	ppb	0.01
Spiked Amount	50.000	Range	63 - 166	Recovery	=	101.24%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.55	85	6865m	5.37	ppb	
3) Chloromethane	1.75	50	14698	5.12	ppb	99
4) Vinyl Chloride	1.85	62	9592	4.60	ppb	98
5) Bromomethane	2.19	94	9157	5.11	ppb	95
6) Chloroethane	2.29	64	5197	4.45	ppb	98
7) Trichlorofluoromethane	2.53	101	9724	5.17	ppb	99
8) Ethanol	2.80	45	7458	232.73	ppb	98
9) Freon-113	3.02	101	8140	4.39	ppb	92
10) 1,1-Dichloroethylene	3.05	61	11355	4.94	ppb	96
11) Acrolein	3.00	56	971	11.62	ppb	84
12) Iodomethane	3.23	142	6351	3.67	ppb	97
13) Methyl Acetate	3.45	43	10478	4.83	ppb	# 75
15) Acrylonitrile	3.83	53	3159	4.61	ppb	97
16) trans-1,2-Dichloroethylene	3.79	61	13988	5.27	ppb	99
17) Carbon Disulfide	3.28	76	23403	4.40	ppb	100
18) Methylene Chloride	3.55	49	24959	9.09	ppb	98
19) tert-Butyl Methyl Ether (M	3.77	73	20356	5.15	ppb	# 100
20) Acetone	3.16	43	5671	6.91	ppb	99
21) 1,1-Dichloroethane	4.21	63	16700	5.28	ppb	100
22) Vinyl Acetate	4.24	43	18016	6.48	ppb	# 66
23) cis-1,2-Dichloroethylene	4.76	96	11114	5.19	ppb	# 67
24) 2-Butanone	4.79	43	5494	4.97	ppb	87
25) 2,2-Dichloropropane	4.73	77	11766	5.56	ppb	100
26) Bromochloromethane	4.99	49	10067	5.27	ppb	99
27) Chloroform	5.06	83	15182	5.46	ppb	98
28) 1,1,1-Trichloroethane	5.20	97	12223	5.51	ppb	# 71
29) Cyclohexane	5.22	56	18304	5.15	ppb	# 66
30) 1,1-Dichloropropylene	5.35	75	12503	5.53	ppb	99
32) Carbon Tetrachloride	5.34	117	9631	4.96	ppb	# 58
33) 1,2-Dichloroethane	5.61	62	9416	5.29	ppb	# 86
34) Benzene	5.56	78	37815	5.70	ppb	100
36) Tetrahydrofuran	5.04	42	3425	4.29	ppb	89
37) Trichloroethylene	6.16	95	9925	5.16	ppb	# 100
38) Methyl Cyclohexane	6.29	83	15049	4.81	ppb	# 51
39) Methyl Methacrylate	6.47	69	5042	4.46	ppb	# 99
40) Dibromomethane	6.54	93	5876	4.89	ppb	97
41) Bromodichloromethane	6.68	83	10269	4.61	ppb	99
42) 1,2-Dichloropropane	6.40	63	9773	5.14	ppb	99
43) 1,4-Dioxane	6.56	88	877	56.20	ppb	88
44) 2-Chloroethyl vinyl ether	6.94	63	4674	4.72	ppb	99
45) cis-1,3-Dichloropropene	7.10	75	14125	4.85	ppb	99
46) 2-Hexanone	8.08	43	7623	4.18	ppb	96
48) Toluene	7.40	91	38588	5.31	ppb	99
49) trans-1,3-Dichloropropene	7.66	75	11808	4.79	ppb	99
50) 1,1,2-Trichloroethane	7.85	83	6549	5.01	ppb	98

Data File : C:\HPCHEM\1\DATA\V4030118\V4781551.D  
 Acq On : 1 Mar 2018 12:26 pm  
 Sample : SEQ-CAL1  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 12:43 2018

Vial: 2  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) 1,3-Dichloropropane	8.03	76	12012	4.75	ppb	# 100
52) Tetrachloroethylene	7.94	166	11859	5.44	ppb	99
53) 4-Methyl-2-Pentanone	7.23	43	11363	4.49	ppb	97
54) Dibromochloromethane	8.27	129	8978	4.60	ppb	99
55) 1,2-Dibromoethane	8.39	107	8401	4.72	ppb	100
56) Chlorobenzene	8.86	112	28246	5.40	ppb	# 99
57) Ethyl Benzene	8.94	91	41550	5.22	ppb	100
58) p- & m-Xylenes	9.06	91	64083	10.73	ppb	100
59) o-Xylene	9.50	91	31187	5.20	ppb	100
60) Styrene	9.53	104	28555	5.20	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.95	131	8999	5.21	ppb	99
62) p-Ethyltoluene	10.46	105	38287	5.04	ppb	99
63) p-Diethylbenzene	11.72	119	20636	5.25	ppb	# 24
65) Bromoform	9.79	173	5077	3.79	ppb	# 100
67) 1,1,2,2-Tetrachloroethane	10.28	83	9435	4.41	ppb	# 68
68) trans-1,4-Dichloro-2-buten	10.33	75	10067	4.55	ppb	# 90
69) 1,2,3-Trichloropropane	10.33	110	2874	4.92	ppb	100
70) Isopropylbenzene	9.89	105	41470	5.13	ppb	# 99
71) Bromobenzene	10.27	77	13755	4.79	ppb	94
72) n-Propylbenzene	10.33	91	49340	5.09	ppb	100
73) 2-Chlorotoluene	10.46	91	30386	5.02	ppb	# 85
74) 4-Chlorotoluene	10.58	91	27904	5.03	ppb	# 98
75) tert-Butylbenzene	10.88	119	29575	5.27	ppb	# 100
76) 1,3,5-trimethylbenzene	10.52	105	33743	5.32	ppb	99
77) 1,2,4-trimethylbenzene	10.94	105	32714	5.22	ppb	99
78) sec-Butylbenzene	11.12	105	44816	5.30	ppb	# 93
79) 1,3-Dichlorobenzene	11.29	146	20680	5.38	ppb	# 68
80) 1,4-Dichlorobenzene	11.40	146	20897	5.43	ppb	# 99
81) 1,2-Dichlorobenzene	11.82	146	19476	5.58	ppb	# 99
82) p-Isopropyltoluene	11.28	119	39917	5.34	ppb	# 100
83) n-Butylbenzene	11.74	91	40866	5.22	ppb	# 100
84) 1,2,4,5-Tetramethylbenzene	12.60	119	31796	5.06	ppb	98
85) 1,2-Dibromo-3-chloropropan	12.74	75	971	3.92	ppb	# 100
86) 1,2,4-Trichlorobenzene	13.63	180	13501	5.47	ppb	# 59
87) Naphthalene	13.93	128	29297	5.35	ppb	# 100
88) Hexachloro-1,3-Butadiene	13.78	225	5865	5.24	ppb	# 69
89) 1,2,3-Trichlorobenzene	14.21	182	11063	5.15	ppb	# 100

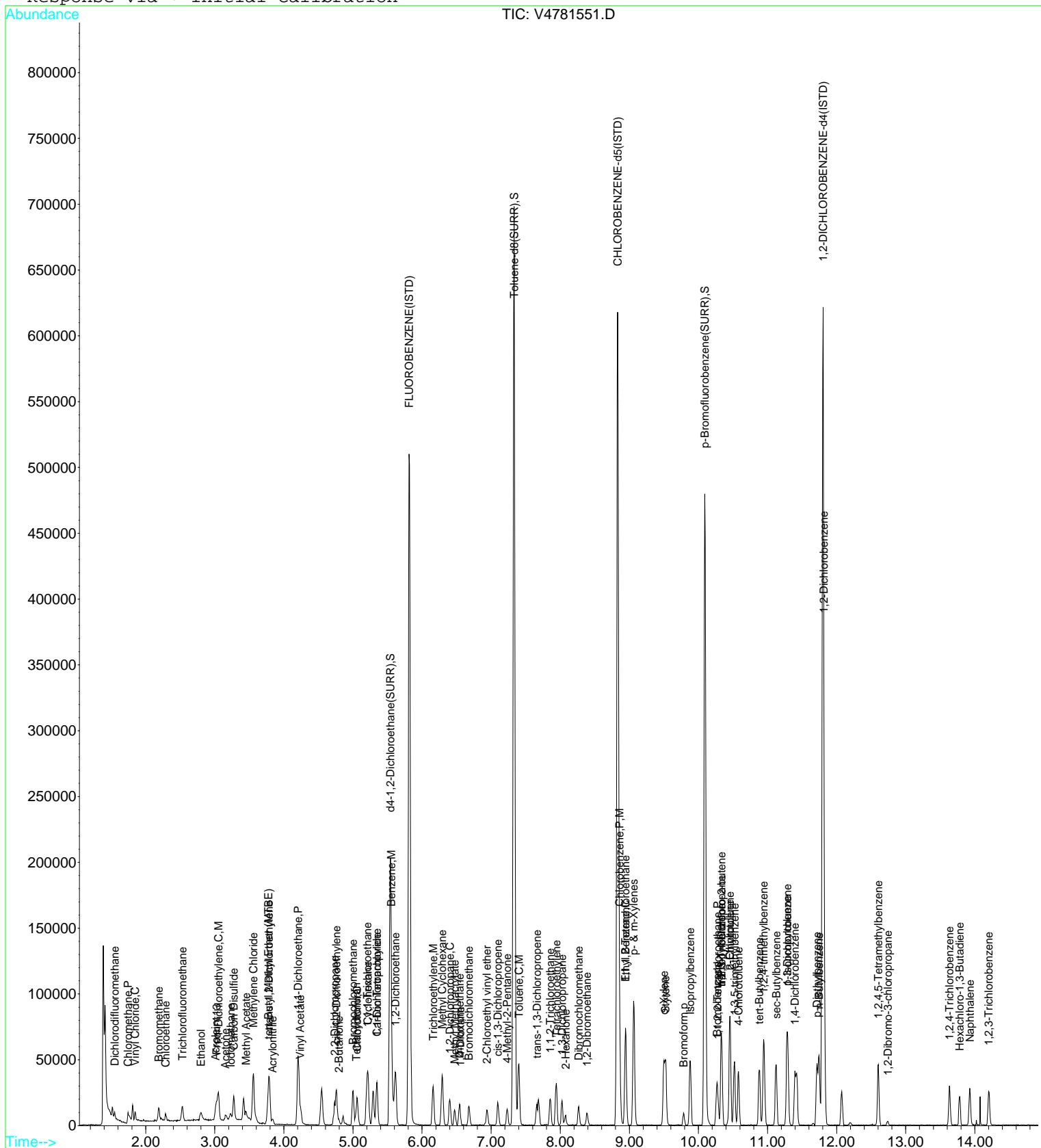


Data File : C:\HPCHEM\1\DATA\V4030118\V4781551.D  
Acq On : 1 Mar 2018 12:26 pm  
Sample : SEQ-CAL1  
Misc : QBV4030118A  
MS Integration Params: rteint.p  
Quant Time: Mar 1 12:43 2018

Vial: 2  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00337.RES

Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Wed Jan 10 14:38:44 2018  
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\V4030118\V4781552.D  
 Acq On : 1 Mar 2018 12:58 pm  
 Sample : SEQ-CAL2  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 13:13 2018

Vial: 3  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.81	70	97713	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.83	117	456166	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	207461	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.53	65	107540	48.89	ppb	0.00
Spiked Amount	50.000	Range	67 - 128	Recovery	=	97.78%
47) Toluene-d8(SURR)	7.33	98	489347	46.87	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	93.74%
66) p-Bromofluorobenzene(SURR)	10.10	174	180414	50.89	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	101.78%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.55	85	13958m	10.69	ppb	
3) Chloromethane	1.75	50	29852	10.18	ppb	99
4) Vinyl Chloride	1.84	62	19640m	9.21	ppb	
5) Bromomethane	2.19	94	17374	9.49	ppb	95
6) Chloroethane	2.29	64	10491	8.80	ppb	100
7) Trichlorofluoromethane	2.53	101	19785	10.30	ppb	99
8) Ethanol	2.80	45	11725	358.24	ppb	98
9) Freon-113	3.02	101	15536	8.21	ppb	95
10) 1,1-Dichloroethylene	3.05	61	23274	9.92	ppb	96
11) Acrolein	3.00	56	1832	21.46	ppb	# 61
12) Iodomethane	3.23	142	15971	9.02	ppb	99
13) Methyl Acetate	3.45	43	18071	8.16	ppb	# 73
14) tert Butyl Alcohol (TBA)	3.69	59	1277	7.28	ppb	# 100
15) Acrylonitrile	3.83	53	7210	10.29	ppb	100
16) trans-1,2-Dichloroethylene	3.79	61	29449	10.86	ppb	100
17) Carbon Disulfide	3.27	76	49540	9.11	ppb	100
18) Methylene Chloride	3.56	49	39410	14.05	ppb	99
19) tert-Butyl Methyl Ether (M	3.77	73	43376	10.75	ppb	# 100
20) Acetone	3.16	43	9266	11.06	ppb	100
21) 1,1-Dichloroethane	4.21	63	35770	11.08	ppb	100
22) Vinyl Acetate	4.24	43	34031	11.99	ppb	# 65
23) cis-1,2-Dichloroethylene	4.76	96	23980	10.96	ppb	# 99
24) 2-Butanone	4.79	43	12539	11.11	ppb	88
25) 2,2-Dichloropropane	4.73	77	23850	11.04	ppb	99
26) Bromochloromethane	4.99	49	21392	10.96	ppb	99
27) Chloroform	5.06	83	30673	10.79	ppb	99
28) 1,1,1-Trichloroethane	5.20	97	25687	11.34	ppb	# 71
29) Cyclohexane	5.22	56	36759	10.12	ppb	# 66
30) 1,1-Dichloropropylene	5.35	75	26037	11.28	ppb	99
32) Carbon Tetrachloride	5.34	117	20473	10.32	ppb	98
33) 1,2-Dichloroethane	5.61	62	20149	11.08	ppb	# 86
34) Benzene	5.55	78	75476	11.14	ppb	100
36) Tetrahydrofuran	5.03	42	7496	9.22	ppb	96
37) Trichloroethylene	6.16	95	19450	9.92	ppb	# 100
38) Methyl Cyclohexane	6.29	83	29757	9.33	ppb	# 51
39) Methyl Methacrylate	6.47	69	10924	9.49	ppb	# 75
40) Dibromomethane	6.54	93	12425	10.15	ppb	94
41) Bromodichloromethane	6.68	83	22140	9.76	ppb	100
42) 1,2-Dichloropropane	6.40	63	20057	10.36	ppb	100
43) 1,4-Dioxane	6.55	88	2363	148.66	ppb	99
44) 2-Chloroethyl vinyl ether	6.94	63	9591	9.52	ppb	100
45) cis-1,3-Dichloropropene	7.09	75	30118	10.14	ppb	100
46) 2-Hexanone	8.07	43	16875	9.08	ppb	96
48) Toluene	7.40	91	78415	10.58	ppb	99
49) trans-1,3-Dichloropropene	7.66	75	25965	10.34	ppb	# 89

Data File : C:\HPCHEM\1\DATA\V4030118\V4781552.D  
 Acq On : 1 Mar 2018 12:58 pm  
 Sample : SEQ-CAL2  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 13:13 2018

Vial: 3  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

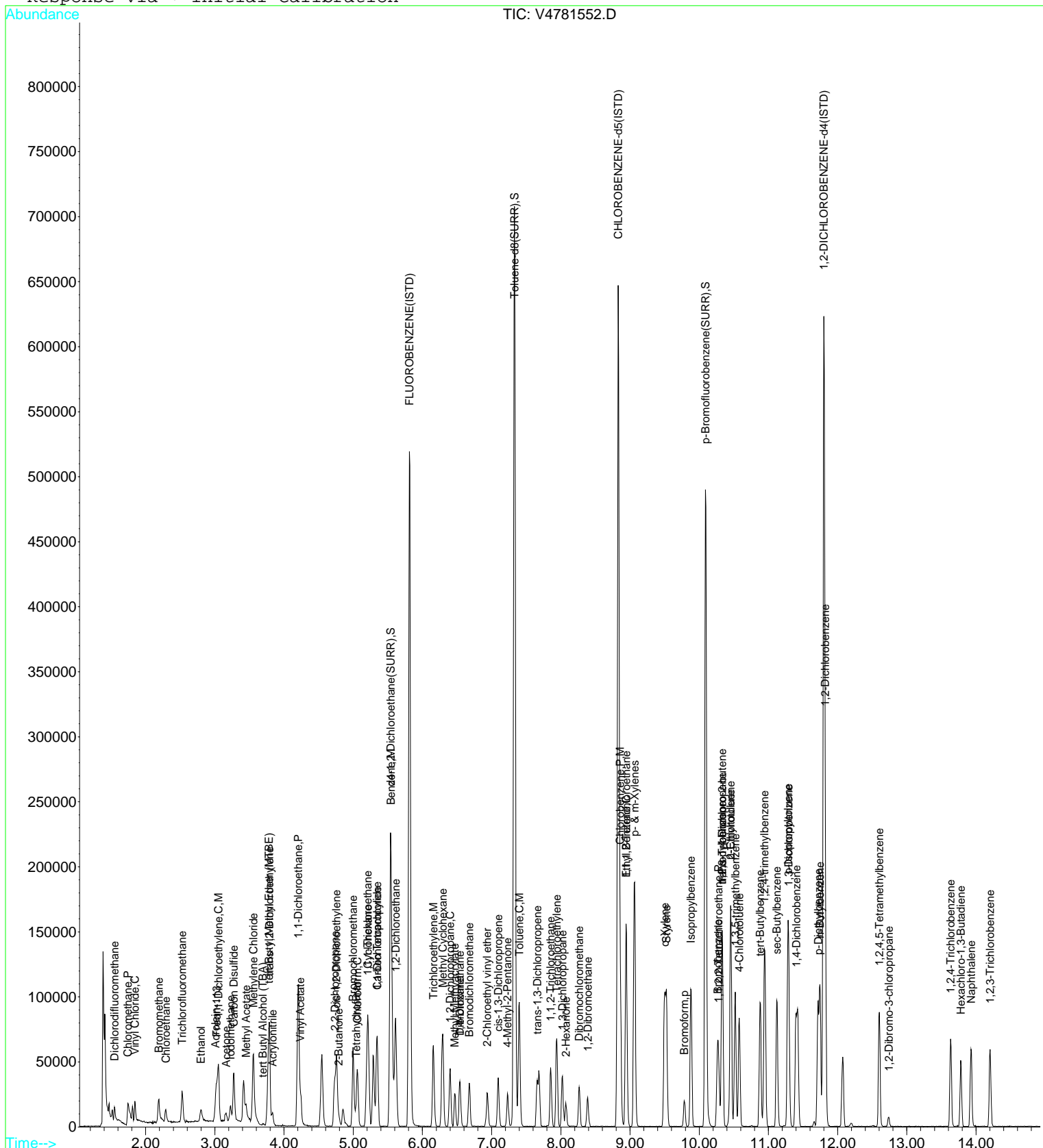
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) 1,1,2-Trichloroethane	7.85	83	12980	9.76	ppb	97
51) 1,3-Dichloropropane	8.02	76	26386	10.25	ppb #	99
52) Tetrachloroethylene	7.94	166	24813	11.17	ppb	99
53) 4-Methyl-2-Pentanone	7.23	43	24175	9.38	ppb	98
54) Dibromochloromethane	8.27	129	19237	9.67	ppb	99
55) 1,2-Dibromoethane	8.39	107	18726	10.34	ppb	99
56) Chlorobenzene	8.86	112	58771	11.03	ppb #	100
57) Ethyl Benzene	8.94	91	85903	10.60	ppb	100
58) p- & m-Xylenes	9.06	91	128906	21.20	ppb	99
59) o-Xylene	9.50	91	63927	10.47	ppb	98
60) Styrene	9.52	104	59337	10.61	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.95	131	18935	10.76	ppb	98
62) p-Ethyltoluene	10.45	105	74534	9.63	ppb	95
63) p-Diethylbenzene	11.71	119	42267	10.56	ppb #	22
65) Bromoform	9.78	173	11966	8.80	ppb #	100
67) 1,1,2,2-Tetrachloroethane	10.28	83	20486	9.42	ppb	99
68) trans-1,4-Dichloro-2-buten	10.34	75	21159	9.42	ppb #	99
69) 1,2,3-Trichloropropane	10.34	110	6224	10.48	ppb	96
70) Isopropylbenzene	9.88	105	88446	10.76	ppb #	89
71) Bromobenzene	10.27	77	29085	9.96	ppb	96
72) n-Propylbenzene	10.33	91	100932	10.24	ppb	99
73) 2-Chlorotoluene	10.45	91	62420	10.15	ppb #	100
74) 4-Chlorotoluene	10.58	91	58412	10.36	ppb #	98
75) tert-Butylbenzene	10.88	119	61161	10.73	ppb #	100
76) 1,3,5-trimethylbenzene	10.52	105	68661	10.65	ppb	99
77) 1,2,4-trimethylbenzene	10.94	105	67765	10.63	ppb	99
78) sec-Butylbenzene	11.13	105	89847	10.46	ppb #	100
79) 1,3-Dichlorobenzene	11.30	146	42781	10.95	ppb #	100
80) 1,4-Dichlorobenzene	11.40	146	42882	10.96	ppb #	83
81) 1,2-Dichlorobenzene	11.83	146	39902	11.24	ppb #	68
82) p-Isopropyltoluene	11.28	119	82851	10.91	ppb #	99
83) n-Butylbenzene	11.74	91	82676	10.40	ppb #	99
84) 1,2,4,5-Tetramethylbenzene	12.60	119	59846	9.36	ppb	97
85) 1,2-Dibromo-3-chloropropan	12.73	75	2591	10.28	ppb #	100
86) 1,2,4-Trichlorobenzene	13.63	180	27481	10.95	ppb	100
87) Naphthalene	13.93	128	60211	10.82	ppb #	97
88) Hexachloro-1,3-Butadiene	13.79	225	11711	10.30	ppb #	98
89) 1,2,3-Trichlorobenzene	14.20	182	22459	10.28	ppb #	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781552.D  
Acq On : 1 Mar 2018 12:58 pm  
Sample : SEQ-CAL2  
Misc : QBV4030118A  
MS Integration Params: rteint.p  
Quant Time: Mar 1 13:13 2018

Vial: 3  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00337.RES

Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Wed Jan 10 14:38:44 2018  
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\V4030118\V4781553.D  
 Acq On : 1 Mar 2018 1:30 pm  
 Sample : SEQ-CAL3  
 Misc : QBV4030118A

Vial: 4  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Mar 1 13:45 2018

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)

Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.82	70	92372	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.84	117	449305	50.00	ppb	0.02
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	205202	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.54	65	103278	49.67	ppb	0.02
Spiked Amount	50.000	Range	67 - 128	Recovery	=	99.34%
47) Toluene-d8(SURR)	7.34	98	471265	45.83	ppb	0.02
Spiked Amount	50.000	Range	87 - 113	Recovery	=	91.66%
66) p-Bromofluorobenzene(SURR)	10.10	174	176714	50.39	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	100.78%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.55	85	25805m	20.91	ppb	
3) Chloromethane	1.76	50	53051	19.14	ppb	100
4) Vinyl Chloride	1.85	62	36369m	18.05	ppb	
5) Bromomethane	2.19	94	28641	16.56	ppb	97
6) Chloroethane	2.29	64	21259	18.87	ppb	99
7) Trichlorofluoromethane	2.53	101	36424	20.06	ppb	100
8) Ethanol	2.80	45	24691	798.01	ppb	99
9) Freon-113	3.03	101	31178	17.43	ppb	96
10) 1,1-Dichloroethylene	3.06	61	41147	18.55	ppb	96
11) Acrolein	3.00	56	4836	59.92	ppb	90
12) Iodomethane	3.23	142	33892	20.26	ppb	100
13) Methyl Acetate	3.45	43	31360	14.98	ppb	76
14) tert Butyl Alcohol (TBA)	3.70	59	3060	18.46	ppb	# 100
15) Acrylonitrile	3.84	53	13124	19.82	ppb	99
16) trans-1,2-Dichloroethylene	3.79	61	50781	19.81	ppb	99
17) Carbon Disulfide	3.28	76	88412	17.20	ppb	100
18) Methylene Chloride	3.56	49	62751	23.67	ppb	99
19) tert-Butyl Methyl Ether (M	3.77	73	78304	20.54	ppb	# 100
20) Acetone	3.16	43	14168	17.88	ppb	100
21) 1,1-Dichloroethane	4.21	63	62863	20.60	ppb	100
22) Vinyl Acetate	4.24	43	67264	25.07	ppb	# 65
23) cis-1,2-Dichloroethylene	4.76	96	41992	20.30	ppb	# 100
24) 2-Butanone	4.79	43	19830	18.58	ppb	88
25) 2,2-Dichloropropane	4.73	77	42701	20.90	ppb	100
26) Bromochloromethane	5.00	49	37767	20.48	ppb	97
27) Chloroform	5.06	83	56158	20.90	ppb	99
28) 1,1,1-Trichloroethane	5.20	97	44025	20.57	ppb	99
29) Cyclohexane	5.22	56	68245	19.88	ppb	99
30) 1,1-Dichloropropylene	5.35	75	45436	20.83	ppb	99
32) Carbon Tetrachloride	5.35	117	37192	19.82	ppb	99
33) 1,2-Dichloroethane	5.62	62	36603	21.30	ppb	# 86
34) Benzene	5.56	78	133763	20.88	ppb	100
36) Tetrahydrofuran	5.04	42	13558	16.93	ppb	97
37) Trichloroethylene	6.16	95	36288	18.80	ppb	# 100
38) Methyl Cyclohexane	6.29	83	57033	18.16	ppb	# 51
39) Methyl Methacrylate	6.47	69	20084	17.72	ppb	# 98
40) Dibromomethane	6.54	93	22116	18.35	ppb	96
41) Bromodichloromethane	6.68	83	39996	17.90	ppb	100
42) 1,2-Dichloropropane	6.40	63	35705	18.73	ppb	99
43) 1,4-Dioxane	6.55	88	6413	409.61	ppb	94
44) 2-Chloroethyl vinyl ether	6.94	63	20291	20.44	ppb	100
45) cis-1,3-Dichloropropene	7.10	75	55242	18.89	ppb	100
46) 2-Hexanone	8.07	43	31551	17.23	ppb	97
48) Toluene	7.40	91	143111	19.61	ppb	100
49) trans-1,3-Dichloropropene	7.66	75	45657	18.45	ppb	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781553.D  
 Acq On : 1 Mar 2018 1:30 pm  
 Sample : SEQ-CAL3  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 13:45 2018

Vial: 4  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

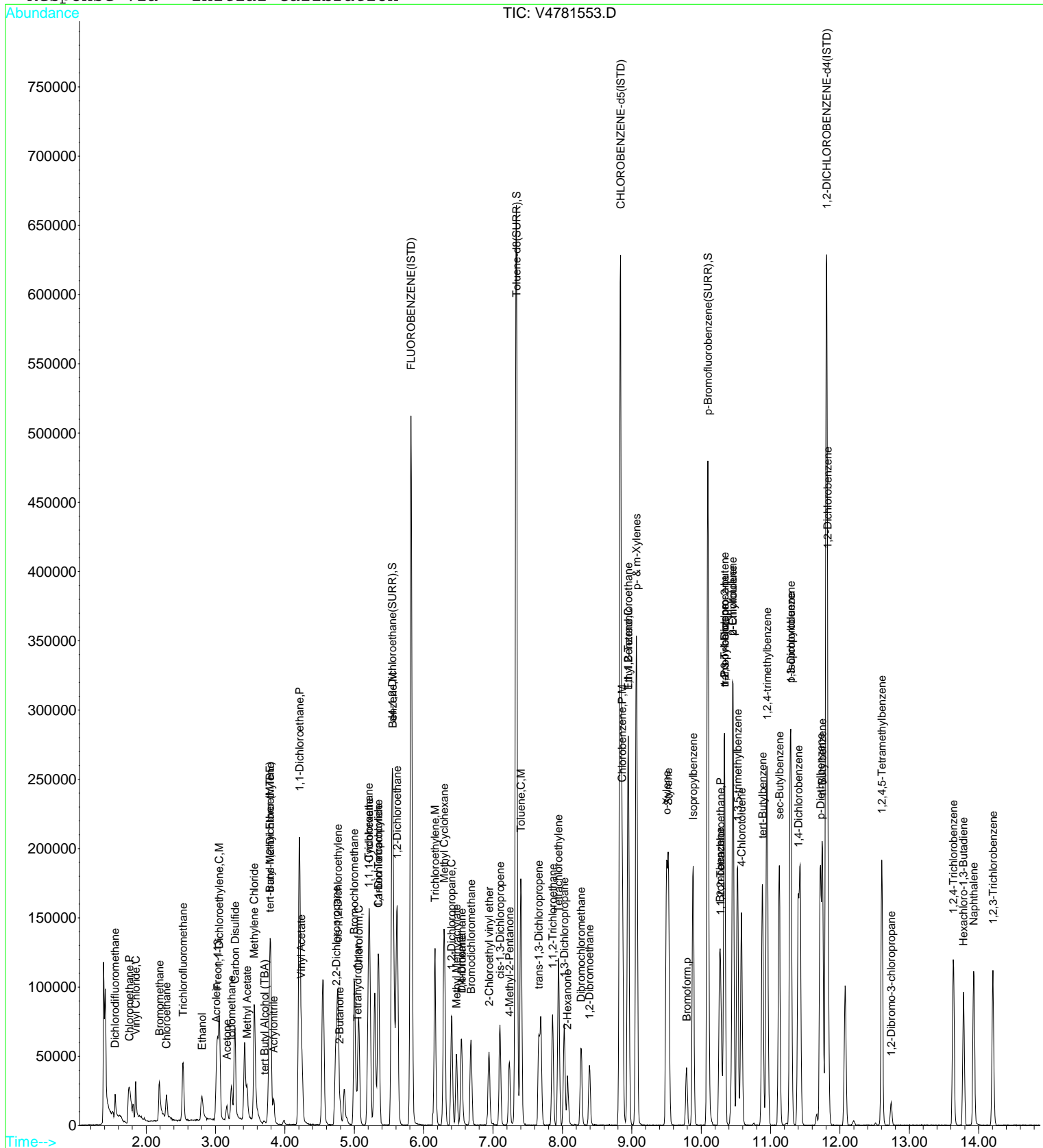
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) 1,1,2-Trichloroethane	7.86	83	24482	18.68	ppb	99
51) 1,3-Dichloropropane	8.02	76	48238	19.02	ppb #	100
52) Tetrachloroethylene	7.94	166	44631	20.40	ppb	99
53) 4-Methyl-2-Pentanone	7.23	43	44023	17.34	ppb	97
54) Dibromochloromethane	8.27	129	35711	18.22	ppb	99
55) 1,2-Dibromoethane	8.39	107	33823	18.95	ppb	100
56) Chlorobenzene	8.87	112	105194	20.05	ppb #	100
57) Ethyl Benzene	8.95	91	155748	19.51	ppb	100
58) p- & m-Xylenes	9.07	91	234173	39.10	ppb	99
59) o-Xylene	9.50	91	117920	19.60	ppb	99
60) Styrene	9.53	104	110827	20.13	ppb	99
61) 1,1,1,2-Tetrachloroethane	8.95	131	34440	19.87	ppb	98
62) p-Ethyltoluene	10.45	105	150591	19.76	ppb	98
63) p-Diethylbenzene	11.71	119	83805	21.26	ppb	93
65) Bromoform	9.79	173	23144	17.20	ppb #	100
67) 1,1,2,2-Tetrachloroethane	10.28	83	39865	18.52	ppb	98
68) trans-1,4-Dichloro-2-buten	10.34	75	40009	18.00	ppb #	100
69) 1,2,3-Trichloropropane	10.34	110	11236	19.13	ppb	99
70) Isopropylbenzene	9.88	105	159093	19.57	ppb #	100
71) Bromobenzene	10.27	77	54148	18.75	ppb	95
72) n-Propylbenzene	10.33	91	187505	19.24	ppb	99
73) 2-Chlorotoluene	10.46	91	115436	18.97	ppb #	85
74) 4-Chlorotoluene	10.58	91	106676	19.13	ppb #	100
75) tert-Butylbenzene	10.88	119	111409	19.76	ppb #	100
76) 1,3,5-trimethylbenzene	10.52	105	125461	19.67	ppb	99
77) 1,2,4-trimethylbenzene	10.94	105	124579	19.75	ppb	99
78) sec-Butylbenzene	11.13	105	166837	19.64	ppb #	100
79) 1,3-Dichlorobenzene	11.30	146	79617	20.61	ppb #	99
80) 1,4-Dichlorobenzene	11.40	146	80794	20.87	ppb #	83
81) 1,2-Dichlorobenzene	11.83	146	72385	20.61	ppb #	99
82) p-Isopropyltoluene	11.28	119	152284	20.27	ppb #	100
83) n-Butylbenzene	11.75	91	152000	19.33	ppb #	99
84) 1,2,4,5-Tetramethylbenzene	12.60	119	126121	19.95	ppb	99
85) 1,2-Dibromo-3-chloropropan	12.74	75	4786	19.20	ppb #	100
86) 1,2,4-Trichlorobenzene	13.63	180	50538	20.36	ppb	100
87) Naphthalene	13.93	128	111117	20.19	ppb #	97
88) Hexachloro-1,3-Butadiene	13.78	225	21697	19.29	ppb #	100
89) 1,2,3-Trichlorobenzene	14.20	182	43187	19.99	ppb #	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781553.D  
Acq On : 1 Mar 2018 1:30 pm  
Sample : SEQ-CAL3  
Misc : QBV4030118A  
MS Integration Params: rteint.p  
Quant Time: Mar 1 13:45 2018

Vial: 4  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00337.RES

Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Wed Jan 10 14:38:44 2018  
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\V4030118\V4781554.D  
 Acq On : 1 Mar 2018 2:01 pm  
 Sample : SEQ-CAL4  
 Misc : QBV4030118A

Vial: 5  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

MS Integration Params: rteint.p  
 Quant Time: Mar 1 14:17 2018

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.82	70	93318	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.84	117	447140	50.00	ppb	0.01
64) 1,2-DICHLOROBENZENE-d4(IST)	11.81	152	202922	50.00	ppb	0.01

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.54	65	104204	49.60	ppb	0.01
Spiked Amount	50.000	Range	67 - 128	Recovery	=	99.20%
47) Toluene-d8(SURR)	7.33	98	490055	47.89	ppb	0.01
Spiked Amount	50.000	Range	87 - 113	Recovery	=	95.78%
66) p-Bromofluorobenzene(SURR)	10.10	174	178426	51.45	ppb	0.01
Spiked Amount	50.000	Range	63 - 166	Recovery	=	102.90%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.55	85	69878m	56.05	ppb	
3) Chloromethane	1.75	50	134126	47.89	ppb	100
4) Vinyl Chloride	1.85	62	95167m	46.75	ppb	
5) Bromomethane	2.19	94	68971	39.46	ppb	98
6) Chloroethane	2.29	64	54800m	48.14	ppb	
7) Trichlorofluoromethane	2.53	101	93764	51.12	ppb	100
8) Ethanol	2.80	45	60665	1940.81	ppb	98
9) Freon-113	3.03	101	77991	43.15	ppb	95
10) 1,1-Dichloroethylene	3.06	61	107741	48.08	ppb	95
11) Acrolein	3.01	56	12379	151.83	ppb	90
12) Iodomethane	3.23	142	107694	63.72	ppb	100
13) Methyl Acetate	3.45	43	74280	35.11	ppb	75
14) tert Butyl Alcohol (TBA)	3.70	59	7991	47.72	ppb	# 100
15) Acrylonitrile	3.84	53	34422	51.45	ppb	99
16) trans-1,2-Dichloroethylene	3.79	61	133063	51.37	ppb	99
17) Carbon Disulfide	3.28	76	229248	44.15	ppb	100
18) Methylene Chloride	3.56	49	126297	47.15	ppb	98
19) tert-Butyl Methyl Ether (M	3.77	73	198089	51.42	ppb	# 100
20) Acetone	3.16	43	27942	34.91	ppb	99
21) 1,1-Dichloroethane	4.21	63	162466	52.69	ppb	100
22) Vinyl Acetate	4.24	43	196859	72.63	ppb	# 66
23) cis-1,2-Dichloroethylene	4.76	96	108419	51.89	ppb	# 100
24) 2-Butanone	4.79	43	51096	47.39	ppb	87
25) 2,2-Dichloropropane	4.73	77	108065	52.36	ppb	100
26) Bromochloromethane	5.00	49	96348	51.71	ppb	97
27) Chloroform	5.06	83	143323	52.81	ppb	100
28) 1,1,1-Trichloroethane	5.20	97	111954	51.77	ppb	99
29) Cyclohexane	5.22	56	171366	49.41	ppb	# 66
30) 1,1-Dichloropropylene	5.35	75	116495	52.85	ppb	99
32) Carbon Tetrachloride	5.34	117	96748	51.04	ppb	100
33) 1,2-Dichloroethane	5.62	62	92687	53.39	ppb	# 100
34) Benzene	5.56	78	342911	52.99	ppb	100
36) Tetrahydrofuran	5.04	42	37378	46.91	ppb	99
37) Trichloroethylene	6.16	95	91668	47.71	ppb	# 100
38) Methyl Cyclohexane	6.30	83	148030	47.37	ppb	# 100
39) Methyl Methacrylate	6.48	69	52776	46.79	ppb	# 100
40) Dibromomethane	6.54	93	57488	47.93	ppb	95
41) Bromodichloromethane	6.68	83	107254	48.23	ppb	100
42) 1,2-Dichloropropane	6.40	63	92374	48.69	ppb	99
43) 1,4-Dioxane	6.55	88	16802	1078.38	ppb	100
44) 2-Chloroethyl vinyl ether	6.94	63	51677	52.31	ppb	100
45) cis-1,3-Dichloropropene	7.10	75	141501	48.61	ppb	100
46) 2-Hexanone	8.08	43	80742	44.30	ppb	96
48) Toluene	7.40	91	354653	48.84	ppb	99
49) trans-1,3-Dichloropropene	7.66	75	119387	48.49	ppb	100



Data File : C:\HPCHEM\1\DATA\V4030118\V4781554.D  
 Acq On : 1 Mar 2018 2:01 pm  
 Sample : SEQ-CAL4  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 14:17 2018

Vial: 5  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

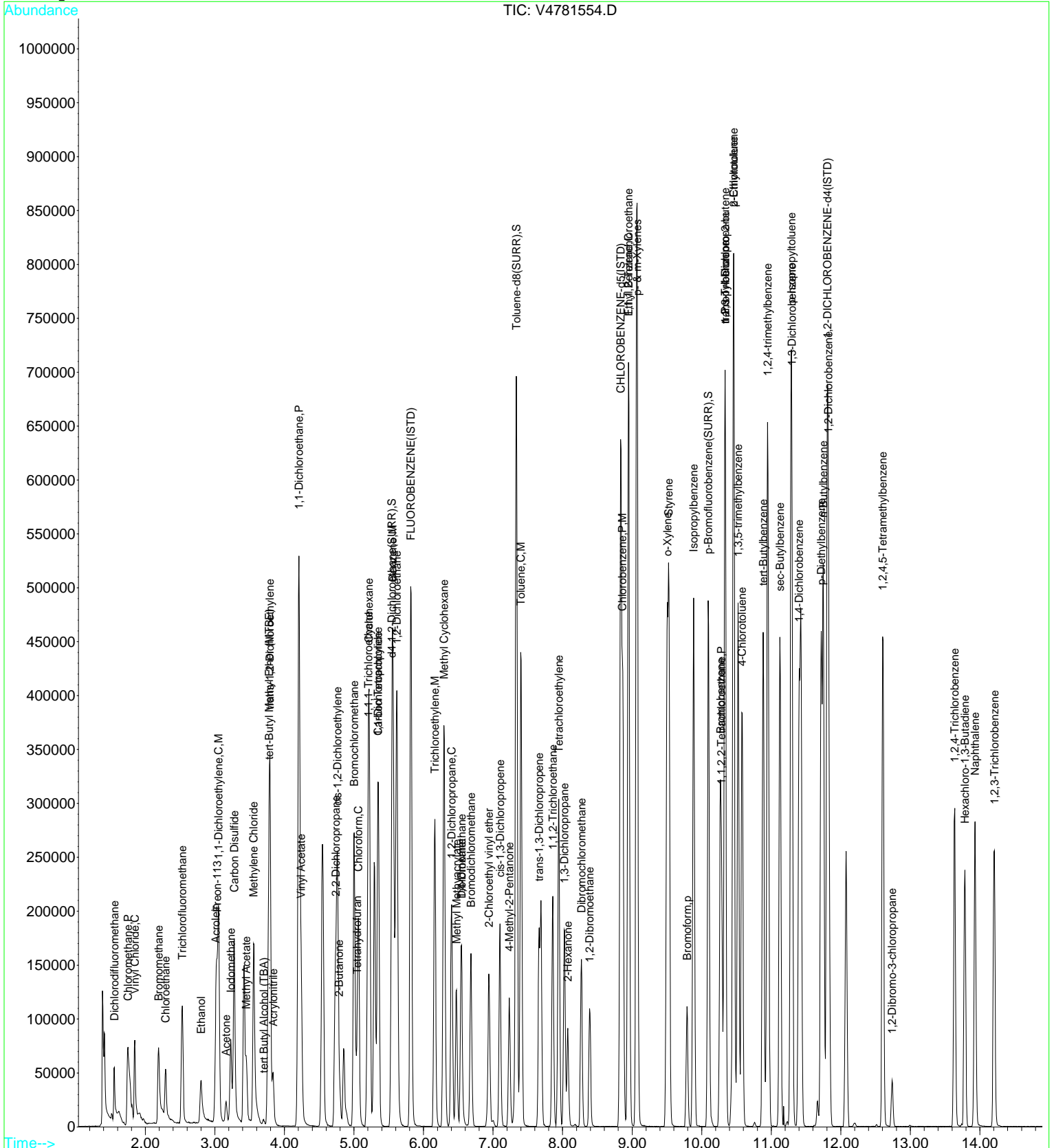
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) 1,1,2-Trichloroethane	7.86	83	62500	47.92	ppb	99
51) 1,3-Dichloropropane	8.03	76	123225	48.82	ppb #	86
52) Tetrachloroethylene	7.95	166	111237	51.08	ppb	99
53) 4-Methyl-2-Pentanone	7.23	43	112789	44.63	ppb	97
54) Dibromochloromethane	8.27	129	92130	47.24	ppb	98
55) 1,2-Dibromoethane	8.39	107	86671	48.80	ppb	100
56) Chlorobenzene	8.86	112	262009	50.19	ppb #	100
57) Ethyl Benzene	8.95	91	392622	49.41	ppb	100
58) p- & m-Xylenes	9.07	91	583708	97.92	ppb	99
59) o-Xylene	9.50	91	295151	49.30	ppb	99
60) Styrene	9.53	104	279522	51.01	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.95	131	88023	51.04	ppb	98
62) p-Ethyltoluene	10.46	105	370058	48.80	ppb	99
63) p-Diethylbenzene	11.72	119	203147	51.77	ppb #	23
65) Bromoform	9.79	173	60778	45.68	ppb #	100
67) 1,1,2,2-Tetrachloroethane	10.29	83	97698	45.91	ppb	99
68) trans-1,4-Dichloro-2-buten	10.34	75	98363	44.76	ppb #	90
69) 1,2,3-Trichloropropane	10.34	110	27995	48.21	ppb	99
70) Isopropylbenzene	9.88	105	399288	49.67	ppb #	100
71) Bromobenzene	10.27	77	133355	46.71	ppb	95
72) n-Propylbenzene	10.34	91	461081	47.83	ppb	99
73) 2-Chlorotoluene	10.46	91	284556	47.29	ppb #	99
74) 4-Chlorotoluene	10.58	91	267242	48.46	ppb #	100
75) tert-Butylbenzene	10.88	119	282590	50.68	ppb #	100
76) 1,3,5-trimethylbenzene	10.52	105	314406	49.84	ppb	99
77) 1,2,4-trimethylbenzene	10.95	105	305368	48.96	ppb	99
78) sec-Butylbenzene	11.12	105	409164	48.71	ppb #	100
79) 1,3-Dichlorobenzene	11.30	146	195651	51.21	ppb #	68
80) 1,4-Dichlorobenzene	11.40	146	198562	51.87	ppb #	83
81) 1,2-Dichlorobenzene	11.83	146	177663	51.15	ppb #	100
82) p-Isopropyltoluene	11.28	119	376809	50.71	ppb #	100
83) n-Butylbenzene	11.75	91	372201	47.86	ppb #	100
84) 1,2,4,5-Tetramethylbenzene	12.60	119	305851	48.93	ppb	98
85) 1,2-Dibromo-3-chloropropan	12.74	75	12903	52.35	ppb #	100
86) 1,2,4-Trichlorobenzene	13.64	180	121564	49.53	ppb	100
87) Naphthalene	13.93	128	277441	50.98	ppb #	100
88) Hexachloro-1,3-Butadiene	13.78	225	54050	48.58	ppb #	100
89) 1,2,3-Trichlorobenzene	14.21	182	104502	48.93	ppb #	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781554.D  
Acq On : 1 Mar 2018 2:01 pm  
Sample : SEQ-CAL4  
Misc : QBV4030118A  
MS Integration Params: rteint.p  
Quant Time: Mar 1 14:17 2018

Vial: 5  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00337.RES

Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Wed Jan 10 14:38:44 2018  
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\V4030118\V4781555.D  
 Acq On : 1 Mar 2018 2:33 pm  
 Sample : SEQ-CAL5  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 14:48 2018

Vial: 6  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.82	70	97402	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.83	117	457090	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	205738	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.54	65	108237	49.36	ppb	0.02
Spiked Amount	50.000	Range	67 - 128	Recovery	=	98.72%
47) Toluene-d8(SURR)	7.33	98	502010	47.99	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	95.98%
66) p-Bromofluorobenzene(SURR)	10.09	174	178925	50.89	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	101.78%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.55	85	143841m	110.54	ppb	
3) Chloromethane	1.74	50	275846	94.36	ppb	100
4) Vinyl Chloride	1.84	62	198154	93.27	ppb	97
5) Bromomethane	2.19	94	140915	77.25	ppb	100
6) Chloroethane	2.29	64	112757	94.89	ppb	99
7) Trichlorofluoromethane	2.53	101	195158	101.94	ppb	100
8) Ethanol	2.80	45	110389	3383.51	ppb	97
9) Freon-113	3.02	101	164620	87.27	ppb	97
10) 1,1-Dichloroethylene	3.05	61	218918	93.60	ppb	96
11) Acrolein	3.00	56	24573	288.76	ppb	91
12) Iodomethane	3.23	142	237972	134.90	ppb	100
13) Methyl Acetate	3.45	43	158181	71.64	ppb	# 73
14) tert Butyl Alcohol (TBA)	3.69	59	16162	92.47	ppb	# 100
15) Acrylonitrile	3.83	53	72405	103.68	ppb	99
16) trans-1,2-Dichloroethylene	3.79	61	270143	99.92	ppb	100
17) Carbon Disulfide	3.27	76	469008	86.54	ppb	100
18) Methylene Chloride	3.56	49	254403	91.00	ppb	98
19) tert-Butyl Methyl Ether (M	3.77	73	407528	101.36	ppb	# 100
20) Acetone	3.16	43	54025	64.68	ppb	99
21) 1,1-Dichloroethane	4.20	63	326428	101.42	ppb	100
22) Vinyl Acetate	4.24	43	361095	127.64	ppb	# 66
23) cis-1,2-Dichloroethylene	4.76	96	220175	100.96	ppb	# 100
24) 2-Butanone	4.79	43	98980	87.95	ppb	87
25) 2,2-Dichloropropane	4.73	77	218131	101.26	ppb	100
26) Bromochloromethane	4.99	49	195790	100.67	ppb	97
27) Chloroform	5.06	83	293725	103.68	ppb	100
28) 1,1,1-Trichloroethane	5.20	97	232270	102.91	ppb	100
29) Cyclohexane	5.22	56	356495	98.47	ppb	100
30) 1,1-Dichloropropylene	5.35	75	236511	102.80	ppb	100
32) Carbon Tetrachloride	5.34	117	201733	101.97	ppb	100
33) 1,2-Dichloroethane	5.61	62	190918	105.36	ppb	# 100
34) Benzene	5.56	78	701201	103.81	ppb	100
36) Tetrahydrofuran	5.03	42	75555	92.75	ppb	98
37) Trichloroethylene	6.16	95	185592	94.49	ppb	# 100
38) Methyl Cyclohexane	6.29	83	308796	96.67	ppb	# 51
39) Methyl Methacrylate	6.46	69	109931	95.34	ppb	# 75
40) Dibromomethane	6.54	93	117961	96.20	ppb	96
41) Bromodichloromethane	6.68	83	224044	98.57	ppb	100
42) 1,2-Dichloropropane	6.40	63	189356	97.63	ppb	99
43) 1,4-Dioxane	6.54	88	34002	2134.80	ppb	98
44) 2-Chloroethyl vinyl ether	6.94	63	109584	108.52	ppb	100
45) cis-1,3-Dichloropropene	7.09	75	291410	97.94	ppb	100
46) 2-Hexanone	8.07	43	160069	85.91	ppb	96
48) Toluene	7.40	91	713676	96.13	ppb	100
49) trans-1,3-Dichloropropene	7.65	75	244639	97.20	ppb	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781555.D  
 Acq On : 1 Mar 2018 2:33 pm  
 Sample : SEQ-CAL5  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 14:48 2018

Vial: 6  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

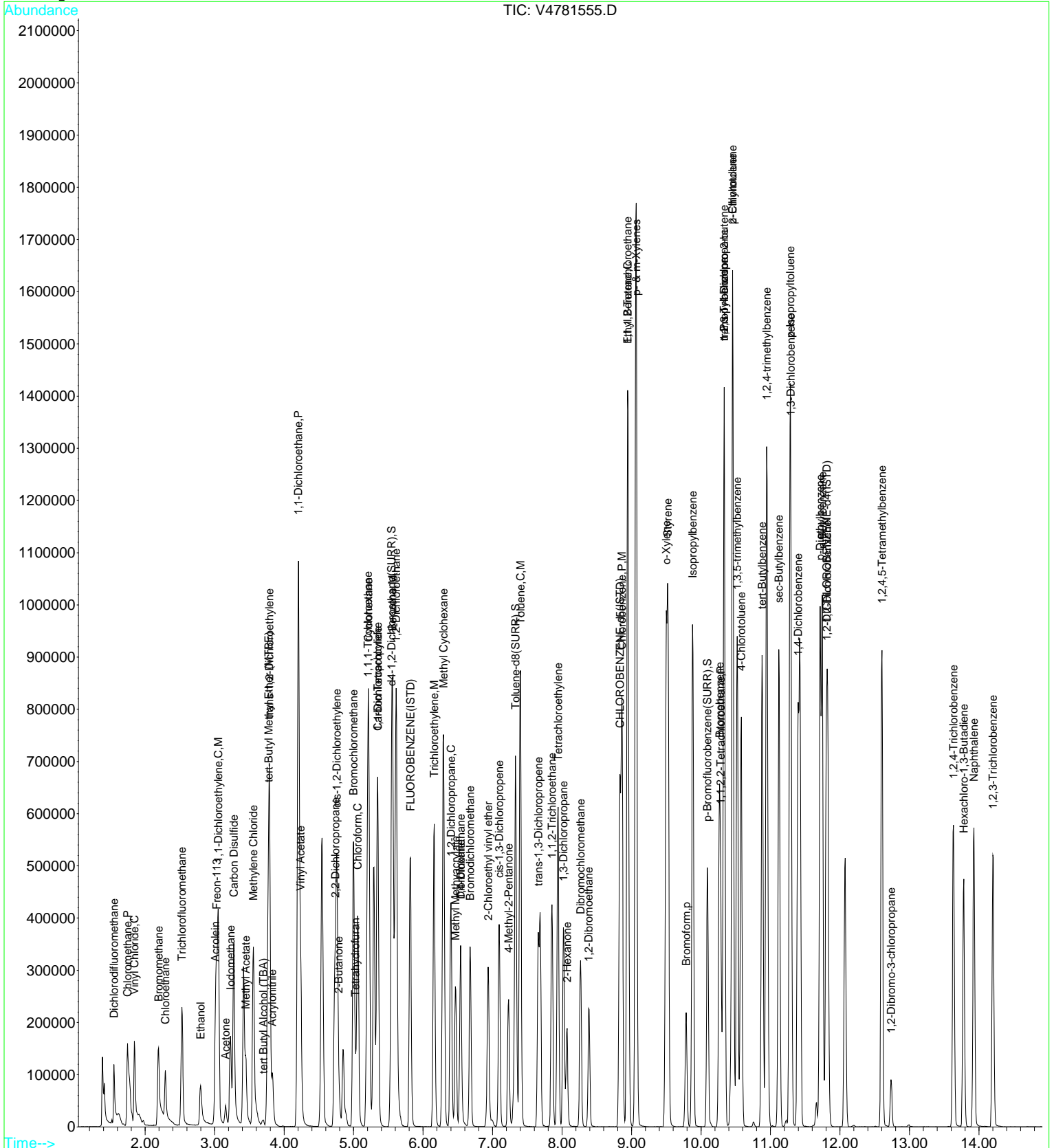
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) 1,1,2-Trichloroethane	7.85	83	128636	96.49	ppb	99
51) 1,3-Dichloropropane	8.02	76	250823	97.20	ppb #	100
52) Tetrachloroethylene	7.94	166	222448	99.93	ppb	99
53) 4-Methyl-2-Pentanone	7.23	43	228807	88.56	ppb	97
54) Dibromochloromethane	8.27	129	194760	97.68	ppb	100
55) 1,2-Dibromoethane	8.38	107	177384	97.70	ppb	100
56) Chlorobenzene	8.86	112	536448	100.52	ppb #	100
57) Ethyl Benzene	8.94	91	784333	96.55	ppb	100
58) p- & m-Xylenes	9.07	91	1172886	192.48	ppb	99
59) o-Xylene	9.50	91	591854	96.71	ppb	99
60) Styrene	9.53	104	563119	100.53	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.95	131	176766	100.26	ppb	99
62) p-Ethyltoluene	10.46	105	756142	97.54	ppb	97
63) p-Diethylbenzene	11.71	119	414115	103.24	ppb #	22
65) Bromoform	9.78	173	122657	90.92	ppb #	100
67) 1,1,2,2-Tetrachloroethane	10.28	83	192446	89.19	ppb	99
68) trans-1,4-Dichloro-2-buten	10.33	75	197816	88.78	ppb #	90
69) 1,2,3-Trichloropropane	10.33	110	56547	96.04	ppb	97
70) Isopropylbenzene	9.88	105	799991	98.16	ppb #	100
71) Bromobenzene	10.26	77	267277	92.33	ppb	95
72) n-Propylbenzene	10.33	91	913999	93.52	ppb	99
73) 2-Chlorotoluene	10.46	91	566480	92.85	ppb #	99
74) 4-Chlorotoluene	10.58	91	525578	94.01	ppb #	98
75) tert-Butylbenzene	10.88	119	557921	98.70	ppb #	100
76) 1,3,5-trimethylbenzene	10.52	105	614363	96.05	ppb	99
77) 1,2,4-trimethylbenzene	10.94	105	608739	96.27	ppb	99
78) sec-Butylbenzene	11.12	105	826013	96.98	ppb #	100
79) 1,3-Dichlorobenzene	11.30	146	382078	98.64	ppb #	68
80) 1,4-Dichlorobenzene	11.40	146	390441	100.60	ppb #	83
81) 1,2-Dichlorobenzene	11.82	146	350173	99.44	ppb #	100
82) p-Isopropyltoluene	11.28	119	732014	97.17	ppb #	100
83) n-Butylbenzene	11.74	91	724536	91.89	ppb #	98
84) 1,2,4,5-Tetramethylbenzene	12.60	119	613858	96.86	ppb	98
85) 1,2-Dibromo-3-chloropropan	12.73	75	24462	97.89	ppb #	100
86) 1,2,4-Trichlorobenzene	13.63	180	242224	97.33	ppb	100
87) Naphthalene	13.93	128	554099	100.43	ppb #	100
88) Hexachloro-1,3-Butadiene	13.78	225	104561	92.70	ppb #	99
89) 1,2,3-Trichlorobenzene	14.20	182	208621	96.34	ppb #	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781555.D  
Acq On : 1 Mar 2018 2:33 pm  
Sample : SEQ-CAL5  
Misc : QBV4030118A  
MS Integration Params: rteint.p  
Quant Time: Mar 1 14:48 2018

Vial: 6  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00337.RES

Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Wed Jan 10 14:38:44 2018  
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\V4030118\V4781556.D  
 Acq On : 1 Mar 2018 3:05 pm  
 Sample : SEQ-CAL6  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 15:27 2018

Vial: 7  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.82	70	100172	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.83	117	463121	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	207492	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.54	65	111341	49.37	ppb	0.01
Spiked Amount	50.000	Range	67 - 128	Recovery	=	98.74%
47) Toluene-d8(SURR)	7.33	98	515134	48.60	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	97.20%
66) p-Bromofluorobenzene(SURR)	10.09	174	182694	51.52	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	103.04%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.55	85	288760m	215.77	ppb	
3) Chloromethane	1.75	50	568539	189.11	ppb	100
4) Vinyl Chloride	1.85	62	399831m	182.99	ppb	
5) Bromomethane	2.19	94	293336	156.36	ppb	100
6) Chloroethane	2.29	64	230028	188.23	ppb	99
7) Trichlorofluoromethane	2.53	101	395836	201.04	ppb	100
8) Ethanol	2.80	45	228187	6800.71	ppb	98
9) Freon-113	3.02	101	321689	165.82	ppb	96
10) 1,1-Dichloroethylene	3.05	61	435758	181.17	ppb	96
11) Acrolein	3.00	56	50779	580.21	ppb	94
12) Iodomethane	3.23	142	502801	277.13	ppb	100
13) Methyl Acetate	3.45	43	310960	136.93	ppb	75
14) tert Butyl Alcohol (TBA)	3.70	59	32227	179.28	ppb	# 100
15) Acrylonitrile	3.83	53	147418	205.25	ppb	99
16) trans-1,2-Dichloroethylene	3.79	61	538265	193.59	ppb	100
17) Carbon Disulfide	3.27	76	929623	166.78	ppb	100
18) Methylene Chloride	3.56	49	508386	176.82	ppb	98
19) tert-Butyl Methyl Ether (M	3.77	73	822295	198.86	ppb	# 100
20) Acetone	3.16	43	104359	121.48	ppb	100
21) 1,1-Dichloroethane	4.20	63	659184	199.15	ppb	100
22) Vinyl Acetate	4.24	43	750962	258.11	ppb	# 66
23) cis-1,2-Dichloroethylene	4.76	96	451315	201.23	ppb	# 100
24) 2-Butanone	4.79	43	209470	180.99	ppb	87
25) 2,2-Dichloropropane	4.73	77	446408	201.49	ppb	100
26) Bromochloromethane	5.00	49	388591	194.28	ppb	96
27) Chloroform	5.06	83	567270	194.71	ppb	99
28) 1,1,1-Trichloroethane	5.20	97	461885	198.99	ppb	99
29) Cyclohexane	5.22	56	690805	185.53	ppb	100
30) 1,1-Dichloropropylene	5.34	75	470076	198.68	ppb	99
32) Carbon Tetrachloride	5.34	117	407151	200.10	ppb	100
33) 1,2-Dichloroethane	5.61	62	381249	204.58	ppb	# 100
34) Benzene	5.56	78	1393959	200.66	ppb	100
36) Tetrahydrofuran	5.03	42	149893	181.62	ppb	98
37) Trichloroethylene	6.16	95	377403	189.65	ppb	# 100
38) Methyl Cyclohexane	6.29	83	591818	182.86	ppb	# 51
39) Methyl Methacrylate	6.47	69	222463	190.42	ppb	# 100
40) Dibromomethane	6.54	93	238917	192.31	ppb	96
41) Bromodichloromethane	6.67	83	450611	195.66	ppb	100
42) 1,2-Dichloropropane	6.40	63	381001	193.88	ppb	99
43) 1,4-Dioxane	6.54	88	68784	4262.33	ppb	99
44) 2-Chloroethyl vinyl ether	6.93	63	210871	206.11	ppb	100
45) cis-1,3-Dichloropropene	7.09	75	579008	192.06	ppb	100
46) 2-Hexanone	8.07	43	318807	168.88	ppb	96
48) Toluene	7.40	91	1419475	188.72	ppb	100
49) trans-1,3-Dichloropropene	7.66	75	489190	191.83	ppb	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781556.D  
 Acq On : 1 Mar 2018 3:05 pm  
 Sample : SEQ-CAL6  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 1 15:27 2018

Vial: 7  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00337.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Wed Jan 10 14:38:44 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

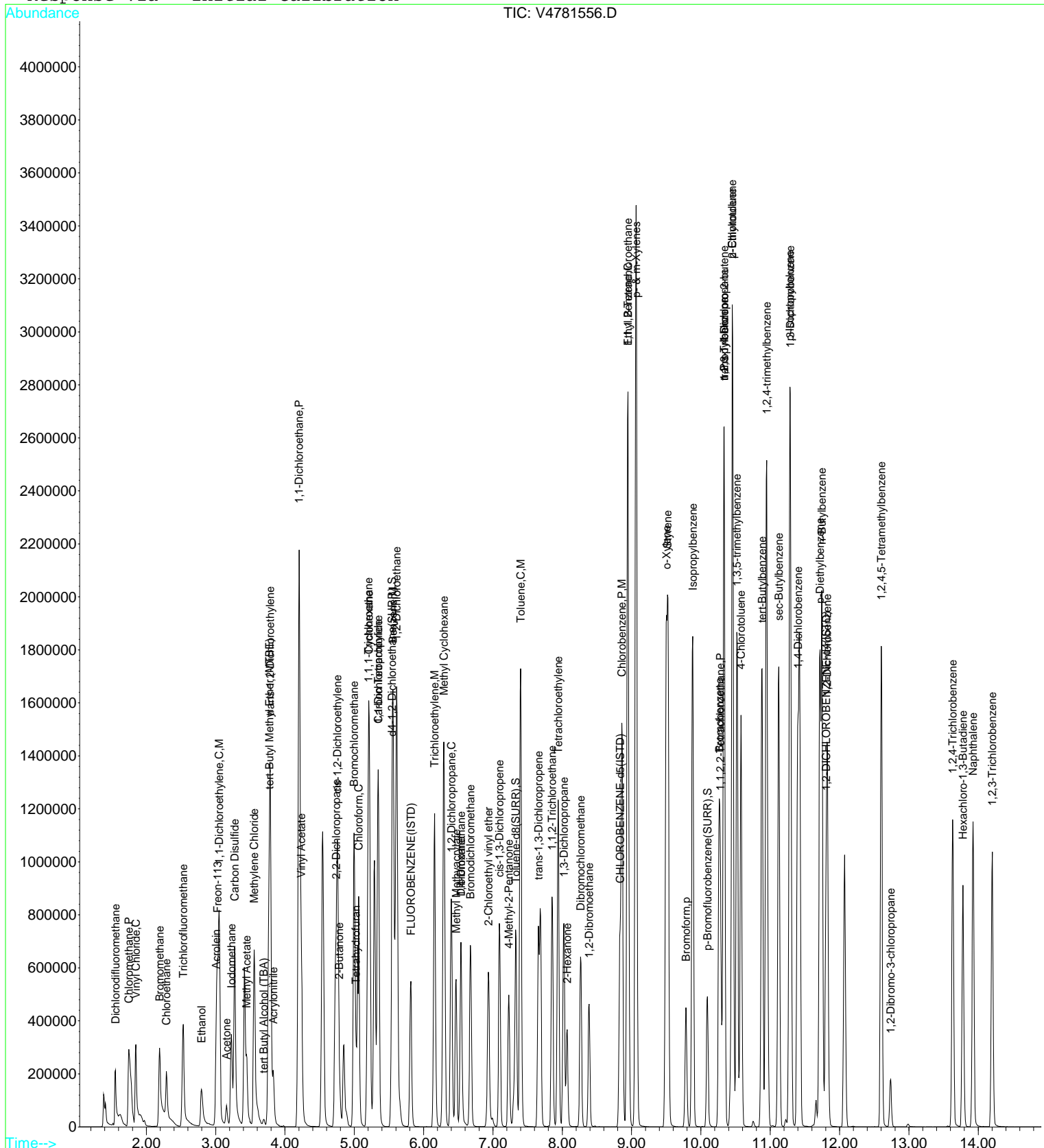
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) 1,1,2-Trichloroethane	7.85	83	252486	186.92	ppb	98
51) 1,3-Dichloropropane	8.02	76	499998	191.24	ppb #	100
52) Tetrachloroethylene	7.94	166	442274	196.09	ppb	99
53) 4-Methyl-2-Pentanone	7.23	43	459143	175.41	ppb	97
54) Dibromochloromethane	8.26	129	392783	194.44	ppb	100
55) 1,2-Dibromoethane	8.39	107	356787	193.96	ppb	100
56) Chlorobenzene	8.86	112	1038244	192.01	ppb #	100
57) Ethyl Benzene	8.94	91	1524860	185.27	ppb	100
58) p- & m-Xylenes	9.06	91	2268044	367.36	ppb	100
59) o-Xylene	9.50	91	1148809	185.28	ppb	99
60) Styrene	9.52	104	1102192	194.20	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.95	131	355515	199.01	ppb	98
62) p-Ethyltoluene	10.45	105	1438350	183.12	ppb	97
63) p-Diethylbenzene	11.71	119	782487	192.54	ppb	93
65) Bromoform	9.79	173	254227	186.85	ppb #	100
67) 1,1,2,2-Tetrachloroethane	10.28	83	385676	177.23	ppb	100
68) trans-1,4-Dichloro-2-buten	10.34	75	386190	171.86	ppb #	99
69) 1,2,3-Trichloropropane	10.34	110	108822	183.27	ppb	98
70) Isopropylbenzene	9.88	105	1550249	188.60	ppb #	100
71) Bromobenzene	10.27	77	523452	179.30	ppb	94
72) n-Propylbenzene	10.33	91	1765013	179.07	ppb	99
73) 2-Chlorotoluene	10.46	91	1079193	175.40	ppb #	99
74) 4-Chlorotoluene	10.58	91	1023979	181.61	ppb #	98
75) tert-Butylbenzene	10.88	119	1087450	190.75	ppb #	90
76) 1,3,5-trimethylbenzene	10.52	105	1192825	184.92	ppb	99
77) 1,2,4-trimethylbenzene	10.94	105	1189412	186.51	ppb	99
78) sec-Butylbenzene	11.12	105	1584999	184.52	ppb #	100
79) 1,3-Dichlorobenzene	11.30	146	753539	192.90	ppb #	100
80) 1,4-Dichlorobenzene	11.40	146	755635	193.05	ppb #	83
81) 1,2-Dichlorobenzene	11.82	146	694114	195.44	ppb #	99
82) p-Isopropyltoluene	11.28	119	1418483	186.70	ppb #	100
83) n-Butylbenzene	11.74	91	1412310	177.60	ppb #	99
84) 1,2,4,5-Tetramethylbenzene	12.60	119	1184945	185.39	ppb	98
85) 1,2-Dibromo-3-chloropropan	12.73	75	48268	191.52	ppb #	100
86) 1,2,4-Trichlorobenzene	13.63	180	469777	187.17	ppb	99
87) Naphthalene	13.93	128	1103451	198.31	ppb #	100
88) Hexachloro-1,3-Butadiene	13.78	225	202242	177.78	ppb #	100
89) 1,2,3-Trichlorobenzene	14.20	182	413159	189.17	ppb #	100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781556.D  
Acq On : 1 Mar 2018 3:05 pm  
Sample : SEQ-CAL6  
Misc : QBV4030118A  
MS Integration Params: rteint.p  
Quant Time: Mar 1 15:27 2018

Vial: 7  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00337.RES

Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Wed Jan 10 14:38:44 2018  
Response via : Initial Calibration





# SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investig

Calibration: YC80003

Laboratory ID: Y8C0202-SCV1

Sequence: Y8C0202

Standard ID: Y18B196

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
1,1,1,2-Tetrachloroethane	50.0	48.6	-2.8	30.00
1,1,1-Trichloroethane	50.0	47.6	-4.7	30.00
1,1,2,2-Tetrachloroethane	50.0	50.9	1.8	30.00
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50.0	49.4	-1.3	30.00
1,1,2-Trichloroethane	50.0	48.2	-3.6	30.00
1,1-Dichloroethane	50.0	48.8	-2.5	30.00
1,1-Dichloroethylene	50.0	49.3	-1.5	30.00
1,2,3-Trichlorobenzene	50.0	49.3	-1.4	30.00
1,2,3-Trichloropropane	50.0	49.5	-1.0	30.00
1,2,4-Trichlorobenzene	50.0	47.2	-5.6	30.00
1,2,4-Trimethylbenzene	50.0	48.0	-4.0	30.00
1,2-Dibromo-3-chloropropane	50.0	51.6	3.3	30.00
1,2-Dibromoethane	50.0	48.6	-2.7	30.00
1,2-Dichlorobenzene	50.0	47.9	-4.2	30.00
1,2-Dichloroethane	50.0	50.2	0.4	30.00
1,2-Dichloropropane	50.0	50.1	0.2	30.00
1,3,5-Trimethylbenzene	50.0	47.8	-4.4	30.00
1,3-Dichlorobenzene	50.0	47.9	-4.3	30.00
1,4-Dichlorobenzene	50.0	48.1	-3.7	30.00
1,4-Dioxane	1050	1330	26.3	30.00
2-Butanone	50.0	52.0	3.9	30.00
2-Hexanone	50.0	50.0	-0.1	30.00
4-Methyl-2-pentanone	50.0	50.1	0.2	30.00
Acetone	50.0	38.1	-23.9	30.00
Acrolein	50.0	55.9	11.8	30.00
Acrylonitrile	50.0	52.9	5.8	30.00
Benzene	50.0	48.4	-3.1	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investig

Calibration: YC80003

Laboratory ID: Y8C0202-SCV1

Sequence: Y8C0202

Standard ID: Y18B196

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
Bromochloromethane	50.0	49.9	-0.2	30.00
Bromodichloromethane	50.0	49.8	-0.5	30.00
Bromoform	50.0	50.9	1.7	30.00
Bromomethane	50.0	53.0	6.0	30.00
Carbon disulfide	50.0	52.4	4.8	30.00
Carbon tetrachloride	50.0	49.1	-1.9	30.00
Chlorobenzene	50.0	47.9	-4.2	30.00
Chloroethane	50.0	54.5	8.9	30.00
Chloroform	50.0	48.8	-2.4	30.00
Chloromethane	50.0	55.3	10.7	30.00
cis-1,2-Dichloroethylene	50.0	48.7	-2.6	30.00
cis-1,3-Dichloropropylene	50.0	47.7	-4.6	30.00
Cyclohexane	50.0	49.7	-0.5	30.00
Dibromochloromethane	50.0	50.0	0.0	30.00
Dibromomethane	50.0	48.7	-2.7	30.00
Dichlorodifluoromethane	50.0	60.7	21.5	30.00
Ethyl Benzene	50.0	48.3	-3.5	30.00
Hexachlorobutadiene	50.0	48.8	-2.4	30.00
Isopropylbenzene	50.0	46.6	-6.7	30.00
Methyl acetate	50.0	45.7	-8.6	30.00
Methyl tert-butyl ether (MTBE)	50.0	51.4	2.8	30.00
Methylcyclohexane	50.0	50.0	-0.02	30.00
Methylene chloride	50.0	38.3	-23.4	30.00
n-Butylbenzene	50.0	47.1	-5.9	30.00
n-Propylbenzene	50.0	47.7	-4.7	30.00
o-Xylene	50.0	49.1	-1.7	30.00
p- & m- Xylenes	100	97.2	-2.8	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

## EPA 8260C

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0104

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900-Kingston CVS Investig

**Calibration:** YC80003

**Laboratory ID:** Y8C0202-SCV1

**Sequence:** Y8C0202

**Standard ID:** Y18B196

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
p-Isopropyltoluene	50.0	48.0	-4.1	30.00
sec-Butylbenzene	50.0	49.7	-0.7	30.00
Styrene	50.0	47.6	-4.9	30.00
tert-Butyl alcohol (TBA)	250	252	0.9	30.00
tert-Butylbenzene	50.0	48.3	-3.4	30.00
Tetrachloroethylene	50.0	46.3	-7.3	30.00
Toluene	50.0	48.1	-3.9	30.00
trans-1,2-Dichloroethylene	50.0	47.8	-4.4	30.00
trans-1,3-Dichloropropylene	50.0	47.5	-5.0	30.00
trans-1,4-dichloro-2-butene	50.0	50.3	0.6	30.00
Trichloroethylene	50.0	48.1	-3.9	30.00
Trichlorofluoromethane	50.0	53.8	7.5	30.00
Vinyl Chloride	50.0	53.8	7.7	30.00

\* Values outside of QC limits

Data File : C:\HPCHEM\1\DATA\V4030118\V4781558.D  
 Acq On : 1 Mar 2018 4:08 pm  
 Sample : SEQ-SCV1  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 2 8:11 2018

Vial: 9  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.82	70	97865	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.83	117	464642	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	211426	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.54	65	108747	49.94	ppb	0.00
Spiked Amount	50.000	Range	67 - 128	Recovery	=	99.88%
47) Toluene-d8(SURR)	7.34	98	502119	49.85	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	99.70%
66) p-Bromofluorobenzene(SURR)	10.10	174	184432	50.08	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	100.16%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.55	85	85937m	60.73	ppb	
3) Chloromethane	1.75	50	158358	55.34	ppb	100
4) Vinyl Chloride	1.85	62	105834m	53.83	ppb	
5) Bromomethane	2.19	94	83257	53.00	ppb	99
6) Chloroethane	2.29	64	60341	54.47	ppb	100
7) Trichlorofluoromethane	2.53	101	105386	53.76	ppb	100
9) Freon-113	3.03	101	80077	49.36	ppb	97
10) 1,1-Dichloroethylene	3.06	61	110192	49.26	ppb	100
11) Acrolein	3.00	56	12976	55.89	ppb	99
12) Iodomethane	3.23	142	107078	54.45	ppb	100
13) Methyl Acetate	3.45	43	78310	45.70	ppb	100
14) tert Butyl Alcohol (TBA)	3.70	59	39230	252.31	ppb	# 100
15) Acrylonitrile	3.83	53	37308	52.88	ppb	99
16) trans-1,2-Dichloroethylene	3.79	61	132543	47.80	ppb	99
17) Carbon Disulfide	3.27	76	248853	52.40	ppb	100
18) Methylene Chloride	3.56	49	128144	38.32	ppb	99
19) tert-Butyl Methyl Ether (M)	3.78	73	213443	51.38	ppb	# 100
20) Acetone	3.16	43	28412	38.07	ppb	100
21) 1,1-Dichloroethane	4.21	63	164489	48.77	ppb	100
22) Vinyl Acetate	4.24	43	222310	60.40	ppb	100
23) cis-1,2-Dichloroethylene	4.76	96	110328	48.71	ppb	# 67
24) 2-Butanone	4.79	43	56472	51.97	ppb	100
25) 2,2-Dichloropropane	4.73	77	109856	48.12	ppb	100
26) Bromochloromethane	5.00	49	100516	49.89	ppb	99
27) Chloroform	5.06	83	145441	48.80	ppb	100
28) 1,1,1-Trichloroethane	5.20	97	113922	47.65	ppb	99
29) Cyclohexane	5.22	56	178976	49.73	ppb	# 100
30) 1,1-Dichloropropylene	5.35	75	119245	48.71	ppb	100
32) Carbon Tetrachloride	5.35	117	98432	49.07	ppb	99
33) 1,2-Dichloroethane	5.61	62	97138	50.21	ppb	100
34) Benzene	5.56	78	350575	48.43	ppb	100
36) Tetrahydrofuran	5.03	42	38675	51.89	ppb	97
37) Trichloroethylene	6.16	95	92947	48.07	ppb	100
38) Methyl Cyclohexane	6.29	83	152369	49.99	ppb	# 62
39) Methyl Methacrylate	6.47	69	58567	53.83	ppb	# 100
40) Dibromomethane	6.54	93	58576	48.67	ppb	99
41) Bromodichloromethane	6.68	83	109660	49.77	ppb	# 70
42) 1,2-Dichloropropane	6.40	63	97466	50.10	ppb	100
43) 1,4-Dioxane	6.55	88	19833	1326.51	ppb	98
44) 2-Chloroethyl vinyl ether	6.94	63	56786	54.59	ppb	100
45) cis-1,3-Dichloropropene	7.09	75	140356	47.68	ppb	100
46) 2-Hexanone	8.07	43	81886	49.95	ppb	100
48) Toluene	7.40	91	361632	48.07	ppb	100
49) trans-1,3-Dichloropropene	7.66	75	117837	47.52	ppb	100
50) 1,1,2-Trichloroethane	7.85	83	62797	48.18	ppb	99

Data File : C:\HPCHEM\1\DATA\V4030118\V4781558.D  
 Acq On : 1 Mar 2018 4:08 pm  
 Sample : SEQ-SCV1  
 Misc : QBV4030118A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 2 8:11 2018

Vial: 9  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

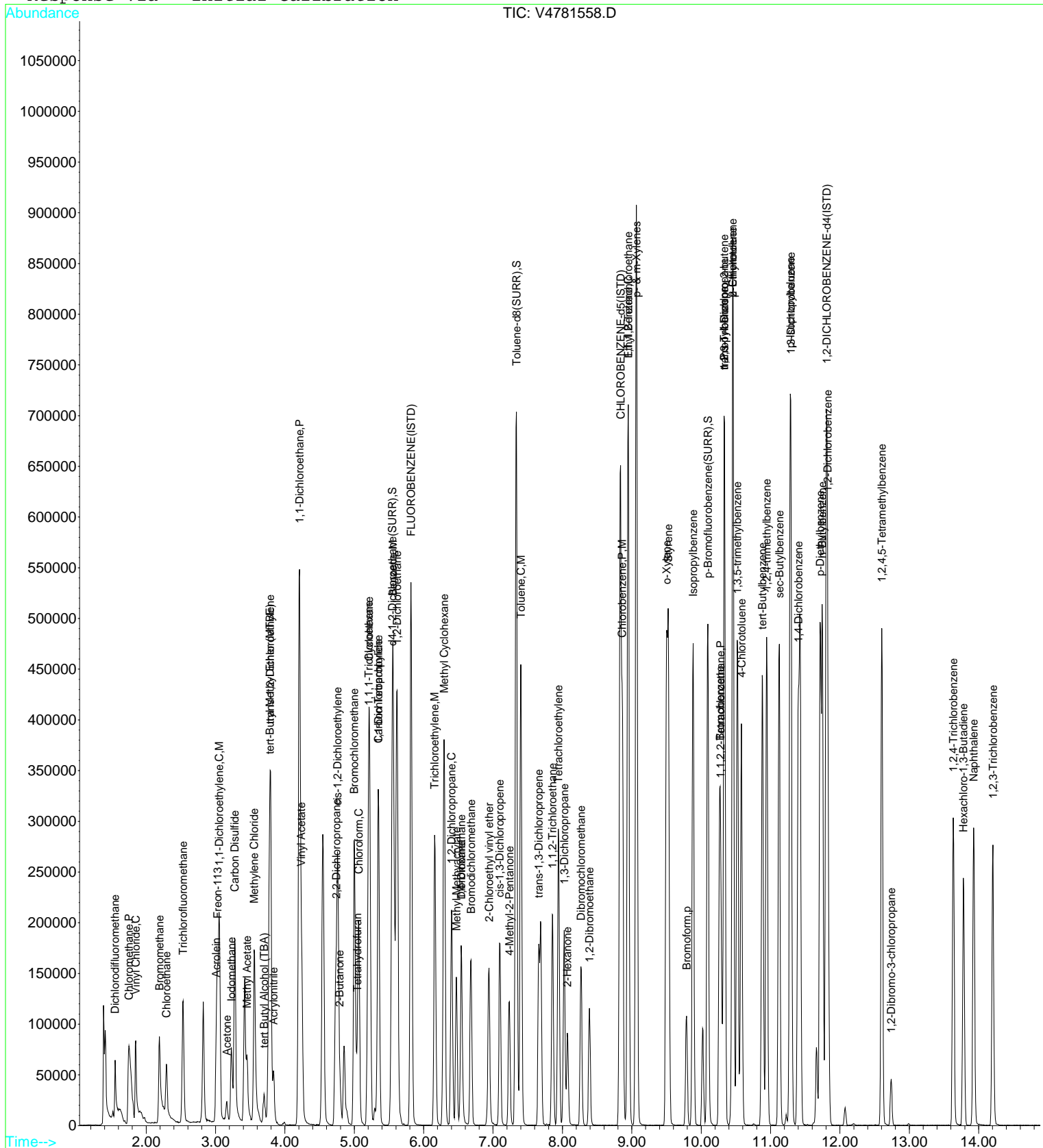
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) 1,3-Dichloropropane	8.02	76	125806	49.36	ppb	# 100
52) Tetrachloroethylene	7.94	166	108800	46.34	ppb	100
53) 4-Methyl-2-Pentanone	7.23	43	117468	50.09	ppb	100
54) Dibromochloromethane	8.27	129	96111	50.00	ppb	99
55) 1,2-Dibromoethane	8.39	107	87524	48.65	ppb	99
56) Chlorobenzene	8.87	112	266685	47.92	ppb	# 100
57) Ethyl Benzene	8.94	91	395870	48.27	ppb	100
58) p- & m-Xylenes	9.07	91	599147	97.20	ppb	100
59) o-Xylene	9.50	91	302943	49.13	ppb	100
60) Styrene	9.53	104	275629	47.57	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.95	131	88991	48.60	ppb	99
62) p-Ethyltoluene	10.46	105	397482	51.94	ppb	97
63) p-Diethylbenzene	11.71	119	219594	52.12	ppb	# 97
65) Bromoform	9.79	173	61778	50.87	ppb	# 100
67) 1,1,2,2-Tetrachloroethane	10.28	83	102414	50.89	ppb	99
68) trans-1,4-Dichloro-2-buten	10.34	75	103603	50.32	ppb	# 100
69) 1,2,3-Trichloropropane	10.33	110	29092	49.48	ppb	99
70) Isopropylbenzene	9.88	105	390528	46.64	ppb	# 100
71) Bromobenzene	10.27	77	138770	49.57	ppb	99
72) n-Propylbenzene	10.33	91	462006	47.66	ppb	100
73) 2-Chlorotoluene	10.46	91	291669	48.81	ppb	# 84
74) 4-Chlorotoluene	10.58	91	265466	47.66	ppb	# 98
75) tert-Butylbenzene	10.88	119	283732	48.28	ppb	# 89
76) 1,3,5-trimethylbenzene	10.52	105	313870	47.80	ppb	100
77) 1,2,4-trimethylbenzene	10.94	105	310306	48.01	ppb	100
78) sec-Butylbenzene	11.13	105	431466	49.66	ppb	# 100
79) 1,3-Dichlorobenzene	11.30	146	196129	47.86	ppb	# 83
80) 1,4-Dichlorobenzene	11.40	146	199486	48.14	ppb	# 100
81) 1,2-Dichlorobenzene	11.83	146	180957	47.90	ppb	# 100
82) p-Isopropyltoluene	11.28	119	377072	47.97	ppb	# 100
83) n-Butylbenzene	11.74	91	369582	47.06	ppb	# 91
84) 1,2,4,5-Tetramethylbenzene	12.60	119	321818	50.94	ppb	100
85) 1,2-Dibromo-3-chloropropan	12.73	75	12719	51.63	ppb	# 100
86) 1,2,4-Trichlorobenzene	13.63	180	122835	47.19	ppb	100
87) Naphthalene	13.93	128	289912	49.66	ppb	# 100
88) Hexachloro-1,3-Butadiene	13.78	225	54941	48.78	ppb	# 99
89) 1,2,3-Trichlorobenzene	14.20	182	108729	49.30	ppb	# 100

Data File : C:\HPCHEM\1\DATA\V4030118\V4781558.D  
Acq On : 1 Mar 2018 4:08 pm  
Sample : SEQ-SCV1  
Misc : QBV4030118A  
MS Integration Params: rteint.p  
Quant Time: Mar 2 8:11 2018

Vial: 9  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00339.RES

Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Thu Mar 01 15:31:22 2018  
Response via : Initial Calibration



## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: GCMS-VOA4 Calibration: YC80003  
 Lab File ID: V4781865.D Calibration Date: 03/02/18 09:51  
 Sequence: Y8C1237 Injection Date: 03/12/18  
 Lab Sample ID: Y8C1237-CCV1 Injection Time: 08:55

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	50.0	47.0	0.1970414	0.1852289		-6.0	20
1,1,1-Trichloroethane	A	50.0	48.2	1.221382	1.176486	0.1	-3.7	20
1,1,2,2-Tetrachloroethane	A	50.0	47.2	0.4759265	0.4497196	0.3	-5.5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	50.0	51.8	0.8288802	0.8586365	0.1	3.6	20
1,1,2-Trichloroethane	A	50.0	50.6	0.1402526	0.1420315	0.1	1.3	20
1,1-Dichloroethane	A	50.0	50.2	1.72318	1.728428	0.2	0.3	20
1,1-Dichloroethylene	A	50.0	50.0	1.142884	1.143427	0.1	0.05	20
1,2,3-Trichlorobenzene	A	50.0	48.6	0.5215511	0.5070478		-2.8	20
1,2,3-Trichloropropane	A	50.0	44.3	0.1390362	0.1232784		-11.3	20
1,2,4-Trichlorobenzene	A	50.0	48.2	0.6155538	0.5937359	0.2	-3.5	20
1,2,4-Trimethylbenzene	A	50.0	47.1	1.528543	1.441048		-5.7	20
1,2-Dibromo-3-chloropropane	A	50.0	48.4	5.825399E-02	5.640955E-02	0.05	-3.2	20
1,2-Dibromoethane	A	50.0	49.2	0.193585	0.1904097	0.1	-1.6	20
1,2-Dichlorobenzene	A	50.0	46.8	0.8934521	0.8354148	0.4	-6.5	20
1,2-Dichloroethane	A	50.0	48.2	0.9884422	0.9525565	0.1	-3.6	20
1,2-Dichloropropane	A	50.0	50.7	0.2093547	0.2124012	0.1	1.5	20
1,3,5-Trimethylbenzene	A	50.0	47.3	1.552723	1.469104		-5.4	20
1,3-Dichlorobenzene	A	50.0	46.9	0.969164	0.909049	0.6	-6.2	20
1,4-Dichlorobenzene	A	50.0	47.3	0.9799309	0.9262044	0.5	-5.5	20
1,4-Dioxane	A	1050	1190	1.608898E-03	1.827033E-03		13.6	20
2-Butanone	A	50.0	48.8	0.5551659	0.5414515	0.1	-2.5	20
2-Hexanone	A	50.0	51.7	0.1764175	0.1823787	0.1	3.4	20
4-Methyl-2-pentanone	A	50.0	49.4	0.2523409	0.2494122	0.1	-1.2	20
Acetone	A	50.0	45.7	0.3812602	0.3485435	0.1	-8.6	20
Acrolein	A	50.0	52.0	0.1186078	0.1232581		3.9	20
Acrylonitrile	A	50.0	51.5	0.3604645	0.3712852		3.0	20
Benzene	A	50.0	49.5	3.698008	3.662957	0.5	-0.9	20
Bromochloromethane	A	50.0	50.0	1.029395	1.029226		-0.02	20
Bromodichloromethane	A	50.0	50.2	0.2371184	0.2381633	0.2	0.4	20

## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: GCMS-VOA4 Calibration: YC80003  
 Lab File ID: V4781865.D Calibration Date: 03/02/18 09:51  
 Sequence: Y8C1237 Injection Date: 03/12/18  
 Lab Sample ID: Y8C1237-CCV1 Injection Time: 08:55

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Bromoform	A	50.0	48.5	0.1301059	0.1339025	0.1	2.9	20
Bromomethane	A	50.0	52.9	0.8026443	0.8492342	0.1	5.8	20
Carbon disulfide	A	50.0	50.3	2.426381	2.442541	0.1	0.7	20
Carbon tetrachloride	A	50.0	49.4	1.024888	1.012243	0.1	-1.2	20
Chlorobenzene	A	50.0	48.7	0.5989089	0.5838626	0.5	-2.5	20
Chloroethane	A	50.0	55.7	0.5659252	0.6307006	0.1	11.4	20
Chloroform	A	50.0	49.4	1.522621	1.505319	0.2	-1.1	20
Chloromethane	A	50.0	54.3	1.461978	1.586918	0.1	8.5	20
cis-1,2-Dichloroethylene	A	50.0	48.5	1.157276	1.121989	0.1	-3.0	20
cis-1,3-Dichloropropylene	A	50.0	50.7	0.3167803	0.3212995	0.2	1.4	20
Cyclohexane	A	50.0	50.3	1.838606	1.849985	0.1	0.6	20
Dibromochloromethane	A	50.0	48.4	0.2068579	0.2002761	0.1	-3.2	20
Dibromomethane	A	50.0	49.0	0.1295048	0.1267772		-2.1	20
Dichlorodifluoromethane	A	50.0	55.0	0.7230102	0.7955656	0.1	10.0	20
Ethyl Benzene	A	50.0	50.7	0.8825255	0.8949019	0.1	1.4	20
Hexachlorobutadiene	A	50.0	49.7	0.2663514	0.2649038		-0.5	20
Isopropylbenzene	A	50.0	47.0	1.980268	1.859416	0.1	-6.1	20
Methyl acetate	A	50.0	46.7	0.8754509	0.8174785	0.1	-6.6	20
Methyl tert-butyl ether (MTBE)	A	50.0	49.2	2.122243	2.087781	0.1	-1.6	20
Methylcyclohexane	A	50.0	52.6	0.3279763	0.3448768	0.1	5.2	20
Methylene chloride	A	50.0	39.7	1.708652	1.355805	0.1	-20.7	20 *
n-Butylbenzene	A	50.0	49.8	1.857246	1.850883		-0.3	20
n-Propylbenzene	A	50.0	48.7	2.292442	2.231085		-2.7	20
o-Xylene	A	50.0	50.8	0.6634767	0.6744161	0.3	1.6	20
p- & m- Xylenes	A	100	102	0.6632989	0.6733339	0.1	1.5	20
p-Isopropyltoluene	A	50.0	47.9	1.858829	1.781123		-4.2	20
sec-Butylbenzene	A	50.0	48.1	2.054575	1.976883		-3.8	20
Styrene	A	50.0	50.5	0.6234602	0.6301319	0.3	1.1	20
tert-Butyl alcohol (TBA)	A	250	49.9	7.943765E-02	1.586918E-02		-80.0	20 *



## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Instrument ID: GCMS-VOA4 Calibration: YC80003  
 Lab File ID: V4781865.D Calibration Date: 03/02/18 09:51  
 Sequence: Y8C1237 Injection Date: 03/12/18  
 Lab Sample ID: Y8C1237-CCV1 Injection Time: 08:55

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
tert-Butylbenzene	A	50.0	47.6	1.389872	1.323624		-4.8	20
Tetrachloroethylene	A	50.0	48.9	0.2526607	0.2472719	0.2	-2.1	20
Toluene	A	50.0	49.9	0.8095882	0.8086495	0.4	-0.1	20
trans-1,2-Dichloroethylene	A	50.0	50.1	1.416562	1.42049	0.1	0.3	20
trans-1,3-Dichloropropylene	A	50.0	50.3	0.2668314	0.2683096	0.1	0.6	20
trans-1,4-dichloro-2-butene	A	50.0	49.0	0.486908	0.4770768		-2.0	20
Trichloroethylene	A	50.0	49.0	0.2080791	0.2041299	0.2	-1.9	20
Trichlorofluoromethane	A	50.0	50.8	1.001515	1.018045	0.1	1.7	20
Vinyl Chloride	A	50.0	55.0	1.004461	1.104289	0.1	9.9	20

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

Data File : C:\HPCHEM\1\DATA\V4031218\V4781865.D  
 Acq On : 12 Mar 2018 8:55 am  
 Sample : SEQ-CCV1  
 Misc : QBV4031218A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 12 10:21 2018

Vial: 4  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.80	70	115822	50.00	ppb	-0.01
35) CHLOROBENZENE-d5(ISTD)	8.82	117	541028	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	260151	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.53	65	118462	45.96	ppb	-0.01
Spiked Amount	50.000	Range	67 - 128	Recovery	=	91.92%
47) Toluene-d8(SURR)	7.32	98	577180	49.21	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	98.42%
66) p-Bromofluorobenzene(SURR)	10.08	174	220433	48.65	ppb	-0.01
Spiked Amount	50.000	Range	63 - 166	Recovery	=	97.30%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.55	85	92144m	55.02	ppb	
3) Chloromethane	1.75	50	183800	54.27	ppb	100
4) Vinyl Chloride	1.84	62	127901m	54.97	ppb	
5) Bromomethane	2.18	94	98360	52.90	ppb	100
6) Chloroethane	2.28	64	73049	55.72	ppb	100
7) Trichlorofluoromethane	2.52	101	117912	50.83	ppb	100
8) Ethanol	2.79	45	72150	2437.16	ppb	100
9) Freon-113	3.01	101	99449	51.79	ppb	97
10) 1,1-Dichloroethylene	3.04	61	132434	50.02	ppb	99
11) Acrolein	2.99	56	14276	51.96	ppb	97
12) Iodomethane	3.21	142	114650	49.26	ppb	100
13) Methyl Acetate	3.44	43	94682	46.69	ppb	100
14) tert Butyl Alcohol (TBA)	3.69	59	9190	49.94	ppb	# 100
15) Acrylonitrile	3.82	53	43003	51.50	ppb	# 65
16) trans-1,2-Dichloroethylene	3.78	61	164524	50.14	ppb	100
17) Carbon Disulfide	3.27	76	282900	50.33	ppb	100
18) Methylene Chloride	3.54	49	157032	39.67	ppb	100
19) tert-Butyl Methyl Ether (M	3.76	73	241811	49.19	ppb	# 100
20) Acetone	3.15	43	40369	45.71	ppb	99
21) 1,1-Dichloroethane	4.20	63	200190	50.15	ppb	100
22) Vinyl Acetate	4.23	43	233999	53.72	ppb	100
23) cis-1,2-Dichloroethylene	4.75	96	129951	48.48	ppb	# 100
24) 2-Butanone	4.78	43	62712	48.76	ppb	100
25) 2,2-Dichloropropane	4.72	77	134558	49.81	ppb	100
26) Bromochloromethane	4.99	49	119207	49.99	ppb	97
27) Chloroform	5.05	83	174349	49.43	ppb	100
28) 1,1,1-Trichloroethane	5.19	97	136263	48.16	ppb	99
29) Cyclohexane	5.21	56	214269	50.31	ppb	# 100
30) 1,1-Dichloropropylene	5.34	75	143190	49.42	ppb	# 84
32) Carbon Tetrachloride	5.33	117	117240	49.38	ppb	99
33) 1,2-Dichloroethane	5.60	62	110327	48.18	ppb	100
34) Benzene	5.55	78	424251	49.53	ppb	100
36) Tetrahydrofuran	5.02	42	44989	51.84	ppb	97
37) Trichloroethylene	6.15	95	110440	49.05	ppb	98
38) Methyl Cyclohexane	6.28	83	186588	52.58	ppb	# 60
39) Methyl Methacrylate	6.46	69	66179	52.24	ppb	# 100
40) Dibromomethane	6.53	93	68590	48.95	ppb	98
41) Bromodichloromethane	6.66	83	128853	50.22	ppb	100
42) 1,2-Dichloropropane	6.39	63	114915	50.73	ppb	99
43) 1,4-Dioxane	6.53	88	20758	1192.36	ppb	100
44) 2-Chloroethyl vinyl ether	6.93	63	66188	54.64	ppb	100
45) cis-1,3-Dichloropropene	7.09	75	173832	50.71	ppb	99
46) 2-Hexanone	8.06	43	98672	51.69	ppb	100
48) Toluene	7.39	91	437502	49.94	ppb	99
49) trans-1,3-Dichloropropene	7.65	75	145163	50.28	ppb	99

Data File : C:\HPCHEM\1\DATA\V4031218\V4781865.D  
 Acq On : 12 Mar 2018 8:55 am  
 Sample : SEQ-CCV1  
 Misc : QBV4031218A  
 MS Integration Params: rteint.p  
 Quant Time: Mar 12 10:21 2018

Vial: 4  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

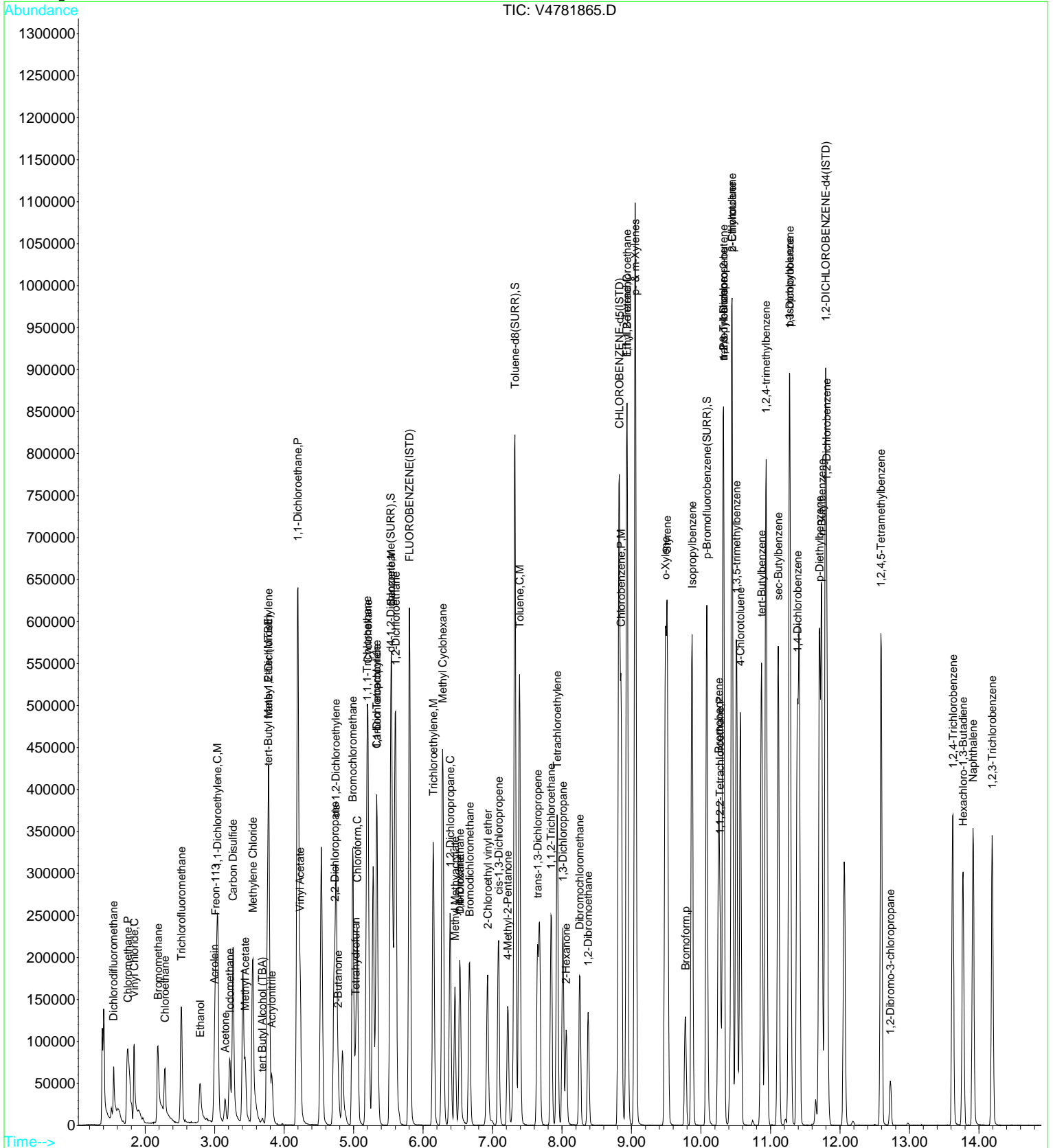
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) 1,1,2-Trichloroethane	7.85	83	76843	50.63	ppb	# 53
51) 1,3-Dichloropropane	8.01	76	151310	50.98	ppb	# 100
52) Tetrachloroethylene	7.93	166	133781	48.93	ppb	99
53) 4-Methyl-2-Pentanone	7.22	43	134939	49.42	ppb	100
54) Dibromochloromethane	8.25	129	108355	48.41	ppb	99
55) 1,2-Dibromoethane	8.38	107	103017	49.18	ppb	100
56) Chlorobenzene	8.85	112	315886	48.74	ppb	# 100
57) Ethyl Benzene	8.93	91	484167	50.70	ppb	100
58) p- & m-Xylenes	9.05	91	728585	101.51	ppb	99
59) o-Xylene	9.49	91	364878	50.82	ppb	100
60) Styrene	9.51	104	340919	50.54	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.94	131	100214	47.00	ppb	98
62) p-Ethyltoluene	10.44	105	460582	51.69	ppb	99
63) p-Diethylbenzene	11.70	119	262155	53.44	ppb	# 98
65) Bromoform	9.78	173	72445	48.49	ppb	# 100
67) 1,1,2,2-Tetrachloroethane	10.28	83	116995	47.25	ppb	99
68) trans-1,4-Dichloro-2-buten	10.32	75	124112	48.99	ppb	# 100
69) 1,2,3-Trichloropropane	10.32	110	32071	44.33	ppb	93
70) Isopropylbenzene	9.87	105	483729	46.95	ppb	# 100
71) Bromobenzene	10.25	77	164656	47.80	ppb	99
72) n-Propylbenzene	10.32	91	580419	48.66	ppb	100
73) 2-Chlorotoluene	10.45	91	352111	47.89	ppb	# 99
74) 4-Chlorotoluene	10.57	91	334874	48.87	ppb	# 98
75) tert-Butylbenzene	10.87	119	344342	47.62	ppb	# 100
76) 1,3,5-trimethylbenzene	10.51	105	382189	47.31	ppb	99
77) 1,2,4-trimethylbenzene	10.93	105	374890	47.14	ppb	100
78) sec-Butylbenzene	11.11	105	514288	48.11	ppb	# 100
79) 1,3-Dichlorobenzene	11.28	146	236490	46.90	ppb	# 83
80) 1,4-Dichlorobenzene	11.38	146	240953	47.26	ppb	# 100
81) 1,2-Dichlorobenzene	11.81	146	217334	46.75	ppb	# 100
82) p-Isopropyltoluene	11.27	119	463361	47.91	ppb	# 100
83) n-Butylbenzene	11.74	91	481509	49.83	ppb	# 91
84) 1,2,4,5-Tetramethylbenzene	12.59	119	388645	50.00	ppb	100
85) 1,2-Dibromo-3-chloropropan	12.72	75	14675	48.42	ppb	# 100
86) 1,2,4-Trichlorobenzene	13.63	180	154461	48.23	ppb	100
87) Naphthalene	13.91	128	338984	47.19	ppb	# 100
88) Hexachloro-1,3-Butadiene	13.77	225	68915	49.73	ppb	# 99
89) 1,2,3-Trichlorobenzene	14.19	182	131909	48.61	ppb	# 100

Data File : C:\HPCHEM\1\DATA\V4031218\V4781865.D  
Acq On : 12 Mar 2018 8:55 am  
Sample : SEQ-CCV1  
Misc : QBV4031218A  
MS Integration Params: rteint.p  
Quant Time: Mar 12 10:21 2018

Vial: 4  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

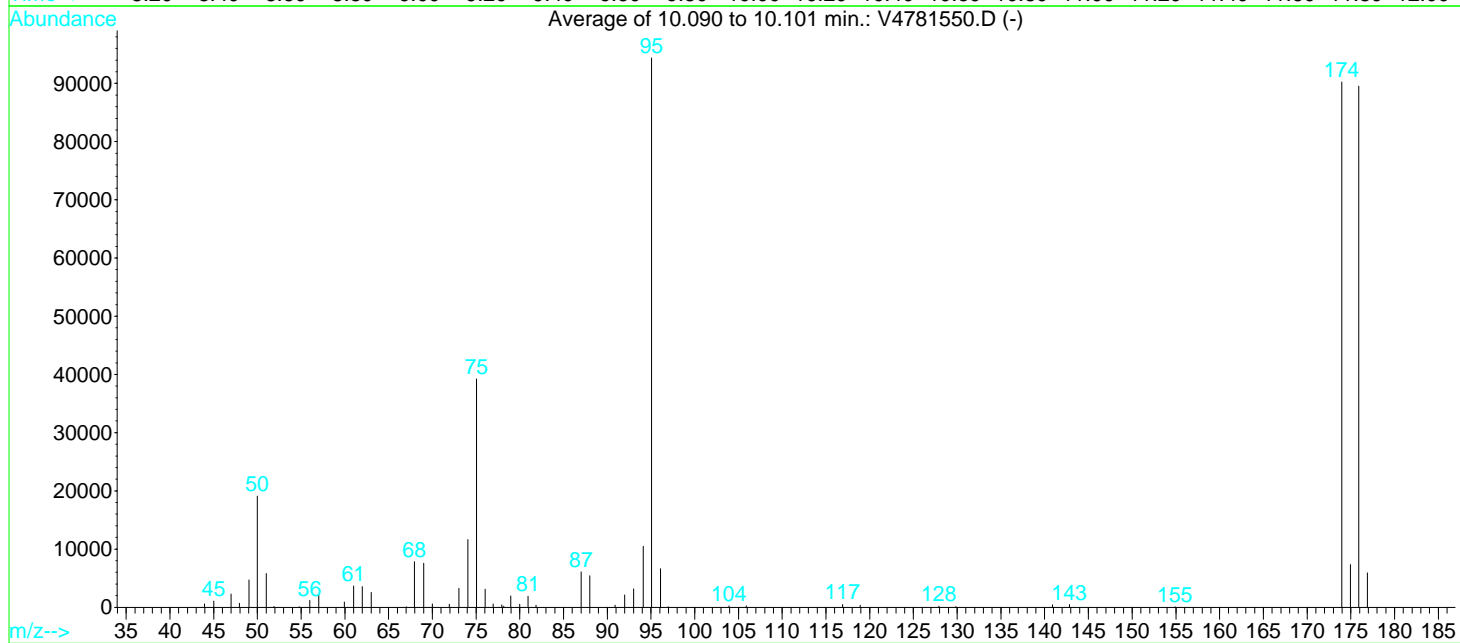
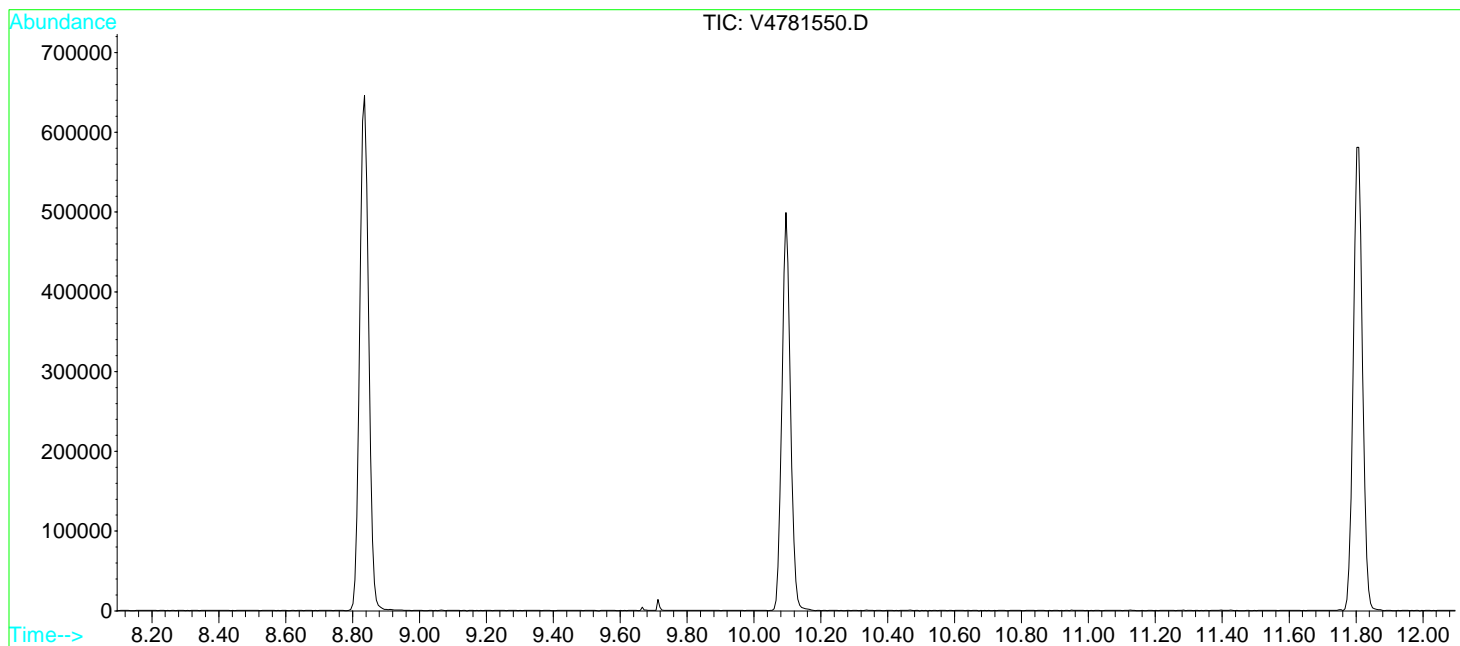
Quant Results File: V4C00339.RES

Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Thu Mar 01 15:31:22 2018  
Response via : Initial Calibration



# VOA Raw QC Data

Data File : C:\HPCHEM\1\DATA\V4030118\V4781550.D Vial: 1  
 Acq On : 1 Mar 2018 11:55 am Operator: SS  
 Sample : SEQ-TUN1 Inst : GCMS-VOA4  
 Misc : QBV4030118A Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Method : C:\HPCHEM\1\METHODS\V4C00337.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260



AutoFind: Scans 1539, 1540, 1541; Background Corrected with Scan 1531

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	19109	PASS
75	95	30	60	41.6	39203	PASS
95	95	100	100	100.0	94347	PASS
96	95	5	9	7.0	6647	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	95.7	90259	PASS
175	174	5	9	8.1	7343	PASS
176	174	95	101	99.2	89547	PASS
177	176	5	9	6.6	5937	PASS

Data File : C:\HPCHEM\1\DATA\V4031218\V4781864.D

Vial: 3

Acq On : 12 Mar 2018 8:23 am

Operator: SS

Sample : SEQ-TUN1

Inst : GCMS-VOA4

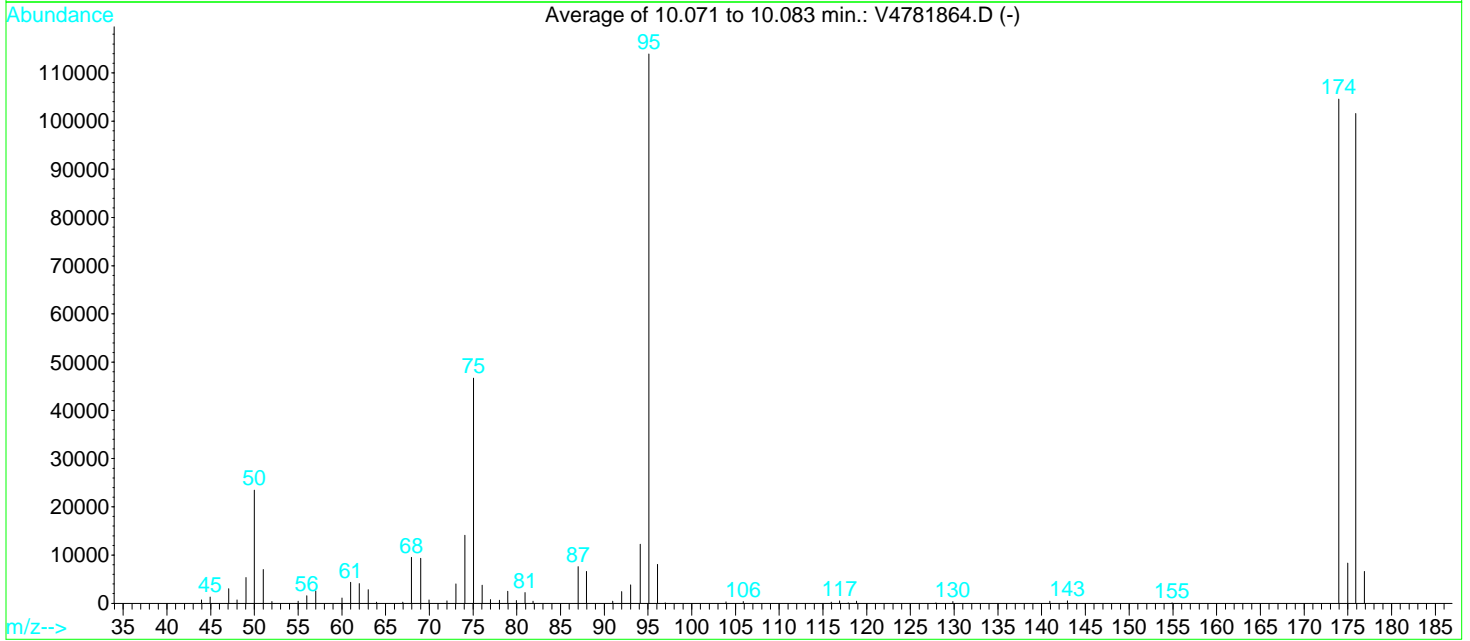
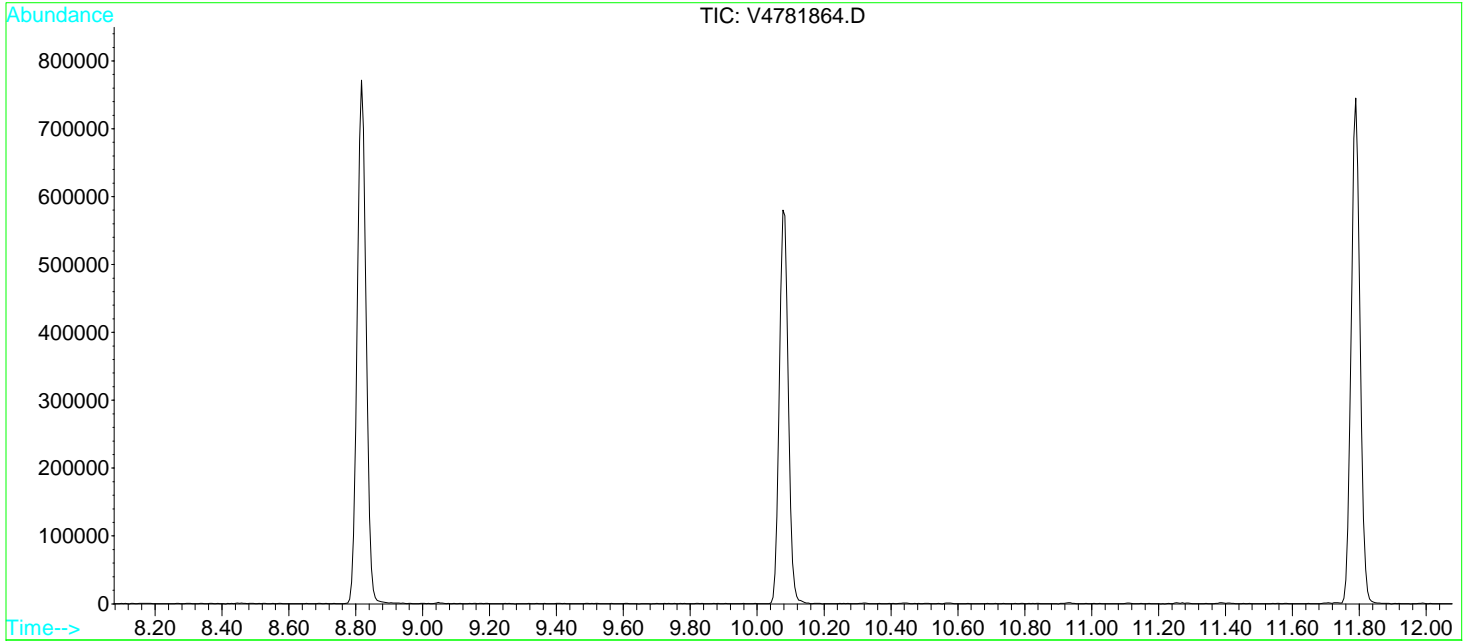
Misc : QBV4031218A

Multiplr: 1.00

MS Integration Params: rteint.p

Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)

Title : VOCs BY GC/MS 8240/8260



AutoFind: Scans 1535, 1536, 1537; Background Corrected with Scan 1527

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	23485	PASS
75	95	30	60	41.0	46717	PASS
95	95	100	100	100.0	113893	PASS
96	95	5	9	7.1	8042	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	91.8	104539	PASS
175	174	5	9	8.0	8325	PASS
176	174	95	101	97.2	101587	PASS
177	176	5	9	6.5	6596	PASS

# METHOD BLANK RAW DATA

SDG: 18C0104  
CLASS: VOA  
METHOD: EPA 8260C



## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK1 File ID: V4781868.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.0050	U
71-55-6	1,1,1-Trichloroethane	0.0050	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0050	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0050	U
79-00-5	1,1,2-Trichloroethane	0.0050	U
75-34-3	1,1-Dichloroethane	0.0050	U
75-35-4	1,1-Dichloroethylene	0.0050	U
87-61-6	1,2,3-Trichlorobenzene	0.0050	U
96-18-4	1,2,3-Trichloropropane	0.0050	U
120-82-1	1,2,4-Trichlorobenzene	0.0050	U
95-63-6	1,2,4-Trimethylbenzene	0.0050	U
96-12-8	1,2-Dibromo-3-chloropropane	0.0050	U
106-93-4	1,2-Dibromoethane	0.0050	U
95-50-1	1,2-Dichlorobenzene	0.0050	U
107-06-2	1,2-Dichloroethane	0.0050	U
78-87-5	1,2-Dichloropropane	0.0050	U
108-67-8	1,3,5-Trimethylbenzene	0.0050	U
541-73-1	1,3-Dichlorobenzene	0.0050	U
106-46-7	1,4-Dichlorobenzene	0.0050	U
123-91-1	1,4-Dioxane	0.10	U
78-93-3	2-Butanone	0.0050	U
591-78-6	2-Hexanone	0.0050	U
108-10-1	4-Methyl-2-pentanone	0.0050	U
67-64-1	Acetone	0.010	U
107-02-8	Acrolein	0.010	U
107-13-1	Acrylonitrile	0.0050	U
71-43-2	Benzene	0.0050	U
74-97-5	Bromochloromethane	0.0050	U
75-27-4	Bromodichloromethane	0.0050	U
75-25-2	Bromoform	0.0050	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK1 File ID: V4781868.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
74-83-9	Bromomethane	0.0050	U
75-15-0	Carbon disulfide	0.0050	U
56-23-5	Carbon tetrachloride	0.0050	U
108-90-7	Chlorobenzene	0.0050	U
75-00-3	Chloroethane	0.0050	U
67-66-3	Chloroform	0.0050	U
74-87-3	Chloromethane	0.0050	U
156-59-2	cis-1,2-Dichloroethylene	0.0050	U
10061-01-5	cis-1,3-Dichloropropylene	0.0050	U
110-82-7	Cyclohexane	0.0050	U
124-48-1	Dibromochloromethane	0.0050	U
74-95-3	Dibromomethane	0.0050	U
75-71-8	Dichlorodifluoromethane	0.0050	U
100-41-4	Ethyl Benzene	0.0050	U
87-68-3	Hexachlorobutadiene	0.0050	U
98-82-8	Isopropylbenzene	0.0050	U
79-20-9	Methyl acetate	0.0050	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.0050	U
108-87-2	Methylcyclohexane	0.0050	U
75-09-2	Methylene chloride	0.010	U
104-51-8	n-Butylbenzene	0.0050	U
103-65-1	n-Propylbenzene	0.0050	U
95-47-6	o-Xylene	0.0050	U
179601-23-1	p- & m- Xylenes	0.010	U
99-87-6	p-Isopropyltoluene	0.0050	U
135-98-8	sec-Butylbenzene	0.0050	U
100-42-5	Styrene	0.0050	U
75-65-0	tert-Butyl alcohol (TBA)	0.010	U
98-06-6	tert-Butylbenzene	0.0050	U
127-18-4	Tetrachloroethylene	0.0050	U

**FORM I**

**METHOD BLANK DATA SHEET  
EPA 8260C**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>18C0104</u>
Client:	<u>Chazen Environmental Services (Poughkeepsie)</u>	Project:	<u>41103.00 Task 0900-Kingston CVS Investigation</u>
Matrix:	<u>Soil</u>	Laboratory ID:	<u>BC80462-BLK1</u>
		File ID:	<u>V4781868.D</u>
Prepared:	<u>03/12/18 07:30</u>	Preparation:	<u>EPA 5035A</u>
		Initial/Final:	<u>5 g / 5 ml</u>
Analyzed:	<u>03/12/18 10:36</u>	Instrument:	<u>GCMS-VOA4</u>
Batch:	<u>BC80462</u>	Sequence:	<u>Y8C1237</u>
		Calibration:	<u>YC80003</u>

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
108-88-3	Toluene	0.0050	U
156-60-5	trans-1,2-Dichloroethylene	0.0050	U
10061-02-6	trans-1,3-Dichloropropylene	0.0050	U
110-57-6	trans-1,4-dichloro-2-butene	0.0050	U
79-01-6	Trichloroethylene	0.0050	U
75-69-4	Trichlorofluoromethane	0.0050	U
75-01-4	Vinyl Chloride	0.0050	U
1330-20-7	Xylenes, Total	0.015	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	44.6	89.2	77 - 125	
Toluene-d8	50.0	49.4	98.8	85 - 120	
p-Bromofluorobenzene	50.0	49.2	98.3	76 - 130	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	112394	5.81	115822	5.8	
Chlorobenzene-d5	521067	8.83	541028	8.82	
1,2-Dichlorobenzene-d4	245938	11.8	260151	11.8	

Data File : C:\HPCHEM\1\DATA\V4031218\V4781868.D  
 Acq On : 12 Mar 2018 10:36 am  
 Sample : BC80462-BLK1  
 Misc : QBV4031218A

Vial: 7  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Mar 12 10:58 2018

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)

Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.81	70	112394	50.00	ppb	0.00
35) CHLOROBENZENE-d5(ISTD)	8.83	117	521067	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(ISTD)	11.80	152	245938	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.54	65	111545	44.60	ppb	0.00
Spiked Amount	50.000	Range	67 - 128	Recovery	=	89.20%
47) Toluene-d8(SURR)	7.33	98	557987	49.39	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	98.78%
66) p-Bromofluorobenzene(SURR)	10.09	174	210554	49.15	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	98.30%

Target Compounds

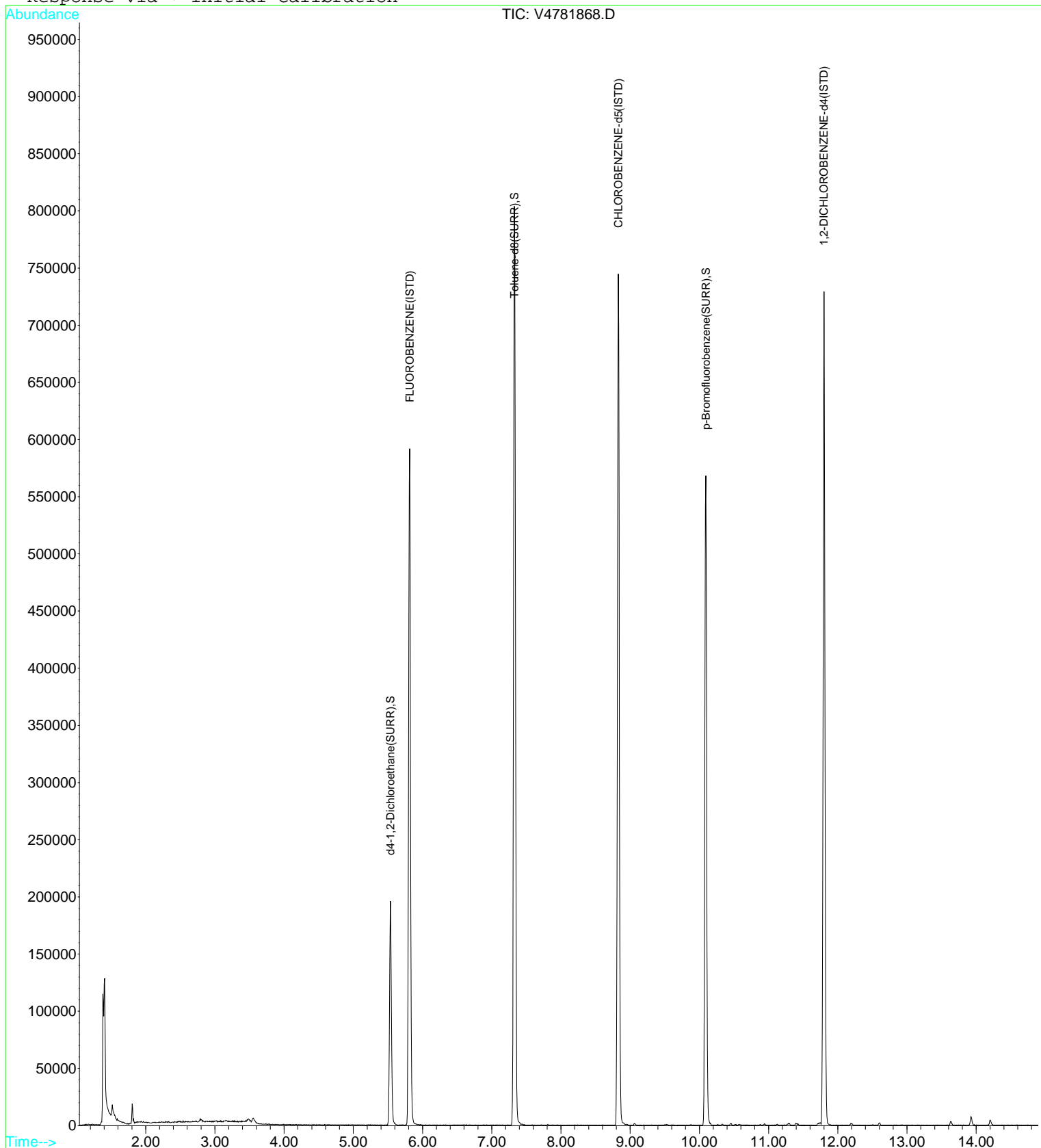
Qvalue

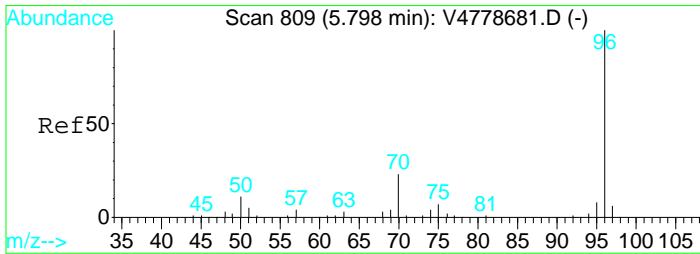
Data File : C:\HPCHEM\1\DATA\V4031218\V4781868.D  
Acq On : 12 Mar 2018 10:36 am  
Sample : BC80462-BLK1  
Misc : QBV4031218A  
MS Integration Params: rteint.p  
Quant Time: Mar 12 10:58 2018

Vial: 7  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00339.RES

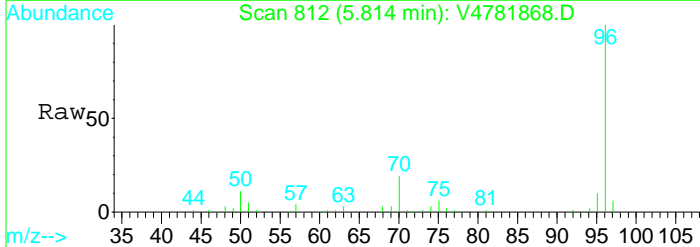
Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Thu Mar 01 15:31:22 2018  
Response via : Initial Calibration



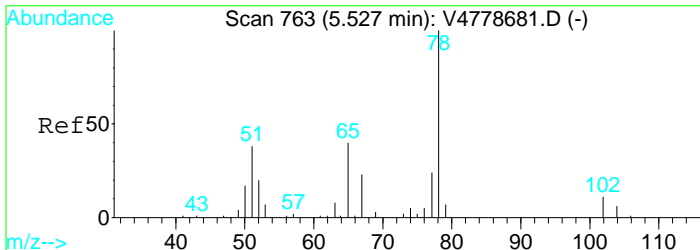
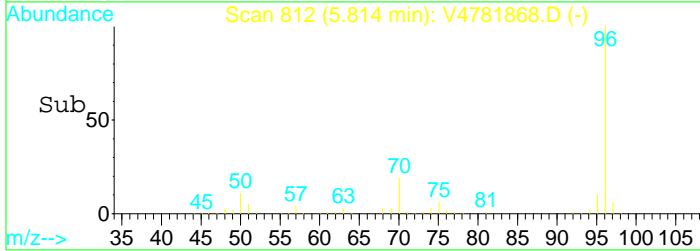
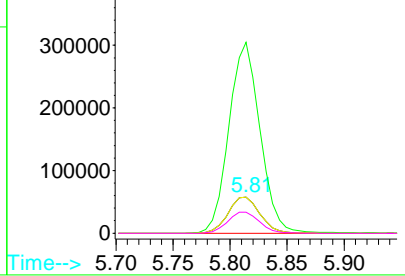


#1  
 FLUOROBENZENE (ISTD)  
 Concen: 50.00 ppb  
 RT: 5.81 min Scan# 812  
 Delta R.T. -0.00 min  
 Lab File: V4781868.D  
 Acq: 12 Mar 2018 10:36 am

Tgt Ion	Resp	Lower	Upper
70	112394		
96	516.2	0.0	0.0#
70	100.0	80.0	120.0
50	0.0	48.7	73.1#

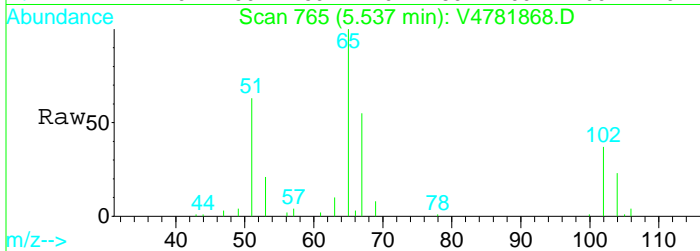


Abundance Ion 70.00 (69.70 to 70.70): V4  
 Ion 96.00 (95.70 to 96.70): V4  
 Ion 70.00 (69.70 to 70.70): V4  
 Ion 50.00 (49.70 to 50.70): V4

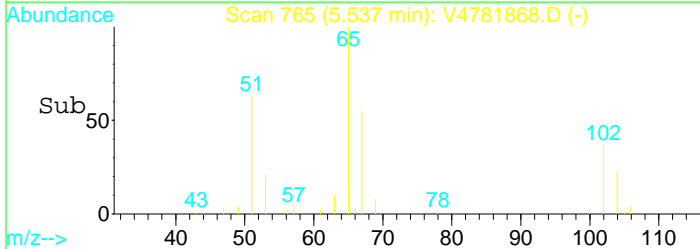
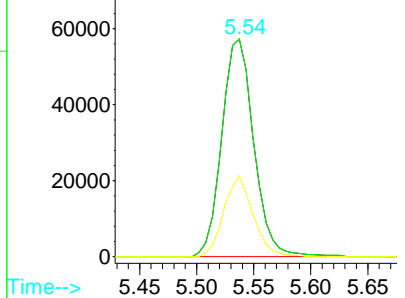


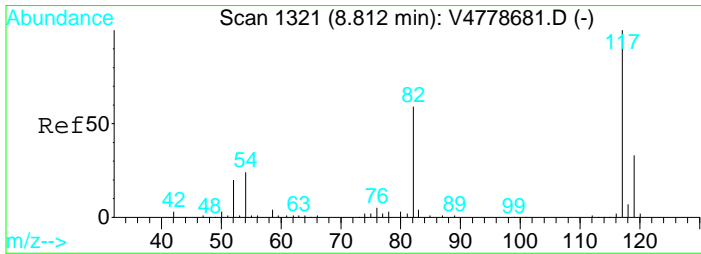
#31  
 d4-1,2-Dichloroethane (SURR)  
 Concen: N.D. ppb  
 RT: 5.54 min Scan# 765  
 Delta R.T. -0.00 min  
 Lab File: V4781868.D  
 Acq: 12 Mar 2018 10:36 am

Tgt Ion	Resp	Lower	Upper
65	111545		
65	100	80.0	120.0
102	33.9	28.0	42.0



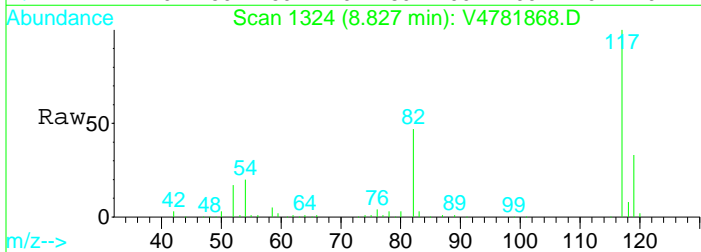
Abundance Ion 65.00 (64.70 to 65.70): V4  
 Ion 65.00 (64.70 to 65.70): V4  
 Ion 102.00 (101.70 to 102.70):



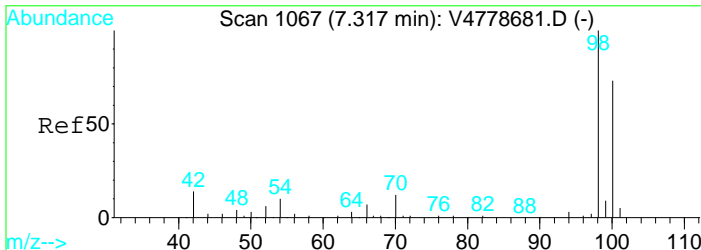
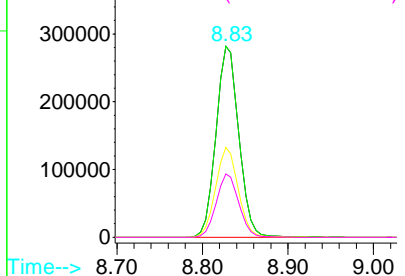
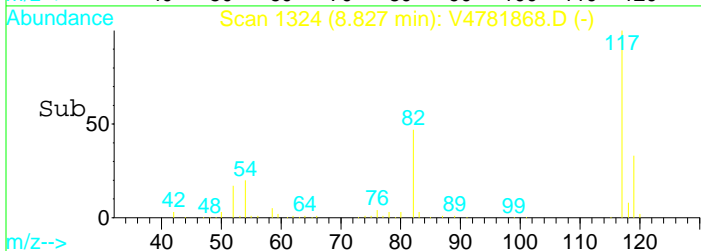


#35  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 50.00 ppb  
 RT: 8.83 min Scan# 1324  
 Delta R.T. -0.00 min  
 Lab File: V4781868.D  
 Acq: 12 Mar 2018 10:36 am

Tgt Ion	Resp	Ion Ratio	Lower	Upper
117	521067	100		
117		100.0	80.0	120.0
82		0.0	0.0	0.0
119		32.6	25.7	38.5

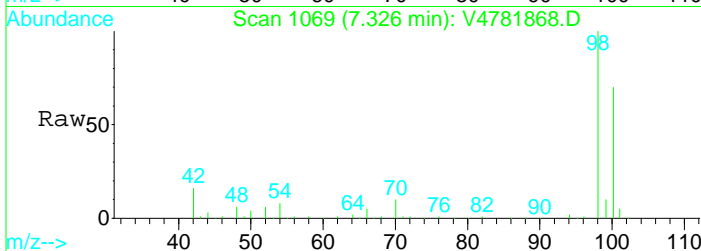


Abundance  
 Ion 117.00 (116.70 to 117.70):  
 Ion 117.00 (116.70 to 117.70):  
 Ion 82.00 (81.70 to 82.70): V4  
 Ion 119.00 (118.70 to 119.70):

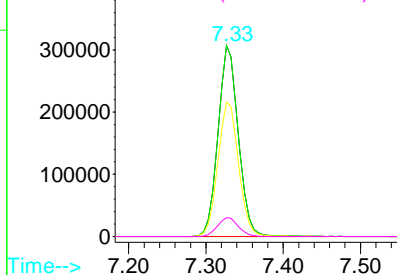
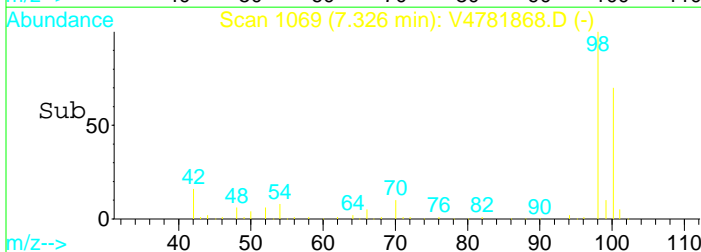


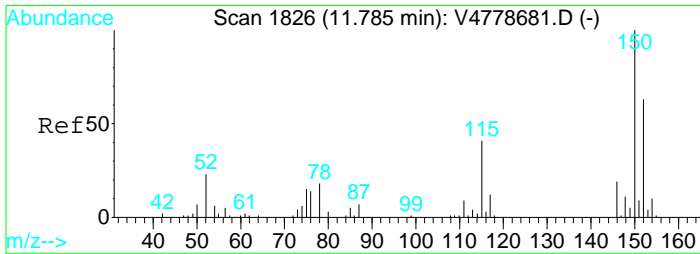
#47  
 Toluene-d8 (SURR)  
 Concen: N.D. ppb  
 RT: 7.33 min Scan# 1069  
 Delta R.T. -0.00 min  
 Lab File: V4781868.D  
 Acq: 12 Mar 2018 10:36 am

Tgt Ion	Resp	Ion Ratio	Lower	Upper
98	557987	100		
98		100.0	80.0	120.0
100		72.1	57.0	85.6
70		0.0	0.0	0.0



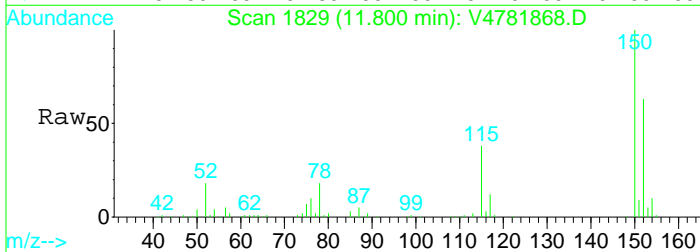
Abundance  
 Ion 98.00 (97.70 to 98.70): V4  
 Ion 98.00 (97.70 to 98.70): V4  
 Ion 100.00 (99.70 to 100.70): V4  
 Ion 70.00 (69.70 to 70.70): V4



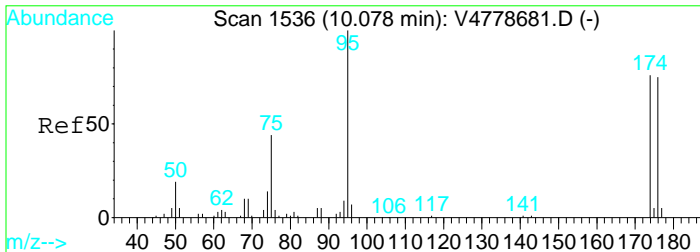
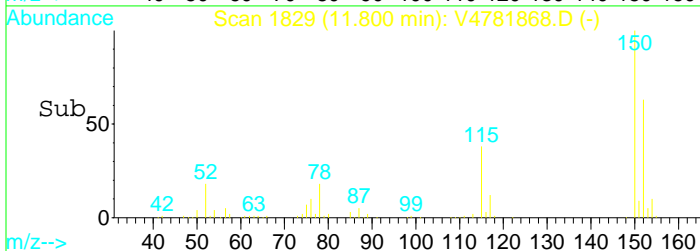
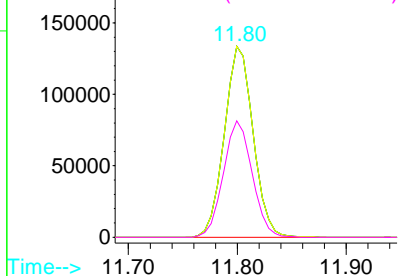


#64  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 50.00 ppb  
 RT: 11.80 min Scan# 1829  
 Delta R.T. -0.00 min  
 Lab File: V4781868.D  
 Acq: 12 Mar 2018 10:36 am

Tgt Ion	Resp	Lower	Upper
152	245938		
152	100	80.0	120.0
152	100.0	80.0	120.0
115	0.0	0.0	0.0

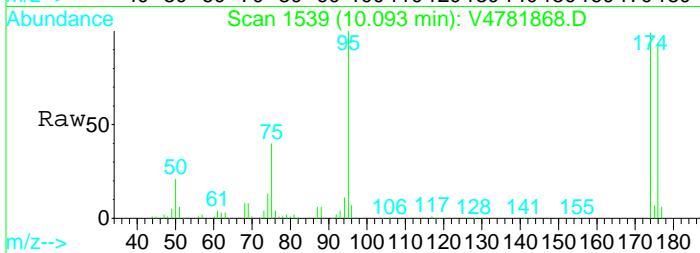


Abundance Ion 152.00 (151.70 to 152.70):  
 Ion 152.00 (151.70 to 152.70):  
 Ion 152.00 (151.70 to 152.70):  
 Ion 115.00 (114.70 to 115.70):

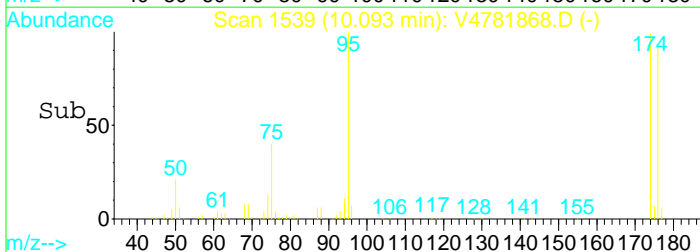
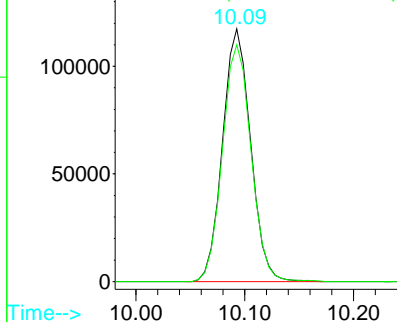


#66  
 p-Bromofluorobenzene (SURR)  
 Concen: N.D. ppb  
 RT: 10.09 min Scan# 1539  
 Delta R.T. -0.00 min  
 Lab File: V4781868.D  
 Acq: 12 Mar 2018 10:36 am

Tgt Ion	Resp	Lower	Upper
174	210554		
174	100		
176	93.6	78.9	118.3



Abundance Ion 174.00 (173.70 to 174.70):  
 Ion 176.00 (175.70 to 176.70):





**FORM I**

**METHOD BLANK DATA SHEET  
EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	10	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	1.0	U
107-02-8	Acrolein	1.0	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	0.97	JD
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	47.2	94.4	77 - 125	D
Toluene-d8	50.0	49.0	98.1	85 - 120	D
p-Bromofluorobenzene	50.0	48.1	96.3	76 - 130	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	105574	5.8	115822	5.8	
Chlorobenzene-d5	508640	8.82	541028	8.82	
1,2-Dichlorobenzene-d4	251170	11.8	260151	11.8	

Data File : C:\HPCHEM\1\DATA\V4031218\V4781869.D Vial: 8  
 Acq On : 12 Mar 2018 11:07 am Operator: SS  
 Sample : BC80462-BLK2 Inst : GCMS-VOA4  
 Misc : QBV4031218A MEOH BLK 100UL/5ML Multiplr: 100.00  
 MS Integration Params: rteint.p  
 Quant Time: Mar 12 11:40 2018 Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.80	70	105574	50.00	ppb	-0.01
35) CHLOROBENZENE-d5(ISTD)	8.82	117	508640	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(ISTD)	11.80	152	251170	50.00	ppb	0.00

System Monitoring Compounds

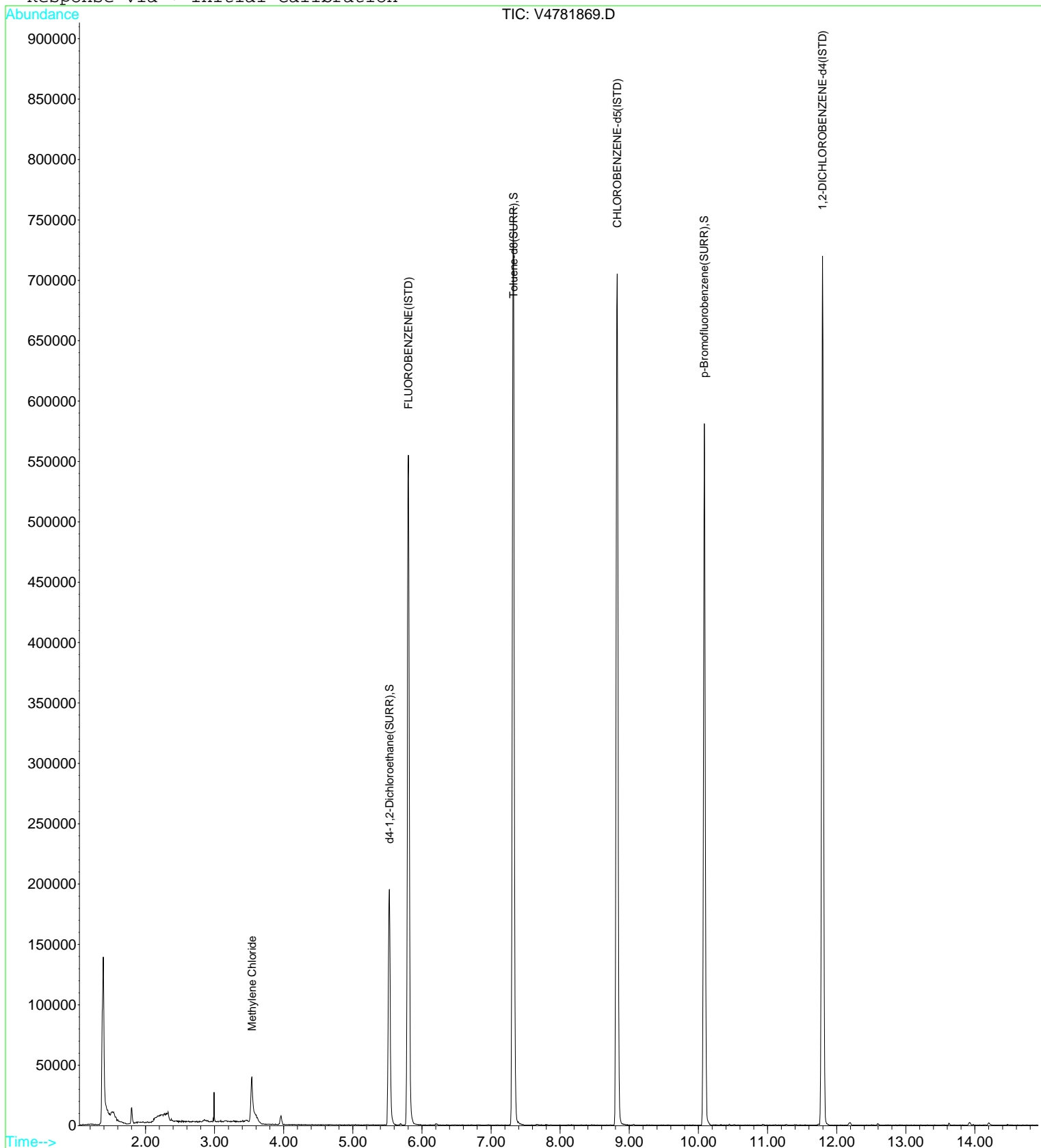
31) d4-1,2-Dichloroethane(SURR)	5.53	65	110922	47.22	ppb	-0.01
Spiked Amount	50.000	Range	67 - 128	Recovery	=	94.44%
47) Toluene-d8(SURR)	7.32	98	540915	49.05	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	98.10%
66) p-Bromofluorobenzene(SURR)	10.09	174	210554	48.13	ppb	0.00
Spiked Amount	50.000	Range	63 - 166	Recovery	=	96.26%

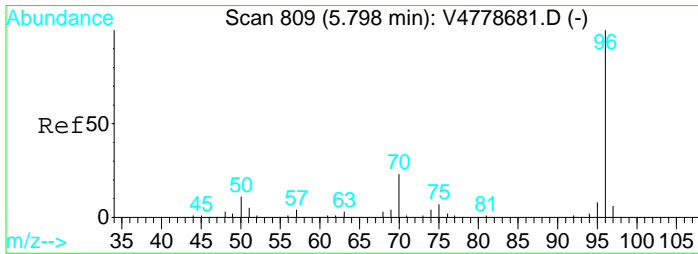
Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
18) Methylene Chloride	3.54	49	34960	9.69	ppb	97

Data File : C:\HPCHEM\1\DATA\V4031218\V4781869.D Vial: 8  
Acq On : 12 Mar 2018 11:07 am Operator: SS  
Sample : BC80462-BLK2 Inst : GCMS-VOA4  
Misc : QBV4031218A MEOH BLK 100UL/5ML Multiplr: 100.00  
MS Integration Params: rteint.p  
Quant Time: Mar 12 11:40 2018 Quant Results File: V4C00339.RES

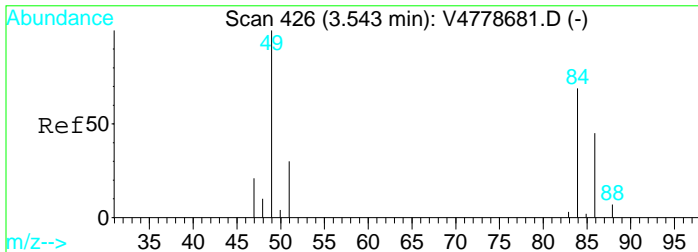
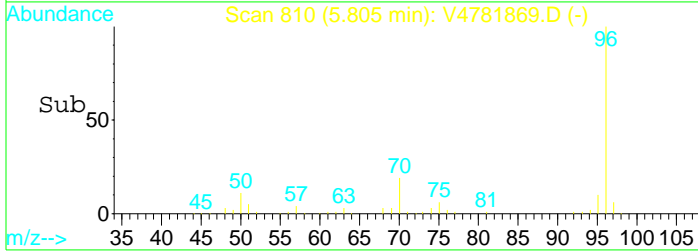
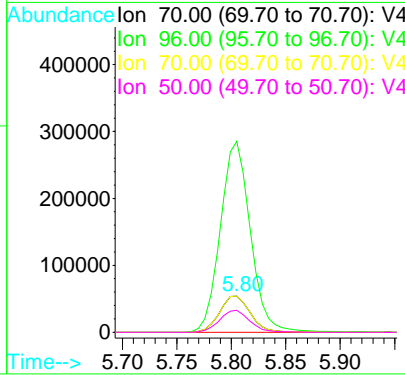
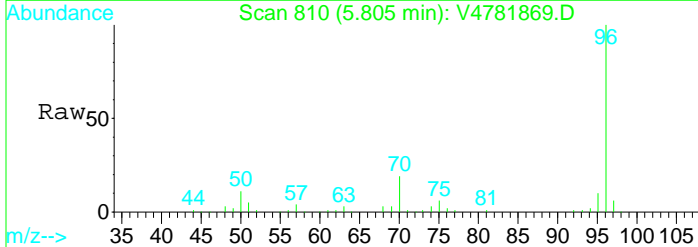
Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Thu Mar 01 15:31:22 2018  
Response via : Initial Calibration





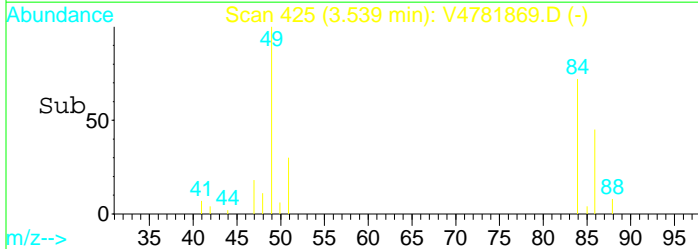
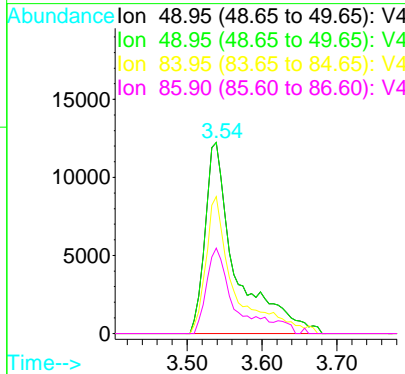
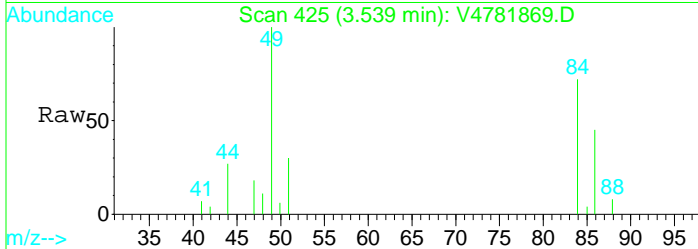
#1  
 FLUOROBENZENE (ISTD)  
 Concen: 50.00 ppb  
 RT: 5.80 min Scan# 810  
 Delta R.T. -0.01 min  
 Lab File: V4781869.D  
 Acq: 12 Mar 2018 11:07 am

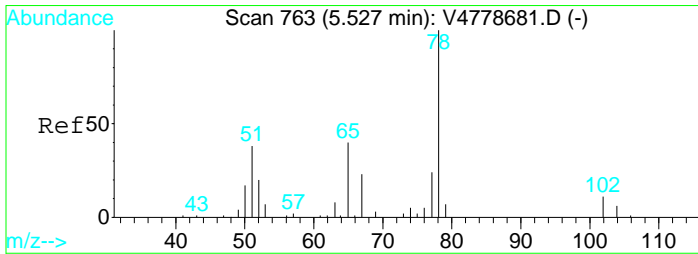
Tgt Ion	Resp	Lower	Upper
70	105574		
Ion Ratio			
70	100		
96	518.9	0.0	0.0#
70	100.0	80.0	120.0
50	0.0	48.7	73.1#



#18  
 Methylene Chloride  
 Concen: 9.69 ppb  
 RT: 3.54 min Scan# 425  
 Delta R.T. -0.02 min  
 Lab File: V4781869.D  
 Acq: 12 Mar 2018 11:07 am

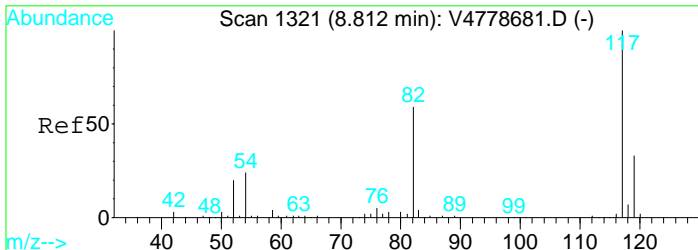
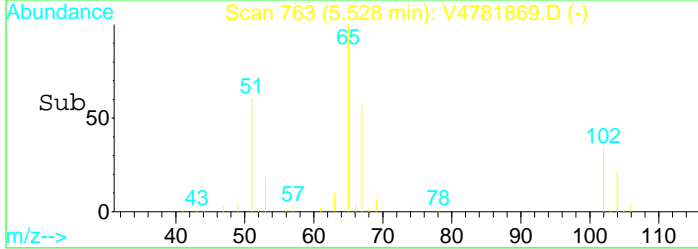
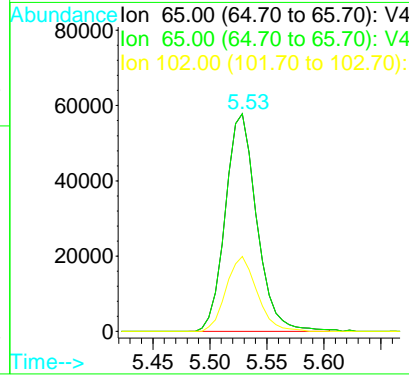
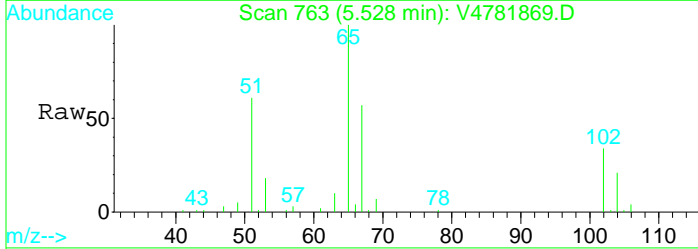
Tgt Ion	Resp	Lower	Upper
49	34960		
Ion Ratio			
49	100		
84	65.7	52.0	78.0
86	33.8	33.5	50.3





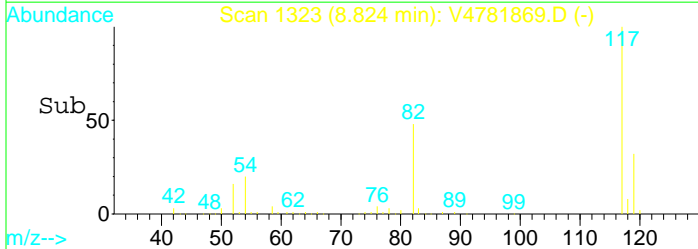
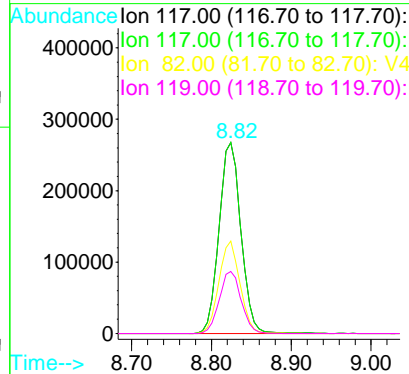
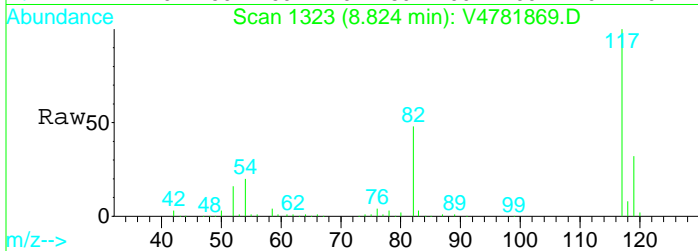
#31  
 d4-1,2-Dichloroethane (SURR)  
 Concen: N.D. ppb  
 RT: 5.53 min Scan# 763  
 Delta R.T. -0.01 min  
 Lab File: V4781869.D  
 Acq: 12 Mar 2018 11:07 am

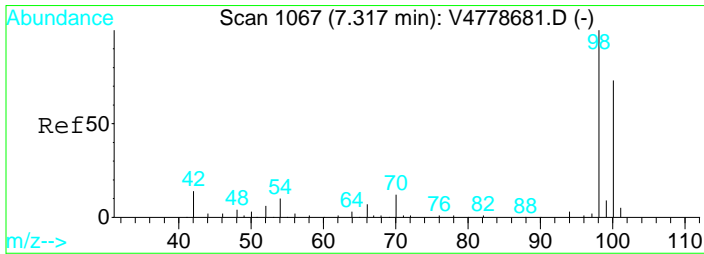
Tgt Ion	Resp	Lower	Upper
65	110922		
65	100	80.0	120.0
102	33.7	28.0	42.0



#35  
 CHLORO BENZENE-d5 (ISTD)  
 Concen: 50.00 ppb  
 RT: 8.82 min Scan# 1323  
 Delta R.T. -0.00 min  
 Lab File: V4781869.D  
 Acq: 12 Mar 2018 11:07 am

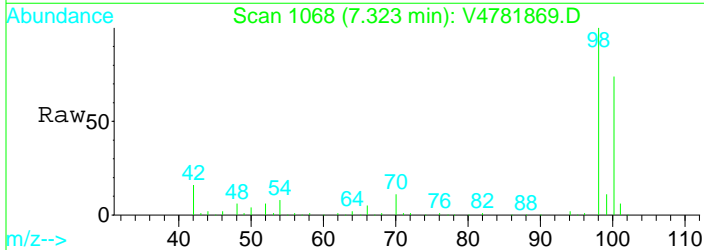
Tgt Ion	Resp	Lower	Upper
117	508640		
117	100	80.0	120.0
82	0.0	0.0	0.0
119	32.4	25.7	38.5



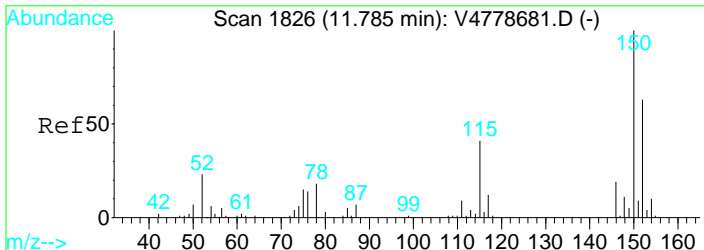
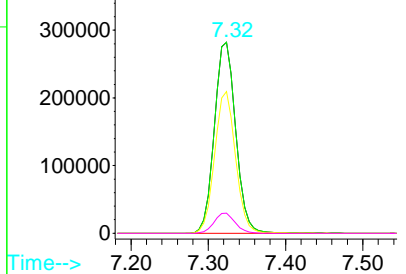
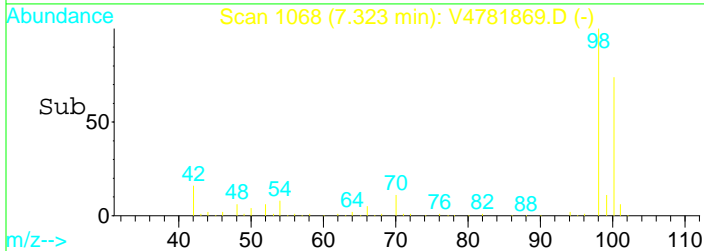


#47  
 Toluene-d8 (SURR)  
 Concen: N.D. ppb  
 RT: 7.32 min Scan# 1068  
 Delta R.T. -0.00 min  
 Lab File: V4781869.D  
 Acq: 12 Mar 2018 11:07 am

Tgt Ion	Resp	Lower	Upper
98	540915		
98	100		
98	100.0	80.0	120.0
100	72.7	57.0	85.6
70	0.0	0.0	0.0

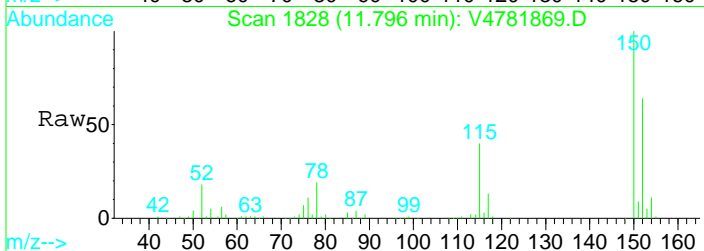


Abundance Ion 98.00 (97.70 to 98.70): V4  
 Ion 98.00 (97.70 to 98.70): V4  
 Ion 100.00 (99.70 to 100.70): V4  
 Ion 70.00 (69.70 to 70.70): V4

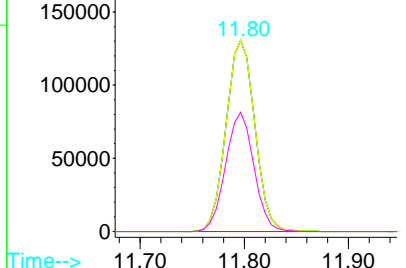
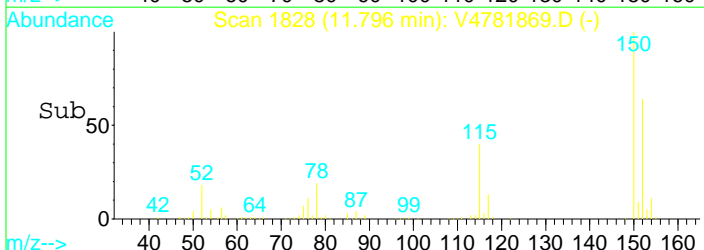


#64  
 1,2-DICHLOROBENZENE-d4 (ISTD)  
 Concen: 50.00 ppb  
 RT: 11.80 min Scan# 1828  
 Delta R.T. -0.00 min  
 Lab File: V4781869.D  
 Acq: 12 Mar 2018 11:07 am

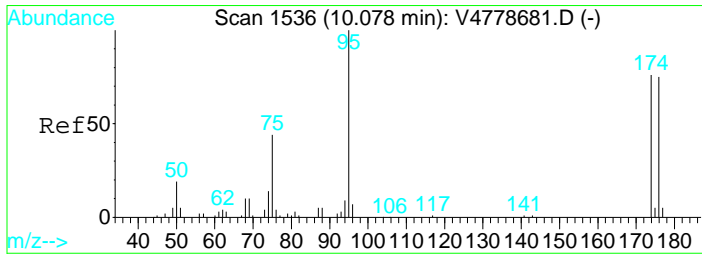
Tgt Ion	Resp	Lower	Upper
152	251170		
152	100		
152	100.0	80.0	120.0
152	100.0	80.0	120.0
115	0.0	0.0	0.0



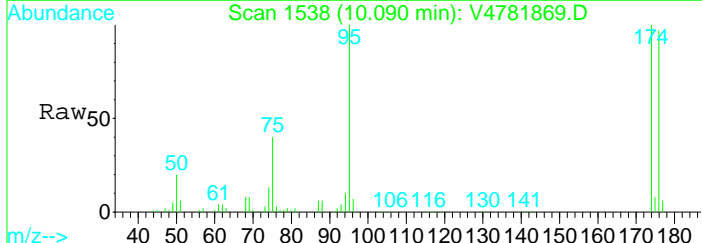
Abundance Ion 152.00 (151.70 to 152.70):  
 Ion 152.00 (151.70 to 152.70):  
 Ion 152.00 (151.70 to 152.70):  
 Ion 115.00 (114.70 to 115.70):



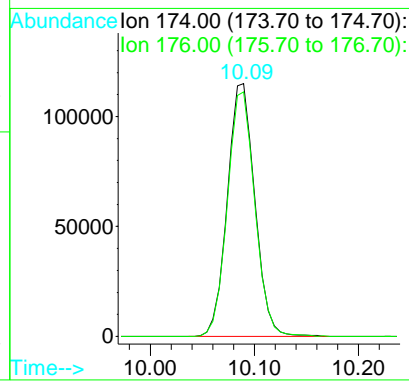
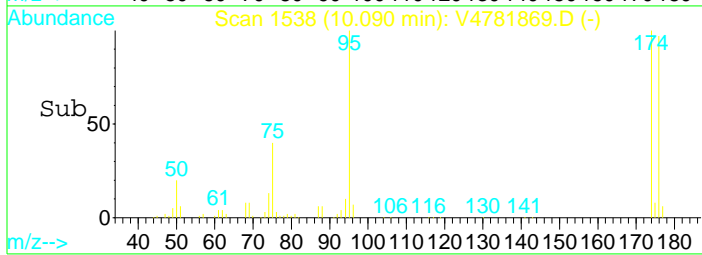




#66  
 p-Bromofluorobenzene (SURR)  
 Concen: N.D. ppb  
 RT: 10.09 min Scan# 1538  
 Delta R.T. -0.00 min  
 Lab File: V4781869.D  
 Acq: 12 Mar 2018 11:07 am



Tgt Ion: 174 Resp: 210554  
 Ion Ratio Lower Upper  
 174 100  
 176 96.7 78.9 118.3



## LCS RAW DATA

SDG: 18C0104  
CLASS: VOA  
METHOD: EPA 8260C

Data File : C:\HPCHEM\1\DATA\V4031218\V4781866.D  
 Acq On : 12 Mar 2018 9:32 am  
 Sample : BC80462-BS1  
 Misc : QBV4031218A

Vial: 5  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

MS Integration Params: rteint.p  
 Quant Time: Mar 12 10:24 2018

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
 Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.80	70	112799	50.00	ppb	-0.01
35) CHLOROBENZENE-d5(ISTD)	8.82	117	534334	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(IST)	11.80	152	257428	50.00	ppb	0.00

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.53	65	118984	47.40	ppb	-0.01
Spiked Amount	50.000	Range	67 - 128	Recovery	=	94.80%
47) Toluene-d8(SURR)	7.32	98	567414	48.98	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	97.96%
66) p-Bromofluorobenzene(SURR)	10.08	174	218255	48.68	ppb	-0.01
Spiked Amount	50.000	Range	63 - 166	Recovery	=	97.36%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.54	85	98389m	60.32	ppb	
3) Chloromethane	1.75	50	199196	60.40	ppb	100
4) Vinyl Chloride	1.84	62	133017m	58.70	ppb	
5) Bromomethane	2.18	94	106799	58.98	ppb	99
6) Chloroethane	2.28	64	74493	58.35	ppb	99
7) Trichlorofluoromethane	2.52	101	122413	54.18	ppb	100
9) Freon-113	3.01	101	105496	56.42	ppb	96
10) 1,1-Dichloroethylene	3.04	61	142595	55.31	ppb	99
11) Acrolein	2.99	56	13095	48.94	ppb	96
12) Iodomethane	3.21	142	120308	53.07	ppb	100
13) Methyl Acetate	3.44	43	96038	48.63	ppb	100
14) tert Butyl Alcohol (TBA)	3.69	59	48898	272.85	ppb	# 100
15) Acrylonitrile	3.82	53	47041	57.85	ppb	99
16) trans-1,2-Dichloroethylene	3.78	61	174976	54.75	ppb	100
17) Carbon Disulfide	3.26	76	315491	57.64	ppb	100
18) Methylene Chloride	3.54	49	173610	45.04	ppb	100
19) tert-Butyl Methyl Ether (M	3.76	73	248297	51.86	ppb	# 100
20) Acetone	3.15	43	33948	39.47	ppb	100
21) 1,1-Dichloroethane	4.20	63	212870	54.76	ppb	100
22) Vinyl Acetate	4.23	43	225770	53.22	ppb	100
23) cis-1,2-Dichloroethylene	4.75	96	140238	53.71	ppb	# 67
24) 2-Butanone	4.77	43	65153	52.02	ppb	100
25) 2,2-Dichloropropane	4.72	77	142120	54.01	ppb	100
26) Bromochloromethane	4.99	49	127079	54.72	ppb	96
27) Chloroform	5.05	83	187661	54.63	ppb	100
28) 1,1,1-Trichloroethane	5.19	97	143708	52.15	ppb	100
29) Cyclohexane	5.20	56	218879	52.77	ppb	# 100
30) 1,1-Dichloropropylene	5.34	75	154170	54.64	ppb	# 84
32) Carbon Tetrachloride	5.33	117	125511	54.28	ppb	100
33) 1,2-Dichloroethane	5.60	62	118310	53.06	ppb	100
34) Benzene	5.55	78	458139	54.92	ppb	100
36) Tetrahydrofuran	5.02	42	48685	56.80	ppb	97
37) Trichloroethylene	6.15	95	119771	53.86	ppb	98
38) Methyl Cyclohexane	6.28	83	184898	52.75	ppb	# 61
39) Methyl Methacrylate	6.46	69	73238	58.54	ppb	# 99
40) Dibromomethane	6.53	93	72624	52.47	ppb	98
41) Bromodichloromethane	6.66	83	140591	55.48	ppb	100
42) 1,2-Dichloropropane	6.39	63	125077	55.91	ppb	99
43) 1,4-Dioxane	6.54	88	22860	1329.55	ppb	100
44) 2-Chloroethyl vinyl ether	6.93	63	71940	60.13	ppb	99
45) cis-1,3-Dichloropropene	7.09	75	181934	53.74	ppb	100
46) 2-Hexanone	8.06	43	96711	51.30	ppb	100
48) Toluene	7.39	91	466374	53.90	ppb	100
49) trans-1,3-Dichloropropene	7.65	75	151749	53.22	ppb	100
50) 1,1,2-Trichloroethane	7.85	83	80933	54.00	ppb	99

Data File : C:\HPCHEM\1\DATA\V4031218\V4781866.D  
 Acq On : 12 Mar 2018 9:32 am  
 Sample : BC80462-BS1  
 Misc : QBV4031218A

Vial: 5  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Mar 12 10:24 2018

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)

Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

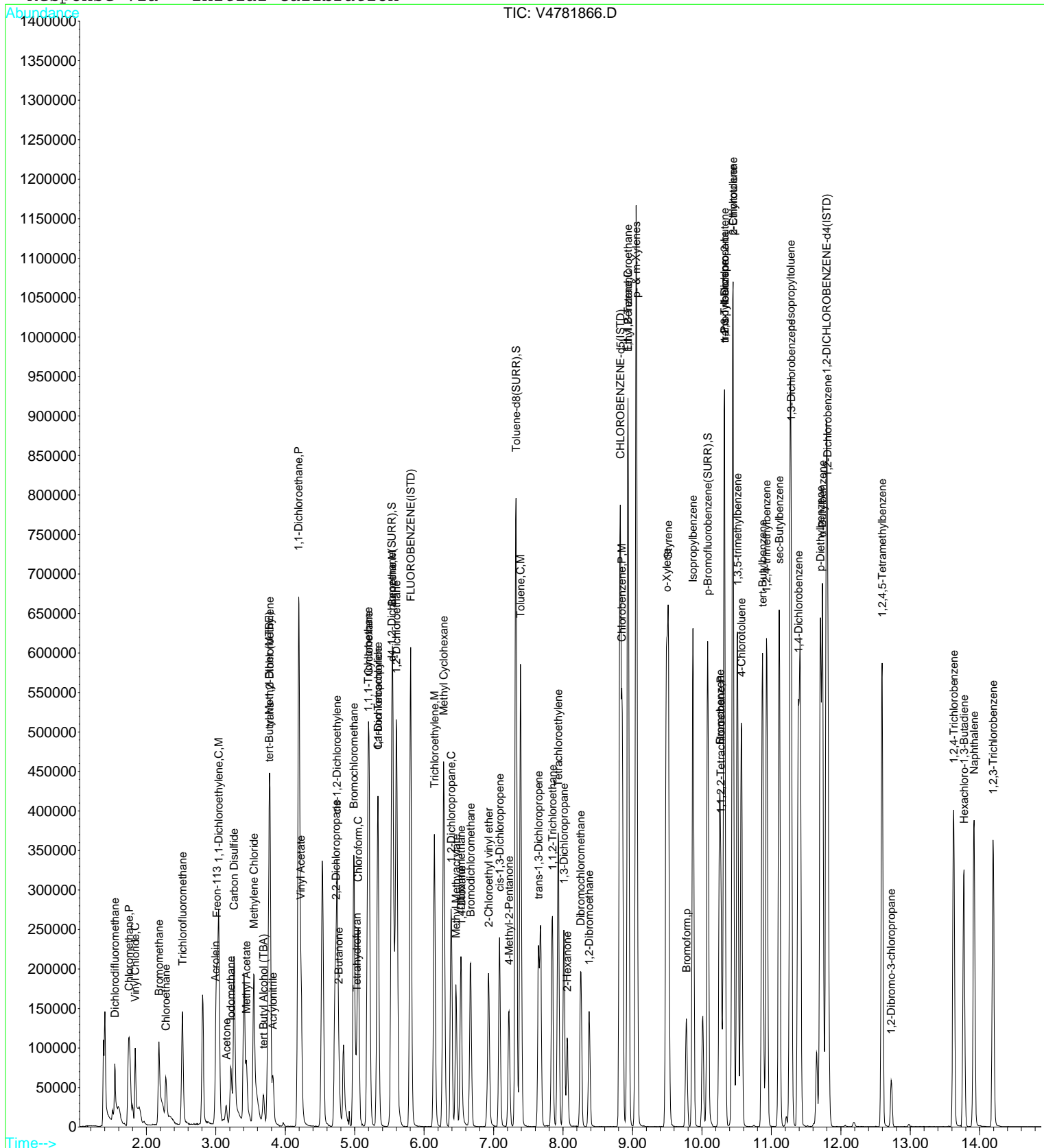
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) 1,3-Dichloropropane	8.01	76	161375	55.05	ppb	# 100
52) Tetrachloroethylene	7.93	166	135251	50.09	ppb	99
53) 4-Methyl-2-Pentanone	7.22	43	139881	51.87	ppb	100
54) Dibromochloromethane	8.26	129	120097	54.33	ppb	99
55) 1,2-Dibromoethane	8.38	107	109413	52.89	ppb	100
56) Chlorobenzene	8.85	112	335421	52.41	ppb	# 100
57) Ethyl Benzene	8.94	91	517090	54.83	ppb	99
58) p- & m-Xylenes	9.05	91	774870	109.31	ppb	99
59) o-Xylene	9.49	91	389409	54.92	ppb	99
60) Styrene	9.51	104	351414	52.74	ppb	# 80
61) 1,1,1,2-Tetrachloroethane	8.94	131	108316	51.44	ppb	98
62) p-Ethyltoluene	10.44	105	464021	52.73	ppb	98
63) p-Diethylbenzene	11.71	119	274732	56.71	ppb	# 99
65) Bromoform	9.78	173	76932	52.03	ppb	# 100
67) 1,1,2,2-Tetrachloroethane	10.28	83	130944	53.44	ppb	100
68) trans-1,4-Dichloro-2-buten	10.32	75	134435	53.63	ppb	# 100
69) 1,2,3-Trichloropropane	10.32	110	35862	50.10	ppb	97
70) Isopropylbenzene	9.87	105	511348	50.15	ppb	# 100
71) Bromobenzene	10.25	77	181147	53.15	ppb	98
72) n-Propylbenzene	10.32	91	613656	51.99	ppb	100
73) 2-Chlorotoluene	10.45	91	371446	51.05	ppb	# 99
74) 4-Chlorotoluene	10.57	91	352090	51.92	ppb	# 98
75) tert-Butylbenzene	10.87	119	359732	50.27	ppb	# 100
76) 1,3,5-trimethylbenzene	10.51	105	408309	51.08	ppb	99
77) 1,2,4-trimethylbenzene	10.93	105	403814	51.31	ppb	99
78) sec-Butylbenzene	11.11	105	569701	53.86	ppb	# 100
79) 1,3-Dichlorobenzene	11.29	146	249398	49.98	ppb	# 83
80) 1,4-Dichlorobenzene	11.38	146	249264	49.41	ppb	# 100
81) 1,2-Dichlorobenzene	11.81	146	226758	49.30	ppb	# 100
82) p-Isopropyltoluene	11.27	119	493359	51.55	ppb	# 100
83) n-Butylbenzene	11.74	91	503656	52.67	ppb	# 91
84) 1,2,4,5-Tetramethylbenzene	12.60	119	389964	50.70	ppb	99
85) 1,2-Dibromo-3-chloropropan	12.73	75	15660	52.21	ppb	# 100
86) 1,2,4-Trichlorobenzene	13.63	180	165405	52.19	ppb	100
87) Naphthalene	13.92	128	374884	52.74	ppb	# 100
88) Hexachloro-1,3-Butadiene	13.77	225	74899	54.62	ppb	# 99
89) 1,2,3-Trichlorobenzene	14.19	182	141099	52.55	ppb	# 100

Data File : C:\HPCHEM\1\DATA\V4031218\V4781866.D  
Acq On : 12 Mar 2018 9:32 am  
Sample : BC80462-BS1  
Misc : QBV4031218A  
MS Integration Params: rteint.p  
Quant Time: Mar 12 10:24 2018

Vial: 5  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00339.RES

Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Thu Mar 01 15:31:22 2018  
Response via : Initial Calibration



Data File : C:\HPCHEM\1\DATA\V4031218\V4781867.D  
 Acq On : 12 Mar 2018 10:04 am  
 Sample : BC80462-BSD1  
 Misc : QBV4031218A

Vial: 6  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Mar 12 10:25 2018

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)

Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) FLUOROBENZENE(ISTD)	5.80	70	118013	50.00	ppb	-0.01
35) CHLOROBENZENE-d5(ISTD)	8.82	117	556848	50.00	ppb	0.00
64) 1,2-DICHLOROBENZENE-d4(IST)	11.79	152	262372	50.00	ppb	-0.01

System Monitoring Compounds

31) d4-1,2-Dichloroethane(SURR)	5.53	65	125367	47.74	ppb	-0.01
Spiked Amount	50.000	Range	67 - 128	Recovery	=	95.48%
47) Toluene-d8(SURR)	7.32	98	601700	49.84	ppb	0.00
Spiked Amount	50.000	Range	87 - 113	Recovery	=	99.68%
66) p-Bromofluorobenzene(SURR)	10.08	174	220922	48.34	ppb	-0.01
Spiked Amount	50.000	Range	63 - 166	Recovery	=	96.68%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.55	85	96197m	56.37	ppb	
3) Chloromethane	1.74	50	193018	55.94	ppb	100
4) Vinyl Chloride	1.84	62	131728	55.56	ppb	# 82
5) Bromomethane	2.18	94	101446	53.55	ppb	100
6) Chloroethane	2.28	64	75112	56.23	ppb	100
7) Trichlorofluoromethane	2.52	101	122971	52.02	ppb	100
9) Freon-113	3.01	101	104206	53.26	ppb	97
10) 1,1-Dichloroethylene	3.04	61	143224	53.09	ppb	100
11) Acrolein	3.00	56	12695	45.35	ppb	97
12) Iodomethane	3.22	142	145365	61.29	ppb	100
13) Methyl Acetate	3.44	43	90425	43.76	ppb	100
14) tert Butyl Alcohol (TBA)	3.69	59	48108	256.58	ppb	# 100
15) Acrylonitrile	3.83	53	46929	55.16	ppb	99
16) trans-1,2-Dichloroethylene	3.78	61	176858	52.90	ppb	100
17) Carbon Disulfide	3.27	76	330422	57.70	ppb	100
18) Methylene Chloride	3.55	49	169319	41.98	ppb	99
19) tert-Butyl Methyl Ether (M)	3.76	73	253460	50.60	ppb	# 100
20) Acetone	3.16	43	34036	37.82	ppb	99
21) 1,1-Dichloroethane	4.20	63	216740	53.29	ppb	100
22) Vinyl Acetate	4.23	43	210399	47.41	ppb	100
23) cis-1,2-Dichloroethylene	4.75	96	141653	51.86	ppb	# 100
24) 2-Butanone	4.78	43	64198	48.99	ppb	100
25) 2,2-Dichloropropane	4.72	77	144992	52.67	ppb	100
26) Bromochloromethane	4.99	49	129828	53.44	ppb	97
27) Chloroform	5.05	83	186619	51.93	ppb	100
28) 1,1,1-Trichloroethane	5.19	97	147971	51.33	ppb	99
29) Cyclohexane	5.20	56	225258	51.91	ppb	# 89
30) 1,1-Dichloropropylene	5.34	75	158754	53.78	ppb	99
32) Carbon Tetrachloride	5.33	117	126797	52.42	ppb	100
33) 1,2-Dichloroethane	5.60	62	118757	50.90	ppb	100
34) Benzene	5.55	78	464618	53.23	ppb	100
36) Tetrahydrofuran	5.02	42	49146	55.02	ppb	97
37) Trichloroethylene	6.15	95	122500	52.86	ppb	98
38) Methyl Cyclohexane	6.28	83	187090	51.22	ppb	# 61
39) Methyl Methacrylate	6.46	69	73724	56.54	ppb	# 100
40) Dibromomethane	6.53	93	73589	51.02	ppb	96
41) Bromodichloromethane	6.67	83	140415	53.17	ppb	100
42) 1,2-Dichloropropane	6.39	63	127923	54.87	ppb	# 89
43) 1,4-Dioxane	6.54	88	21630	1207.15	ppb	99
44) 2-Chloroethyl vinyl ether	6.93	63	70866	56.84	ppb	99
45) cis-1,3-Dichloropropene	7.09	75	183934	52.14	ppb	99
46) 2-Hexanone	8.06	43	97389	49.57	ppb	100
48) Toluene	7.39	91	472115	52.36	ppb	100
49) trans-1,3-Dichloropropene	7.65	75	152443	51.30	ppb	100
50) 1,1,2-Trichloroethane	7.85	83	81203	51.99	ppb	100

Data File : C:\HPCHEM\1\DATA\V4031218\V4781867.D  
 Acq On : 12 Mar 2018 10:04 am  
 Sample : BC80462-BSD1  
 Misc : QBV4031218A

Vial: 6  
 Operator: SS  
 Inst : GCMS-VOA4  
 Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Mar 12 10:25 2018

Quant Results File: V4C00339.RES

Quant Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)

Title : VOCs BY GC/MS 8240/8260  
 Last Update : Thu Mar 01 15:31:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : V4CACQ

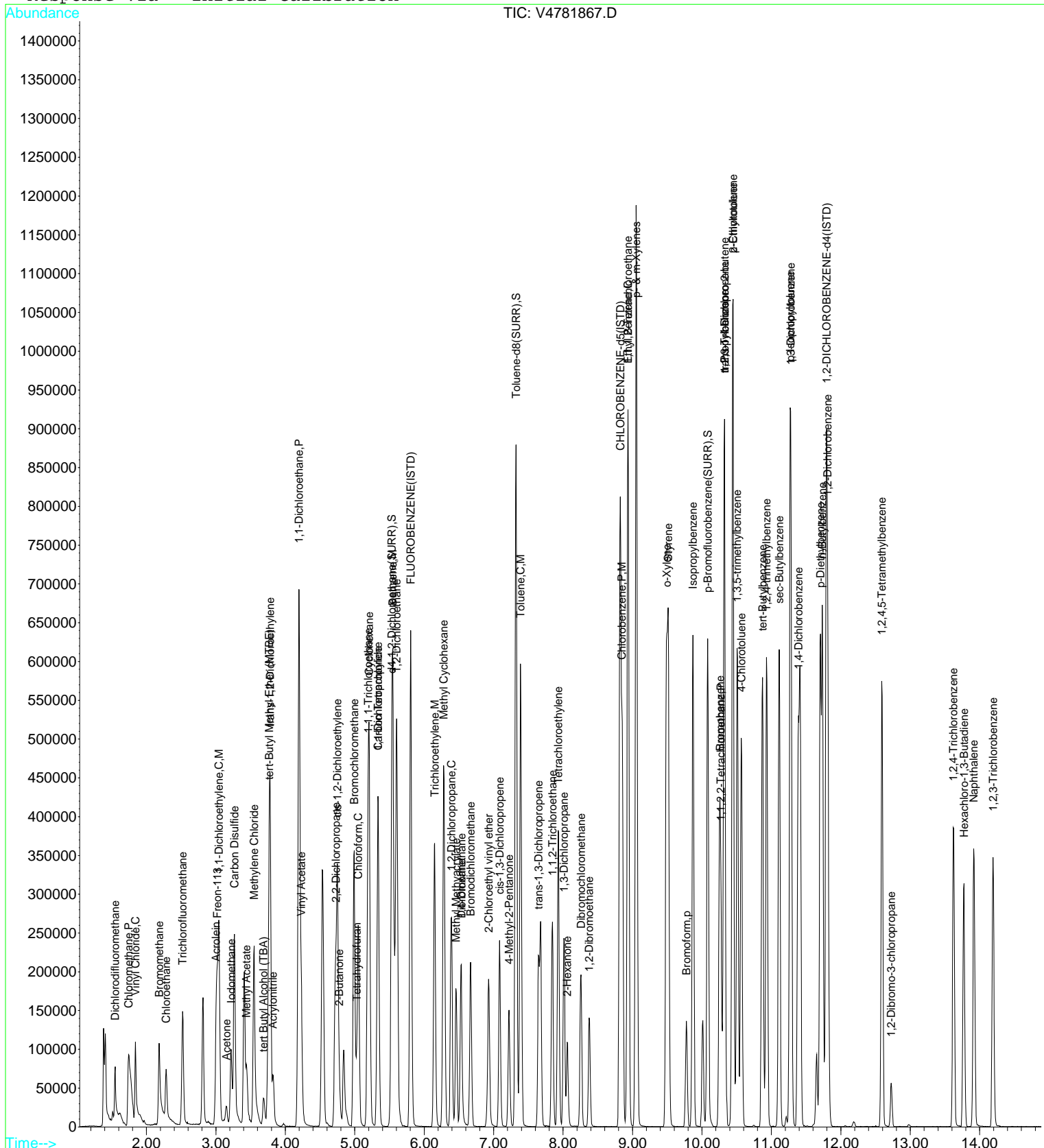
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) 1,3-Dichloropropane	8.01	76	163153	53.41	ppb	# 100
52) Tetrachloroethylene	7.93	166	137674	48.93	ppb	# 71
53) 4-Methyl-2-Pentanone	7.22	43	139387	49.60	ppb	100
54) Dibromochloromethane	8.26	129	117458	50.99	ppb	99
55) 1,2-Dibromoethane	8.38	107	109791	50.92	ppb	100
56) Chlorobenzene	8.85	112	330197	49.50	ppb	# 100
57) Ethyl Benzene	8.94	91	518605	52.76	ppb	100
58) p- & m-Xylenes	9.05	91	775513	104.98	ppb	99
59) o-Xylene	9.49	91	391487	52.98	ppb	99
60) Styrene	9.51	104	355255	51.16	ppb	100
61) 1,1,1,2-Tetrachloroethane	8.94	131	111391	50.76	ppb	98
62) p-Ethyltoluene	10.44	105	473288	51.61	ppb	99
63) p-Diethylbenzene	11.71	119	269288	53.34	ppb	# 98
65) Bromoform	9.78	173	76617	50.84	ppb	# 100
67) 1,1,2,2-Tetrachloroethane	10.28	83	129543	51.87	ppb	100
68) trans-1,4-Dichloro-2-buten	10.32	75	132405	51.82	ppb	# 100
69) 1,2,3-Trichloropropane	10.32	110	35455	48.60	ppb	97
70) Isopropylbenzene	9.87	105	508852	48.97	ppb	# 100
71) Bromobenzene	10.25	77	179087	51.55	ppb	98
72) n-Propylbenzene	10.32	91	609177	50.64	ppb	100
73) 2-Chlorotoluene	10.45	91	372448	50.23	ppb	# 99
74) 4-Chlorotoluene	10.57	91	344282	49.81	ppb	# 98
75) tert-Butylbenzene	10.87	119	356163	48.83	ppb	# 100
76) 1,3,5-trimethylbenzene	10.51	105	401542	49.28	ppb	99
77) 1,2,4-trimethylbenzene	10.93	105	401052	50.00	ppb	100
78) sec-Butylbenzene	11.11	105	548772	50.90	ppb	# 100
79) 1,3-Dichlorobenzene	11.28	146	242820	47.75	ppb	# 83
80) 1,4-Dichlorobenzene	11.38	146	245767	47.79	ppb	# 100
81) 1,2-Dichlorobenzene	11.81	146	226925	48.40	ppb	# 100
82) p-Isopropyltoluene	11.27	119	484370	49.66	ppb	# 100
83) n-Butylbenzene	11.74	91	491793	50.46	ppb	# 91
84) 1,2,4,5-Tetramethylbenzene	12.59	119	377475	48.15	ppb	99
85) 1,2-Dibromo-3-chloropropan	12.73	75	15656	51.22	ppb	# 100
86) 1,2,4-Trichlorobenzene	13.63	180	159235	49.30	ppb	100
87) Naphthalene	13.91	128	354273	48.90	ppb	# 100
88) Hexachloro-1,3-Butadiene	13.77	225	70920	50.74	ppb	# 99
89) 1,2,3-Trichlorobenzene	14.19	182	135643	49.56	ppb	# 100

Data File : C:\HPCHEM\1\DATA\V4031218\V4781867.D  
Acq On : 12 Mar 2018 10:04 am  
Sample : BC80462-BSD1  
Misc : QBV4031218A  
MS Integration Params: rteint.p  
Quant Time: Mar 12 10:25 2018

Vial: 6  
Operator: SS  
Inst : GCMS-VOA4  
Multiplr: 1.00

Quant Results File: V4C00339.RES

Method : C:\HPCHEM\1\METHODS\V4C00339.M (RTE Integrator)  
Title : VOCs BY GC/MS 8240/8260  
Last Update : Thu Mar 01 15:31:22 2018  
Response via : Initial Calibration





# BENCHSHEETS

SDG: 18C0104

CLASS: VOA

METHOD: EPA 8260C

**PREPARATION BENCH SHEET-SOILS/SOLIDS:**

**BC80462**

**Preparation Date: 03/12/2018 07:30**

**York Analytical Laboratories, Inc.**

**Printed: 4/17/2018 1:59:19PM**

**Matrix: Soil**

**Preparation: EPA 5035A**

**Surrogate used: Y15L023 1 ul**

Lab Number	Analysis	Initial (g)	Final (ml)	Spike ID	Source ID	ul Spike	Comments
18C0104-01 B	Volatile Organics, 8260 - Comprehensive	6.56	5				From BC80384 by TAB on 0
18C0104-02 B	Volatile Organics, 8260 - Comprehensive	6.66	5				From BC80384 by TAB on 0
18C0110-04RE1 E	Volatile Organics, CP-51 (formerly STARS) Lis	6.58	5				From BC80385 by TAB on 0
18C0110-05 E	Volatile Organics, CP-51 (formerly STARS) Lis	8.59	5				From BC80385 by TAB on 0
18C0110-05 E	Volatile Organics, Ethanol	8.59	5				From BC80385 by TAB on 0
18C0110-07RE1 E	Volatile Organics, CP-51 (formerly STARS) Lis	6.04	5				From BC80385 by TAB on 0
18C0110-10RE1 E	Volatile Organics, CP-51 (formerly STARS) Lis	6.57	5				From BC80385 by TAB on 0
18C0110-13 B	Volatile Organics, CP-51 (formerly STARS) Lis	5	5				From BC80384 by TAB on 0
18C0110-13 B	Volatile Organics, Ethanol	5	5				From BC80384 by TAB on 0
18C0124-09 B	Volatile Organics, 8260 - Comprehensive	5	5				
18C0124-09 B	Volatile Organics, Tentatively Identified Cmpds	5	5				
18C0124-10 B	Volatile Organics, Tentatively Identified Cmpds	5	5				
18C0124-10 B	Volatile Organics, 8260 - Comprehensive	5	5				
18C0126-01RE1 B	Volatile Organics, 8260 - Comprehensive	5	5				From BC80384 by TAB on 0
18C0126-02RE1 B	Volatile Organics, 8260 - Comprehensive	5	5				From BC80384 by TAB on 0
18C0162-01 A	Volatile Organics, CP-51 (formerly STARS) Lis	5	5				Added for BatchQC in: BC8
18C0162-01 A	Volatile Organics, Ethanol	5	5				Added for BatchQC in: BC8
18C0162-01 A	Volatile Organics, Tentatively Identified Cmpds	5	5				Added for BatchQC in: BC8
18C0360-01 A	Volatile Organics, 8260 - Comprehensive	5	5				Results by 4 PM
BC80462-BLK1	QC	5	5				
BC80462-BLK2	QC	5	5				
BC80462-BS1	QC	5	5	Y18B196		5	
BC80462-BS2	QC	5	5			5	
BC80462-BSD1	QC	5	5	Y18B196		5	
BC80462-BSD2	QC	5	5			5	
BC80462-MS1	QC	5	5	Y18B196	18C0162-01	5	
BC80462-MSD1	QC	5	5	Y18B196	18C0162-01	5	

**Reagents:**

ID Number	Description	Lot Number	ID Number	Description	Lot Number
-----------	-------------	------------	-----------	-------------	------------

Preparations Performed by TAB

Date: 03/12/2018 07:30

York Analytical Laboratories, Inc.

SDG: 18C0104

CLASS: WET

METHOD: SM 2540G

**DATA PACKAGE COVER PAGE**

**SM 2540G**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

---

**Client Sample Id:**

KC-CB-01 (25-30')

KC-CB-02 (25-30')

**Lab Sample Id:**

18C0104-01

18C0104-02

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the project narrative. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the

Signature:



Name:

Benjamin Gulizia

Date:

4/17/2018

Title:

Laboratory Director

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilLaboratory ID: 18C0104-01

File ID:

Sampled: 03/01/18 09:00Prepared: 03/08/18 19:26Analyzed: 03/09/18 16:35Solids: 77.06Preparation: % Solids PrepInitial/Final: 5 g / 5 gBatch: BC80373

Sequence:

Calibration: 03/09/18 1Instrument: Inst

CAS NO.	Analyte	Concentration (%)	Dilution Factor	Q	Method
solids	% Solids	77.1	1		SM 2540G

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilLaboratory ID: 18C0104-02

File ID:

Sampled: 03/01/18 10:00Prepared: 03/08/18 19:26Analyzed: 03/09/18 16:35Solids: 75.23Preparation: % Solids PrepInitial/Final: 5 g / 5 gBatch: BC80373

Sequence:

Calibration: 03/09/18 1Instrument: Inst

CAS NO.	Analyte	Concentration (%)	Dilution Factor	Q	Method
solids	% Solids	75.2	1		SM 2540G



# BENCHSHEETS

SDG: 18C0104  
CLASS: WET  
METHOD: SM 2540G



**PREPARATION BENCH SHEET-SOILS/SOLIDS:**

**BC80373**

**Preparation Date: 03/08/2018 19:26**

**York Analytical Laboratories, Inc.**

**Printed: 4/17/2018 1:59:24PM**

**Matrix: Soil**

**Preparation: % Solids Prep**

**(No Surrogate)**

**ul**

Lab Number	Analysis	Initial (g)	Final (g)	Spike ID	Source ID	ul Spike	Comments
18C0101-01 D	Total Solids	5	5				
18C0101-02 D	Total Solids	5	5				
18C0103-02 A	Total Solids	5	5				
18C0104-01 A	Total Solids	5	5				
18C0104-02 A	Total Solids	5	5				
18C0106-01 A	Total Solids	5	5				
18C0107-01 A	Total Solids	5	5				
18C0109-01 A	Total Solids	5	5				
18C0109-02 A	Total Solids	5	5				
18C0110-01 A	Total Solids	5	5				
18C0110-02 A	Total Solids	5	5				
18C0110-03 A	Total Solids	5	5				
18C0110-04 A	Total Solids	5	5				
18C0110-05 A	Total Solids	5	5				
18C0110-06 A	Total Solids	5	5				
18C0110-07 A	Total Solids	5	5				
18C0110-08 A	Total Solids	5	5				
18C0110-09 A	Total Solids	5	5				
18C0110-10 A	Total Solids	5	5				
18C0110-11 A	Total Solids	5	5				
BC80373-DUP1	QC	5	5		18C0110-11		

**Reagents:**

<u>ID Number</u>	<u>Description</u>	<u>Lot Number</u>	<u>ID Number</u>	<u>Description</u>	<u>Lot Number</u>
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Preparations Performed by TAJ

Date: 03/08/2018 19:26

# Log Book Data

**TOTAL SOLIDS ELECTRONIC LOG**

<u>Sample No.</u>	<u>Analyte</u>	<u>Analysis Date</u>	<u>Analyst</u>	<u>Batch ID</u>	<u>Init. Result</u>	<u>Final Result</u>	<u>Units</u>	<u>Prep. Units</u>
18C0104-01	% Solids	3/9/2018 4:35:34PM	TAJ	BC80373	77.06	77.1	%	g
18C0104-01	Final Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	3.18	3.18	%	g
18C0104-01	Initial Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	3.74	3.74	%	g
18C0104-01	Tare Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	1.28	1.28	%	g
18C0104-02	% Solids	3/9/2018 4:35:34PM	TAJ	BC80373	75.23	75.2	%	g
18C0104-02	Final Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	3.22	3.22	%	g
18C0104-02	Initial Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	3.85	3.85	%	g
18C0104-02	Tare Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	1.29	1.29	%	g
18C0110-11	% Solids	3/9/2018 4:35:34PM	TAJ	BC80373	85.08	85.1	%	g
18C0110-11	Final Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	8.05	8.05	%	g
18C0110-11	Initial Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	9.23	9.23	%	g
18C0110-11	Tare Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	1.29	1.29	%	g
BC80373-DUP1	% Solids	3/9/2018 4:35:34PM	TAJ	BC80373	85.38	85.4	%	g
BC80373-DUP1	Final Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	9.11	9.11	%	g
BC80373-DUP1	Initial Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	10.45	10.5	%	g
BC80373-DUP1	Tare Wt.	3/9/2018 4:35:34PM	TAJ	BC80373	1.28	1.28	%	g

# HOLDING TIME SUMMARY

SM 2540G

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KC-CB-01 (25-30')	03/01/18 09:00	03/05/18 15:15	03/08/18 19:26	7.43	28.00	03/09/18 16:35	8.32	28.00	
KC-CB-02 (25-30')	03/01/18 10:00	03/05/18 15:15	03/08/18 19:26	7.39	28.00	03/09/18 16:35	8.27	28.00	

# METHOD DETECTION AND REPORTING LIMITS

## SM 2540G

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0104

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900-Kingston CVS Investig

**Matrix:** Soil

**Instrument:**

Analyte	LOD	LOQ	Units
% Solids	0.100	0.100	%

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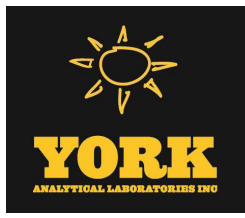
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# Technical Report

prepared for:

**Chazen Environmental Services (Poughkeepsie)**

21 Fox Street

Poughkeepsie NY, 12601

**Attention: Eric Orlowski**

Report Date: 04/30/2018

**Client Project ID: 41103.00 Task 0900 - Kingston CVS Investigation**

York Project (SDG) No.: 18C0189

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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ClientServices@yorklab.com

**Chazen Environmental Services (Poughkeepsie)**

21 Fox Street  
Poughkeepsie NY, 12601  
Attention: Eric Orłowski

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**Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 06, 2018 and listed below. The project was identified as your project: **41103.00 Task 0900 - Kingston CVS Investigation.**

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18C0189-01	KC-MW-01 (0318)	Water	03/05/2018	03/06/2018
18C0189-02	KC-MW-02 (0318)	Water	03/05/2018	03/06/2018
18C0189-03	KC-MW-05 (0318)	Water	03/05/2018	03/06/2018
18C0189-04	KC-MW-DUP2 (0318)	Water	03/05/2018	03/06/2018
18C0189-05	TRIP BLANK	Water	03/05/2018	03/06/2018

## **General Notes for York Project (SDG) No.: 18C0189**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



**Benjamin Gulizia**  
Laboratory Director

**Date:** 04/30/2018





### Sample Information

**Client Sample ID:** KC-MW-01 (0318)

**York Sample ID:** 18C0189-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 12:30 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>2.4</b>	J	ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-34-3	<b>1,1-Dichloroethane</b>	<b>3.7</b>	J	ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-93-4	1,2-Dibromoethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-06-2	1,2-Dichloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-87-5	1,2-Dichloropropane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
123-91-1	1,4-Dioxane	ND		ug/L	400	400	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-93-3	2-Butanone	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
591-78-6	2-Hexanone	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-10-1	4-Methyl-2-pentanone	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			



### Sample Information

**Client Sample ID:** KC-MW-01 (0318)

**York Sample ID:** 18C0189-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 12:30 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/L	10	20	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-02-8	Acrolein	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
107-13-1	Acrylonitrile	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
71-43-2	Benzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-97-5	Bromochloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-27-4	Bromodichloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-25-2	Bromoform	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-83-9	Bromomethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-15-0	Carbon disulfide	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
56-23-5	Carbon tetrachloride	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
108-90-7	Chlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-00-3	Chloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
67-66-3	Chloroform	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-87-3	Chloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>730</b>		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
110-82-7	Cyclohexane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
124-48-1	Dibromochloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
74-95-3	Dibromomethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
100-41-4	Ethyl Benzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
87-68-3	Hexachlorobutadiene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
98-82-8	Isopropylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		
79-20-9	Methyl acetate	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
									Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP		



### Sample Information

**Client Sample ID:** KC-MW-01 (0318)

**York Sample ID:** 18C0189-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 12:30 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-87-2	Methylcyclohexane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-09-2	Methylene chloride	ND		ug/L	10	20	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
104-51-8	n-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
103-65-1	n-Propylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-47-6	o-Xylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP			
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP			
99-87-6	p-Isopropyltoluene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
135-98-8	sec-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
100-42-5	Styrene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	5.0	10	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
98-06-6	tert-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
127-18-4	Tetrachloroethylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-88-3	Toluene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>20</b>		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			
79-01-6	<b>Trichloroethylene</b>	<b>780</b>		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-69-4	Trichlorofluoromethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-01-4	<b>Vinyl Chloride</b>	<b>110</b>		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		ug/L	6.0	15	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:18	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			

**Surrogate Recoveries**

**Result**

**Acceptance Range**

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	100 %
2037-26-5	Surrogate: Toluene-d8	97.2 %
460-00-4	Surrogate: p-Bromofluorobenzene	97.8 %



### Sample Information

**Client Sample ID:** KC-MW-01 (0318)

**York Sample ID:** 18C0189-01

<u>York Project (SDG) No.</u> 18C0189	<u>Client Project ID</u> 41103.00 Task 0900 - Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 12:30 pm	<u>Date Received</u> 03/06/2018
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**Metals, Priority Pollutant**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-38-2	Arsenic	ND		mg/L	0.004	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-41-7	Beryllium	ND		mg/L	0.001	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-43-9	<b>Cadmium</b>	<b>0.077</b>		mg/L	0.003	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-47-3	<b>Chromium</b>	<b>0.011</b>		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-50-8	<b>Copper</b>	<b>0.009</b>		mg/L	0.003	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7439-92-1	Lead	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-02-0	<b>Nickel</b>	<b>0.190</b>		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7782-49-2	<b>Selenium</b>	<b>0.050</b>		mg/L	0.011	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-22-4	Silver	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-28-0	Thallium	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML
7440-66-6	<b>Zinc</b>	<b>0.154</b>		mg/L	0.017	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 15:55	KML

**Mercury by 7473**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 09:12	03/13/2018 15:58	SY

### Sample Information

**Client Sample ID:** KC-MW-02 (0318)

**York Sample ID:** 18C0189-02

<u>York Project (SDG) No.</u> 18C0189	<u>Client Project ID</u> 41103.00 Task 0900 - Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 6:25 pm	<u>Date Received</u> 03/06/2018
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**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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### Sample Information

**Client Sample ID:** KC-MW-02 (0318)

**York Sample ID:** 18C0189-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 6:25 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-34-3	<b>1,1-Dichloroethane</b>	<b>0.48</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			





Sample Information

Client Sample ID: KC-MW-02 (0318)

York Sample ID: 18C0189-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 6:25 pm

03/06/2018

Volatile Organics, 8260 - Comprehensive

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

Table with columns: CAS No., Parameter, Result, Flag, Units, Reported to LOD/MDL, LOQ, Dilution, Reference Method, Date/Time Prepared, Date/Time Analyzed, Analyst. Rows include Acetone, Acrolein, Acrylonitrile, Benzene, Bromochloromethane, Bromodichloromethane, Bromoform, Bromomethane, Carbon disulfide, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, cis-1,2-Dichloroethylene, cis-1,3-Dichloropropylene, Cyclohexane, Dibromochloromethane, Dibromomethane, Dichlorodifluoromethane, Ethyl Benzene, Hexachlorobutadiene, Isopropylbenzene, Methyl acetate.



### Sample Information

**Client Sample ID:** KC-MW-02 (0318)

**York Sample ID:** 18C0189-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 6:25 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

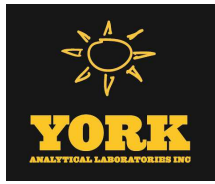
**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
79-01-6	<b>Trichloroethylene</b>	<b>1.7</b>		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
75-01-4	<b>Vinyl Chloride</b>	<b>2.2</b>		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:25	AS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	96.1 %	69-130
2037-26-5	Surrogate: Toluene-d8	97.1 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	98.8 %	79-122



**Sample Information**

**Client Sample ID:** KC-MW-02 (0318)

**York Sample ID:** 18C0189-02

<u>York Project (SDG) No.</u> 18C0189	<u>Client Project ID</u> 41103.00 Task 0900 - Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 6:25 pm	<u>Date Received</u> 03/06/2018
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**Metals, Priority Pollutant**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-38-2	Arsenic	ND		mg/L	0.004	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-41-7	Beryllium	ND		mg/L	0.001	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-43-9	Cadmium	ND		mg/L	0.003	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-47-3	Chromium	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-50-8	<b>Copper</b>	<b>0.011</b>		mg/L	0.003	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7439-92-1	Lead	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-02-0	Nickel	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7782-49-2	<b>Selenium</b>	<b>0.080</b>		mg/L	0.011	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-22-4	Silver	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-28-0	<b>Thallium</b>	<b>0.034</b>		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML
7440-66-6	Zinc	ND		mg/L	0.017	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:06	KML

**Mercury by 7473**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 09:12	03/13/2018 16:09	SY

**Sample Information**

**Client Sample ID:** KC-MW-05 (0318)

**York Sample ID:** 18C0189-03

<u>York Project (SDG) No.</u> 18C0189	<u>Client Project ID</u> 41103.00 Task 0900 - Kingston CVS Investigation	<u>Matrix</u> Water	<u>Collection Date/Time</u> March 5, 2018 3:00 pm	<u>Date Received</u> 03/06/2018
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**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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### Sample Information

**Client Sample ID:** KC-MW-05 (0318)

**York Sample ID:** 18C0189-03

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-34-3	<b>1,1-Dichloroethane</b>	<b>0.35</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			



### Sample Information

**Client Sample ID:** KC-MW-05 (0318)

**York Sample ID:** 18C0189-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>20</b>		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS



### Sample Information

**Client Sample ID:** KC-MW-05 (0318)

**York Sample ID:** 18C0189-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>0.30</b>	J	ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
79-01-6	<b>Trichloroethylene</b>	<b>51</b>		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	03/12/2018 10:00	03/12/2018 18:51	AS

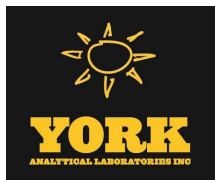
**Surrogate Recoveries**

**Result**

**Acceptance Range**

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	103 %
2037-26-5	Surrogate: Toluene-d8	95.1 %
460-00-4	Surrogate: p-Bromofluorobenzene	98.2 %





### Sample Information

**Client Sample ID:** KC-MW-05 (0318)

**York Sample ID:** 18C0189-03

York Project (SDG) No. 18C0189      Client Project ID 41103.00 Task 0900 - Kingston CVS Investigation      Matrix Water      Collection Date/Time March 5, 2018 3:00 pm      Date Received 03/06/2018

**Metals, Priority Pollutant**

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 3015A

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	0.009		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-38-2	Arsenic	ND		mg/L	0.004	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-41-7	Beryllium	ND		mg/L	0.001	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-43-9	Cadmium	ND		mg/L	0.003	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-47-3	Chromium	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-50-8	Copper	0.013		mg/L	0.003	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7439-92-1	Lead	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-02-0	Nickel	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7782-49-2	Selenium	0.099		mg/L	0.011	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-22-4	Silver	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-28-0	Thallium	ND		mg/L	0.006	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML
7440-66-6	Zinc	ND		mg/L	0.017	1	EPA 6010C Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 11:43	03/13/2018 16:09	KML

**Mercury by 7473**

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 7473 water

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473 Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	03/13/2018 09:12	03/13/2018 16:20	SY

### Sample Information

**Client Sample ID:** KC-MW-DUP2 (0318)

**York Sample ID:** 18C0189-04

York Project (SDG) No. 18C0189      Client Project ID 41103.00 Task 0900 - Kingston CVS Investigation      Matrix Water      Collection Date/Time March 5, 2018 3:00 pm      Date Received 03/06/2018

**Volatile Organics, 8260 - Comprehensive**

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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### Sample Information

**Client Sample ID:** KC-MW-DUP2 (0318)

**York Sample ID:** 18C0189-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

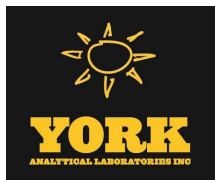
**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>2.2</b>	J	ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-34-3	<b>1,1-Dichloroethane</b>	<b>3.7</b>	J	ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-93-4	1,2-Dibromoethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-50-1	1,2-Dichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-06-2	1,2-Dichloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-87-5	1,2-Dichloropropane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
541-73-1	1,3-Dichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-46-7	1,4-Dichlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
123-91-1	1,4-Dioxane	ND		ug/L	400	400	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-93-3	2-Butanone	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
591-78-6	2-Hexanone	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-10-1	4-Methyl-2-pentanone	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			





### Sample Information

**Client Sample ID:** KC-MW-DUP2 (0318)

**York Sample ID:** 18C0189-04

York Project (SDG) No.  
18C0189

Client Project ID  
41103.00 Task 0900 - Kingston CVS Investigation

Matrix  
Water

Collection Date/Time  
March 5, 2018 3:00 pm

Date Received  
03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/L	10	20	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
107-02-8	Acrolein	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
107-13-1	Acrylonitrile	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
71-43-2	Benzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
74-97-5	Bromochloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
75-27-4	Bromodichloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
75-25-2	Bromoform	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
74-83-9	Bromomethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
75-15-0	Carbon disulfide	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
56-23-5	Carbon tetrachloride	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
108-90-7	Chlorobenzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
75-00-3	Chloroethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
67-66-3	Chloroform	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
74-87-3	Chloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>780</b>		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
110-82-7	Cyclohexane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
124-48-1	Dibromochloromethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
74-95-3	Dibromomethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
75-71-8	Dichlorodifluoromethane	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
100-41-4	Ethyl Benzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
87-68-3	Hexachlorobutadiene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
98-82-8	Isopropylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS
79-20-9	Methyl acetate	ND		ug/L	2.0	5.0	10	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	03/12/2018 10:00	03/12/2018 19:44	AS



### Sample Information

**Client Sample ID:** KC-MW-DUP2 (0318)

**York Sample ID:** 18C0189-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-87-2	Methylcyclohexane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-09-2	Methylene chloride	ND		ug/L	10	20	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
104-51-8	n-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
103-65-1	n-Propylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-47-6	o-Xylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP			
179601-23-1	p- & m- Xylenes	ND		ug/L	5.0	10	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP			
99-87-6	p-Isopropyltoluene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
135-98-8	sec-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
100-42-5	Styrene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	5.0	10	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
98-06-6	tert-Butylbenzene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
127-18-4	Tetrachloroethylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-88-3	Toluene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
156-60-5	<b>trans-1,2-Dichloroethylene</b>	<b>22</b>		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			
79-01-6	<b>Trichloroethylene</b>	<b>840</b>		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-69-4	Trichlorofluoromethane	ND		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-01-4	<b>Vinyl Chloride</b>	<b>120</b>		ug/L	2.0	5.0	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
1330-20-7	Xylenes, Total	ND		ug/L	6.0	15	10	EPA 8260C	03/12/2018 10:00	03/12/2018 19:44	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			

**Surrogate Recoveries**

**Result**

**Acceptance Range**

17060-07-0	Surrogate: 1,2-Dichloroethane-d4	101 %
2037-26-5	Surrogate: Toluene-d8	97.8 %
460-00-4	Surrogate: p-Bromofluorobenzene	98.8 %



### Sample Information

**Client Sample ID:** KC-MW-DUP2 (0318) **York Sample ID:** 18C0189-04  
**York Project (SDG) No.:** 18C0189 **Client Project ID:** 41103.00 Task 0900 - Kingston CVS Investigation **Matrix:** Water **Collection Date/Time:** March 5, 2018 3:00 pm **Date Received:** 03/06/2018

#### Metals, Priority Pollutant

Sample Prepared by Method: EPA 3015A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-36-0	Antimony	ND		mg/L	0.006	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-38-2	Arsenic	0.005		mg/L	0.004	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-41-7	Beryllium	ND		mg/L	0.001	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-43-9	Cadmium	0.078		mg/L	0.003	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-47-3	Chromium	0.023		mg/L	0.006	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-50-8	Copper	0.017		mg/L	0.003	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7439-92-1	Lead	0.006		mg/L	0.006	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-02-0	Nickel	0.184		mg/L	0.006	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7782-49-2	Selenium	0.051		mg/L	0.011	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-22-4	Silver	ND		mg/L	0.006	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-28-0	Thallium	ND		mg/L	0.006	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			
7440-66-6	Zinc	0.168		mg/L	0.017	1	EPA 6010C	03/13/2018 11:43	03/13/2018 16:11	KML
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

#### Mercury by 7473

Sample Prepared by Method: EPA 7473 water

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7439-97-6	Mercury	ND		mg/L	0.00020	1	EPA 7473	03/13/2018 09:12	03/13/2018 16:31	SY
							Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP			

### Sample Information

**Client Sample ID:** TRIP BLANK **York Sample ID:** 18C0189-05  
**York Project (SDG) No.:** 18C0189 **Client Project ID:** 41103.00 Task 0900 - Kingston CVS Investigation **Matrix:** Water **Collection Date/Time:** March 5, 2018 3:00 pm **Date Received:** 03/06/2018

#### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5030B

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOO	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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### Sample Information

**Client Sample ID:** TRIP BLANK

**York Sample ID:** 18C0189-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			



### Sample Information

**Client Sample ID:** TRIP BLANK

**York Sample ID:** 18C0189-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-64-1	Acetone	ND		ug/L	1.0	2.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
								Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			



## Sample Information

**Client Sample ID:** TRIP BLANK

**York Sample ID:** 18C0189-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

18C0189

41103.00 Task 0900 - Kingston CVS Investigation

Water

March 5, 2018 3:00 pm

03/06/2018

**Volatile Organics, 8260 - Comprehensive**

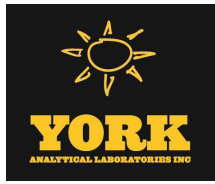
**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
75-09-2	<b>Methylene chloride</b>	<b>8.9</b>		ug/L	1.0	2.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C	03/12/2018 10:00	03/12/2018 17:59	AS

	Surrogate Recoveries	Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	97.7 %	69-130
2037-26-5	Surrogate: Toluene-d8	101 %	81-117
460-00-4	Surrogate: p-Bromofluorobenzene	97.9 %	79-122



## Case Narrative

Client: Chazen Environmental Services (Poughkeepsie)  
Client Project ID: 41103.00 Task 0900 - Kingston CVS Investigation  
Prepared for: Eric Orłowski

### Introduction

This Case Narrative applies only to the samples submitted to our laboratory on **03/06/2018 15:40** as detailed on the chain-of-custody form.

The 5 sample(s) were received intact in a custody-sealed cooler unless otherwise noted. Upon receipt, cooler temperature(s) was determined using a NIST traceable digital infrared thermometer. The cooler temperature was acceptable ( $\leq 6^{\circ}\text{C}$ ) and documented as:

<u>Cooler</u>	<u>Temp C°</u>
Default Cooler	3.6

Chain-of-custody was maintained from receipt through analysis in the laboratory.

### Methodology

All preparation and analyses were conducted according to the appropriate EPA methods detailed in the report.

### Sample and Analysis Qualifiers

<u>Sample Name</u>	<u>Matrix</u>
KC-MW-01 (0318)	Water
KC-MW-02 (0318)	Water
KC-MW-05 (0318)	Water
KC-MW-DUP2 (0318)	Water
TRIP BLANK	Water

### QC Sample Non-Conformances

Any QC sample non-conformances (CCV, LCS, DUP, MS) are detailed in the data package and in the attached tables.

No other problems were encountered during analysis.

### York Project/SDG no.: 18C0189 Statement

We certify that these data are in compliance with SOP requirements both technically and for completeness for other than the conditions stated above. Release of the data contained in the hard copy report and any electronic deliverables has been authorized by the Laboratory Manager as verified by the signature on this laboratory report.

Approved by: Ben Gulizia  
Laboratory Director

Date: 04/30/2018





York Analytical Laboratories, Inc.

## Formulae Used for Sample Calculations

### VOLATILE ORGANICS

#### 1. Volatiles in Air-ppbv

Cx (ppbv) = Compound concentration, ppbv (parts per billion by volume)

$$C_x = \frac{(A_x)(C_{is})(DF)}{(A_{is})(RRF)}$$

#### 2. Volatiles in Air-ug/m<sup>3</sup>

Cx (ug/m<sup>3</sup>) = Compound concentration in ug/m<sup>3</sup>

$$C_x (\text{ug/m}^3) = \frac{(\text{ppbv} \times \text{Molecular wt.})}{(24.040)}$$

#### 3. Volatile Organics (water and soil), ug/L or ug/kg

##### Soils/Waters

$$C_x = \frac{(A_x)(IS)(DF)}{(A_{is})(RRF)(V)(\% \text{ solids})}$$

##### Medium Level Soils

$$C_x = \frac{(A_x)(IS)(VT)(1000)(DF)}{(A_{is})(RRF)(VA)(V)(\% \text{ solids})}$$

#### 4. Semi-Volatiles (waters and soils)

$$C_x = \frac{(A_x)(IS)(VE)(DF)}{(A_{is})(RRF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

#### 5. Pesticides/PCB (waters and soils), DRO, CTETPH

$$C_x = \frac{(A_x)(VE)(DF)}{(CF)(\text{Volume injected, uL})(V)(\% \text{ solids})}$$

WHERE:

Cx = concentration of analyte as ug/L or ug/kg

Ax = Area of the characteristic ion for the compound to be measured, counts.

Ais = Area of the characteristic ion for the specific internal standard, counts.

IS = Concentration of the internal standard spiking mixture, ng

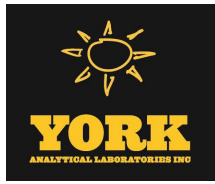
RRF = Mean relative response factor from the initial calibration.

DF = Dilution factor calculated as described in section 2. If no dilution is performed, DF= 1

V = Volume for liquids in mL, weight for soils/solids in grams.

VA = volume of MeOH aliquot for medium level soils





VE = final volume of concentrated extract

VT = volume of MeOH for volatiles medium level soils

CF = calibration factor for external calibration used in GC pest/pcb

Cis = Concentration of the internal standard spiking mixture, ppbv



## Case Narrative Non-Conformance Summary

Laboratory:	York Analytical Laboratories, Inc.	Client:	Chazen Environmental Services (Poughkeepsie)
Project:	41103.00 Task 0900 - Kingston CVS Investigati	Lab Project No:	18C0189
Laboratory Sample ID(s):	18C0189-01 - 18C0189-05	Sampling Date(s):	03/05/2018 - 03/05/2018
Review Date(s):	04/30/2018 - 04/30/2018	Laboratory Reviewer(s):	SBW

### QC Sample Nonconformances

**Batch ID:** BC80492      **Affected Samples:**      **See Batch Summary**

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
BC80492-BLK1	1,2,3-Trichlorobenzene - 87-61-6	0.51 ug/L	Blank		-					

**Batch ID:** Y8C1238      **Affected Samples:**      **See Batch Summary**

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
Y8C1238-CCV1	1,2,3-Trichlorobenzene - 87-61-6	14.3 ug/L	Calibration Check	143	80-120	High Bias				
Y8C1238-CCV1	2-Butanone - 78-93-3	12.4 ug/L	Calibration Check	124	80-120	High Bias				
Y8C1238-CCV1	Acetone - 67-64-1	12.9 ug/L	Calibration Check	129	80-120	High Bias				
Y8C1238-CCV1	Bromomethane - 74-83-9	6.64 ug/L	Calibration Check	66.4	80-120	Low Bias				
Y8C1238-CCV1	Chloromethane - 74-87-3	6.78 ug/L	Calibration Check	67.8	80-120	Low Bias				
Y8C1238-CCV1	Dichlorodifluoromethane - 75-71-8	7.04 ug/L	Calibration Check	70.4	80-120	Low Bias				

**Batch ID:** Y8C1403      **Affected Samples:**      **See Batch Summary**

QC Sample ID	Analyte - CAS No.	Result	Type of QC Nonconformance	%REC	%REC Limits	Bias	RPD	RPD Limit	Bias	Notes
Y8C1403-CRL1	Arsenic - 7440-38-2	0.021 ug/mL	Instrument RL Check	142	70-130	High Bias				

**Batch ID:** BC80492      **General Method:** Volatile Organic Compounds by GC/MS

YORK Sample ID	Client Sample ID
18C0189-01	KC-MW-01 (0318)
18C0189-02	KC-MW-02 (0318)
18C0189-03	KC-MW-05 (0318)
18C0189-04	KC-MW-DUP2 (0318)
18C0189-05	TRIP BLANK
BC80492-BLK1	Blank
BC80492-BS1	LCS
BC80492-BSD1	LCS Dup

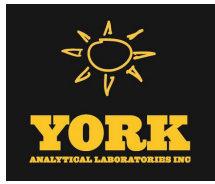


# No Sample Nonconformances Found

Notes: Other nonconformances, if any, are detailed in the Data Quality Assessment worksheets.

For multiple surrogate analyses such as semi-volatiles, volatiles, etc, single surrogate excursions do not necessarily indicate a bias in the sample. Samples with multiple surrogate excursions may exhibit a bias in the results.

Definitions: LCS - Laboratory Control Sample  
LCS dup - Laboratory Control Sample Duplicate  
MS - Matrix Spike  
MSD - Matrix Spike Duplicate  
BS - Blank Spike also called LCS  
BSD - Blank Spike Duplicate also called LCS dup  
SRM - Standard Reference Material  
DUP - Duplicate



## Analytical Batch Summary

**Batch ID:** BC80492

**Preparation Method:** EPA 5030B

**Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
18C0189-01	KC-MW-01 (0318)	03/12/18
18C0189-02	KC-MW-02 (0318)	03/12/18
18C0189-03	KC-MW-05 (0318)	03/12/18
18C0189-04	KC-MW-DUP2 (0318)	03/12/18
18C0189-05	TRIP BLANK	03/12/18
BC80492-BLK1	Blank	03/12/18
BC80492-BS1	LCS	03/12/18
BC80492-BSD1	LCS Dup	03/12/18

**Batch ID:** BC80531

**Preparation Method:** EPA 7473 water

**Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18C0189-01	KC-MW-01 (0318)	03/13/18
18C0189-02	KC-MW-02 (0318)	03/13/18
18C0189-03	KC-MW-05 (0318)	03/13/18
18C0189-04	KC-MW-DUP2 (0318)	03/13/18
BC80531-BLK1	Blank	03/13/18
BC80531-SRM1	Reference	03/13/18

**Batch ID:** BC80552

**Preparation Method:** EPA 3015A

**Prepared By:** SY

YORK Sample ID	Client Sample ID	Preparation Date
18C0189-01	KC-MW-01 (0318)	03/13/18
18C0189-02	KC-MW-02 (0318)	03/13/18
18C0189-03	KC-MW-05 (0318)	03/13/18
18C0189-04	KC-MW-DUP2 (0318)	03/13/18
BC80552-BLK1	Blank	03/13/18
BC80552-DUP1	Duplicate	03/13/18
BC80552-MS1	Matrix Spike	03/13/18
BC80552-SRM1	Reference	03/13/18



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BC80492 - EPA 5030B

#### Blank (BC80492-BLK1)

Prepared & Analyzed: 03/12/2018

1,1,1,2-Tetrachloroethane	ND	0.50	ug/L							
1,1,1-Trichloroethane	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.50	"							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.50	"							
1,1,2-Trichloroethane	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
1,1-Dichloroethylene	ND	0.50	"							
1,2,3-Trichlorobenzene	0.51	0.50	"							
1,2,3-Trichloropropane	ND	0.50	"							
1,2,4-Trichlorobenzene	ND	0.50	"							
1,2,4-Trimethylbenzene	ND	0.50	"							
1,2-Dibromo-3-chloropropane	ND	0.50	"							
1,2-Dibromoethane	ND	0.50	"							
1,2-Dichlorobenzene	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dichloropropane	ND	0.50	"							
1,3,5-Trimethylbenzene	ND	0.50	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	0.50	"							
1,4-Dioxane	ND	40	"							
2-Butanone	ND	0.50	"							
2-Hexanone	ND	0.50	"							
4-Methyl-2-pentanone	ND	0.50	"							
Acetone	ND	2.0	"							
Acrolein	ND	0.50	"							
Acrylonitrile	ND	0.50	"							
Benzene	ND	0.50	"							
Bromochloromethane	ND	0.50	"							
Bromodichloromethane	ND	0.50	"							
Bromoform	ND	0.50	"							
Bromomethane	ND	0.50	"							
Carbon disulfide	ND	0.50	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	0.50	"							
Chloroethane	ND	0.50	"							
Chloroform	ND	0.50	"							
Chloromethane	ND	0.50	"							
cis-1,2-Dichloroethylene	ND	0.50	"							
cis-1,3-Dichloropropylene	ND	0.50	"							
Cyclohexane	ND	0.50	"							
Dibromochloromethane	ND	0.50	"							
Dibromomethane	ND	0.50	"							
Dichlorodifluoromethane	ND	0.50	"							
Ethyl Benzene	ND	0.50	"							
Hexachlorobutadiene	ND	0.50	"							
Isopropylbenzene	ND	0.50	"							
Methyl acetate	ND	0.50	"							
Methyl tert-butyl ether (MTBE)	ND	0.50	"							
Methylcyclohexane	ND	0.50	"							
Methylene chloride	ND	2.0	"							



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC80492 - EPA 5030B</b>											
<b>Blank (BC80492-BLK1)</b>										Prepared & Analyzed: 03/12/2018	
n-Butylbenzene	ND	0.50	ug/L								
n-Propylbenzene	ND	0.50	"								
o-Xylene	ND	0.50	"								
p- & m- Xylenes	ND	1.0	"								
p-Isopropyltoluene	ND	0.50	"								
sec-Butylbenzene	ND	0.50	"								
Styrene	ND	0.50	"								
tert-Butyl alcohol (TBA)	ND	1.0	"								
tert-Butylbenzene	ND	0.50	"								
Tetrachloroethylene	ND	0.50	"								
Toluene	ND	0.50	"								
trans-1,2-Dichloroethylene	ND	0.50	"								
trans-1,3-Dichloropropylene	ND	0.50	"								
trans-1,4-dichloro-2-butene	ND	0.50	"								
Trichloroethylene	ND	0.50	"								
Trichlorofluoromethane	ND	0.50	"								
Vinyl Chloride	ND	0.50	"								
Xylenes, Total	ND	1.5	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.94		"	10.0		99.4	69-130				
<i>Surrogate: Toluene-d8</i>	9.73		"	10.0		97.3	81-117				
<i>Surrogate: p-Bromofluorobenzene</i>	9.94		"	10.0		99.4	79-122				
<b>LCS (BC80492-BS1)</b>										Prepared & Analyzed: 03/12/2018	
1,1,1,2-Tetrachloroethane	9.3		ug/L	10.0		92.9	82-126				
1,1,1-Trichloroethane	9.4		"	10.0		93.6	78-136				
1,1,2,2-Tetrachloroethane	9.4		"	10.0		94.1	76-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.4		"	10.0		94.1	54-165				
1,1,2-Trichloroethane	9.1		"	10.0		91.2	82-123				
1,1-Dichloroethane	9.4		"	10.0		94.3	82-129				
1,1-Dichloroethylene	9.2		"	10.0		91.7	68-138				
1,2,3-Trichlorobenzene	9.0		"	10.0		89.7	76-136				
1,2,3-Trichloropropane	9.9		"	10.0		98.9	77-128				
1,2,4-Trichlorobenzene	8.2		"	10.0		82.0	76-137				
1,2,4-Trimethylbenzene	9.6		"	10.0		95.7	82-132				
1,2-Dibromo-3-chloropropane	9.0		"	10.0		89.6	45-147				
1,2-Dibromoethane	9.1		"	10.0		91.2	83-124				
1,2-Dichlorobenzene	9.4		"	10.0		94.1	79-123				
1,2-Dichloroethane	9.2		"	10.0		92.2	73-132				
1,2-Dichloropropane	8.7		"	10.0		87.0	78-126				
1,3,5-Trimethylbenzene	9.6		"	10.0		95.5	80-131				
1,3-Dichlorobenzene	9.7		"	10.0		97.3	86-122				
1,4-Dichlorobenzene	9.7		"	10.0		97.4	85-124				
1,4-Dioxane	180		"	200		89.2	10-349				
2-Butanone	11		"	10.0		114	49-152				
2-Hexanone	9.3		"	10.0		93.3	51-146				
4-Methyl-2-pentanone	8.4		"	10.0		83.7	57-145				
Acetone	12		"	10.0		119	14-150				
Acrolein	11		"	10.0		108	10-153				
Acrylonitrile	9.0		"	10.0		90.3	51-150				
Benzene	9.4		"	10.0		93.6	85-126				
Bromochloromethane	9.8		"	10.0		98.2	77-128				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC80492 - EPA 5030B

LCS (BC80492-BS1)

Prepared & Analyzed: 03/12/2018

Bromodichloromethane	8.8		ug/L	10.0		87.9	79-128				
Bromoform	8.8		"	10.0		88.4	78-133				
Bromomethane	6.4		"	10.0		64.0	43-168				
Carbon disulfide	8.7		"	10.0		87.3	68-146				
Carbon tetrachloride	9.3		"	10.0		93.0	77-141				
Chlorobenzene	9.3		"	10.0		93.2	88-120				
Chloroethane	9.0		"	10.0		90.4	65-136				
Chloroform	9.7		"	10.0		96.9	82-128				
Chloromethane	7.2		"	10.0		72.5	43-155				
cis-1,2-Dichloroethylene	9.4		"	10.0		94.3	83-129				
cis-1,3-Dichloropropylene	8.9		"	10.0		88.7	80-131				
Cyclohexane	8.8		"	10.0		88.1	63-149				
Dibromochloromethane	8.9		"	10.0		88.8	80-130				
Dibromomethane	8.9		"	10.0		89.2	72-134				
Dichlorodifluoromethane	8.0		"	10.0		79.9	44-144				
Ethyl Benzene	9.1		"	10.0		91.1	80-131				
Hexachlorobutadiene	7.6		"	10.0		75.6	67-146				
Isopropylbenzene	9.6		"	10.0		95.5	76-140				
Methyl acetate	8.6		"	10.0		85.7	51-139				
Methyl tert-butyl ether (MTBE)	9.5		"	10.0		94.8	76-135				
Methylcyclohexane	8.4		"	10.0		84.0	72-143				
Methylene chloride	9.1		"	10.0		90.7	55-137				
n-Butylbenzene	8.6		"	10.0		85.8	79-132				
n-Propylbenzene	9.4		"	10.0		94.3	78-133				
o-Xylene	9.4		"	10.0		94.5	78-130				
p- & m- Xylenes	18		"	20.0		91.9	77-133				
p-Isopropyltoluene	9.0		"	10.0		89.9	81-136				
sec-Butylbenzene	8.8		"	10.0		88.1	79-137				
Styrene	9.4		"	10.0		94.3	67-132				
tert-Butyl alcohol (TBA)	9.9		"	10.0		99.2	25-162				
tert-Butylbenzene	9.1		"	10.0		90.9	77-138				
Tetrachloroethylene	9.1		"	10.0		90.8	82-131				
Toluene	8.8		"	10.0		88.3	80-127				
trans-1,2-Dichloroethylene	9.2		"	10.0		91.6	80-132				
trans-1,3-Dichloropropylene	8.8		"	10.0		88.4	78-131				
trans-1,4-dichloro-2-butene	9.3		"	10.0		92.7	63-141				
Trichloroethylene	8.7		"	10.0		87.3	82-128				
Trichlorofluoromethane	9.6		"	10.0		96.1	67-139				
Vinyl Chloride	8.9		"	10.0		89.3	58-145				
Surrogate: 1,2-Dichloroethane-d4	10.0		"	10.0		100	69-130				
Surrogate: Toluene-d8	9.44		"	10.0		94.4	81-117				
Surrogate: p-Bromofluorobenzene	10.3		"	10.0		103	79-122				



Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC80492 - EPA 5030B</b>											
<b>LCS Dup (BC80492-BSD1)</b>											
Prepared & Analyzed: 03/12/2018											
1,1,1,2-Tetrachloroethane	9.4		ug/L	10.0		94.4	82-126		1.60	30	
1,1,1-Trichloroethane	9.2		"	10.0		92.3	78-136		1.40	30	
1,1,2,2-Tetrachloroethane	9.5		"	10.0		95.1	76-129		1.06	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.0		"	10.0		89.6	54-165		4.90	30	
1,1,2-Trichloroethane	9.6		"	10.0		95.6	82-123		4.71	30	
1,1-Dichloroethane	9.3		"	10.0		93.1	82-129		1.28	30	
1,1-Dichloroethylene	8.8		"	10.0		88.5	68-138		3.55	30	
1,2,3-Trichlorobenzene	10		"	10.0		103	76-136		14.0	30	
1,2,3-Trichloropropane	9.8		"	10.0		98.4	77-128		0.507	30	
1,2,4-Trichlorobenzene	8.9		"	10.0		89.0	76-137		8.19	30	
1,2,4-Trimethylbenzene	9.3		"	10.0		93.0	82-132		2.86	30	
1,2-Dibromo-3-chloropropane	9.8		"	10.0		97.8	45-147		8.75	30	
1,2-Dibromoethane	9.6		"	10.0		95.8	83-124		4.92	30	
1,2-Dichlorobenzene	9.3		"	10.0		92.7	79-123		1.50	30	
1,2-Dichloroethane	9.4		"	10.0		94.0	73-132		1.93	30	
1,2-Dichloropropane	8.8		"	10.0		88.5	78-126		1.71	30	
1,3,5-Trimethylbenzene	9.2		"	10.0		92.3	80-131		3.41	30	
1,3-Dichlorobenzene	9.3		"	10.0		93.0	86-122		4.52	30	
1,4-Dichlorobenzene	9.4		"	10.0		93.5	85-124		4.09	30	
1,4-Dioxane	200		"	200		101	10-349		12.2	30	
2-Butanone	12		"	10.0		120	49-152		5.39	30	
2-Hexanone	10		"	10.0		103	51-146		10.3	30	
4-Methyl-2-pentanone	9.2		"	10.0		92.1	57-145		9.56	30	
Acetone	12		"	10.0		122	14-150		1.99	30	
Acrolein	11		"	10.0		108	10-153		0.00	30	
Acrylonitrile	9.9		"	10.0		99.0	51-150		9.19	30	
Benzene	9.3		"	10.0		92.8	85-126		0.858	30	
Bromochloromethane	9.8		"	10.0		98.0	77-128		0.204	30	
Bromodichloromethane	8.9		"	10.0		89.0	79-128		1.24	30	
Bromoform	9.5		"	10.0		94.9	78-133		7.09	30	
Bromomethane	7.0		"	10.0		69.9	43-168		8.81	30	
Carbon disulfide	8.4		"	10.0		84.2	68-146		3.62	30	
Carbon tetrachloride	9.0		"	10.0		90.3	77-141		2.95	30	
Chlorobenzene	9.4		"	10.0		93.5	88-120		0.321	30	
Chloroethane	9.2		"	10.0		91.7	65-136		1.43	30	
Chloroform	9.4		"	10.0		94.0	82-128		3.04	30	
Chloromethane	7.1		"	10.0		71.0	43-155		2.09	30	
cis-1,2-Dichloroethylene	9.2		"	10.0		91.9	83-129		2.58	30	
cis-1,3-Dichloropropylene	9.0		"	10.0		90.4	80-131		1.90	30	
Cyclohexane	8.5		"	10.0		85.1	63-149		3.46	30	
Dibromochloromethane	9.2		"	10.0		92.1	80-130		3.65	30	
Dibromomethane	9.2		"	10.0		92.2	72-134		3.31	30	
Dichlorodifluoromethane	7.6		"	10.0		76.0	44-144		5.00	30	
Ethyl Benzene	9.4		"	10.0		93.8	80-131		2.92	30	
Hexachlorobutadiene	8.6		"	10.0		86.0	67-146		12.9	30	
Isopropylbenzene	9.4		"	10.0		93.9	76-140		1.69	30	
Methyl acetate	9.5		"	10.0		95.1	51-139		10.4	30	
Methyl tert-butyl ether (MTBE)	9.7		"	10.0		96.8	76-135		2.09	30	
Methylcyclohexane	8.7		"	10.0		87.1	72-143		3.62	30	
Methylene chloride	8.8		"	10.0		88.0	55-137		3.02	30	
n-Butylbenzene	9.1		"	10.0		90.6	79-132		5.44	30	





**Volatile Organic Compounds by GC/MS - Quality Control Data**  
**York Analytical Laboratories, Inc.**

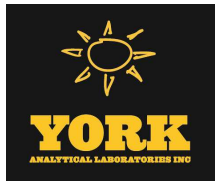
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BC80492 - EPA 5030B**

**LCS Dup (BC80492-BSD1)**

Prepared & Analyzed: 03/12/2018

n-Propylbenzene	9.3		ug/L	10.0		93.0	78-133		1.39	30	
o-Xylene	9.6		"	10.0		95.8	78-130		1.37	30	
p- & m- Xylenes	19		"	20.0		94.0	77-133		2.21	30	
p-Isopropyltoluene	9.3		"	10.0		93.1	81-136		3.50	30	
sec-Butylbenzene	9.3		"	10.0		93.4	79-137		5.84	30	
Styrene	9.6		"	10.0		96.0	67-132		1.79	30	
tert-Butyl alcohol (TBA)	11		"	10.0		107	25-162		7.85	30	
tert-Butylbenzene	9.4		"	10.0		94.1	77-138		3.46	30	
Tetrachloroethylene	9.4		"	10.0		93.5	82-131		2.93	30	
Toluene	8.9		"	10.0		89.3	80-127		1.13	30	
trans-1,2-Dichloroethylene	9.0		"	10.0		90.0	80-132		1.76	30	
trans-1,3-Dichloropropylene	9.2		"	10.0		92.1	78-131		4.10	30	
trans-1,4-dichloro-2-butene	9.4		"	10.0		93.5	63-141		0.859	30	
Trichloroethylene	8.9		"	10.0		88.7	82-128		1.59	30	
Trichlorofluoromethane	9.3		"	10.0		92.6	67-139		3.71	30	
Vinyl Chloride	8.5		"	10.0		85.2	58-145		4.70	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.2</i>		<i>"</i>	<i>10.0</i>		<i>102</i>	<i>69-130</i>				
<i>Surrogate: Toluene-d8</i>	<i>9.50</i>		<i>"</i>	<i>10.0</i>		<i>95.0</i>	<i>81-117</i>				
<i>Surrogate: p-Bromofluorobenzene</i>	<i>9.99</i>		<i>"</i>	<i>10.0</i>		<i>99.9</i>	<i>79-122</i>				



**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BC80552 - EPA 3015A**

**Blank (BC80552-BLK1)**

Prepared & Analyzed: 03/13/2018

Antimony	ND	0.006	mg/L								
Arsenic	ND	0.004	"								
Beryllium	ND	0.001	"								
Cadmium	ND	0.003	"								
Chromium	ND	0.006	"								
Copper	ND	0.003	"								
Lead	ND	0.006	"								
Nickel	ND	0.006	"								
Selenium	ND	0.011	"								
Silver	ND	0.006	"								
Thallium	ND	0.006	"								
Zinc	ND	0.017	"								

**Duplicate (BC80552-DUP1)**

\*Source sample: 18C0189-01 (KC-MW-01 (0318))

Prepared & Analyzed: 03/13/2018

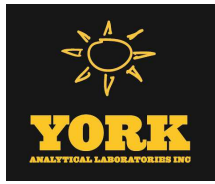
Antimony	0.009	0.006	mg/L		ND						20
Arsenic	ND	0.004	"		ND						20
Beryllium	ND	0.001	"		ND						20
Cadmium	0.077	0.003	"		0.077				0.0408		20
Chromium	0.010	0.006	"		0.011				3.98		20
Copper	0.010	0.003	"		0.009				4.05		20
Lead	ND	0.006	"		ND						20
Nickel	0.188	0.006	"		0.190				1.10		20
Selenium	0.057	0.011	"		0.050				11.8		20
Silver	ND	0.006	"		ND						20
Thallium	ND	0.006	"		ND						20
Zinc	0.155	0.017	"		0.154				0.485		20

**Matrix Spike (BC80552-MS1)**

\*Source sample: 18C0189-01 (KC-MW-01 (0318))

Prepared & Analyzed: 03/13/2018

Antimony	0.279	0.006	mg/L	0.278	ND	100	75-125				
Arsenic	2.20	0.004	"	2.22	ND	99.0	75-125				
Beryllium	0.056	0.001	"	0.0556	ND	101	75-125				
Cadmium	0.131	0.003	"	0.0556	0.077	96.8	75-125				
Chromium	0.222	0.006	"	0.222	0.011	95.0	75-125				
Copper	0.283	0.003	"	0.278	0.009	98.4	75-125				
Lead	0.541	0.006	"	0.556	ND	97.3	75-125				
Nickel	0.754	0.006	"	0.556	0.190	101	75-125				
Selenium	2.11	0.011	"	2.22	0.050	92.7	75-125				
Silver	0.050	0.006	"	0.0556	ND	90.4	75-125				
Thallium	2.39	0.006	"	2.22	ND	108	75-125				
Zinc	0.666	0.017	"	0.556	0.154	92.2	75-125				



**Metals by ICP - Quality Control Data**  
**York Analytical Laboratories, Inc.**

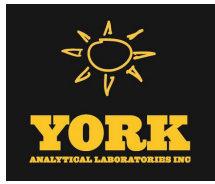
Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BC80552 - EPA 3015A**

**Reference (BC80552-SRM1)**

Prepared & Analyzed: 03/13/2018

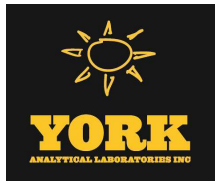
Antimony	0.419		ug/mL	0.420		99.7	76.9-119.2				
Arsenic	0.737		"	0.740		99.6	84.3-114.3				
Beryllium	0.478		"	0.460		104	85-115				
Cadmium	0.232		"	0.240		96.8	84.9-115				
Chromium	0.854		"	0.860		99.3	85-115				
Copper	0.316		"	0.320		98.9	85-115				
Lead	0.651		"	0.640		102	85-115				
Nickel	1.78		"	1.78		100	87-113.7				
Selenium	0.716		"	0.680		105	85.1-115.1				
Silver	0.574		"	0.600		95.7	85-115				
Thallium	0.724		"	0.680		107	82.8-115.4				
Zinc	1.54		"	1.62		95.0	84.9-115				



Mercury by EPA 7000/200 Series Methods - Quality Control Data

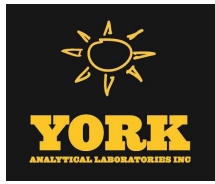
York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BC80531 - EPA 7473 water</b>											
<b>Blank (BC80531-BLK1)</b>											
Mercury	ND	0.00020	mg/L								Prepared & Analyzed: 03/13/2018
<b>Reference (BC80531-SRM1)</b>											
Mercury	0.0100		mg/L	0.0100		100	70-130				Prepared & Analyzed: 03/13/2018



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18C0189-01	KC-MW-01 (0318)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0189-02	KC-MW-02 (0318)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0189-03	KC-MW-05 (0318)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0189-04	KC-MW-DUP2 (0318)	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
18C0189-05	TRIP BLANK	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



## Sample and Data Qualifiers Relating to This Work Order

- J Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
- B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

### Definitions and Other Explanations

- \* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
- ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
- RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
- LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence. This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
- LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
- MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
- Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
- NR Not reported
- RPD Relative Percent Difference
- Wet The data has been reported on an as-received (wet weight) basis
- Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
- Non-Dir. Non-dir. flag (Non-Directional Bias) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

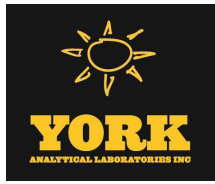
If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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## Laboratory Chain-of-Custody Record

**York Project (SDG) No.: 18C0189**

**Samples Received:** 03/06/2018 15:40    **By:** Douglas J. Kukta    **Logged In:** 03/06/2018 13:40    **By:** Tom Gabrielson

- Sample Conditions:**
- |                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Custody Seals<br><input checked="" type="checkbox"/> Containers Intact<br><input checked="" type="checkbox"/> COC/Labels Agree<br><input checked="" type="checkbox"/> Preservation Confirmed<br><input checked="" type="checkbox"/> Cooler Temperature Confirmed<br><input type="checkbox"/> COC Complete | <input checked="" type="checkbox"/> Chain of Custody Form Received<br><input checked="" type="checkbox"/> Appropriate Sample Volumes Received<br><input checked="" type="checkbox"/> Appropriate Sample Containers Submitted<br><input checked="" type="checkbox"/> Samples Submitted within Holding Times<br><input type="checkbox"/> Corrective Action Form Required |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

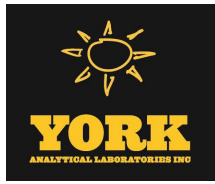
### Preparation Chain-of-Custody

Sample ID	Reason Prep	Prep Start Date	Prep End Date	Prep Analyst
18C0189-01	EPA 3015A	03/13/2018 11:43	03/13/2018 11:43	Sarah Yu
18C0189-02	EPA 3015A	03/13/2018 11:43	03/13/2018 11:43	Sarah Yu
18C0189-03	EPA 3015A	03/13/2018 11:43	03/13/2018 11:43	Sarah Yu
18C0189-04	EPA 3015A	03/13/2018 11:43	03/13/2018 11:43	Sarah Yu
18C0189-01	EPA 5030B	03/12/2018 10:00	03/12/2018 10:00	Arlene Schork
18C0189-02	EPA 5030B	03/12/2018 10:00	03/12/2018 10:00	Arlene Schork
18C0189-03	EPA 5030B	03/12/2018 10:00	03/12/2018 10:00	Arlene Schork
18C0189-04	EPA 5030B	03/12/2018 10:00	03/12/2018 10:00	Arlene Schork
18C0189-05	EPA 5030B	03/12/2018 10:00	03/12/2018 10:00	Arlene Schork
18C0189-01	EPA 7473 water	03/13/2018 9:12	03/13/2018 9:12	Sarah Yu
18C0189-02	EPA 7473 water	03/13/2018 9:12	03/13/2018 9:12	Sarah Yu
18C0189-03	EPA 7473 water	03/13/2018 9:12	03/13/2018 9:12	Sarah Yu
18C0189-04	EPA 7473 water	03/13/2018 9:12	03/13/2018 9:12	Sarah Yu

### Analysis Chain-of-Custody

Sample ID	Reason Analysis	Analysis Start Date	Analysis End Date	Analyst
18C0189-01	Mercury by 7473	03/13/2018 9:12	03/13/2018 15:58	Sarah Yu
18C0189-02	Mercury by 7473	03/13/2018 9:12	03/13/2018 16:09	Sarah Yu
18C0189-03	Mercury by 7473	03/13/2018 9:12	03/13/2018 16:20	Sarah Yu
18C0189-04	Mercury by 7473	03/13/2018 9:12	03/13/2018 16:31	Sarah Yu
18C0189-01	Metals, Priority Pollutant	03/13/2018 11:43	03/13/2018 15:55	Kristin M. Lopez
18C0189-02	Metals, Priority Pollutant	03/13/2018 11:43	03/13/2018 16:06	Kristin M. Lopez
18C0189-03	Metals, Priority Pollutant	03/13/2018 11:43	03/13/2018 16:09	Kristin M. Lopez
18C0189-04	Metals, Priority Pollutant	03/13/2018 11:43	03/13/2018 16:11	Kristin M. Lopez





## Analysis Chain-of-Custody

Sample ID	Reason Analysis	Analysis Start Date	Analysis End Date	Analyst
18C0189-01	Volatile Organics, 8260 - Comprehens	03/12/2018 10:00	03/12/2018 19:18	Arlene Schork
18C0189-02	Volatile Organics, 8260 - Comprehens	03/12/2018 10:00	03/12/2018 18:25	Arlene Schork
18C0189-03	Volatile Organics, 8260 - Comprehens	03/12/2018 10:00	03/12/2018 18:51	Arlene Schork
18C0189-04	Volatile Organics, 8260 - Comprehens	03/12/2018 10:00	03/12/2018 19:44	Arlene Schork
18C0189-05	Volatile Organics, 8260 - Comprehens	03/12/2018 10:00	03/12/2018 17:59	Arlene Schork

# Field Chain-of-Custody Record

York Project No. 18C-0189

YORK ANALYTICAL LABORATORIES  
120 RESEARCH DR.  
STRATFORD, CT 06615  
(203) 325-1371  
FAX (203) 357-0166

NOTE: York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions.

<b>YOUR Information</b> Company: Chazen Environmental Address: 21 Fox Street Poughkeepsie, NY 12601 Phone No. 845-486-1520 Contact Person: Eric Orłowski E-Mail Address: eorowski@chazenco.com		<b>Report To:</b> Company: Chazen Environmental Address: Phone No. Attention:		<b>Invoice To:</b> Company: Chazen Environmental Address: Phone No. Attention:		<b>YOUR Project ID</b> 41103.00 Task 0100 - Kingston CVS Annual <b>Purchase Order No.</b> 01880 0185		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> Standard(5-7 Days) <input checked="" type="checkbox"/>		<b>Report Type</b> Summary Report <input type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> CT RCP DQA/DUE Pkg <input type="checkbox"/> NY ASP A Package <input type="checkbox"/> NY ASP B Package <input checked="" type="checkbox"/> NI DEP Red. Deliv. <input type="checkbox"/> Electronic Data Deliverables (EDD) <input type="checkbox"/> Simple Excel <input checked="" type="checkbox"/> NY SDEC EQULS <input type="checkbox"/> EQULS (std) <input type="checkbox"/> EZ-EDD (EQULS) <input type="checkbox"/> NI DEP SRP HazSite EDD <input type="checkbox"/> GIS/KEY (std) <input type="checkbox"/> Other <input type="checkbox"/> York Regulatory Comparison <input type="checkbox"/> Excel Spreadsheet <input type="checkbox"/> Compare to the following Reg. (please fill in): Part 375 Commercial Part 703.5 GW			
<b>Matrix Codes</b> S - soil Other - specify (oil, etc.) WW - wastewater GW - groundwater DW - drinking water Air-A - ambient air Air-SV - soil vapor		<b>Volatiles</b> 8260 full TICs 624 Site Spec. STARS list Nessen Co. BTEX Suffulk Co. MTBE Ketones TCL list Oxygenates TAGM list CT RCP list 524.2 Avom. only 502.2 Halog. only NI DEP list App. IX list SP/P or TCLP 8021B list		<b>Semi-Volat.</b> 8270 or 625 8082 PCB STARS list 8081 Pest BN Only 8151 Herb Acids Only CT RCP PAH list App. IX TAGM list Site Spec. CT RCP list SP/P or TCLP TCL list NI DEP list App. IX Chloroform TCLP BNA 608 Pest SP/P or TCLP 608 PCB		<b>Metals</b> RCRA8 PP13 list TAL CT15 list TAGM list NI DEP list Total Dissolved SP/P or TCLP Air VPH Air TCs Lead/Cadmium LIST Below Helium		<b>Misc. Org.</b> TPH GRO TPH DRO CT ETPH NY 310-13 TPH 1664 Air TO14A Air TO15 Air STARS Air VPH Air TCs Medicine Helium		<b>Full Lists</b> Pri. Poll. TCL Organics TAL MeCN Full TCLP Full App. IX Part 360-Residue Part 360-Residue Part 360-Residue Part 360-Residue NY DEP Sewer Asbestos TAGM Silica		<b>Misc.</b> Corrosivity Reactivity Ignitability Flash Point Sweep Anal. Hydrocarbons TOX BTUL Aquatic Tox. NY DEP Sewer TOC Asbestos Silica	

**Print Clearly and Legibly. All Information must be complete. Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.**

*[Signature]*  
 Eric J. Orłowski  
 Name (printed)

Sample Identification	Date/Time Sampled	Sample Matrix	Choose Analyses Needed from the Menu Above and Enter Below	Container Description(s)
KC-MW-01 (0318)	3/5/2018 1230	GW	TCL VOCs, PRIORITY POLLUTANT METALS	3 X 40 ML VOAS, 1 X 500 ML
KC-MW-02 (0318)	3/5/2018 1825	GW	TCL VOCs, PRIORITY POLLUTANT METALS	3 X 40 ML VOAS, 1 X 500 ML
KC-MW-05 (0318)	3/5/2018	GW	TCL VOCs, PRIORITY POLLUTANT METALS	3 X 40 ML VOAS, 1 X 500 ML
KC-MW-DUP2 (0318)	3/5/2018	GW	TCL VOCs, PRIORITY POLLUTANT METALS	3 X 40 ML VOAS, 1 X 500 ML
TRIP BLANK		DI	TCL VOCs	2 X 40 ML VOAS

Preservation  4°C  Frozen  HCl  MeOH  HNO<sub>3</sub>  H<sub>2</sub>SO<sub>4</sub>  NaOH   
 ZrAc  Ascorbic Acid  Other

Comments: SAMPLES RELINQUISHED TO SECURE REFRIGERATOR AT CHAZEN HQ 3/6/2018 AT 0900.  
*[Signature]* 3/6/2018 0900 Date/Time  
 Samples Relinquished By Date/Time  
*[Signature]* 3/6/18 1540 Date/Time  
 Samples Received in LAB by Date/Time  
*[Signature]* 3-6-18 1200 Date/Time  
 Temperature on Receipt 36 °C

York Analytical Laboratories, Inc.

SDG: 18C0189

CLASS: VOA

METHOD: EPA 8260C

**DATA PACKAGE COVER PAGE**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

---

**Client Sample Id:**

**Lab Sample Id:**

KC-MW-01 (0318)

18C0189-01

KC-MW-02 (0318)

18C0189-02

KC-MW-05 (0318)

18C0189-03

KC-MW-DUP2 (0318)

18C0189-04

TRIP BLANK

18C0189-05

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the project narrative. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the

Signature:



Name:

Benjamin Gulizia

Date:

4/30/2018

Title:

Laboratory Director

# VOA QC Summary

## FORM II

## SURROGATE STANDARD RECOVERY AND RT SUMMARY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.      SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie)      Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238      Instrument: QVOA6  
 Matrix: Water      Calibration: YB80032

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1238-CCV1)</b>			Lab File ID: QV604735.D		Analyzed: 03/12/18 13:02			
1,2-Dichloroethane-d4	10.0	99.6	80 - 120	5.83	5.832333	-0.0023	+/-1.00	
Toluene-d8	10.0	95.8	80 - 120	7.683	7.682889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	101	80 - 120	10.46	10.459	0.0010	+/-1.00	
<b>LCS (BC80492-BS1)</b>			Lab File ID: QV604736.D		Analyzed: 03/12/18 13:39			
1,2-Dichloroethane-d4	10.0	100	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	94.4	81 - 117	7.681	7.682889	-0.0019	+/-1.00	
p-Bromofluorobenzene	10.0	103	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>LCS Dup (BC80492-BSD1)</b>			Lab File ID: QV604737.D		Analyzed: 03/12/18 14:05			
1,2-Dichloroethane-d4	10.0	102	69 - 130	5.83	5.832333	-0.0023	+/-1.00	
Toluene-d8	10.0	95.0	81 - 117	7.683	7.682889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	99.9	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>Blank (BC80492-BLK1)</b>			Lab File ID: QV604739.D		Analyzed: 03/12/18 14:58			
1,2-Dichloroethane-d4	10.0	99.4	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	97.3	81 - 117	7.683	7.682889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	99.4	79 - 122	10.46	10.459	0.0010	+/-1.00	
<b>TRIP BLANK (18C0189-05)</b>			Lab File ID: QV604745.D		Analyzed: 03/12/18 17:59			
1,2-Dichloroethane-d4	10.0	97.7	69 - 130	5.825	5.832333	-0.0073	+/-1.00	
Toluene-d8	10.0	101	81 - 117	7.678	7.682889	-0.0049	+/-1.00	
p-Bromofluorobenzene	10.0	97.9	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>KC-MW-02 (0318) (18C0189-02)</b>			Lab File ID: QV604746.D		Analyzed: 03/12/18 18:25			
1,2-Dichloroethane-d4	10.0	96.1	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	97.1	81 - 117	7.681	7.682889	-0.0019	+/-1.00	
p-Bromofluorobenzene	10.0	98.8	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>KC-MW-05 (0318) (18C0189-03)</b>			Lab File ID: QV604747.D		Analyzed: 03/12/18 18:51			
1,2-Dichloroethane-d4	10.0	103	69 - 130	5.825	5.832333	-0.0073	+/-1.00	
Toluene-d8	10.0	95.1	81 - 117	7.678	7.682889	-0.0049	+/-1.00	
p-Bromofluorobenzene	10.0	98.2	79 - 122	10.454	10.459	-0.0050	+/-1.00	
<b>KC-MW-01 (0318) (18C0189-01)</b>			Lab File ID: QV604748.D		Analyzed: 03/12/18 19:18			
1,2-Dichloroethane-d4	10.0	100	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	97.2	81 - 117	7.681	7.682889	-0.0019	+/-1.00	
p-Bromofluorobenzene	10.0	97.8	79 - 122	10.457	10.459	-0.0020	+/-1.00	

FORM II

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.                      SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie)              Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238                                                                  Instrument: QVOA6  
 Matrix: Water                                                                              Calibration: YB80032

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>KC-MW-DUP2 (0318) (18C0189-04)</b>		Lab File ID: QV604749.D			Analyzed: 03/12/18 19:44			
1,2-Dichloroethane-d4	10.0	101	69 - 130	5.831	5.832333	-0.0013	+/-1.00	
Toluene-d8	10.0	97.8	81 - 117	7.678	7.682889	-0.0049	+/-1.00	
p-Bromofluorobenzene	10.0	98.8	79 - 122	10.457	10.459	-0.0020	+/-1.00	

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterBatch: BC80492Laboratory ID: BC80492-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	9.3	92.9	82 - 126
1,1,1-Trichloroethane	10.0	9.4	93.6	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.4	94.1	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.4	94.1	54 - 165
1,1,2-Trichloroethane	10.0	9.1	91.2	82 - 123
1,1-Dichloroethane	10.0	9.4	94.3	82 - 129
1,1-Dichloroethylene	10.0	9.2	91.7	68 - 138
1,2,3-Trichlorobenzene	10.0	9.0	89.7	76 - 136
1,2,3-Trichloropropane	10.0	9.9	98.9	77 - 128
1,2,4-Trichlorobenzene	10.0	8.2	82.0	76 - 137
1,2,4-Trimethylbenzene	10.0	9.6	95.7	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.0	89.6	45 - 147
1,2-Dibromoethane	10.0	9.1	91.2	83 - 124
1,2-Dichlorobenzene	10.0	9.4	94.1	79 - 123
1,2-Dichloroethane	10.0	9.2	92.2	73 - 132
1,2-Dichloropropane	10.0	8.7	87.0	78 - 126
1,3,5-Trimethylbenzene	10.0	9.6	95.5	80 - 131
1,3-Dichlorobenzene	10.0	9.7	97.3	86 - 122
1,4-Dichlorobenzene	10.0	9.7	97.4	85 - 124
1,4-Dioxane	200	180	89.2	10 - 349
2-Butanone	10.0	11	114	49 - 152
2-Hexanone	10.0	9.3	93.3	51 - 146
4-Methyl-2-pentanone	10.0	8.4	83.7	57 - 145
Acetone	10.0	12	119	14 - 150
Acrolein	10.0	11	108	10 - 153
Acrylonitrile	10.0	9.0	90.3	51 - 150
Benzene	10.0	9.4	93.6	85 - 126
Bromochloromethane	10.0	9.8	98.2	77 - 128
Bromodichloromethane	10.0	8.8	87.9	79 - 128
Bromoform	10.0	8.8	88.4	78 - 133



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80492 Laboratory ID: BC80492-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Bromomethane	10.0	6.4	64.0	43 - 168
Carbon disulfide	10.0	8.7	87.3	68 - 146
Carbon tetrachloride	10.0	9.3	93.0	77 - 141
Chlorobenzene	10.0	9.3	93.2	88 - 120
Chloroethane	10.0	9.0	90.4	65 - 136
Chloroform	10.0	9.7	96.9	82 - 128
Chloromethane	10.0	7.2	72.5	43 - 155
cis-1,2-Dichloroethylene	10.0	9.4	94.3	83 - 129
cis-1,3-Dichloropropylene	10.0	8.9	88.7	80 - 131
Cyclohexane	10.0	8.8	88.1	63 - 149
Dibromochloromethane	10.0	8.9	88.8	80 - 130
Dibromomethane	10.0	8.9	89.2	72 - 134
Dichlorodifluoromethane	10.0	8.0	79.9	44 - 144
Ethyl Benzene	10.0	9.1	91.1	80 - 131
Hexachlorobutadiene	10.0	7.6	75.6	67 - 146
Isopropylbenzene	10.0	9.6	95.5	76 - 140
Methyl acetate	10.0	8.6	85.7	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.5	94.8	76 - 135
Methylcyclohexane	10.0	8.4	84.0	72 - 143
Methylene chloride	10.0	9.1	90.7	55 - 137
n-Butylbenzene	10.0	8.6	85.8	79 - 132
n-Propylbenzene	10.0	9.4	94.3	78 - 133
o-Xylene	10.0	9.4	94.5	78 - 130
p- & m- Xylenes	20.0	18	91.9	77 - 133
p-Isopropyltoluene	10.0	9.0	89.9	81 - 136
sec-Butylbenzene	10.0	8.8	88.1	79 - 137
Styrene	10.0	9.4	94.3	67 - 132
tert-Butyl alcohol (TBA)	10.0	9.9	99.2	25 - 162
tert-Butylbenzene	10.0	9.1	90.9	77 - 138
Tetrachloroethylene	10.0	9.1	90.8	82 - 131

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80492 Laboratory ID: BC80492-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Toluene	10.0	8.8	88.3	80 - 127
trans-1,2-Dichloroethylene	10.0	9.2	91.6	80 - 132
trans-1,3-Dichloropropylene	10.0	8.8	88.4	78 - 131
trans-1,4-dichloro-2-butene	10.0	9.3	92.7	63 - 141
Trichloroethylene	10.0	8.7	87.3	82 - 128
Trichlorofluoromethane	10.0	9.6	96.1	67 - 139
Vinyl Chloride	10.0	8.9	89.3	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterBatch: BC80492Laboratory ID: BC80492-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	9.4	94.4	1.60	30	82 - 126
1,1,1-Trichloroethane	10.0	9.2	92.3	1.40	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.5	95.1	1.06	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.0	89.6	4.90	30	54 - 165
1,1,2-Trichloroethane	10.0	9.6	95.6	4.71	30	82 - 123
1,1-Dichloroethane	10.0	9.3	93.1	1.28	30	82 - 129
1,1-Dichloroethylene	10.0	8.8	88.5	3.55	30	68 - 138
1,2,3-Trichlorobenzene	10.0	10	103	14.0	30	76 - 136
1,2,3-Trichloropropane	10.0	9.8	98.4	0.507	30	77 - 128
1,2,4-Trichlorobenzene	10.0	8.9	89.0	8.19	30	76 - 137
1,2,4-Trimethylbenzene	10.0	9.3	93.0	2.86	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.8	97.8	8.75	30	45 - 147
1,2-Dibromoethane	10.0	9.6	95.8	4.92	30	83 - 124
1,2-Dichlorobenzene	10.0	9.3	92.7	1.50	30	79 - 123
1,2-Dichloroethane	10.0	9.4	94.0	1.93	30	73 - 132
1,2-Dichloropropane	10.0	8.8	88.5	1.71	30	78 - 126
1,3,5-Trimethylbenzene	10.0	9.2	92.3	3.41	30	80 - 131
1,3-Dichlorobenzene	10.0	9.3	93.0	4.52	30	86 - 122
1,4-Dichlorobenzene	10.0	9.4	93.5	4.09	30	85 - 124
1,4-Dioxane	200	200	101	12.2	30	10 - 349
2-Butanone	10.0	12	120	5.39	30	49 - 152
2-Hexanone	10.0	10	103	10.3	30	51 - 146
4-Methyl-2-pentanone	10.0	9.2	92.1	9.56	30	57 - 145
Acetone	10.0	12	122	1.99	30	14 - 150
Acrolein	10.0	11	108	0.00	30	10 - 153
Acrylonitrile	10.0	9.9	99.0	9.19	30	51 - 150
Benzene	10.0	9.3	92.8	0.858	30	85 - 126
Bromochloromethane	10.0	9.8	98.0	0.204	30	77 - 128
Bromodichloromethane	10.0	8.9	89.0	1.24	30	79 - 128
Bromoform	10.0	9.5	94.9	7.09	30	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterBatch: BC80492Laboratory ID: BC80492-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	10.0	7.0	69.9	8.81	30	43 - 168
Carbon disulfide	10.0	8.4	84.2	3.62	30	68 - 146
Carbon tetrachloride	10.0	9.0	90.3	2.95	30	77 - 141
Chlorobenzene	10.0	9.4	93.5	0.321	30	88 - 120
Chloroethane	10.0	9.2	91.7	1.43	30	65 - 136
Chloroform	10.0	9.4	94.0	3.04	30	82 - 128
Chloromethane	10.0	7.1	71.0	2.09	30	43 - 155
cis-1,2-Dichloroethylene	10.0	9.2	91.9	2.58	30	83 - 129
cis-1,3-Dichloropropylene	10.0	9.0	90.4	1.90	30	80 - 131
Cyclohexane	10.0	8.5	85.1	3.46	30	63 - 149
Dibromochloromethane	10.0	9.2	92.1	3.65	30	80 - 130
Dibromomethane	10.0	9.2	92.2	3.31	30	72 - 134
Dichlorodifluoromethane	10.0	7.6	76.0	5.00	30	44 - 144
Ethyl Benzene	10.0	9.4	93.8	2.92	30	80 - 131
Hexachlorobutadiene	10.0	8.6	86.0	12.9	30	67 - 146
Isopropylbenzene	10.0	9.4	93.9	1.69	30	76 - 140
Methyl acetate	10.0	9.5	95.1	10.4	30	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.7	96.8	2.09	30	76 - 135
Methylcyclohexane	10.0	8.7	87.1	3.62	30	72 - 143
Methylene chloride	10.0	8.8	88.0	3.02	30	55 - 137
n-Butylbenzene	10.0	9.1	90.6	5.44	30	79 - 132
n-Propylbenzene	10.0	9.3	93.0	1.39	30	78 - 133
o-Xylene	10.0	9.6	95.8	1.37	30	78 - 130
p- & m- Xylenes	20.0	19	94.0	2.21	30	77 - 133
p-Isopropyltoluene	10.0	9.3	93.1	3.50	30	81 - 136
sec-Butylbenzene	10.0	9.3	93.4	5.84	30	79 - 137
Styrene	10.0	9.6	96.0	1.79	30	67 - 132
tert-Butyl alcohol (TBA)	10.0	11	107	7.85	30	25 - 162
tert-Butylbenzene	10.0	9.4	94.1	3.46	30	77 - 138
Tetrachloroethylene	10.0	9.4	93.5	2.93	30	82 - 131

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80492 Laboratory ID: BC80492-BSD1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	10.0	8.9	89.3	1.13	30	80 - 127
trans-1,2-Dichloroethylene	10.0	9.0	90.0	1.76	30	80 - 132
trans-1,3-Dichloropropylene	10.0	9.2	92.1	4.10	30	78 - 131
trans-1,4-dichloro-2-butene	10.0	9.4	93.5	0.859	30	63 - 141
Trichloroethylene	10.0	8.9	88.7	1.59	30	82 - 128
Trichlorofluoromethane	10.0	9.3	92.6	3.71	30	67 - 139
Vinyl Chloride	10.0	8.5	85.2	4.70	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Batch: BC80492 Batch Matrix: Water Preparation: EPA 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-MW-01 (0318)	18C0189-01	QV604748.D	03/12/18 10:00	
KC-MW-02 (0318)	18C0189-02	QV604746.D	03/12/18 10:00	
KC-MW-05 (0318)	18C0189-03	QV604747.D	03/12/18 10:00	
KC-MW-DUP2 (0318)	18C0189-04	QV604749.D	03/12/18 10:00	
TRIP BLANK	18C0189-05	QV604745.D	03/12/18 10:00	
Blank	BC80492-BLK1	QV604739.D	03/12/18 10:00	
LCS	BC80492-BS1	QV604736.D	03/12/18 10:00	
LCS Dup	BC80492-BSD1	QV604737.D	03/12/18 10:00	

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.51	B
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	0.50	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U



**FORM I**

**METHOD BLANK DATA SHEET  
EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.94	99.4	69 - 130	
p-Bromofluorobenzene	10.0	9.94	99.4	79 - 122	
Toluene-d8	10.0	9.73	97.3	81 - 117	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,2-Dichlorobenzene-d4	96405	12.174	89967	12.174	
Chlorobenzene-d5	236992	9.186	224712	9.188	
Fluorobenzene	57774	6.134	54432	6.131	

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationLab File ID: QV604443.DInjection Date: 02/26/18Instrument ID: QVOA6Injection Time: 17:46Sequence: Y8B2822Lab Sample ID: Y8B2822-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.5	PASS
75	30 - 60% of 95	48.3	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.96	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	97.5	PASS
175	5 - 9% of 174	7.92	PASS
176	95 - 101% of 174	96.8	PASS
177	5 - 9% of 176	6.85	PASS

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationLab File ID: QV604732.DInjection Date: 03/12/18Instrument ID: QVOA6Injection Time: 11:41Sequence: Y8C1238Lab Sample ID: Y8C1238-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	21.5	PASS
75	30 - 60% of 95	49.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.63	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	97.5	PASS
175	5 - 9% of 174	8.05	PASS
176	95 - 101% of 174	95.2	PASS
177	5 - 9% of 176	7.11	PASS

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
Sequence: Y8B2822 Instrument: QVOA6  
Matrix: Water Calibration: YB80032

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8B2822-TUN1	QV604443.D	02/26/18 17:46
Cal Standard	Y8B2822-CAL1	QV604445.D	02/26/18 18:39
Cal Standard	Y8B2822-CAL2	QV604446.D	02/26/18 19:05
Cal Standard	Y8B2822-CAL3	QV604447.D	02/26/18 19:31
Cal Standard	Y8B2822-CAL4	QV604448.D	02/26/18 19:58
Cal Standard	Y8B2822-CAL5	QV604449.D	02/26/18 20:24
Cal Standard	Y8B2822-CAL6	QV604450.D	02/26/18 20:51
Cal Standard	Y8B2822-CAL7	QV604451.D	02/26/18 21:17
Cal Standard	Y8B2822-CAL8	QV604452.D	02/26/18 21:43
Cal Standard	Y8B2822-CAL9	QV604453.D	02/26/18 22:10
Secondary Cal Check	Y8B2822-SCV1	QV604455.D	02/26/18 23:03

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238 Instrument: QVOA6  
 Matrix: Water Calibration: YB80032

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1238-TUN1	QV604732.D	03/12/18 11:41
Calibration Check	Y8C1238-CCV1	QV604735.D	03/12/18 13:02
LCS	BC80492-BS1	QV604736.D	03/12/18 13:39
LCS Dup	BC80492-BSD1	QV604737.D	03/12/18 14:05
Blank	BC80492-BLK1	QV604739.D	03/12/18 14:58
TRIP BLANK	18C0189-05	QV604745.D	03/12/18 17:59
KC-MW-02 (0318)	18C0189-02	QV604746.D	03/12/18 18:25
KC-MW-05 (0318)	18C0189-03	QV604747.D	03/12/18 18:51
KC-MW-01 (0318)	18C0189-01	QV604748.D	03/12/18 19:18
KC-MW-DUP2 (0318)	18C0189-04	QV604749.D	03/12/18 19:44

FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8B2822 Instrument: QVOA6  
 Matrix: Water Calibration: YB80032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8B2822-CAL1)</b> Lab File ID: QV604445.D Analyzed: 02/26/18 18:39									
Fluorobenzene	60877	6.128	54341	6.131	112	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	238915	9.191	219468	9.189	109	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	96903	12.174	87396	12.171	111	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL2)</b> Lab File ID: QV604446.D Analyzed: 02/26/18 19:05									
Fluorobenzene	57438	6.131	54341	6.131	106	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	224845	9.191	219468	9.189	102	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	90471	12.174	87396	12.171	104	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL3)</b> Lab File ID: QV604447.D Analyzed: 02/26/18 19:31									
Fluorobenzene	59185	6.134	54341	6.131	109	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	237719	9.188	219468	9.189	108	50 - 200	-0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	95478	12.174	87396	12.171	109	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL4)</b> Lab File ID: QV604448.D Analyzed: 02/26/18 19:58									
Fluorobenzene	54341	6.131	54341	6.131	100	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	219468	9.189	219468	9.189	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	87396	12.171	87396	12.171	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B2822-CAL5)</b> Lab File ID: QV604449.D Analyzed: 02/26/18 20:24									
Fluorobenzene	59413	6.131	54341	6.131	109	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	233156	9.189	219468	9.189	106	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	91822	12.174	87396	12.171	105	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL6)</b> Lab File ID: QV604450.D Analyzed: 02/26/18 20:51									
Fluorobenzene	54928	6.131	54341	6.131	101	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	216585	9.189	219468	9.189	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	83877	12.174	87396	12.171	96	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL7)</b> Lab File ID: QV604451.D Analyzed: 02/26/18 21:17									
Fluorobenzene	57387	6.131	54341	6.131	106	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	221669	9.189	219468	9.189	101	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	87220	12.174	87396	12.171	100	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL8)</b> Lab File ID: QV604452.D Analyzed: 02/26/18 21:43									
Fluorobenzene	55386	6.131	54341	6.131	102	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	209615	9.191	219468	9.189	96	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	85159	12.174	87396	12.171	97	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL9)</b> Lab File ID: QV604453.D Analyzed: 02/26/18 22:10									
Fluorobenzene	55457	6.128	54341	6.131	102	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	208158	9.191	219468	9.189	95	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	85593	12.177	87396	12.171	98	50 - 200	0.0060	+/-0.17	



FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238 Instrument: QVOA6  
 Matrix: Water Calibration: YB80032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1238-CCV1)</b> Lab File ID: QV604735.D Analyzed: 03/12/18 13:02									
Fluorobenzene	54432	6.131				50 - 200		+/-0.17	
Chlorobenzene-d5	224712	9.188				50 - 200		+/-0.17	
1,2-Dichlorobenzene-d4	89967	12.174				50 - 200		+/-0.17	
<b>LCS (BC80492-BS1)</b> Lab File ID: QV604736.D Analyzed: 03/12/18 13:39									
Fluorobenzene	53111	6.131	54432	6.131	98	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	223874	9.189	224712	9.188	100	50 - 200	0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	86307	12.171	89967	12.174	96	50 - 200	-0.0030	+/-0.17	
<b>LCS Dup (BC80492-BSD1)</b> Lab File ID: QV604737.D Analyzed: 03/12/18 14:05									
Fluorobenzene	53595	6.131	54432	6.131	98	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	221309	9.189	224712	9.188	98	50 - 200	0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	91943	12.171	89967	12.174	102	50 - 200	-0.0030	+/-0.17	
<b>Blank (BC80492-BLK1)</b> Lab File ID: QV604739.D Analyzed: 03/12/18 14:58									
Fluorobenzene	57774	6.134	54432	6.131	106	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	236992	9.186	224712	9.188	105	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	96405	12.174	89967	12.174	107	50 - 200	0.0000	+/-0.17	
<b>TRIP BLANK (18C0189-05)</b> Lab File ID: QV604745.D Analyzed: 03/12/18 17:59									
Fluorobenzene	55611	6.125	54432	6.131	102	50 - 200	-0.0060	+/-0.17	
Chlorobenzene-d5	213644	9.189	224712	9.188	95	50 - 200	0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	83069	12.171	89967	12.174	92	50 - 200	-0.0030	+/-0.17	
<b>KC-MW-02 (0318) (18C0189-02)</b> Lab File ID: QV604746.D Analyzed: 03/12/18 18:25									
Fluorobenzene	49945	6.128	54432	6.131	92	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	205040	9.186	224712	9.188	91	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	83000	12.174	89967	12.174	92	50 - 200	0.0000	+/-0.17	
<b>KC-MW-05 (0318) (18C0189-03)</b> Lab File ID: QV604747.D Analyzed: 03/12/18 18:51									
Fluorobenzene	48648	6.128	54432	6.131	89	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	202965	9.186	224712	9.188	90	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	83840	12.171	89967	12.174	93	50 - 200	-0.0030	+/-0.17	
<b>KC-MW-01 (0318) (18C0189-01)</b> Lab File ID: QV604748.D Analyzed: 03/12/18 19:18									
Fluorobenzene	51199	6.131	54432	6.131	94	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	212955	9.188	224712	9.188	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	87617	12.171	89967	12.174	97	50 - 200	-0.0030	+/-0.17	
<b>KC-MW-DUP2 (0318) (18C0189-04)</b> Lab File ID: QV604749.D Analyzed: 03/12/18 19:44									
Fluorobenzene	49547	6.131	54432	6.131	91	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	204559	9.186	224712	9.188	91	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	82649	12.174	89967	12.174	92	50 - 200	0.0000	+/-0.17	



# HOLDING TIME SUMMARY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KC-MW-01 (0318)	03/05/18 12:30	03/06/18 15:40	03/12/18 10:00	6.90	14.00	03/12/18 19:18	7.28	14.00	
KC-MW-02 (0318)	03/05/18 18:25	03/06/18 15:40	03/12/18 10:00	6.65	14.00	03/12/18 18:25	7.00	14.00	
KC-MW-05 (0318)	03/05/18 15:00	03/06/18 15:40	03/12/18 10:00	6.79	14.00	03/12/18 18:51	7.16	14.00	
KC-MW-DUP2 (0318)	03/05/18 15:00	03/06/18 15:40	03/12/18 10:00	6.79	14.00	03/12/18 19:44	7.20	14.00	
TRIP BLANK	03/05/18 15:00	03/06/18 15:40	03/12/18 10:00	6.79	14.00	03/12/18 17:59	7.12	14.00	

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Invest

Matrix: Water

Instrument: QVOA6

Analyte	LOD	LOQ	Units
1,1,1,2-Tetrachloroethane	0.20	0.50	ug/L
1,1,1-Trichloroethane	0.20	0.50	ug/L
1,1,2,2-Tetrachloroethane	0.20	0.50	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane (Fr	0.20	0.50	ug/L
1,1,2-Trichloroethane	0.20	0.50	ug/L
1,1-Dichloroethane	0.20	0.50	ug/L
1,1-Dichloroethylene	0.20	0.50	ug/L
1,2,3-Trichlorobenzene	0.20	0.50	ug/L
1,2,3-Trichloropropane	0.20	0.50	ug/L
1,2,4-Trichlorobenzene	0.20	0.50	ug/L
1,2,4-Trimethylbenzene	0.20	0.50	ug/L
1,2-Dibromo-3-chloropropane	0.20	0.50	ug/L
1,2-Dibromoethane	0.20	0.50	ug/L
1,2-Dichlorobenzene	0.20	0.50	ug/L
1,2-Dichloroethane	0.20	0.50	ug/L
1,2-Dichloropropane	0.20	0.50	ug/L
1,3,5-Trimethylbenzene	0.20	0.50	ug/L
1,3-Dichlorobenzene	0.20	0.50	ug/L
1,4-Dichlorobenzene	0.20	0.50	ug/L
1,4-Dioxane	40	40	ug/L
2-Butanone	0.20	0.50	ug/L
2-Hexanone	0.20	0.50	ug/L
4-Methyl-2-pentanone	0.20	0.50	ug/L
Acetone	1.0	2.0	ug/L
Acrolein	0.20	0.50	ug/L
Acrylonitrile	0.20	0.50	ug/L
Benzene	0.20	0.50	ug/L
Bromochloromethane	0.20	0.50	ug/L
Bromodichloromethane	0.20	0.50	ug/L
Bromoform	0.20	0.50	ug/L
Bromomethane	0.20	0.50	ug/L
Carbon disulfide	0.20	0.50	ug/L
Carbon tetrachloride	0.20	0.50	ug/L
Chlorobenzene	0.20	0.50	ug/L
Chloroethane	0.20	0.50	ug/L
Chloroform	0.20	0.50	ug/L
Chloromethane	0.20	0.50	ug/L

# METHOD DETECTION AND REPORTING LIMITS

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Invest

Matrix: Water

Instrument: QVOA6

Analyte	LOD	LOQ	Units
cis-1,2-Dichloroethylene	0.20	0.50	ug/L
cis-1,3-Dichloropropylene	0.20	0.50	ug/L
Cyclohexane	0.20	0.50	ug/L
Dibromochloromethane	0.20	0.50	ug/L
Dibromomethane	0.20	0.50	ug/L
Dichlorodifluoromethane	0.20	0.50	ug/L
Ethyl Benzene	0.20	0.50	ug/L
Hexachlorobutadiene	0.20	0.50	ug/L
Isopropylbenzene	0.20	0.50	ug/L
Methyl acetate	0.20	0.50	ug/L
Methyl tert-butyl ether (MTBE)	0.20	0.50	ug/L
Methylcyclohexane	0.20	0.50	ug/L
Methylene chloride	1.0	2.0	ug/L
n-Butylbenzene	0.20	0.50	ug/L
n-Propylbenzene	0.20	0.50	ug/L
o-Xylene	0.20	0.50	ug/L
p- & m- Xylenes	0.50	1.0	ug/L
p-Isopropyltoluene	0.20	0.50	ug/L
sec-Butylbenzene	0.20	0.50	ug/L
Styrene	0.20	0.50	ug/L
tert-Butyl alcohol (TBA)	0.50	1.0	ug/L
tert-Butylbenzene	0.20	0.50	ug/L
Tetrachloroethylene	0.20	0.50	ug/L
Toluene	0.20	0.50	ug/L
trans-1,2-Dichloroethylene	0.20	0.50	ug/L
trans-1,3-Dichloropropylene	0.20	0.50	ug/L
trans-1,4-dichloro-2-butene	0.20	0.50	ug/L
Trichloroethylene	0.20	0.50	ug/L
Trichlorofluoromethane	0.20	0.50	ug/L
Vinyl Chloride	0.20	0.50	ug/L
Xylenes, Total	0.60	1.5	ug/L

# VOA Sample Data

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-01 File ID: QV604748.D  
 Sampled: 03/05/18 12:30 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:18  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	5.0	U
71-55-6	1,1,1-Trichloroethane	10	2.4	JD
79-34-5	1,1,2,2-Tetrachloroethane	10	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	5.0	U
79-00-5	1,1,2-Trichloroethane	10	5.0	U
75-34-3	1,1-Dichloroethane	10	3.7	JD
75-35-4	1,1-Dichloroethylene	10	5.0	U
87-61-6	1,2,3-Trichlorobenzene	10	5.0	U
96-18-4	1,2,3-Trichloropropane	10	5.0	U
120-82-1	1,2,4-Trichlorobenzene	10	5.0	U
95-63-6	1,2,4-Trimethylbenzene	10	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	5.0	U
106-93-4	1,2-Dibromoethane	10	5.0	U
95-50-1	1,2-Dichlorobenzene	10	5.0	U
107-06-2	1,2-Dichloroethane	10	5.0	U
78-87-5	1,2-Dichloropropane	10	5.0	U
108-67-8	1,3,5-Trimethylbenzene	10	5.0	U
541-73-1	1,3-Dichlorobenzene	10	5.0	U
106-46-7	1,4-Dichlorobenzene	10	5.0	U
123-91-1	1,4-Dioxane	10	400	U
78-93-3	2-Butanone	10	5.0	U
591-78-6	2-Hexanone	10	5.0	U
108-10-1	4-Methyl-2-pentanone	10	5.0	U
67-64-1	Acetone	10	20	U
107-02-8	Acrolein	10	5.0	U
107-13-1	Acrylonitrile	10	5.0	U
71-43-2	Benzene	10	5.0	U
74-97-5	Bromochloromethane	10	5.0	U
75-27-4	Bromodichloromethane	10	5.0	U
75-25-2	Bromoform	10	5.0	U
74-83-9	Bromomethane	10	5.0	U
75-15-0	Carbon disulfide	10	5.0	U
56-23-5	Carbon tetrachloride	10	5.0	U
108-90-7	Chlorobenzene	10	5.0	U
75-00-3	Chloroethane	10	5.0	U
67-66-3	Chloroform	10	5.0	U
74-87-3	Chloromethane	10	5.0	U
156-59-2	cis-1,2-Dichloroethylene	10	730	D
10061-01-5	cis-1,3-Dichloropropylene	10	5.0	U
110-82-7	Cyclohexane	10	5.0	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-01 File ID: QV604748.D  
 Sampled: 03/05/18 12:30 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:18  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	10	5.0	U
74-95-3	Dibromomethane	10	5.0	U
75-71-8	Dichlorodifluoromethane	10	5.0	U
100-41-4	Ethyl Benzene	10	5.0	U
87-68-3	Hexachlorobutadiene	10	5.0	U
98-82-8	Isopropylbenzene	10	5.0	U
79-20-9	Methyl acetate	10	5.0	U
1634-04-4	Methyl tert-butyl ether (MTBE)	10	5.0	U
108-87-2	Methylcyclohexane	10	5.0	U
75-09-2	Methylene chloride	10	20	U
104-51-8	n-Butylbenzene	10	5.0	U
103-65-1	n-Propylbenzene	10	5.0	U
95-47-6	o-Xylene	10	5.0	U
179601-23-1	p- & m- Xylenes	10	10	U
99-87-6	p-Isopropyltoluene	10	5.0	U
135-98-8	sec-Butylbenzene	10	5.0	U
100-42-5	Styrene	10	5.0	U
75-65-0	tert-Butyl alcohol (TBA)	10	10	U
98-06-6	tert-Butylbenzene	10	5.0	U
127-18-4	Tetrachloroethylene	10	5.0	U
108-88-3	Toluene	10	5.0	U
156-60-5	trans-1,2-Dichloroethylene	10	20	D
10061-02-6	trans-1,3-Dichloropropylene	10	5.0	U
110-57-6	trans-1,4-dichloro-2-butene	10	5.0	U
79-01-6	Trichloroethylene	10	780	D
75-69-4	Trichlorofluoromethane	10	5.0	U
75-01-4	Vinyl Chloride	10	110	D
1330-20-7	Xylenes, Total	10	15	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	10.0	100	69 - 130	
Toluene-d8	10.0	9.72	97.2	81 - 117	
p-Bromofluorobenzene	10.0	9.78	97.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	51199	6.131	54432	6.131	
Chlorobenzene-d5	212955	9.188	224712	9.188	
1,2-Dichlorobenzene-d4	87617	12.171	89967	12.174	

\* Values outside of QC limits

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 Data File : QV604748.D  
 Acq On : 12 Mar 2018 7:18 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-01  
 Misc : QBQV6031218A 8260 COMP 10X 5ML/50ML AF B  
 ALS Vial : 18 Sample Multiplier: 10

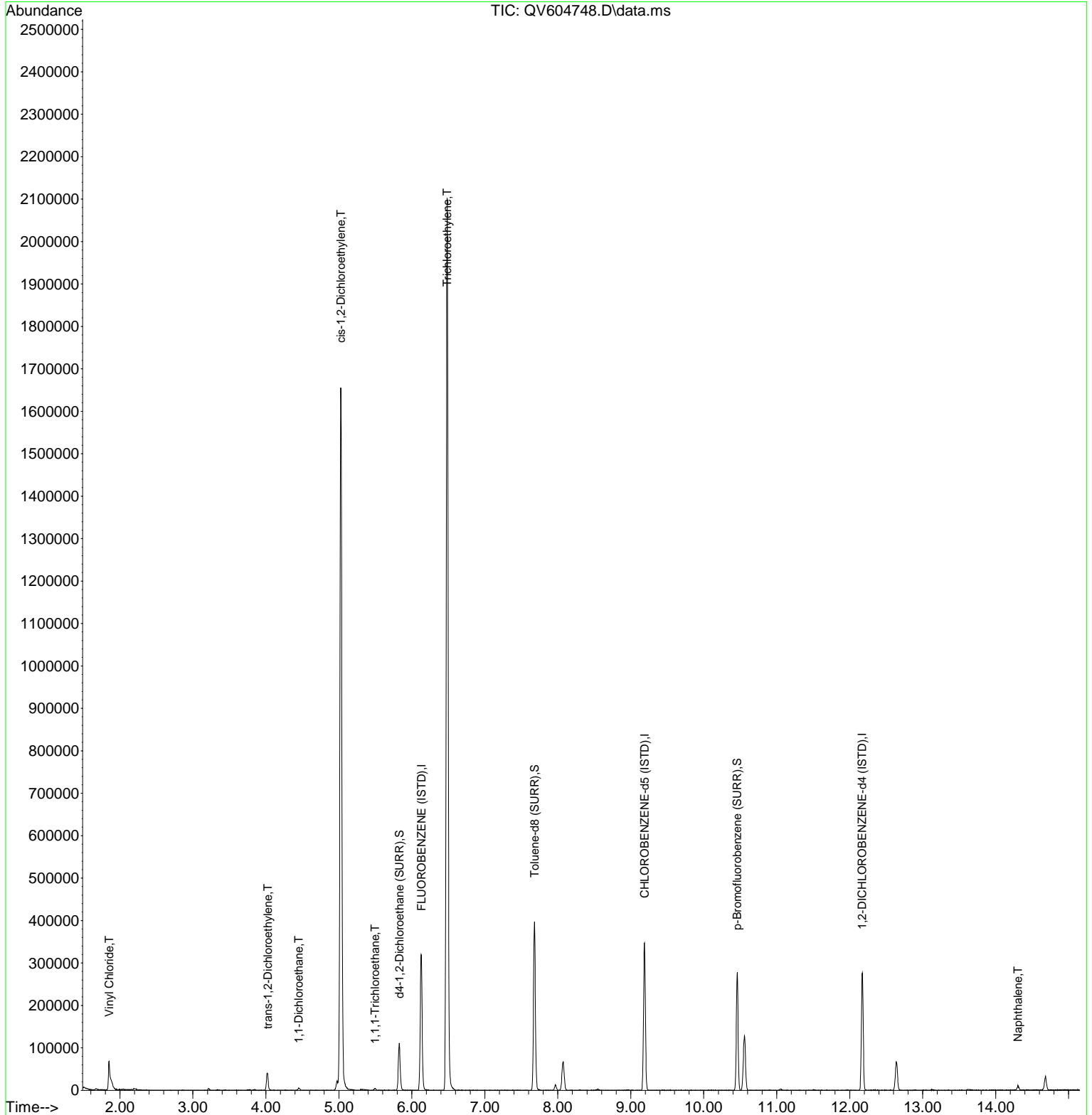
Quant Time: Mar 13 12:09:17 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	51199	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.188	117	212955	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.171	152	87617	10.00	ppb	-0.01
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.828	65	68777	10.02	ppb	-0.01
Spiked Amount	10.000	Range 69 - 130	Recovery	=	100.20%	
51) Toluene-d8 (SURR)	7.681	98	261261	9.72	ppb	0.00
Spiked Amount	10.000	Range 81 - 117	Recovery	=	97.20%	
70) p-Bromofluorobenzene (...)	10.457	95	87029	9.78	ppb	-0.01
Spiked Amount	10.000	Range 79 - 122	Recovery	=	97.80%	
Target Compounds						
						Qvalue
4) Vinyl Chloride	1.852	62	83877	10.84	ppb	# 89
19) trans-1,2-Dichloroethy...	4.025	61	21728	2.03	ppb	99
21) 1,1-Dichloroethane	4.450	63	5087	0.37	ppb	# 94
25) cis-1,2-Dichloroethylene	5.026	61	918298	73.36	ppb	98
31) 1,1,1-Trichloroethane	5.494	97	2729	0.24	ppb	# 85
41) Trichloroethylene	6.484	95	626905	78.03	ppb	86
93) Naphthalene	14.305	128	8769	0.71	ppb	# 88
-----						

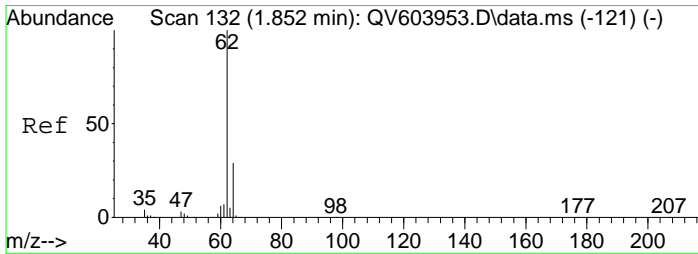
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 Data File : QV604748.D  
 Acq On : 12 Mar 2018 7:18 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-01  
 Misc : QBQV6031218A 8260 COMP 10X 5ML/50ML AF B  
 ALS Vial : 18 Sample Multiplier: 10

Quant Time: Mar 13 12:09:17 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

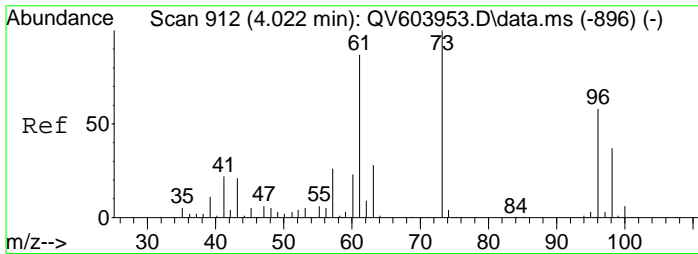
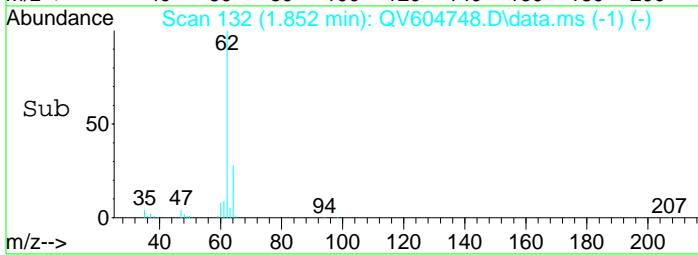
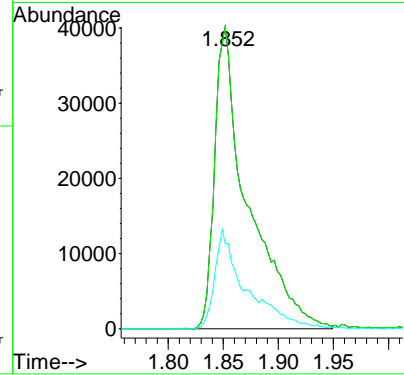
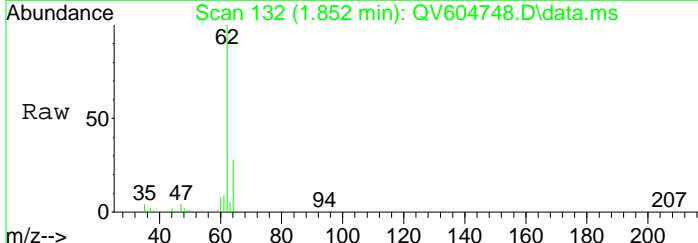






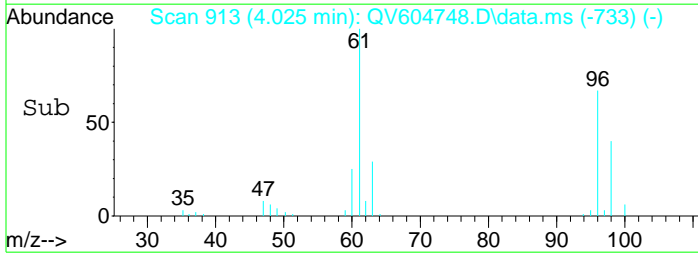
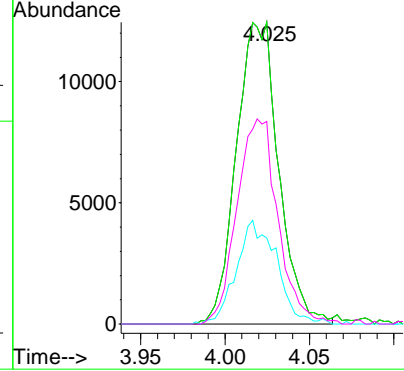
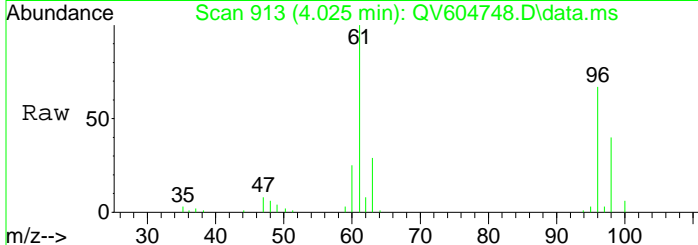
#4  
 Vinyl Chloride  
 Concen: 10.84 ppb  
 RT: 1.852 min Scan# 132  
 Delta R.T. -0.006 min  
 Lab File: QV604748.D  
 Acq: 12 Mar 2018 7:18 pm

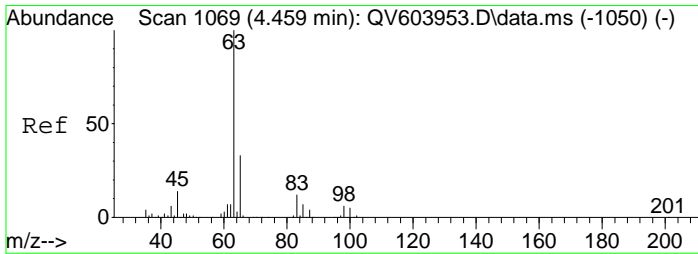
Tgt Ion	Resp	Lower	Upper
62	100		
62	100.0	65.0	135.0
64	0.0	17.9	37.3#



#19  
 trans-1,2-Dichloroethylene  
 Concen: 2.03 ppb  
 RT: 4.025 min Scan# 913  
 Delta R.T. -0.000 min  
 Lab File: QV604748.D  
 Acq: 12 Mar 2018 7:18 pm

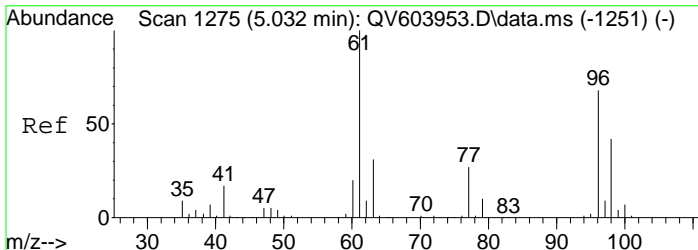
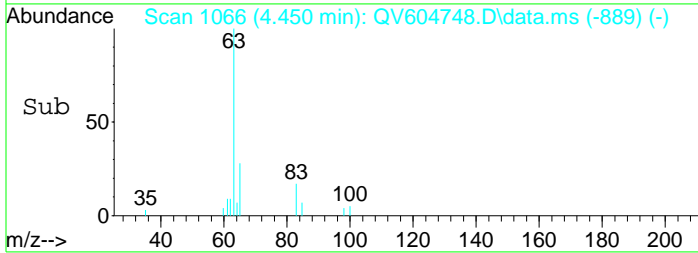
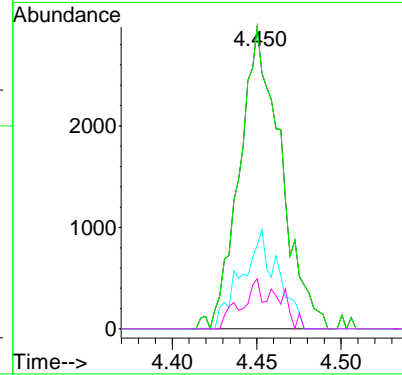
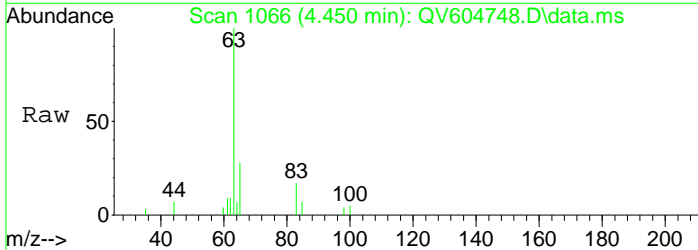
Tgt Ion	Resp	Lower	Upper
61	100		
61	100.0	65.0	135.0
63	32.8	20.4	42.4
96	65.8	44.1	91.5





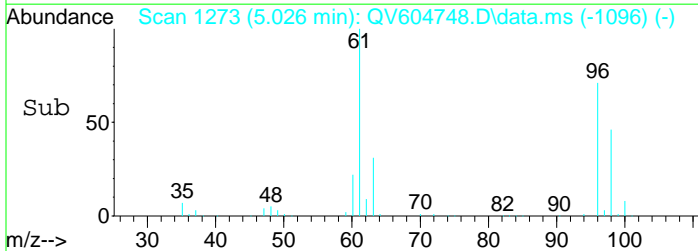
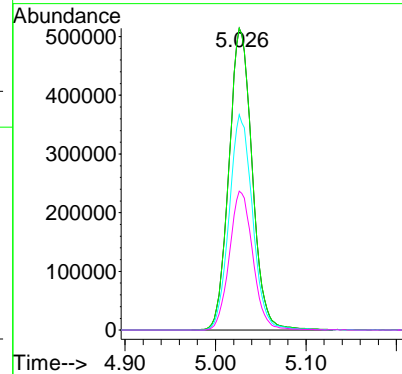
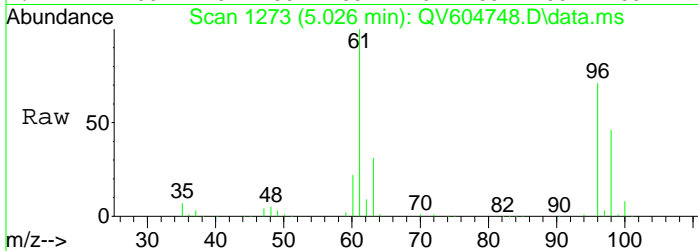
#21  
 1,1-Dichloroethane  
 Concen: 0.37 ppb  
 RT: 4.450 min Scan# 1066  
 Delta R.T. -0.009 min  
 Lab File: QV604748.D  
 Acq: 12 Mar 2018 7:18 pm

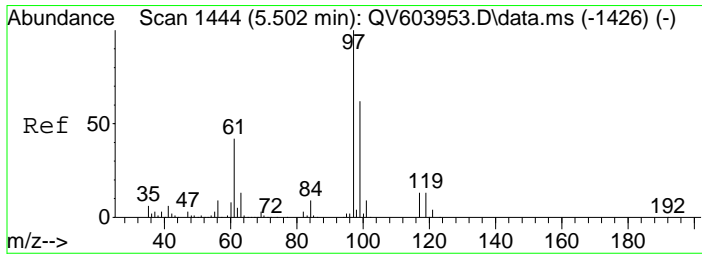
Tgt Ion	Resp	Lower	Upper
63	100		
63	100.0	65.0	135.0
65	21.0	19.4	40.2
83	3.2	6.9	20.7#



#25  
 cis-1,2-Dichloroethylene  
 Concen: 73.36 ppb  
 RT: 5.026 min Scan# 1273  
 Delta R.T. -0.009 min  
 Lab File: QV604748.D  
 Acq: 12 Mar 2018 7:18 pm

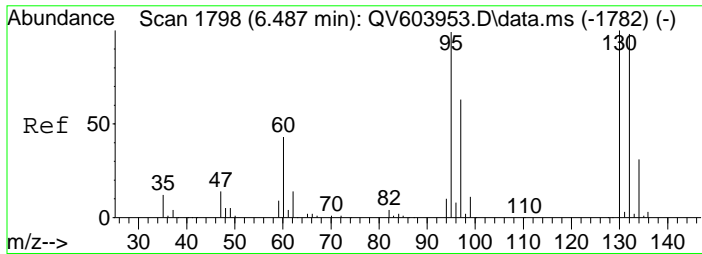
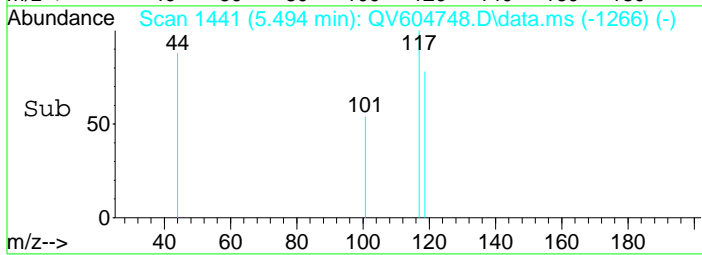
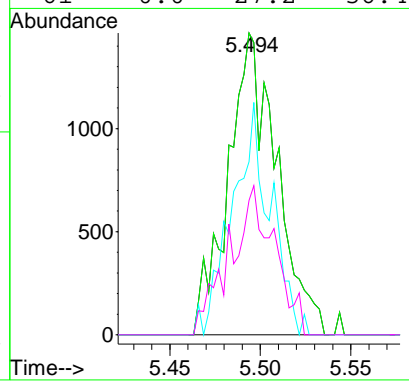
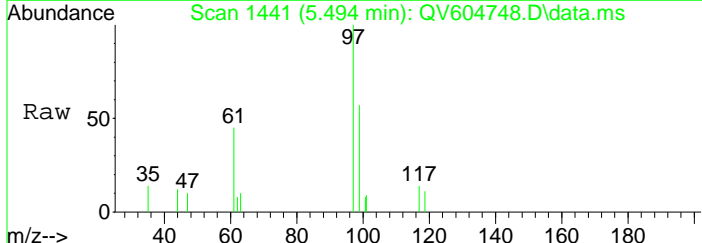
Tgt Ion	Resp	Lower	Upper
61	100		
61	100.0	65.0	135.0
96	71.6	48.0	99.6
98	46.4	27.9	57.9





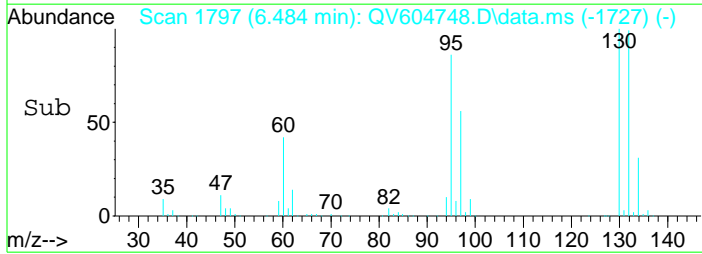
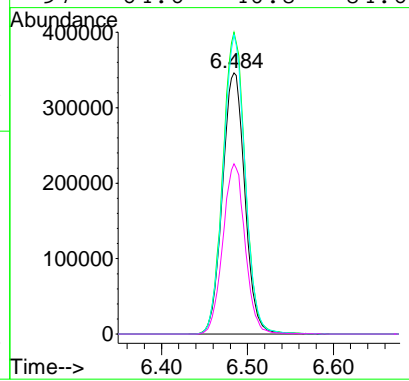
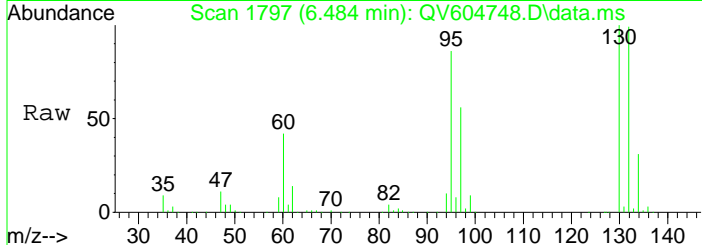
#31  
 1,1,1-Trichloroethane  
 Concen: 0.24 ppb  
 RT: 5.494 min Scan# 1441  
 Delta R.T. -0.014 min  
 Lab File: QV604748.D  
 Acq: 12 Mar 2018 7:18 pm

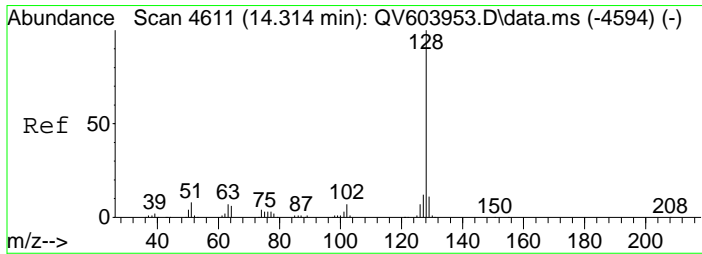
Tgt Ion	Resp	Lower	Upper
97	100		
97	100.0	65.0	135.0
99	60.8	42.5	88.3
61	0.0	27.2	56.4#



#41  
 Trichloroethylene  
 Concen: 78.03 ppb  
 RT: 6.484 min Scan# 1797  
 Delta R.T. -0.006 min  
 Lab File: QV604748.D  
 Acq: 12 Mar 2018 7:18 pm

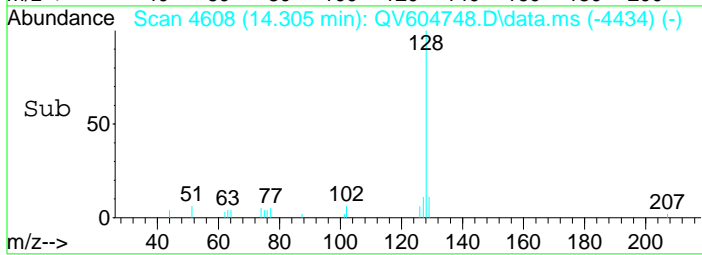
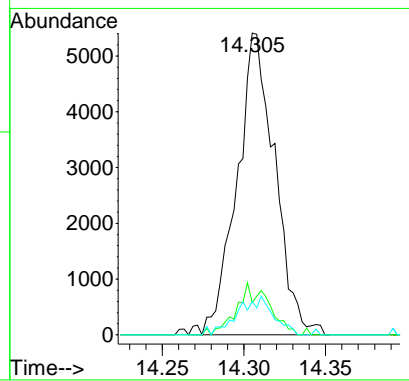
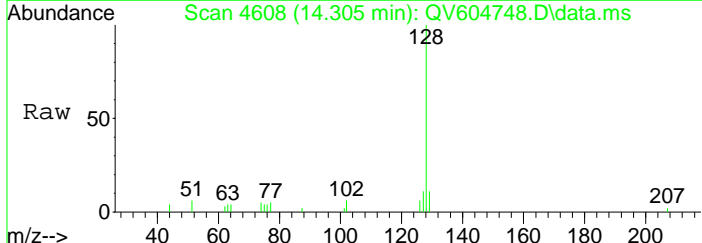
Tgt Ion	Resp	Lower	Upper
95	100		
130	115.3	62.6	130.0
132	112.3	62.0	128.8
97	64.6	40.8	84.6





#93  
 Naphthalene  
 Concen: 0.71 ppb  
 RT: 14.305 min Scan# 4608  
 Delta R.T. -0.017 min  
 Lab File: QV604748.D  
 Acq: 12 Mar 2018 7:18 pm

Tgt Ion	Resp	Lower	Upper
128	100		
127	8.7	8.5	17.6
129	4.9	6.1	12.7#



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-02 File ID: QV604746.D  
 Sampled: 03/05/18 18:25 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:25  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.48	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	1.4	J
107-02-8	Acrolein	1	0.50	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	14	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-02 File ID: QV604746.D  
 Sampled: 03/05/18 18:25 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:25  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	1.7	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	2.2	
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.61	96.1	69 - 130	
Toluene-d8	10.0	9.71	97.1	81 - 117	
p-Bromofluorobenzene	10.0	9.88	98.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	49945	6.128	54432	6.131	
Chlorobenzene-d5	205040	9.186	224712	9.188	
1,2-Dichlorobenzene-d4	83000	12.174	89967	12.174	

\* Values outside of QC limits

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604746.D  
 Acq On : 12 Mar 2018 6:25 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-02  
 Misc : QBQV6031218A 8260 COMP AF B  
 ALS Vial : 16 Sample Multiplier: 1

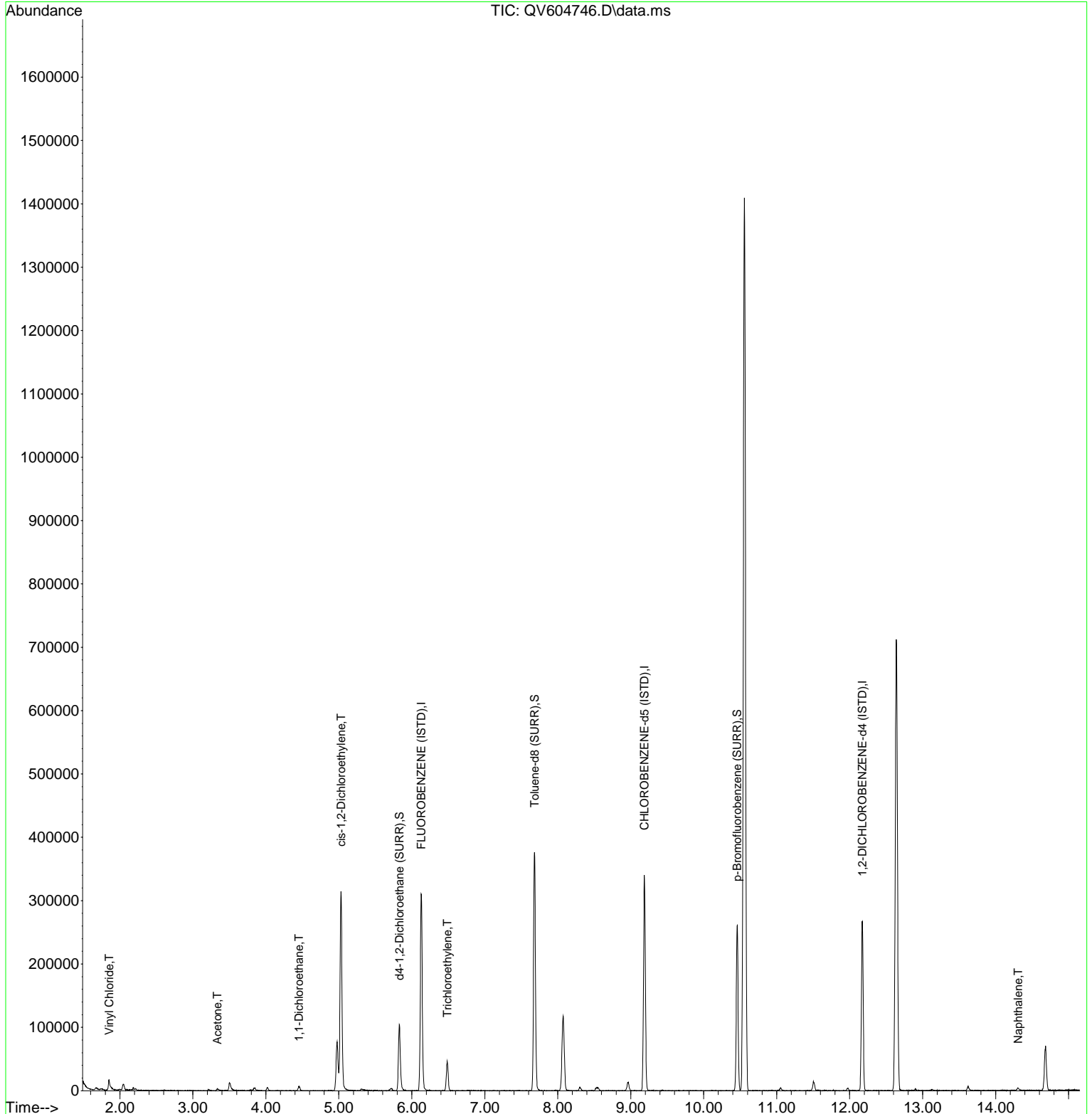
Quant Time: Mar 13 10:05:44 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.128	70	49945	10.00	ppb	0.00
40) CHLOROBENZENE-d5 (ISTD)	9.186	117	205040	10.00	ppb	-0.01
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	83000	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.828	65	64388	9.61	ppb	-0.01
Spiked Amount	10.000	Range	69 - 130	Recovery	=	96.10%
51) Toluene-d8 (SURR)	7.681	98	251148	9.71	ppb	0.00
Spiked Amount	10.000	Range	81 - 117	Recovery	=	97.10%
70) p-Bromofluorobenzene (...)	10.457	95	83309	9.88	ppb	-0.01
Spiked Amount	10.000	Range	79 - 122	Recovery	=	98.80%
Target Compounds						
						Qvalue
4) Vinyl Chloride	1.852	62	16596	2.20	ppb	98
12) Acetone	3.332	43	2593	1.35	ppb	# 89
21) 1,1-Dichloroethane	4.453	63	6514	0.48	ppb	# 87
25) cis-1,2-Dichloroethylene	5.029	61	168808	13.82	ppb	# 69
41) Trichloroethylene	6.487	95	13335	1.72	ppb	84
93) Naphthalene	14.308	128	3843	0.33	ppb	# 88
-----						

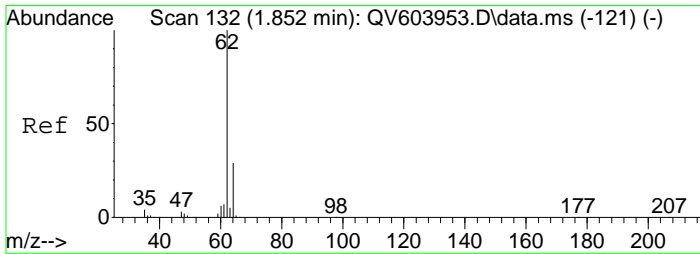
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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 Acq On : 12 Mar 2018 6:25 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-02  
 Misc : QBQV6031218A 8260 COMP AF B  
 ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 13 10:05:44 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

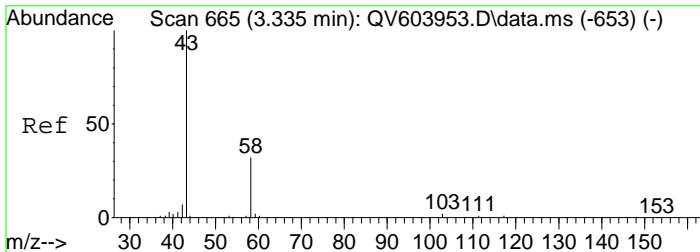
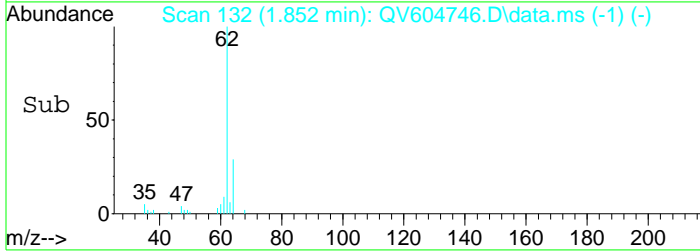
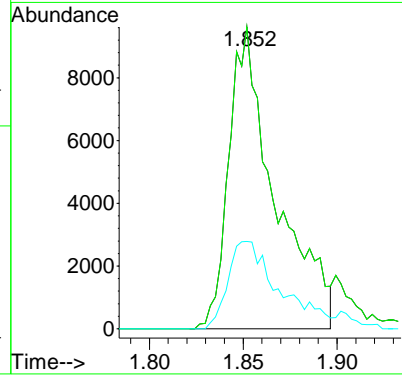
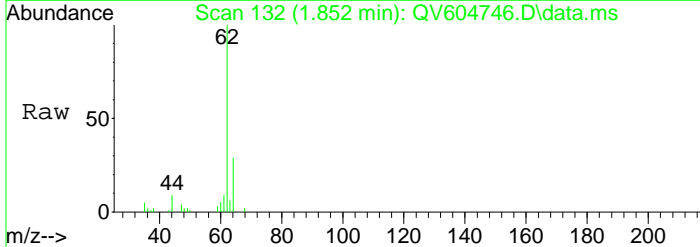






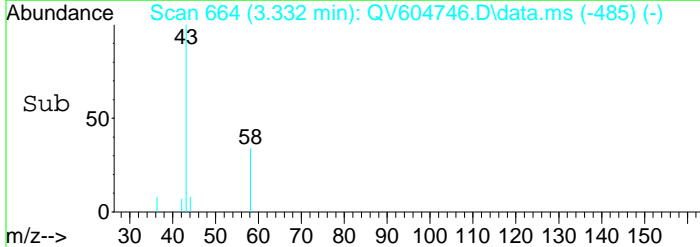
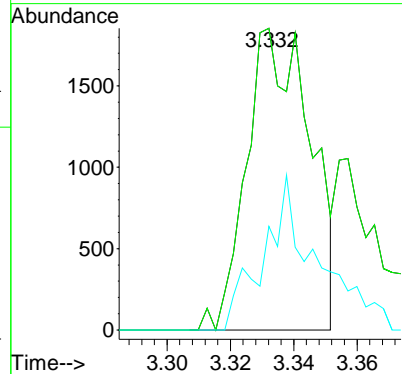
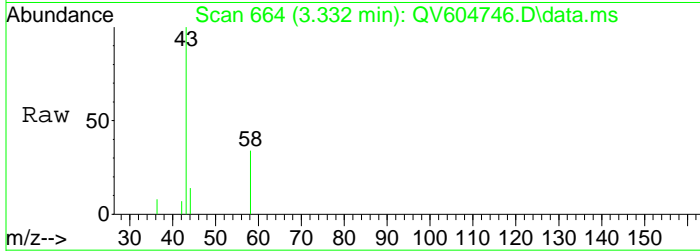
#4  
 Vinyl Chloride  
 Concen: 2.20 ppb  
 RT: 1.852 min Scan# 132  
 Delta R.T. -0.006 min  
 Lab File: QV604746.D  
 Acq: 12 Mar 2018 6:25 pm

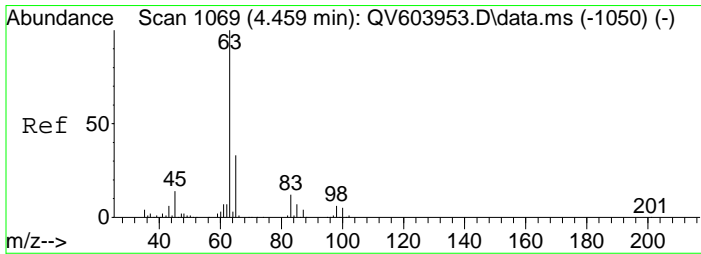
Tgt Ion	Resp	Lower	Upper
62	16596		
62	100		
62	100.0	65.0	135.0
64	31.8	17.9	37.3



#12  
 Acetone  
 Concen: 1.35 ppb  
 RT: 3.332 min Scan# 664  
 Delta R.T. -0.003 min  
 Lab File: QV604746.D  
 Acq: 12 Mar 2018 6:25 pm

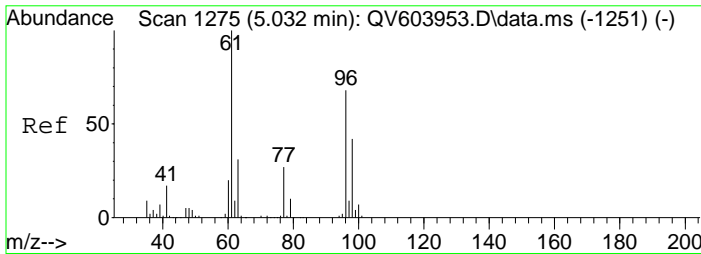
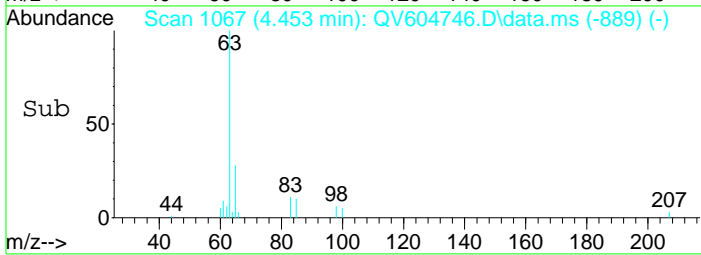
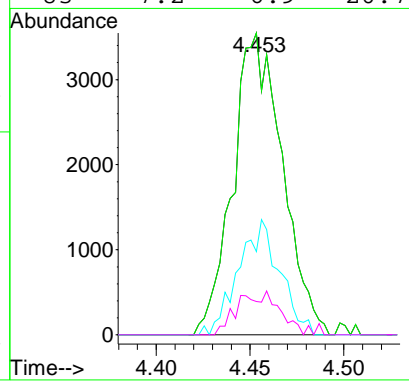
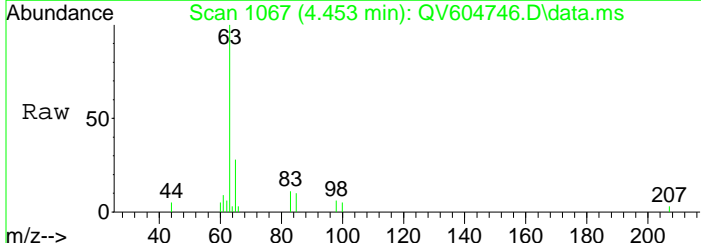
Tgt Ion	Resp	Lower	Upper
43	2593		
43	100		
43	100.0	80.0	120.0
58	0.0	13.9	41.6#





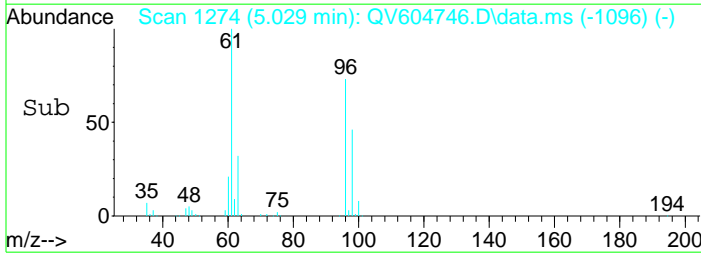
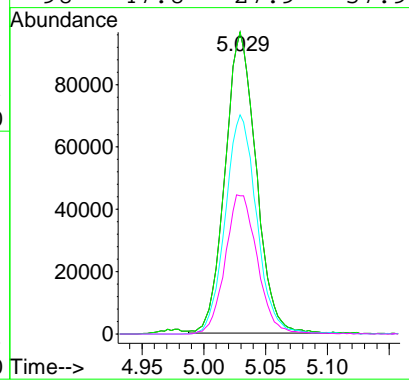
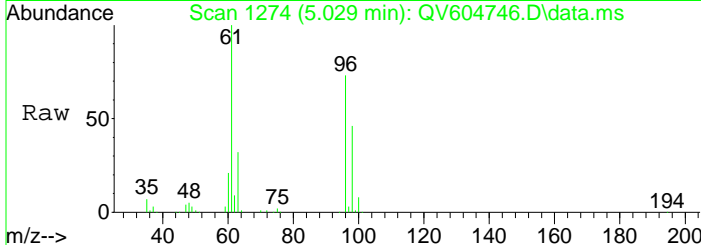
#21  
 1,1-Dichloroethane  
 Concen: 0.48 ppb  
 RT: 4.453 min Scan# 1067  
 Delta R.T. -0.006 min  
 Lab File: QV604746.D  
 Acq: 12 Mar 2018 6:25 pm

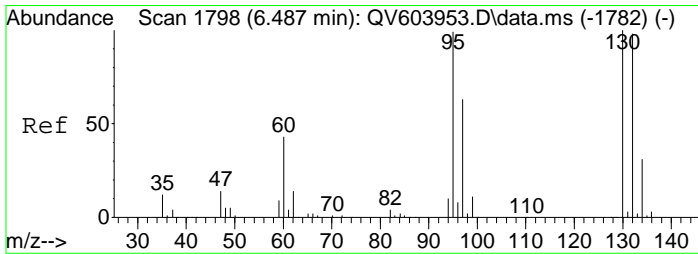
Tgt Ion	Resp	Lower	Upper
63	100		
63	100.0	65.0	135.0
65	0.0	19.4	40.2#
83	7.2	6.9	20.7



#25  
 cis-1,2-Dichloroethylene  
 Concen: 13.82 ppb  
 RT: 5.029 min Scan# 1274  
 Delta R.T. -0.006 min  
 Lab File: QV604746.D  
 Acq: 12 Mar 2018 6:25 pm

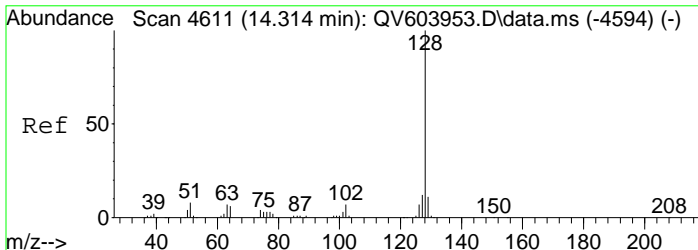
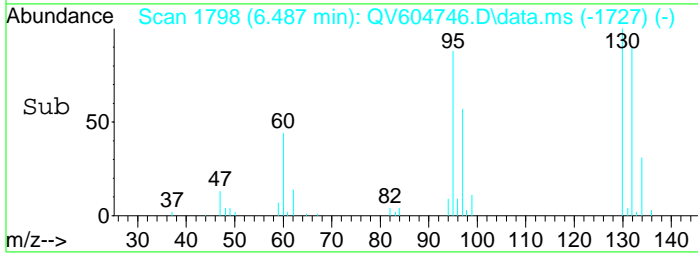
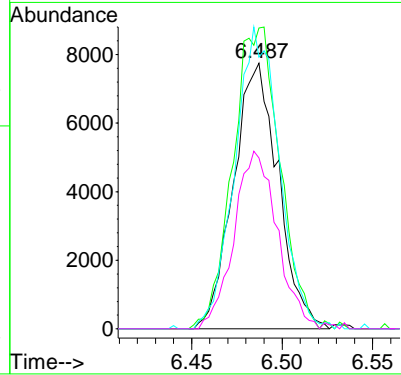
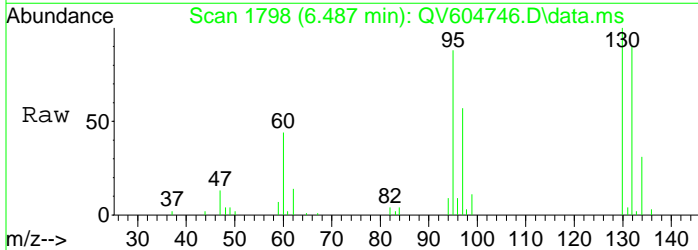
Tgt Ion	Resp	Lower	Upper
61	100		
61	100.0	65.0	135.0
96	0.0	48.0	99.6#
98	47.8	27.9	57.9





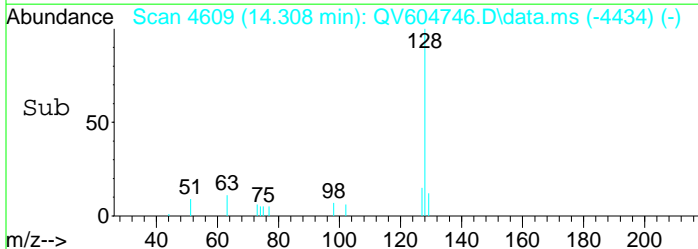
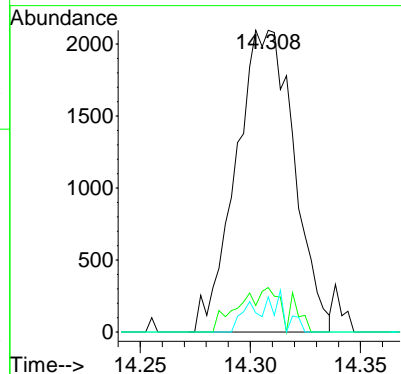
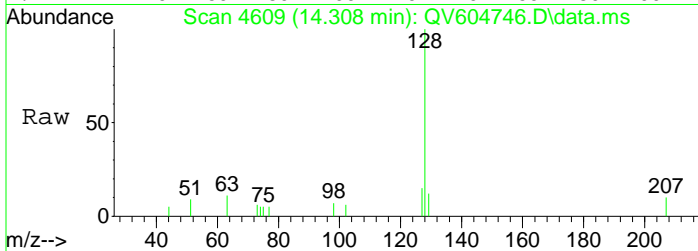
#41  
 Trichloroethylene  
 Concen: 1.72 ppb  
 RT: 6.487 min Scan# 1798  
 Delta R.T. -0.003 min  
 Lab File: QV604746.D  
 Acq: 12 Mar 2018 6:25 pm

Tgt Ion	Resp	Lower	Upper
95	13335		
130	119.5	62.6	130.0
132	113.0	62.0	128.8
97	64.4	40.8	84.6



#93  
 Naphthalene  
 Concen: 0.33 ppb  
 RT: 14.308 min Scan# 4609  
 Delta R.T. -0.014 min  
 Lab File: QV604746.D  
 Acq: 12 Mar 2018 6:25 pm

Tgt Ion	Resp	Lower	Upper
128	3843		
127	10.1	8.5	17.6
129	3.0	6.1	12.7#



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-03 File ID: QV604747.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.35	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.0	U
107-02-8	Acrolein	1	0.50	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	20	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-03 File ID: QV604747.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.30	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	51	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	10.3	103	69 - 130	
Toluene-d8	10.0	9.51	95.1	81 - 117	
p-Bromofluorobenzene	10.0	9.82	98.2	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	48648	6.128	54432	6.131	
Chlorobenzene-d5	202965	9.186	224712	9.188	
1,2-Dichlorobenzene-d4	83840	12.171	89967	12.174	

\* Values outside of QC limits

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604747.D  
 Acq On : 12 Mar 2018 6:51 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-03  
 Misc : QBQV6031218A 8260 COMP B  
 ALS Vial : 17 Sample Multiplier: 1

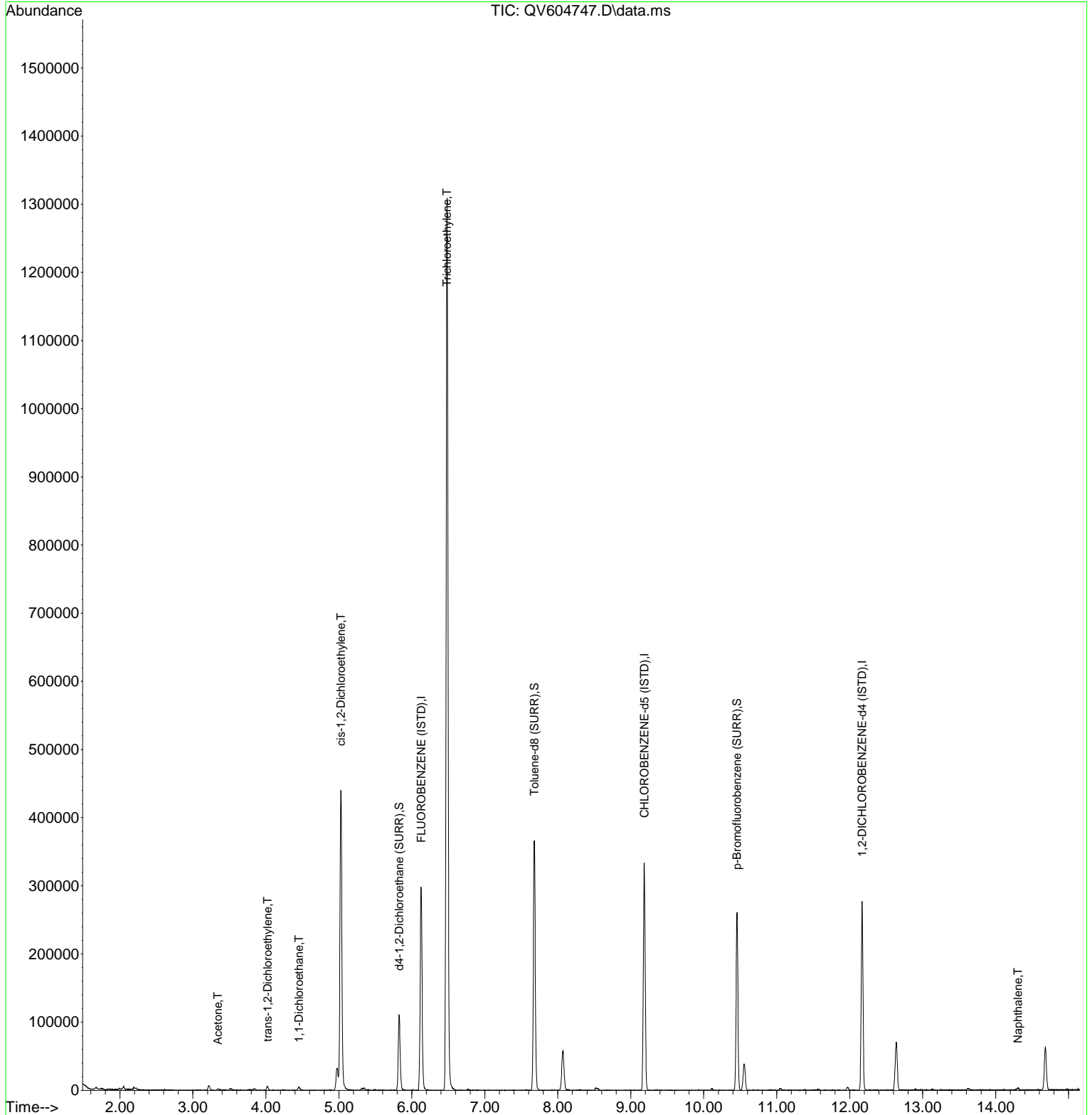
Quant Time: Mar 13 12:03:55 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

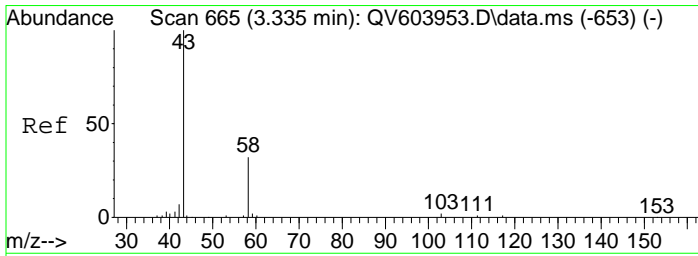
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.128	70	48648	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.186	117	202965	10.00	ppb	-0.01
67) 1,2-DICHLOROBENZENE-d4...	12.171	152	83840	10.00	ppb	-0.01
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.825	65	67234	10.31	ppb	-0.01
Spiked Amount	10.000	Range 69 - 130	Recovery	=	103.10%	
51) Toluene-d8 (SURR)	7.678	98	243622	9.51	ppb	-0.01
Spiked Amount	10.000	Range 81 - 117	Recovery	=	95.10%	
70) p-Bromofluorobenzene (...)	10.454	95	83624	9.82	ppb	-0.01
Spiked Amount	10.000	Range 79 - 122	Recovery	=	98.20%	
Target Compounds						
12) Acetone	3.340	43	1404	0.75	ppb	Qvalue 94
19) trans-1,2-Dichloroethy...	4.022	61	3069	0.30	ppb	# 89
21) 1,1-Dichloroethane	4.453	63	4639	0.35	ppb	# 87
25) cis-1,2-Dichloroethylene	5.026	61	240226	20.20	ppb	98
41) Trichloroethylene	6.481	95	389030	50.81	ppb	85
93) Naphthalene	14.305	128	3101	0.26	ppb	# 82
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604747.D  
 Acq On : 12 Mar 2018 6:51 pm  
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 Operator : AS  
 Sample : 18C0189-03  
 Misc : QBQV6031218A 8260 COMP B  
 ALS Vial : 17 Sample Multiplier: 1

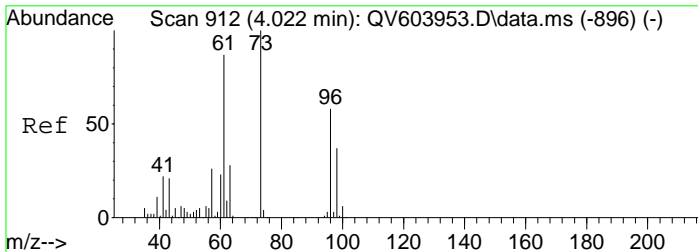
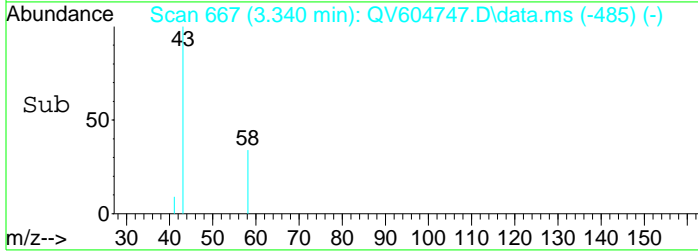
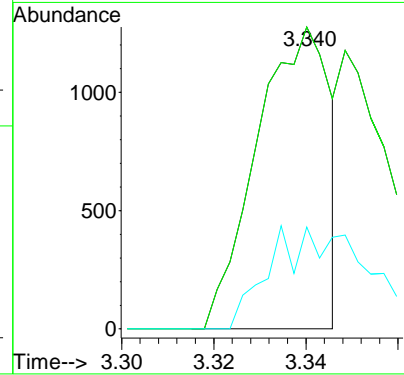
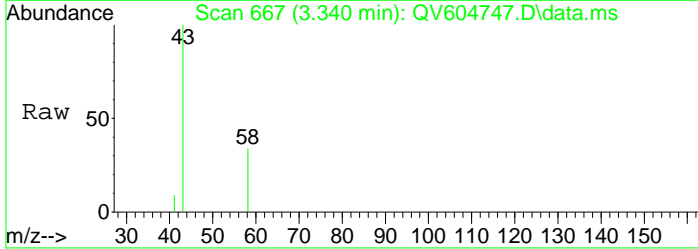
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 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration





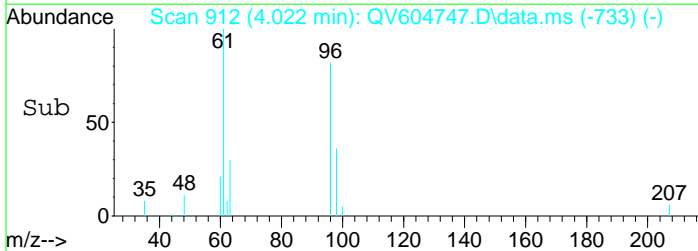
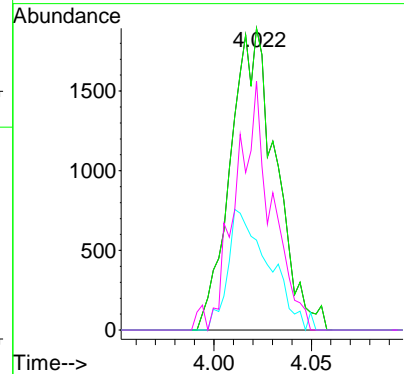
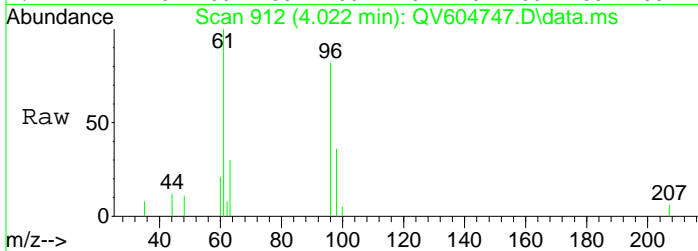
#12  
 Acetone  
 Concen: 0.75 ppb  
 RT: 3.340 min Scan# 667  
 Delta R.T. 0.005 min  
 Lab File: QV604747.D  
 Acq: 12 Mar 2018 6:51 pm

Tgt Ion	Resp	Lower	Upper
43	100		
43	100.0	80.0	120.0
58	14.4	13.9	41.6

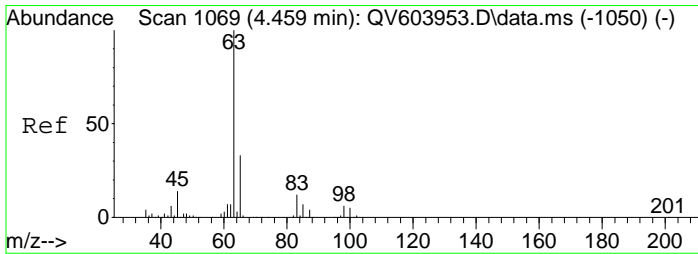


#19  
 trans-1,2-Dichloroethylene  
 Concen: 0.30 ppb  
 RT: 4.022 min Scan# 912  
 Delta R.T. -0.003 min  
 Lab File: QV604747.D  
 Acq: 12 Mar 2018 6:51 pm

Tgt Ion	Resp	Lower	Upper
61	100		
61	100.0	65.0	135.0
63	0.0	20.4	42.4#
96	64.0	44.1	91.5

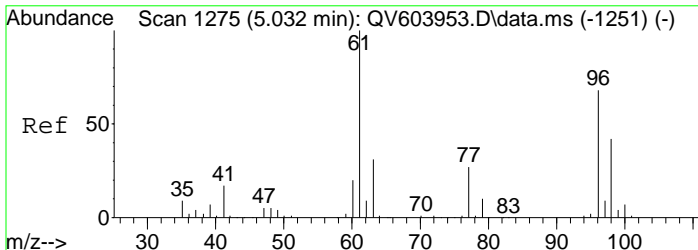
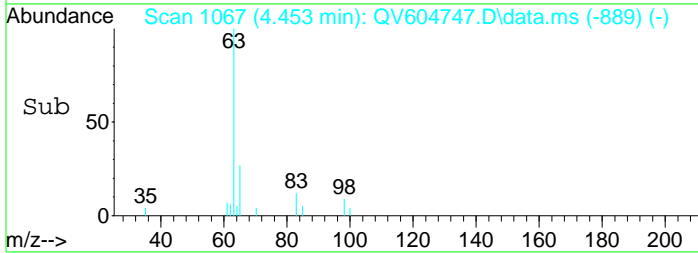
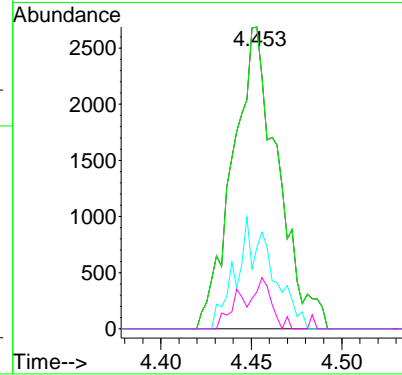
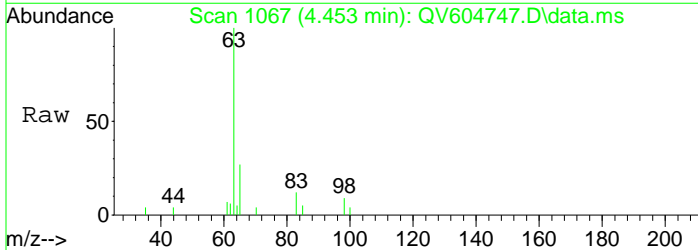






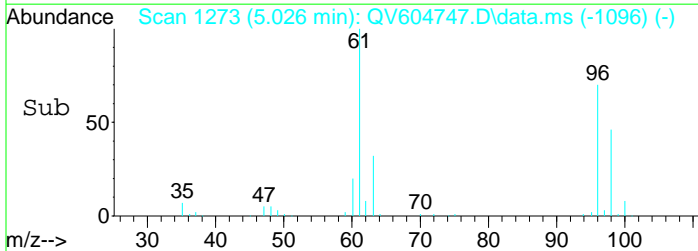
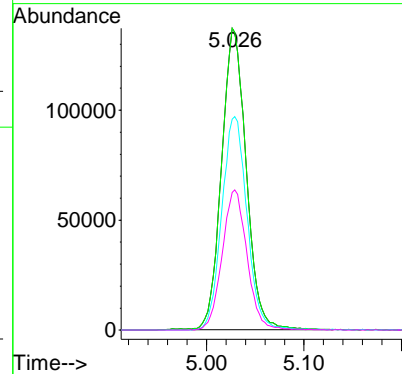
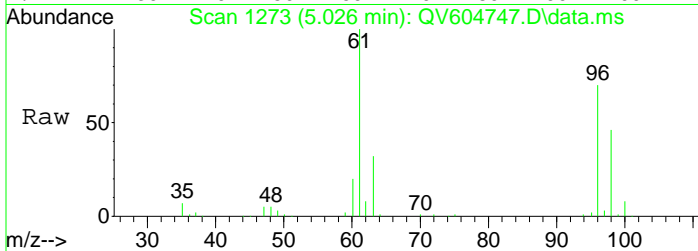
#21  
 1,1-Dichloroethane  
 Concen: 0.35 ppb  
 RT: 4.453 min Scan# 1067  
 Delta R.T. -0.006 min  
 Lab File: QV604747.D  
 Acq: 12 Mar 2018 6:51 pm

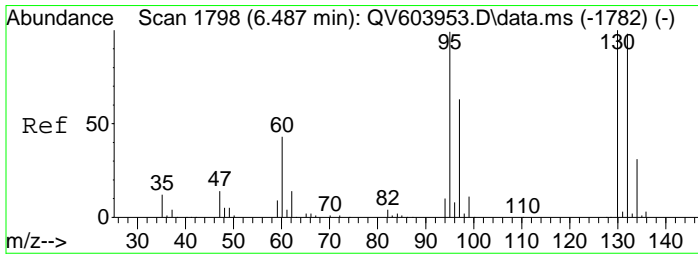
Tgt Ion	Resp	Lower	Upper
63	100		
63	100.0	65.0	135.0
65	0.0	19.4	40.2#
83	6.7	6.9	20.7#



#25  
 cis-1,2-Dichloroethylene  
 Concen: 20.20 ppb  
 RT: 5.026 min Scan# 1273  
 Delta R.T. -0.009 min  
 Lab File: QV604747.D  
 Acq: 12 Mar 2018 6:51 pm

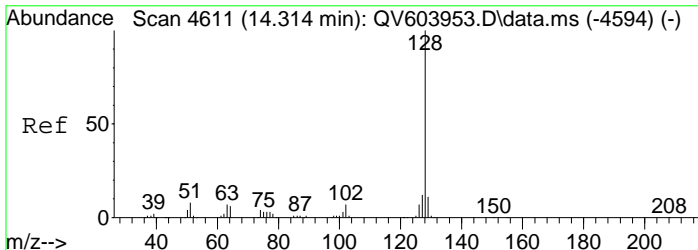
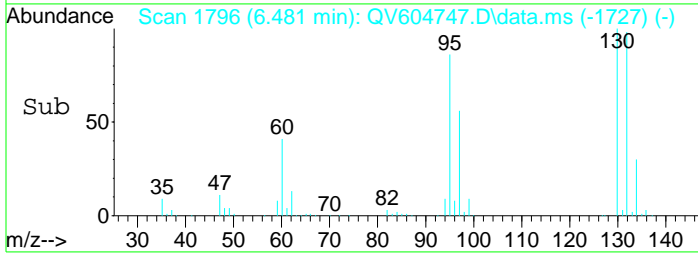
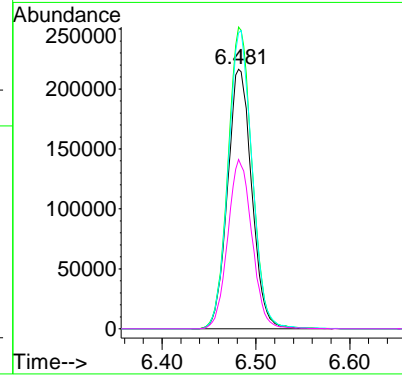
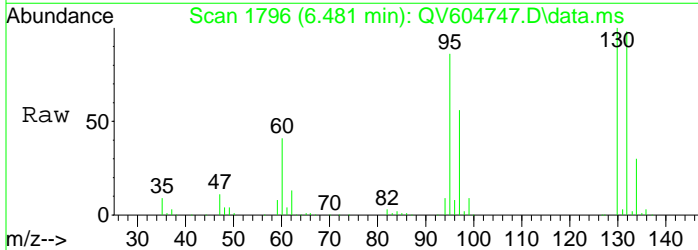
Tgt Ion	Resp	Lower	Upper
61	100		
61	100.0	65.0	135.0
96	72.9	48.0	99.6
98	47.1	27.9	57.9





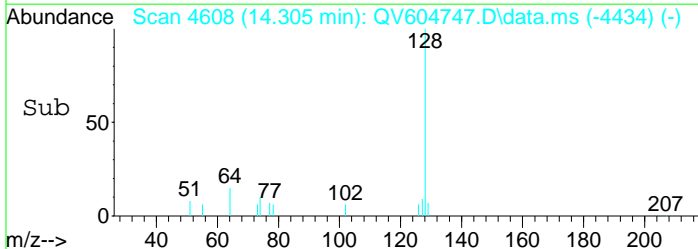
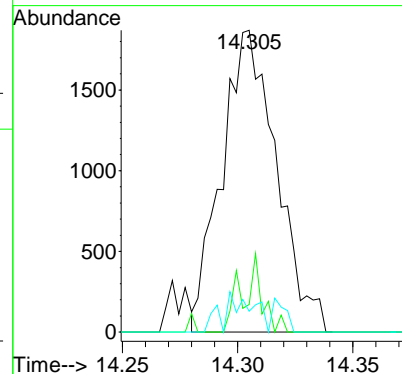
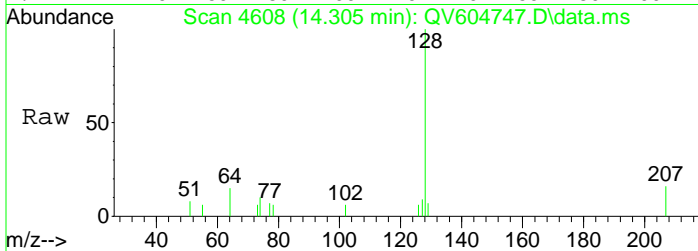
#41  
 Trichloroethylene  
 Concen: 50.81 ppb  
 RT: 6.481 min Scan# 1796  
 Delta R.T. -0.009 min  
 Lab File: QV604747.D  
 Acq: 12 Mar 2018 6:51 pm

Tgt Ion	Resp	Lower	Upper
95	100		
130	116.0	62.6	130.0
132	113.2	62.0	128.8
97	65.2	40.8	84.6



#93  
 Naphthalene  
 Concen: 0.26 ppb  
 RT: 14.305 min Scan# 4608  
 Delta R.T. -0.017 min  
 Lab File: QV604747.D  
 Acq: 12 Mar 2018 6:51 pm

Tgt Ion	Resp	Lower	Upper
128	100		
127	5.7	8.5	17.6#
129	2.7	6.1	12.7#



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-04 File ID: QV604749.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:44  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	5.0	U
71-55-6	1,1,1-Trichloroethane	10	2.2	JD
79-34-5	1,1,2,2-Tetrachloroethane	10	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	5.0	U
79-00-5	1,1,2-Trichloroethane	10	5.0	U
75-34-3	1,1-Dichloroethane	10	3.7	JD
75-35-4	1,1-Dichloroethylene	10	5.0	U
87-61-6	1,2,3-Trichlorobenzene	10	5.0	U
96-18-4	1,2,3-Trichloropropane	10	5.0	U
120-82-1	1,2,4-Trichlorobenzene	10	5.0	U
95-63-6	1,2,4-Trimethylbenzene	10	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	5.0	U
106-93-4	1,2-Dibromoethane	10	5.0	U
95-50-1	1,2-Dichlorobenzene	10	5.0	U
107-06-2	1,2-Dichloroethane	10	5.0	U
78-87-5	1,2-Dichloropropane	10	5.0	U
108-67-8	1,3,5-Trimethylbenzene	10	5.0	U
541-73-1	1,3-Dichlorobenzene	10	5.0	U
106-46-7	1,4-Dichlorobenzene	10	5.0	U
123-91-1	1,4-Dioxane	10	400	U
78-93-3	2-Butanone	10	5.0	U
591-78-6	2-Hexanone	10	5.0	U
108-10-1	4-Methyl-2-pentanone	10	5.0	U
67-64-1	Acetone	10	20	U
107-02-8	Acrolein	10	5.0	U
107-13-1	Acrylonitrile	10	5.0	U
71-43-2	Benzene	10	5.0	U
74-97-5	Bromochloromethane	10	5.0	U
75-27-4	Bromodichloromethane	10	5.0	U
75-25-2	Bromoform	10	5.0	U
74-83-9	Bromomethane	10	5.0	U
75-15-0	Carbon disulfide	10	5.0	U
56-23-5	Carbon tetrachloride	10	5.0	U
108-90-7	Chlorobenzene	10	5.0	U
75-00-3	Chloroethane	10	5.0	U
67-66-3	Chloroform	10	5.0	U
74-87-3	Chloromethane	10	5.0	U
156-59-2	cis-1,2-Dichloroethylene	10	780	D
10061-01-5	cis-1,3-Dichloropropylene	10	5.0	U
110-82-7	Cyclohexane	10	5.0	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-04 File ID: QV604749.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:44  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	10	5.0	U
74-95-3	Dibromomethane	10	5.0	U
75-71-8	Dichlorodifluoromethane	10	5.0	U
100-41-4	Ethyl Benzene	10	5.0	U
87-68-3	Hexachlorobutadiene	10	5.0	U
98-82-8	Isopropylbenzene	10	5.0	U
79-20-9	Methyl acetate	10	5.0	U
1634-04-4	Methyl tert-butyl ether (MTBE)	10	5.0	U
108-87-2	Methylcyclohexane	10	5.0	U
75-09-2	Methylene chloride	10	20	U
104-51-8	n-Butylbenzene	10	5.0	U
103-65-1	n-Propylbenzene	10	5.0	U
95-47-6	o-Xylene	10	5.0	U
179601-23-1	p- & m- Xylenes	10	10	U
99-87-6	p-Isopropyltoluene	10	5.0	U
135-98-8	sec-Butylbenzene	10	5.0	U
100-42-5	Styrene	10	5.0	U
75-65-0	tert-Butyl alcohol (TBA)	10	10	U
98-06-6	tert-Butylbenzene	10	5.0	U
127-18-4	Tetrachloroethylene	10	5.0	U
108-88-3	Toluene	10	5.0	U
156-60-5	trans-1,2-Dichloroethylene	10	22	D
10061-02-6	trans-1,3-Dichloropropylene	10	5.0	U
110-57-6	trans-1,4-dichloro-2-butene	10	5.0	U
79-01-6	Trichloroethylene	10	840	D
75-69-4	Trichlorofluoromethane	10	5.0	U
75-01-4	Vinyl Chloride	10	120	D
1330-20-7	Xylenes, Total	10	15	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	10.1	101	69 - 130	
Toluene-d8	10.0	9.78	97.8	81 - 117	
p-Bromofluorobenzene	10.0	9.88	98.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	49547	6.131	54432	6.131	
Chlorobenzene-d5	204559	9.186	224712	9.188	
1,2-Dichlorobenzene-d4	82649	12.174	89967	12.174	

\* Values outside of QC limits

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604749.D  
 Acq On : 12 Mar 2018 7:44 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-04  
 Misc : QBQV6031218A 8260 COMP 10X 5ML/50ML AF B  
 ALS Vial : 19 Sample Multiplier: 10

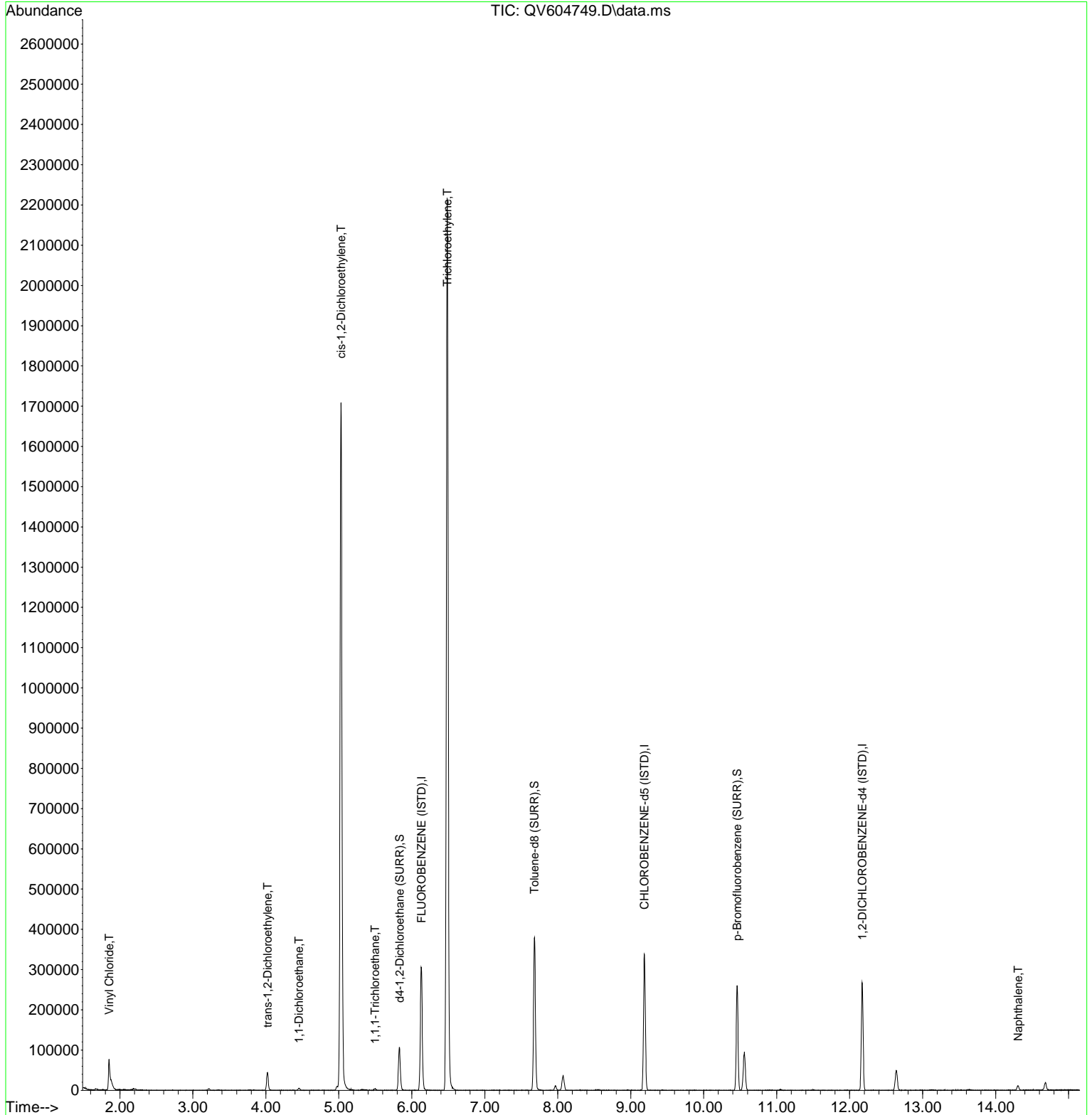
Quant Time: Mar 13 12:14:17 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

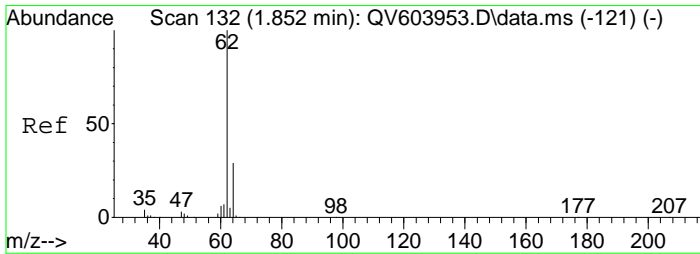
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	49547	10.00	ppb	0.00
40) CHLOROBENZENE-d5 (ISTD)	9.186	117	204559	10.00	ppb	-0.01
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	82649	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.831	65	67297	10.13	ppb	0.00
Spiked Amount	10.000	Range 69 - 130	Recovery	=	101.30%	
51) Toluene-d8 (SURR)	7.678	98	252510	9.78	ppb	-0.01
Spiked Amount	10.000	Range 81 - 117	Recovery	=	97.80%	
70) p-Bromofluorobenzene (...)	10.457	95	82983	9.88	ppb	-0.01
Spiked Amount	10.000	Range 79 - 122	Recovery	=	98.80%	
Target Compounds						
						Qvalue
4) Vinyl Chloride	1.852	62	88245	11.79	ppb	99
19) trans-1,2-Dichloroethy...	4.022	61	22922	2.22	ppb	# 71
21) 1,1-Dichloroethane	4.453	63	5050	0.37	ppb	99
25) cis-1,2-Dichloroethylene	5.029	61	947650	78.23	ppb	98
31) 1,1,1-Trichloroethane	5.494	97	2404	0.22	ppb	# 85
41) Trichloroethylene	6.487	95	651086	84.37	ppb	85
93) Naphthalene	14.308	128	10312	0.89	ppb	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604749.D  
 Acq On : 12 Mar 2018 7:44 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-04  
 Misc : QBQV6031218A 8260 COMP 10X 5ML/50ML AF B  
 ALS Vial : 19 Sample Multiplier: 10

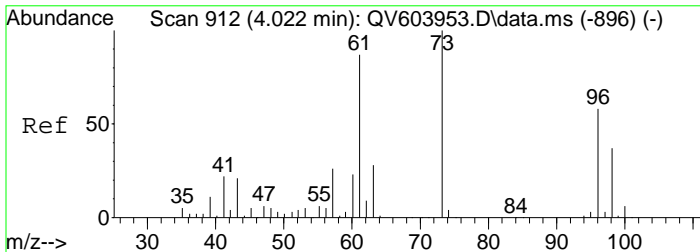
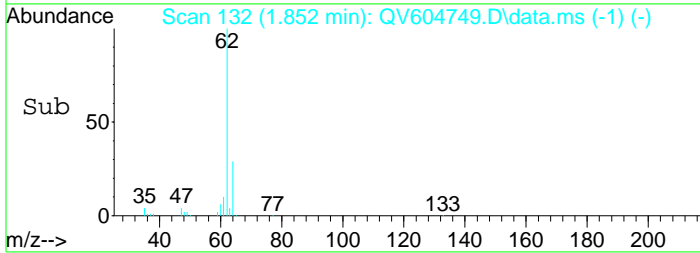
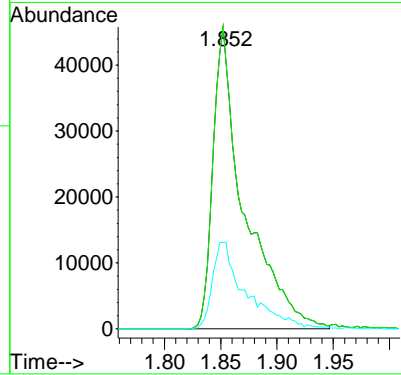
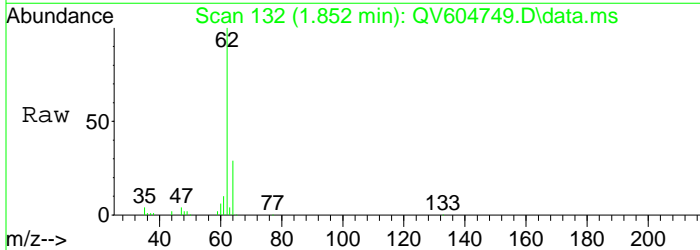
Quant Time: Mar 13 12:14:17 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration





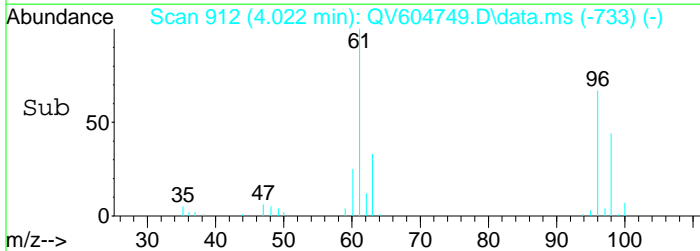
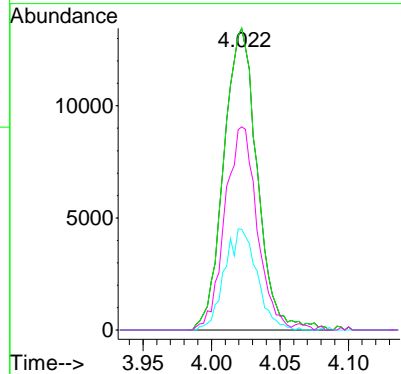
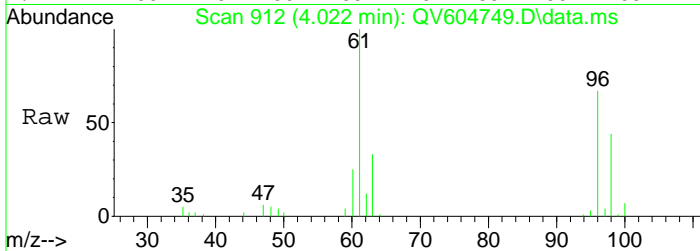
#4  
 Vinyl Chloride  
 Concen: 11.79 ppb  
 RT: 1.852 min Scan# 132  
 Delta R.T. -0.006 min  
 Lab File: QV604749.D  
 Acq: 12 Mar 2018 7:44 pm

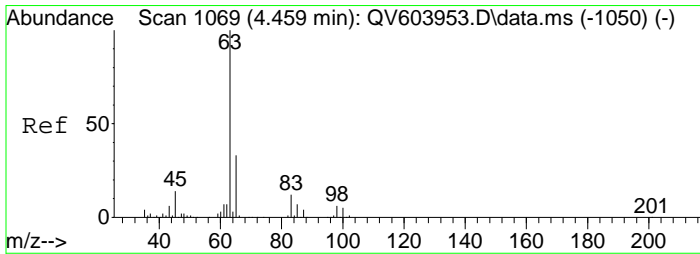
Tgt Ion	Resp	Lower	Upper
62	100		
62	100.0	65.0	135.0
64	30.9	17.9	37.3



#19  
 trans-1,2-Dichloroethylene  
 Concen: 2.22 ppb  
 RT: 4.022 min Scan# 912  
 Delta R.T. -0.003 min  
 Lab File: QV604749.D  
 Acq: 12 Mar 2018 7:44 pm

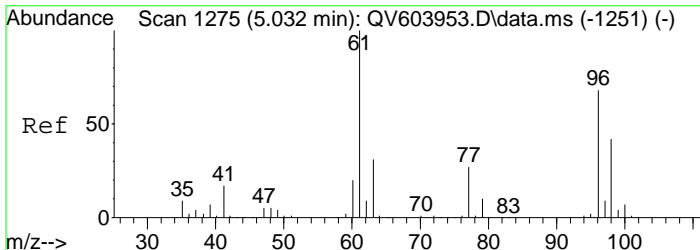
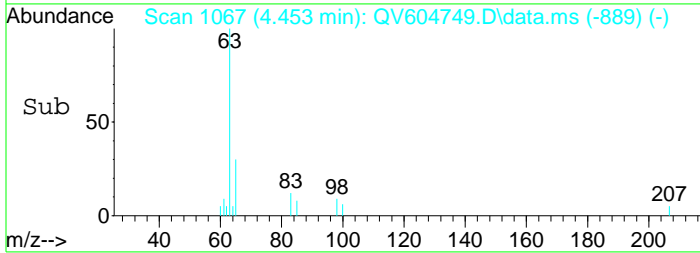
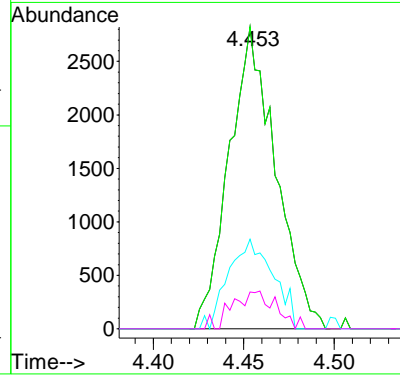
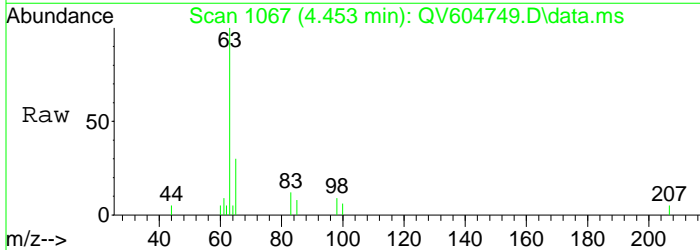
Tgt Ion	Resp	Lower	Upper
61	100		
61	100.0	65.0	135.0
63	32.5	20.4	42.4
96	0.0	44.1	91.5#





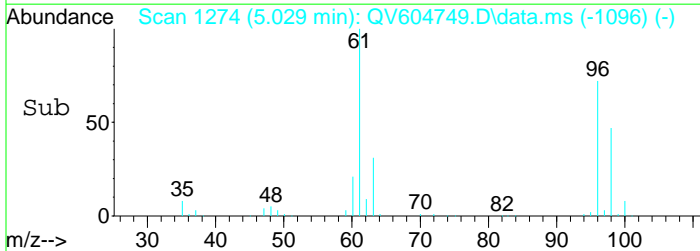
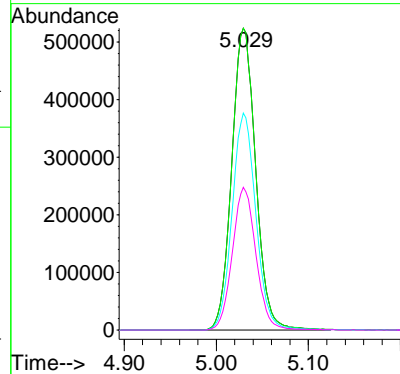
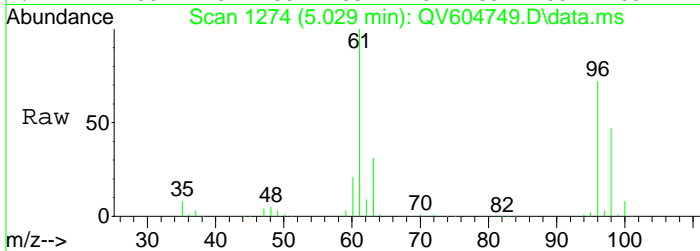
#21  
 1,1-Dichloroethane  
 Concen: 0.37 ppb  
 RT: 4.453 min Scan# 1067  
 Delta R.T. -0.006 min  
 Lab File: QV604749.D  
 Acq: 12 Mar 2018 7:44 pm

Tgt Ion	Resp	Lower	Upper
63	100		
63	100.0	65.0	135.0
65	28.5	19.4	40.2
83	11.2	6.9	20.7

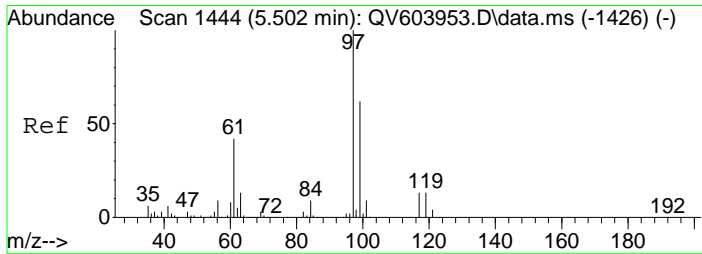


#25  
 cis-1,2-Dichloroethylene  
 Concen: 78.23 ppb  
 RT: 5.029 min Scan# 1274  
 Delta R.T. -0.006 min  
 Lab File: QV604749.D  
 Acq: 12 Mar 2018 7:44 pm

Tgt Ion	Resp	Lower	Upper
61	100		
61	100.0	65.0	135.0
96	71.5	48.0	99.6
98	46.8	27.9	57.9

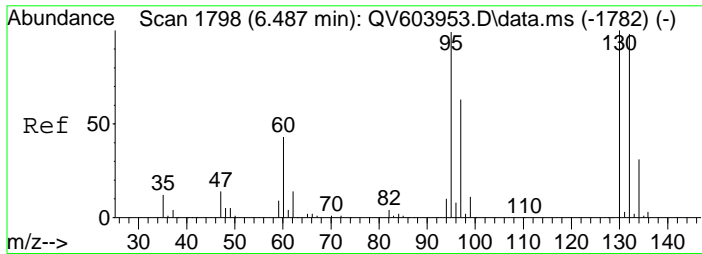
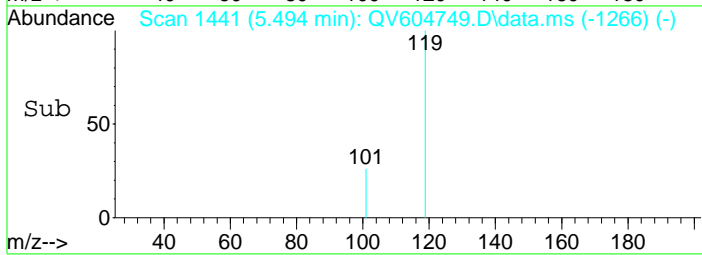
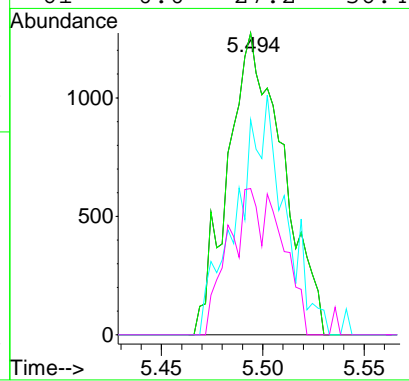
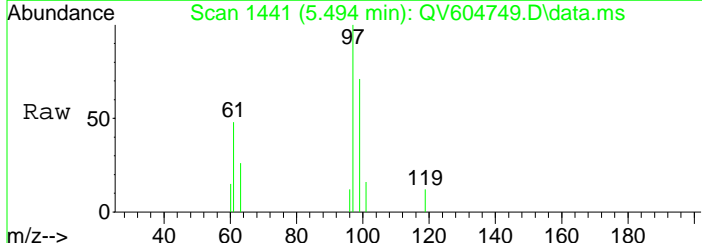






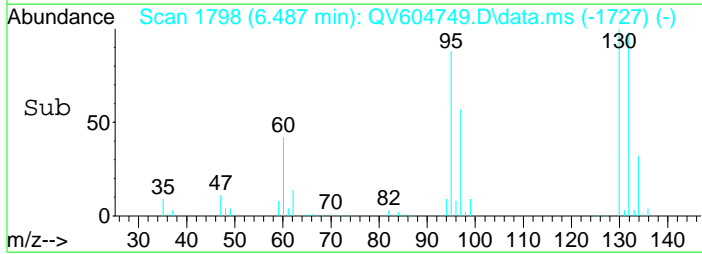
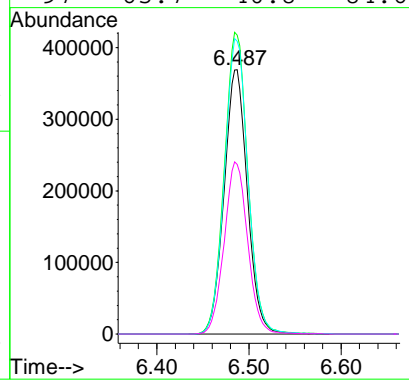
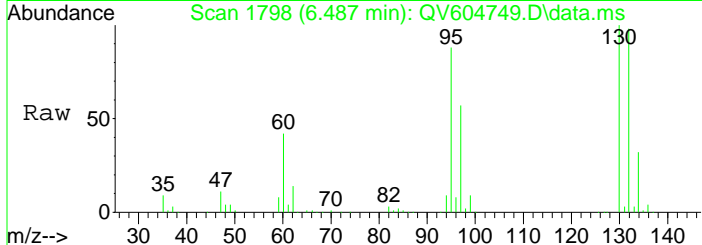
#31  
 1,1,1-Trichloroethane  
 Concen: 0.22 ppb  
 RT: 5.494 min Scan# 1441  
 Delta R.T. -0.014 min  
 Lab File: QV604749.D  
 Acq: 12 Mar 2018 7:44 pm

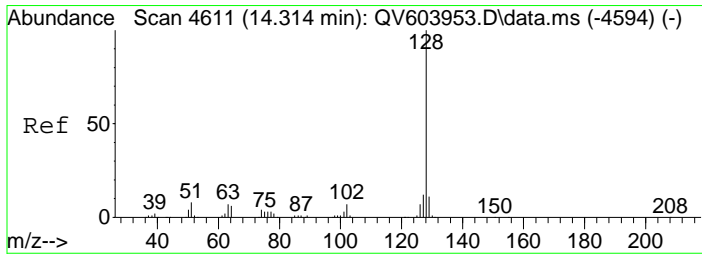
Tgt Ion	Resp	Lower	Upper
97	100		
97	100.0	65.0	135.0
99	69.1	42.5	88.3
61	0.0	27.2	56.4#



#41  
 Trichloroethylene  
 Concen: 84.37 ppb  
 RT: 6.487 min Scan# 1798  
 Delta R.T. -0.003 min  
 Lab File: QV604749.D  
 Acq: 12 Mar 2018 7:44 pm

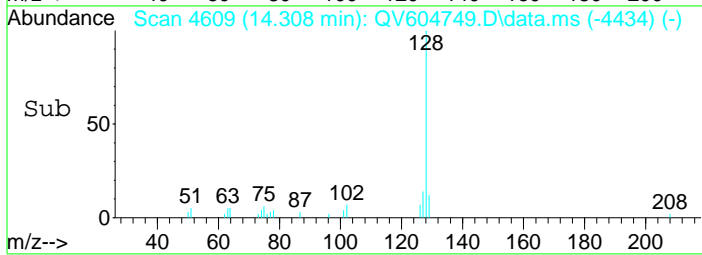
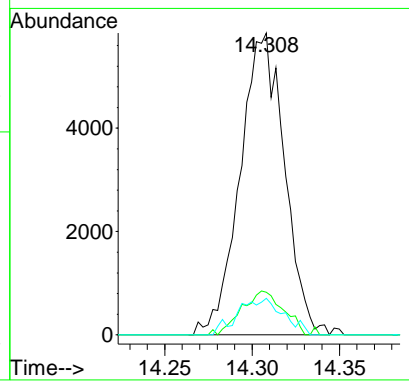
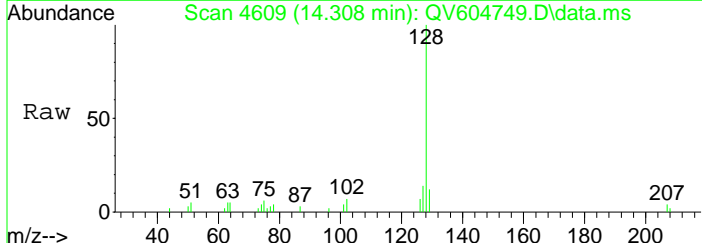
Tgt Ion	Resp	Lower	Upper
95	100		
130	115.8	62.6	130.0
132	113.0	62.0	128.8
97	65.7	40.8	84.6





#93  
 Naphthalene  
 Concen: 0.89 ppb  
 RT: 14.308 min Scan# 4609  
 Delta R.T. -0.014 min  
 Lab File: QV604749.D  
 Acq: 12 Mar 2018 7:44 pm

Tgt Ion	Resp	Lower	Upper
128	10312		
127	13.7	8.5	17.6
129	11.4	6.1	12.7



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-05 File ID: QV604745.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 17:59  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.50	U
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.0	U
107-02-8	Acrolein	1	0.50	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-05 File ID: QV604745.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 17:59  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	8.9	
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	0.50	U
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.77	97.7	69 - 130	
Toluene-d8	10.0	10.1	101	81 - 117	
p-Bromofluorobenzene	10.0	9.79	97.9	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	55611	6.125	54432	6.131	
Chlorobenzene-d5	213644	9.189	224712	9.188	
1,2-Dichlorobenzene-d4	83069	12.171	89967	12.174	

\* Values outside of QC limits

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604745.D  
 Acq On : 12 Mar 2018 5:59 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-05  
 Misc : QBQV6031218A 8260 COMP B  
 ALS Vial : 15 Sample Multiplier: 1

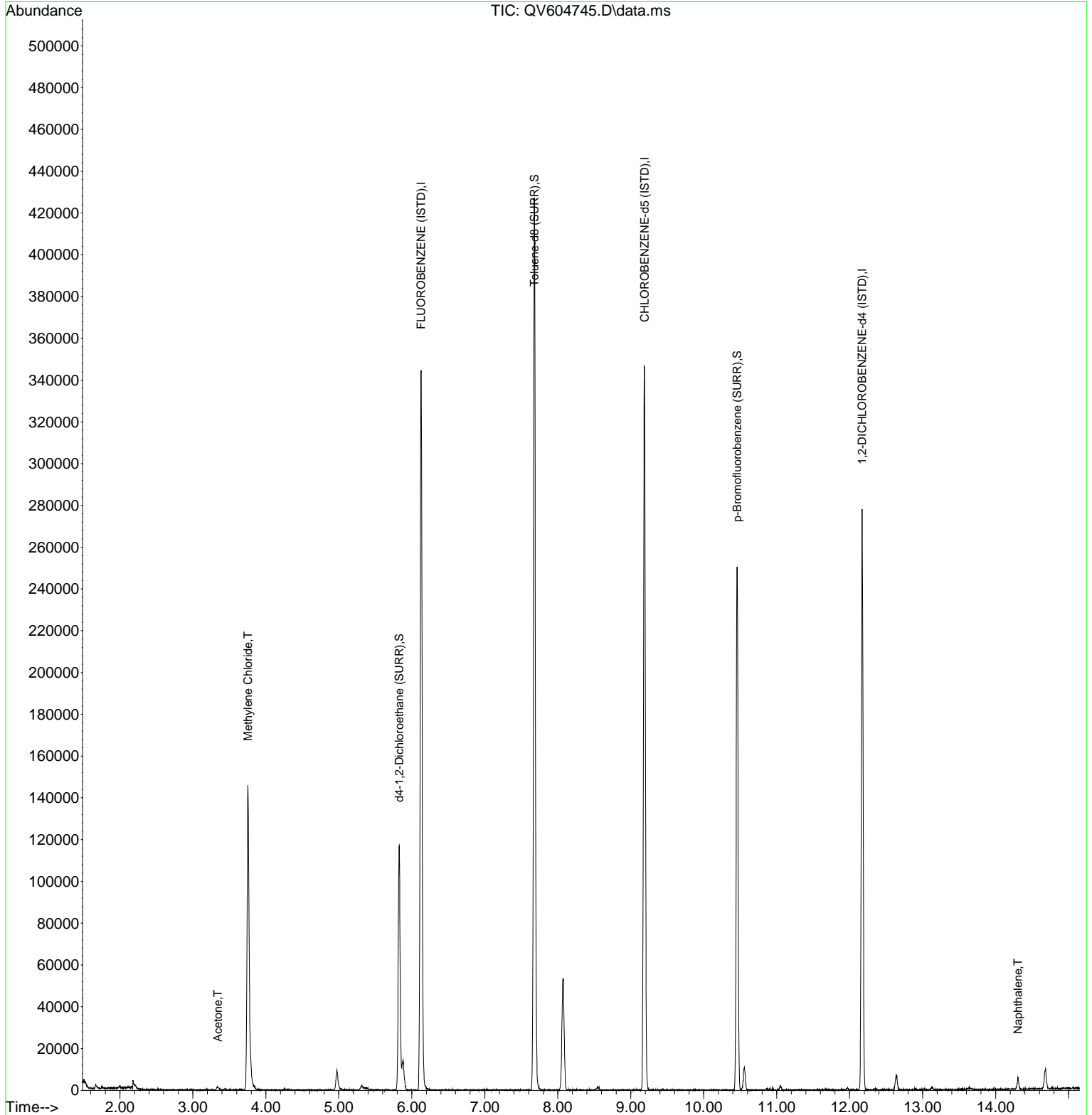
Quant Time: Mar 12 19:27:33 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
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 Response via : Initial Calibration

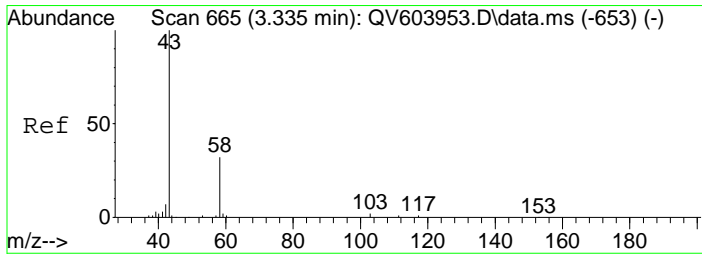
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.125	70	55611	10.00	ppb	#-0.01
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	213644	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.171	152	83069	10.00	ppb	-0.01
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.825	65	72821	9.77	ppb	-0.01
Spiked Amount	10.000	Range 69 - 130	Recovery	=	97.70%	
51) Toluene-d8 (SURR)	7.678	98	271346	10.07	ppb	-0.01
Spiked Amount	10.000	Range 81 - 117	Recovery	=	100.70%	
70) p-Bromofluorobenzene (...)	10.457	95	82583	9.79	ppb	-0.01
Spiked Amount	10.000	Range 79 - 122	Recovery	=	97.90%	
Target Compounds						
12) Acetone	3.340	43	2007	0.94	ppb	97
17) Methylene Chloride	3.755	49	96548	8.88	ppb	87
93) Naphthalene	14.305	128	4608	0.39	ppb	97
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604745.D  
 Acq On : 12 Mar 2018 5:59 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : 18C0189-05  
 Misc : QBQV6031218A 8260 COMP B  
 ALS Vial : 15 Sample Multiplier: 1

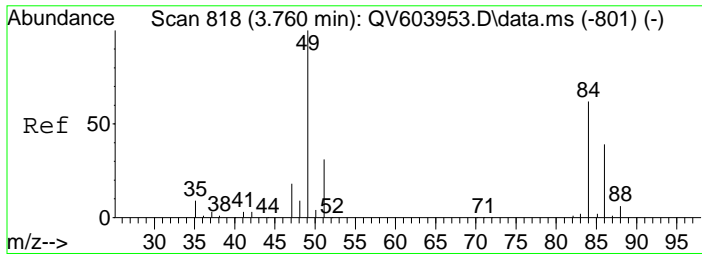
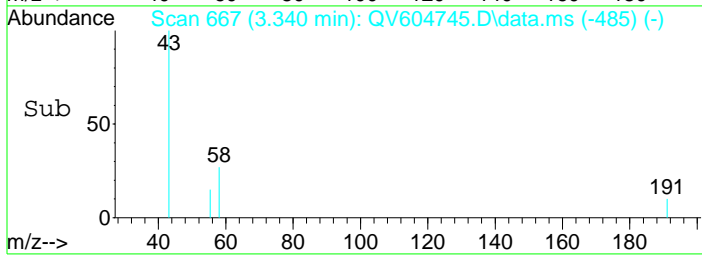
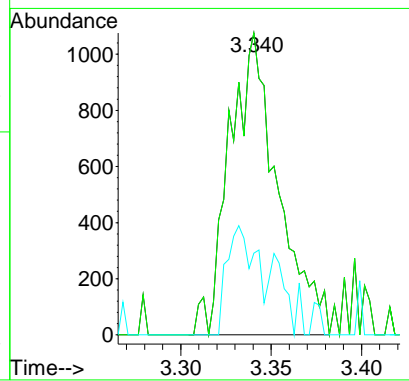
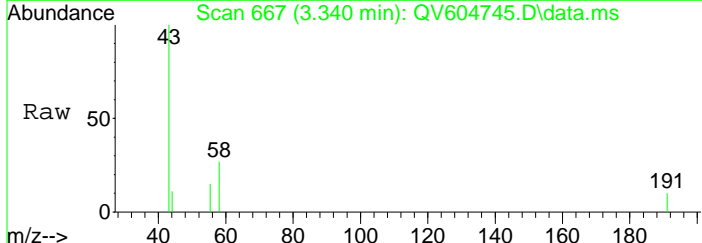
Quant Time: Mar 12 19:27:33 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
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 Response via : Initial Calibration





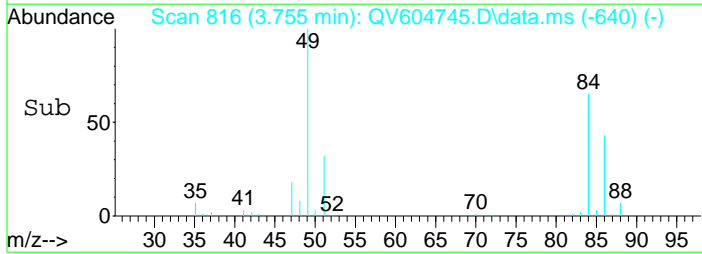
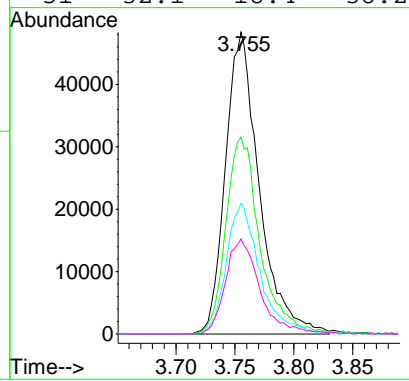
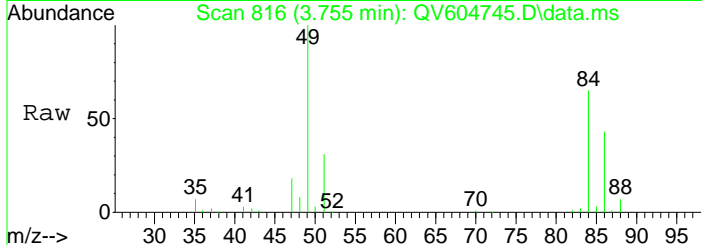
#12  
 Acetone  
 Concen: 0.94 ppb  
 RT: 3.340 min Scan# 667  
 Delta R.T. 0.005 min  
 Lab File: QV604745.D  
 Acq: 12 Mar 2018 5:59 pm

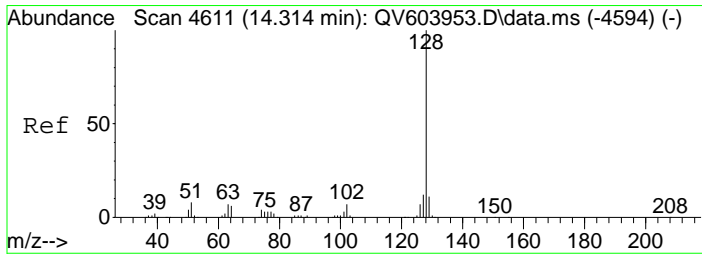
Tgt Ion	Resp	Lower	Upper
43	100		
43	100.0	80.0	120.0
58	21.2	13.9	41.6



#17  
 Methylene Chloride  
 Concen: 8.88 ppb  
 RT: 3.755 min Scan# 816  
 Delta R.T. -0.011 min  
 Lab File: QV604745.D  
 Acq: 12 Mar 2018 5:59 pm

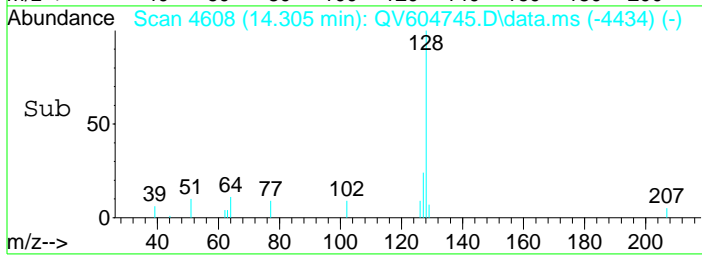
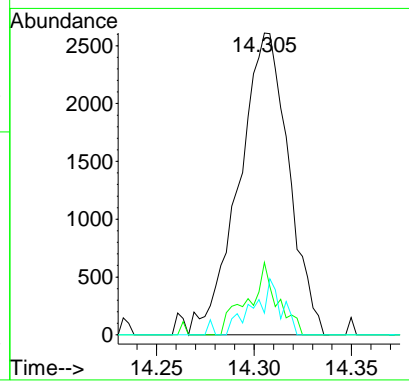
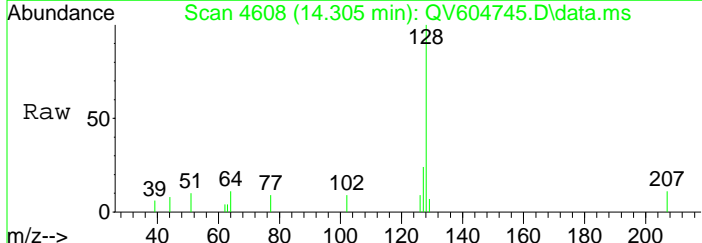
Tgt Ion	Resp	Lower	Upper
49	100		
49	100		
84	65.7	51.5	107.1
86	42.7	34.1	70.7
51	32.1	18.4	38.2





#93  
 Naphthalene  
 Concen: 0.39 ppb  
 RT: 14.305 min Scan# 4608  
 Delta R.T. -0.017 min  
 Lab File: QV604745.D  
 Acq: 12 Mar 2018 5:59 pm

Tgt Ion	Resp	Lower	Upper
128	100		
127	14.3	8.5	17.6
129	10.5	6.1	12.7





# VOA Standards Data

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigCalibration: YB80032Instrument: QVOA6Matrix: WaterCalibration Date: 02/26/18 17:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	0.5	0.3299081	2	0.355734	4	0.3233965	10	0.3553593	20	0.3589893	40	0.3764884
1,1,1-Trichloroethane	0.5	1.845032	2	2.120983	4	1.949438	10	2.164517	20	2.266238	40	2.345165
1,1,2,2-Tetrachloroethane	0.5	0.5372383	2	0.6368892	4	0.574635	10	0.6158062	20	0.6003137	40	0.6327241
1,1,2-Trichloro-1,2,2-trifluoroethane	0.5	1.166286	2	1.325516	4	1.198023	10	1.297805	20	1.336601	40	1.424183
1,1,2-Trichloroethane	0.5	0.2177343	2	0.2513287	4	0.224004	10	0.2507245	20	0.2469227	40	0.2583882
1,1-Dichloroethane	0.5	2.344071	2	2.689248	4	2.459998	10	2.771443	20	2.768047	40	2.888754
1,1-Dichloroethylene	0.5	1.927822	2	2.22553	4	2.004393	10	2.223864	20	2.311195	40	2.369033
1,1-Dichloropropylene	0.5	1.658755	2	1.837547	4	1.698023	10	1.803611	20	1.898835	40	1.964695
1,2,3-Trichlorobenzene	0.5	0.4755271	2	0.4243901	4	0.4341838	10	0.4752849	20	0.4869585	40	0.5524011
1,2,3-Trichloropropane	0.5	0.1886423	2	0.1970245	4	0.1903056	10	0.203007	20	0.1978774	40	0.2094734
1,2,4,5-Tetramethylbenzene	0.5	2.083527	2	2.303224	4	2.038035	10	2.421644	20	2.597384	40	2.763588
1,2,4-Trichlorobenzene	0.5	0.5983303	2	0.6690542	4	0.6253535	10	0.7319328	20	0.7648929	40	0.8461378
1,2,4-Trimethylbenzene	0.5	2.746045	2	3.103094	4	2.70709	10	3.031958	20	3.186344	40	3.342621
1,2-Dibromo-3-chloropropane	0.5	6.707739E-02	2	7.991511E-02	4	6.768575E-02	10	8.007231E-02	20	8.076496E-02	40	8.806049E-02
1,2-Dibromoethane	0.5	0.2310445	2	0.2546421	4	0.2305453	10	0.2565568	20	0.2539952	40	0.2661345
1,2-Dichlorobenzene	0.5	1.40264	2	1.560776	4	1.381077	10	1.53142	20	1.564424	40	1.675304
1,2-Dichloroethane	0.5	1.45178	2	1.680856	4	1.537256	10	1.730995	20	1.637159	40	1.776248
1,2-Dichloroethane-d4	10	1.337517	10	1.310456	10	1.357084	10	1.367917	10	1.320098	10	1.324352
1,2-Dichloropropane	0.5	0.3442228	2	0.4000756	4	0.350603	10	0.3891456	20	0.3934404	40	0.4109495
1,3,5-Trimethylbenzene	0.5	2.80982	2	3.06905	4	2.735683	10	3.020413	20	3.253507	40	3.403606
1,3-Dichlorobenzene	0.5	1.601395	2	1.77427	4	1.61257	10	1.771443	20	1.840942	40	1.941223
1,3-Dichloropropane	0.5	0.3836511	2	0.4298294	4	0.3829206	10	0.4217836	20	0.4210143	40	0.4398723
1,4-Dichlorobenzene	0.5	1.645563	2	1.768357	4	1.584187	10	1.782667	20	1.837397	40	1.944112
1,4-Dioxane	10	1.071511E-03	40	1.625564E-03	80	1.554882E-03	200	1.625977E-03	400	1.71752E-03	800	1.647217E-03
2,2-Dichloropropane	0.5	1.826306	2	2.061875	4	1.902298	10	2.121455	20	2.198728	40	2.256226
2-Butanone	0.5	8.016164E-02	2	0.1025454	4	0.1102475	10	0.1287978	20	0.1120378	40	0.1211768
2-Chlorotoluene	0.5	2.492596	2	2.875341	4	2.507672	10	2.751144	20	2.871349	40	3.007726
2-Hexanone	0.5	0.1860913	2	0.1999822	4	0.1916549	10	0.2220005	20	0.2069087	40	0.2082277
4-Chlorotoluene	0.5	2.340898	2	2.621282	4	2.254472	10	2.509634	20	2.590828	40	2.7202
4-Methyl-2-pentanone	0.5	0.2481217	2	0.291334	4	0.2635885	10	0.2957834	20	0.2836749	40	0.2952732
Acetone	0.5	4.073969	2	0.5270901	4	0.3983273	10	0.4653945	20	0.3843687	40	0.319136

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigCalibration: YB80032Instrument: QVOA6Matrix: WaterCalibration Date: 02/26/18 17:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acrolein	0.5		2	0.1203036	4	9.322463E-02	10	0.1224674	20	0.1168515	40	0.1290917
Acrylonitrile	0.5	0.2664389	2	0.3506389	4	0.3460336	10	0.4080713	20	0.3813896	40	0.3939703
Benzene	0.5	4.860949	2	5.354121	4	4.881051	10	5.394104	20	5.454278	40	5.626388
Bromobenzene	0.5	1.197693	2	1.317936	4	1.181031	10	1.291306	20	1.297483	40	1.376265
Bromochloromethane	0.5	1.152488	2	1.304972	4	1.195953	10	1.280341	20	1.203743	40	1.185247
Bromodichloromethane	0.5	0.3700898	2	0.4357224	4	0.3959612	10	0.4404697	20	0.4462377	40	0.4730014
Bromoform	0.5	0.1609778	2	0.1941115	4	0.1765425	10	0.200339	20	0.1996003	40	0.2143304
Bromomethane	0.5		2	0.290226	4	0.2973304	10	0.361127	20	0.4817043	40	0.6183458
Carbon disulfide	0.5	2.631536	2	2.839497	4	2.608473	10	2.825822	20	3.075993	40	3.159422
Carbon tetrachloride	0.5	1.752714	2	1.940266	4	1.805314	10	2.014446	20	2.091554	40	2.22119
Chlorobenzene	0.5	0.9158069	2	0.9758945	4	0.8775592	10	0.9785071	20	0.9846669	40	1.015509
Chloroethane	0.5	0.797674	2	0.9514607	4	0.8700262	10	0.9497249	20	0.9572568	40	1.013472
Chloroform	0.5	2.122312	2	2.355235	4	2.102729	10	2.371119	20	2.363658	40	2.460835
Chloromethane	0.5	1.470835	2	1.676242	4	1.504689	10	1.629009	20	1.693358	40	1.798286
cis-1,2-Dichloroethylene	0.5	2.127897	2	2.411209	4	2.15912	10	2.457665	20	2.48513	40	2.541049
cis-1,3-Dichloropropylene	0.5	0.4925601	2	0.5378372	4	0.4797997	10	0.539418	20	0.5495012	40	0.5656717
Cyclohexane	0.5	2.604596	2	2.91967	4	2.608262	10	2.819068	20	2.899761	40	3.051709
Dibromochloromethane	0.5	0.2821924	2	0.3222665	4	0.2984196	10	0.3358303	20	0.3358181	40	0.3553951
Dibromomethane	0.5	0.1510161	2	0.1750095	4	0.1587694	10	0.1722939	20	0.1741731	40	0.1815269
Dichlorodifluoromethane	0.5	1.065756	2	1.236638	4	1.171116	10	1.175392	20	1.164509	40	1.258001
Ethyl Benzene	0.5	1.47316	2	1.598257	4	1.412308	10	1.561207	20	1.62922	40	1.68752
Hexachlorobutadiene	0.5	0.1599538	2	0.1500481	4	0.1415247	10	0.1615978	20	0.2188855	40	0.2397767
Isopropylbenzene	0.5	3.521872	2	3.98111	4	3.576609	10	3.94819	20	4.226803	40	4.389228
Methyl acetate	0.5	0.7257256	2	0.7613427	4	0.6818451	10	0.8016599	20	0.7723815	40	0.8116034
Methyl tert-butyl ether (MTBE)	0.5	2.96171	2	3.390961	4	3.124483	10	3.525809	20	3.42346	40	3.532793
Methylcyclohexane	0.5	0.4952389	2	0.5490894	4	0.4954379	10	0.5049073	20	0.5963518	40	0.6340871
Methylene chloride	0.5	1.818092	2	1.925206	4	1.75471	10	1.961024	20	1.923316	40	1.999668
Naphthalene	0.5	<del>3.493803</del>	2	1.621735	4	1.346514	10	1.320049	20	1.244424	40	1.363097
n-Butylbenzene	0.5	2.427582	2	2.54192	4	2.283667	10	2.538789	20	2.978268	40	3.138518
n-Propylbenzene	0.5	3.863245	2	4.176255	4	3.779352	10	4.132752	20	4.537317	40	4.684481
o-Xylene	0.5	1.084151	2	1.213169	4	1.09173	10	1.216232	20	1.228431	40	1.265399

## FORM VI

## INITIAL CALIBRATION DATA

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigCalibration: YB80032Instrument: QVOA6Matrix: WaterCalibration Date: 02/26/18 17:46

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p- & m- Xylenes	1	1.128602	4	1.222876	8	1.097241	20	1.193568	40	1.2421	80	1.280465
p-Bromofluorobenzene	10	1.029968	10	1.029258	10	1.017858	10	1.039979	10	1.035003	10	1.017347
p-Diethylbenzene	0.5	1.266627	2	1.366128	4	1.220674	10	1.378656	20	1.586662	40	1.664035
p-Ethyltoluene	0.5	3.237877	2	3.561639	4	3.142216	10	3.483718	20	3.781109	40	3.927355
p-Isopropyltoluene	0.5	2.790626	2	3.063855	4	2.761526	10	3.011007	20	3.443614	40	3.612915
sec-Butylbenzene	0.5	3.047996	2	3.249107	4	2.902658	10	3.206062	20	3.741309	40	3.932356
Styrene	0.5	0.9110353	2	1.034913	4	0.9177853	10	1.026068	20	1.017628	40	1.045254
tert-Butyl alcohol (TBA)	0.5	8.213283E-02	2	0.1102058	4	0.1147673	10	0.132423	20	0.1262013	40	0.1279266
tert-Butylbenzene	0.5	2.460605	2	2.63532	4	2.339335	10	2.551341	20	2.861988	40	2.983115
Tetrachloroethylene	0.5	0.4399891	2	0.487269	4	0.4351672	10	0.4738276	20	0.5112543	40	0.5349274
Toluene	0.5	1.428876	2	1.507261	4	1.325567	10	1.455447	20	1.492417	40	1.541757
Toluene-d8	10	1.246368	10	1.254544	10	1.237983	10	1.244355	10	1.260572	10	1.258637
trans-1,2-Dichloroethylene	0.5	1.808236	2	1.964553	4	1.832686	10	2.042178	20	2.112332	40	2.166964
trans-1,3-Dichloropropylene	0.5	0.3959567	2	0.4402144	4	0.4053525	10	0.4547952	20	0.4577558	40	0.4795946
trans-1,4-dichloro-2-butene	0.5	0.6212398	2	0.6971295	4	0.6438394	10	0.7048835	20	0.6967067	40	0.7360659
Trichloroethylene	0.5	0.3050457	2	0.3632502	4	0.3187903	10	0.3489711	20	0.37497	40	0.3914075
Trichlorofluoromethane	0.5	1.84996	2	2.144834	4	1.976472	10	2.101305	20	2.039116	40	2.109421
Vinyl acetate	0.5	3.968987	2	4.354957	4	3.996114	10	4.616569	20	4.473516	40	4.582053
Vinyl Chloride	0.5	1.415641	2	1.461054	4	1.305821	10	1.41926	20	1.495725	40	1.59471

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigCalibration: YB80032Instrument: QVOA6Matrix: WaterCalibration Date: 02/26/18 17:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,1,1,2-Tetrachloroethane	80	0.3828811	120	0.39636	160	0.4005614						
1,1,1-Trichloroethane	80	2.44692	120	2.529934	160	2.580929						
1,1,2,2-Tetrachloroethane	80	0.6354219	120	0.6376396	160	0.6417435						
1,1,2-Trichloro-1,2,2-trifluoroethane	80	1.466569	120	1.48606	160	1.562206						
1,1,2-Trichloroethane	80	0.2631993	120	0.2732752	160	0.2766252						
1,1-Dichloroethane	80	2.956417	120	2.840909	160	2.75672						
1,1-Dichloroethylene	80	2.307735	120	2.348015	160	2.381634						
1,1-Dichloropropylene	80	2.036454	120	2.099389	160	2.146854						
1,2,3-Trichlorobenzene	80	0.5675275	120	0.5990715	160	0.6435573						
1,2,3-Trichloropropane	80	0.2107673	120	0.2104328	160	0.2132965						
1,2,4,5-Tetramethylbenzene	80	2.802213	120	2.852002	160	2.914699						
1,2,4-Trichlorobenzene	80	0.8751548	120	0.9052185	160	0.9445873						
1,2,4-Trimethylbenzene	80	3.34658	120	3.3818	160	3.412256						
1,2-Dibromo-3-chloropropane	80	9.500258E-02	120	9.522677E-02	160	9.868287E-02						
1,2-Dibromoethane	80	0.2736191	120	0.2821963	160	0.2843558						
1,2-Dichlorobenzene	80	1.696007	120	1.726393	160	1.745949						
1,2-Dichloroethane	80	1.844231	120	1.88761	160	1.924587						
1,2-Dichloroethane-d4	10	1.34825	10	1.33763	10	1.364228						
1,2-Dichloropropane	80	0.4281767	120	0.4466085	160	0.4516653						
1,3,5-Trimethylbenzene	80	3.391342	120	3.407893	160	3.422364						
1,3-Dichlorobenzene	80	1.973581	120	1.996255	160	2.003913						
1,3-Dichloropropane	80	0.445144	120	0.4608675	160	0.462466						
1,4-Dichlorobenzene	80	1.978665	120	2.003796	160	2.031618						
1,4-Dioxane	1600	1.658159E-03	2400	2.003455E-03	3200	1.956417E-03						
2,2-Dichloropropane	80	2.320826	120	2.42289	160	2.448836						
2-Butanone	80	0.1223404	120	0.1248164	160	0.1256852						
2-Chlorotoluene	80	2.982998	120	3.010287	160	3.01057						
2-Hexanone	80	0.2132932	120	0.2178605	160	0.220211						
4-Chlorotoluene	80	2.724541	120	2.745763	160	2.757468						
4-Methyl-2-pentanone	80	0.3024718	120	0.3116392	160	0.3149648						
Acetone	80	0.3149864	120	0.3337682	160	0.3349149						

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigCalibration: YB80032Instrument: QVOA6Matrix: WaterCalibration Date: 02/26/18 17:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
Acrolein	80	0.1470738	120	0.1604271	160	0.1666776						
Acrylonitrile	80	0.4069563	120	0.4138756	160	0.4227904						
Benzene	80	5.729867	120	5.841234	160	5.866624						
Bromobenzene	80	1.374855	120	1.381853	160	1.39578						
Bromochloromethane	80	1.145386	120	1.163578	160	1.148321						
Bromodichloromethane	80	0.4948205	120	0.5198634	160	0.5331503						
Bromoform	80	0.2220693	120	0.2322806	160	0.2386039						
Bromomethane	80	0.7412763	120	0.8084955	160	0.8486158						
Carbon disulfide	80	3.197691	120	3.392694	160	3.436647						
Carbon tetrachloride	80	2.307467	120	2.390047	160	2.455405						
Chlorobenzene	80	1.026161	120	1.063088	160	1.06998						
Chloroethane	80	1.010098	120	1.036795	160	1.054774						
Chloroform	80	2.514921	120	2.584713	160	2.570582						
Chloromethane	80	1.869883	120	1.976757	160	2.046152						
cis-1,2-Dichloroethylene	80	2.611744	120	2.610637	160	2.600471						
cis-1,3-Dichloropropylene	80	0.5814587	120	0.6096343	160	0.6175817						
Cyclohexane	80	3.125311	120	3.160283	160	3.283596						
Dibromochloromethane	80	0.3715647	120	0.3854905	160	0.3914758						
Dibromomethane	80	0.1880461	120	0.1976835	160	0.2005721						
Dichlorodifluoromethane	80	1.291427	120	1.315367	160	1.377695						
Ethyl Benzene	80	1.69496	120	1.738841	160	1.754352						
Hexachlorobutadiene	80	0.2480366	120	0.2592455	160	0.2763829						
Isopropylbenzene	80	4.329539	120	4.321407	160	4.320162						
Methyl acetate	80	0.8015644	120	0.813077	160	0.8265356						
Methyl tert-butyl ether (MTBE)	80	3.660167	120	3.7845	160	3.855177						
Methylcyclohexane	80	0.6628887	120	0.6877056	160	0.724677						
Methylene chloride	80	2.029952	120	2.087376	160	2.102383						
Naphthalene	80	1.395761	120	1.455743	160	1.506709						
n-Butylbenzene	80	3.154516	120	3.190227	160	3.233199						
n-Propylbenzene	80	4.640035	120	4.657938	160	4.650802						
o-Xylene	80	1.263198	120	1.301995	160	1.309274						

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investig  
 Calibration: YB80032 Instrument: QVOA6  
 Matrix: Water Calibration Date: 02/26/18 17:46

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
p- & m- Xylenes	160	1.283959	240	1.314703	320	1.315757						
p-Bromofluorobenzene	10	1.001857	10	0.9787809	10	0.9928966						
p-Diethylbenzene	80	1.679936	120	1.697688	160	1.732033						
p-Ethyltoluene	80	3.881911	120	3.895088	160	3.890027						
p-Isopropyltoluene	80	3.599968	120	3.623416	160	3.630498						
sec-Butylbenzene	80	3.895394	120	3.91273	160	3.946165						
Styrene	80	1.046814	120	1.080141	160	1.091941						
tert-Butyl alcohol (TBA)	80	0.1339045	120	0.1408765	160	0.1447056						
tert-Butylbenzene	80	2.94958	120	2.980679	160	2.99775						
Tetrachloroethylene	80	0.5565776	120	0.584681	160	0.5981178						
Toluene	80	1.587269	120	1.637369	160	1.659599						
Toluene-d8	10	1.267047	10	1.284073	10	1.300892						
trans-1,2-Dichloroethylene	80	2.254267	120	2.336634	160	2.260251						
trans-1,3-Dichloropropylene	80	0.4992511	120	0.5184131	160	0.5275104						
trans-1,4-dichloro-2-butene	80	0.7460817	120	0.7548977	160	0.7620132						
Trichloroethylene	80	0.4112077	120	0.4348118	160	0.4469138						
Trichlorofluoromethane	80	2.117108	120	2.198374	160	2.269844						
Vinyl acetate	80	4.638363	120	4.737422	160	4.741331						
Vinyl Chloride	80	1.631097	120	1.639956	160	1.637679						

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationCalibration: YB80032Instrument: QVOA6Matrix: WaterCalibration Date: 02/26/18 17:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1,2-Tetrachloroethane	0.3644087	7.4358	9.308666	1.681798E-02			20	
1,1,1-Trichloroethane	2.249906	11.26896	5.499667	2.768828E-02			SPCC (0.1)	
1,1,2,2-Tetrachloroethane	0.6124902	5.850924	10.63867	8.224111E-03			SPCC (0.3)	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.362583	9.762572	3.209111	0.0384152			SPCC (0.1)	
1,1,2-Trichloroethane	0.2513558	7.96592	8.193333	8.926255E-03			SPCC (0.1)	
1,1-Dichloroethane	2.719512	7.298434	4.454778	4.205402E-02			SPCC (0.2)	
1,1-Dichloroethylene	2.233247	7.273105	3.219333	6.660661E-02			SPCC (0.1)	
1,1-Dichloropropylene	1.904907	9.00631	5.657333	2.857585E-02			20	
1,2,3-Trichlorobenzene	0.5176558	14.70453	14.58611	3.478904E-03			20	
1,2,3-Trichloropropane	0.2023141	4.585442	10.68611	1.178019E-02			20	
1,2,4,5-Tetramethylbenzene	2.530702	13.17547	12.99811	1.137197E-02			20	
1,2,4-Trichlorobenzene	0.7734069	16.32776	14.01889	2.160327E-02			SPCC (0.2)	
1,2,4-Trimethylbenzene	3.139754	8.532162	11.32744	2.241252E-02			20	
1,2-Dibromo-3-chloropropane	0.0836098	13.85094	13.097	2.414623E-02			SPCC (0.05)	
1,2-Dibromoethane	0.2592322	7.57679	8.726334	8.196696E-03			SPCC (0.1)	
1,2-Dichlorobenzene	1.58711	8.484256	12.194	0.0262616			SPCC (0.4)	
1,2-Dichloroethane	1.718969	9.252974	5.904556	0.0424442			SPCC (0.1)	
1,2-Dichloroethane-d4	1.340837	1.502163	5.832333	2.297659E-02			20	
1,2-Dichloropropane	0.4016542	9.41608	6.719667	0.0351571			SPCC (0.1)	
1,3,5-Trimethylbenzene	3.168186	8.511378	10.90611	2.901608E-02			20	
1,3-Dichlorobenzene	1.835066	8.547736	11.66967	2.168713E-02			SPCC (0.6)	
1,3-Dichloropropane	0.4275054	6.815029	8.363778	0.0264333			20	
1,4-Dichlorobenzene	1.841818	8.696753	11.77011	1.623149E-02			SPCC (0.5)	
1,4-Dioxane	1.651189E-03	16.14181	6.867444	7.776569E-02			20	
2,2-Dichloropropane	2.173271	9.981524	5.010222	2.828075E-02			20	
2-Butanone	0.114201	13.44981	5.058111	0.1793737			SPCC (0.1)	
2-Chlorotoluene	2.834409	7.354667	10.831	1.820665E-02			20	
2-Hexanone	0.2073589	6.098569	8.421222	1.469648E-02			SPCC (0.1)	
4-Chlorotoluene	2.58501	7.096346	10.95144	2.100134E-02			20	
4-Methyl-2-pentanone	0.2896502	7.524751	7.570333	3.964848E-02			SPCC (0.1)	
Acetone	0.3847483	19.94076	3.326	0.2123401			SPCC (0.1)	
Acrolein	0.1320147	18.57011	3.151625	0.1356746		0.9996169	0.99	



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Calibration: YB80032 Instrument: QVOA6  
 Matrix: Water Calibration Date: 02/26/18 17:46

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acrylonitrile	0.376685	13.10783	4.036556	0.1037221			20	
Benzene	5.445402	6.86787	5.863333	2.047973E-02			SPCC (0.5)	
Bromobenzene	1.312689	6.07458	10.62867	2.744361E-02			20	
Bromochloromethane	1.197781	4.84254	5.272445	3.304267E-02			20	
Bromodichloromethane	0.4565907	11.88457	7.001	2.941043E-02			SPCC (0.2)	
Bromoform	0.2043173	12.436	10.13422	1.773618E-02			SPCC (0.1)	
Bromomethane	0.5558901	41.28187	2.236875	0.2653941		0.999355	SPCC (0.1)	
Carbon disulfide	3.018642	10.19155	3.448	6.339889E-02			SPCC (0.1)	
Carbon tetrachloride	2.108711	11.94817	5.652222	2.778196E-02			SPCC (0.1)	
Chlorobenzene	0.9896858	6.410731	9.220667	2.241421E-02			SPCC (0.5)	
Chloroethane	0.9601424	8.626288	2.361556	0.1296595			SPCC (0.1)	
Chloroform	2.3829	7.375888	5.344778	1.897125E-02			SPCC (0.2)	
Chloromethane	1.740579	11.42611	1.752667	0.1255879			SPCC (0.1)	
cis-1,2-Dichloroethylene	2.444991	7.566914	5.031	2.365307E-02			SPCC (0.1)	
cis-1,3-Dichloropropylene	0.5526069	8.532346	7.433	1.732302E-02			SPCC (0.2)	
Cyclohexane	2.941362	8.086456	5.53	2.453761E-02			SPCC (0.1)	
Dibromochloromethane	0.3420503	11.00448	8.605111	2.639827E-02			SPCC (0.1)	
Dibromomethane	0.1776767	9.255471	6.852667	2.808883E-02			20	
Dichlorodifluoromethane	1.228433	7.690201	1.521778	7.802507E-02			SPCC (0.1)	
Ethyl Benzene	1.616647	7.284984	9.315	7.289421E-03			SPCC (0.1)	
Hexachlorobutadiene	0.2061613	25.57616	14.18578	1.666527E-02		0.999774	0.99	
Isopropylbenzene	4.068324	8.181126	10.26211	1.692519E-02			SPCC (0.1)	
Methyl acetate	0.7773039	6.121592	3.656889	0.1641465			SPCC (0.1)	
Methyl tert-butyl ether (MTBE)	3.473229	8.372836	4.011111	0.1043344			SPCC (0.1)	
Methylcyclohexane	0.5944871	14.76487	6.642667	2.259223E-02			SPCC (0.1)	
Methylene chloride	1.955747	5.931045	3.759222	4.593058E-02			SPCC (0.1)	
Naphthalene	1.406754	8.416637	14.30613	6.52745E-03			20	
n-Butylbenzene	2.831854	13.34769	12.138	1.948608E-02			20	
n-Propylbenzene	4.346909	8.35911	10.71433	1.401585E-02			20	
o-Xylene	1.219287	6.716719	9.870444	2.427155E-02			SPCC (0.3)	
p- & m- Xylenes	1.23103	6.383918	9.437444	3.322393E-02			SPCC (0.1)	
p-Bromofluorobenzene	1.015883	2.038633	10.459	1.897982E-02			20	



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604445.D  
 Acq On : 26 Feb 2018 6:39 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL1  
 Misc : QBQV6022618A 0.5ppb STND AQU  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 27 12:07:05 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Thu Feb 15 11:43:21 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.128	70	60877	10.00	ppb	0.00
40) CHLOROBENZENE-d5 (ISTD)	9.191	117	238915	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	96903	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.831	65	81424	10.51	ppb	0.00
Spiked Amount 10.000	Range 69	- 130	Recovery =	105.10%		
51) Toluene-d8 (SURR)	7.684	98	297776	9.92	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery =	99.20%		
70) p-Bromofluorobenzene (...)	10.460	95	99807	9.09	ppb	0.00
Spiked Amount 10.000	Range 79	- 122	Recovery =	90.90%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	3244m	0.50	ppb	
3) Chloromethane	1.749	50	4477	0.39	ppb	# 94
4) Vinyl Chloride	1.852	62	4309m	0.46	ppb	
6) Chloroethane	2.364	64	2428	0.37	ppb	97
7) Trichlorofluoromethane	2.639	101	5631	0.42	ppb	100
8) Ethanol	2.970	45	1313m	19.38	ppb	
9) Freon-113	3.210	101	3550	0.43	ppb	# 66
10) 1,1-Dichloroethylene	3.221	61	5868	0.39	ppb	# 95
12) Acetone	3.338	43	3269	1.10	ppb	96
14) Methyl Acetate	3.666	43	2209	0.37	ppb	96
15) Carbon disulfide	3.446	76	8010	0.41	ppb	99
16) tert-Butyl Alcohol (TBA)	3.922	59	250m	0.25	ppb	
17) Methylene Chloride	3.758	49	5534	0.38	ppb	78
18) Acrylonitrile	4.042	53	811	0.27	ppb	# 75
19) trans-1,2-Dichloroethy...	4.025	61	5504	0.37	ppb	96
20) tert-Butyl Methyl Ethe...	4.016	73	9015	0.36	ppb	97
21) 1,1-Dichloroethane	4.451	63	7135	0.37	ppb	99
22) Vinyl Acetate	4.498	43	12081	0.33	ppb	100
23) Diisopropyl ether (DIPE)	4.487	45	15393	0.35	ppb	# 87
24) Ethyl-tert-Butyl ether...	4.843	59	14027	0.36	ppb	96
25) cis-1,2-Dichloroethylene	5.032	61	6477	0.36	ppb	# 82
26) 2-Butanone	5.077	72	244m	0.26	ppb	
27) 2,2-Dichloropropane	5.007	77	5559	0.38	ppb	# 91
28) Tetrahydrofuran	5.341	42	1098m	0.40	ppb	
29) Bromochloromethane	5.274	49	3508	0.38	ppb	94
30) Chloroform	5.346	83	6460	0.38	ppb	# 67
31) 1,1,1-Trichloroethane	5.499	97	5616	0.38	ppb	97
32) Cyclohexane	5.527	56	7928	0.40	ppb	84
33) 1,1-Dichloropropylene	5.661	75	5049	0.38	ppb	# 66
35) Carbon Tetrachloride	5.655	117	5335	0.40	ppb	# 92
36) tert-Amyl alcohol (TAA)	5.883	59	2987	3.20	ppb	88
37) 1,2-Dichloroethane	5.900	62	4419	0.37	ppb	99
38) Benzene	5.861	78	14796	0.38	ppb	# 1
39) tert-Amyl methyl ether...	5.947	73	10274	0.36	ppb	95
41) Trichloroethylene	6.490	95	3644	0.35	ppb	82
42) Methyl Cyclohexane	6.643	83	5916	0.41	ppb	# 82
43) Methyl Methacrylate	6.807	69	1733m	0.30	ppb	
44) Dibromomethane	6.852	93	1804	0.35	ppb	87
45) Bromodichloromethane	6.999	83	4421	0.33	ppb	# 93
46) 1,2-Dichloropropane	6.718	63	4112	0.34	ppb	# 88
47) 1,4-Dioxane	6.874	88	256m	4.88	ppb	
48) 2-Chloroethyl vinyl ether	7.274	63	1817	0.34	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	5884	0.38	ppb	# 89

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604445.D  
 Acq On : 26 Feb 2018 6:39 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL1  
 Misc : QBQV6022618A 0.5ppb STND AQU  
 ALS Vial : 4 Sample Multiplier: 1

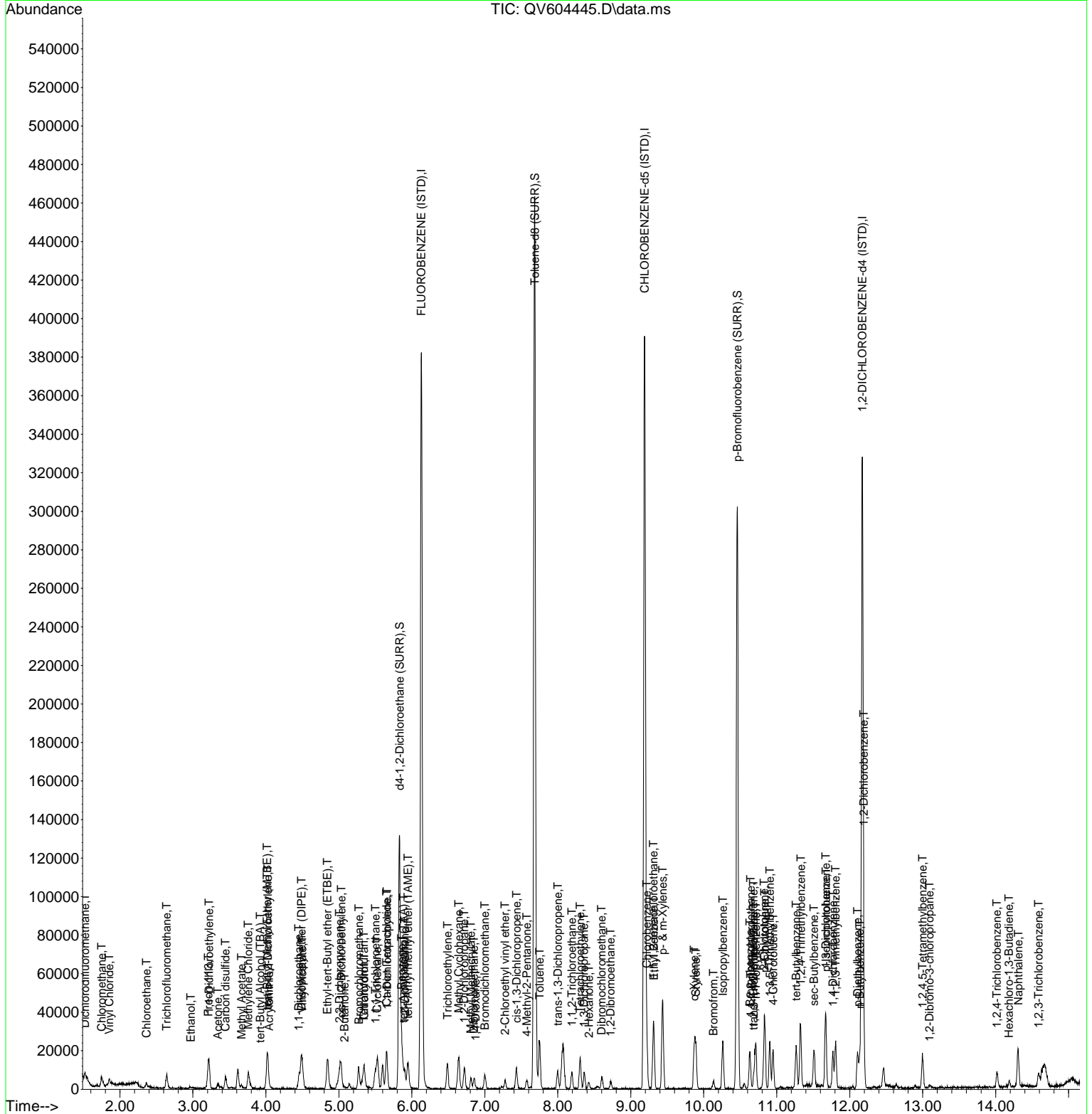
Quant Time: Feb 27 12:07:05 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Thu Feb 15 11:43:21 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) 4-Methyl-2-Pentanone	7.575	43	2964	0.32	ppb	# 82
52) Toluene	7.750	91	17069	0.40	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	4730	0.34	ppb	# 88
54) 1,1,2-Trichloroethane	8.193	97	2601	0.37	ppb	# 73
55) 1,3-Dichloropropane	8.360	76	4583	0.36	ppb	92
56) Tetrachloroethylene	8.304	166	5256	0.40	ppb	97
57) 2-Hexanone	8.426	43	2223	0.33	ppb	# 85
58) Dibromochloromethane	8.599	129	3371	0.36	ppb	# 90
59) 1,2-Dibromoethane	8.724	107	2760	0.38	ppb	95
60) Chlorobenzene	9.219	112	10940	0.40	ppb	# 66
61) 1,1,1,2-tetrachloroethane	9.308	131	3941	0.40	ppb	# 73
62) Ethyl Benzene	9.317	91	17598	0.39	ppb	97
63) p- & m-Xylenes	9.436	91	26964	0.79	ppb	92
64) o-Xylene	9.868	91	12951	0.37	ppb	97
65) Styrene	9.893	104	10883	0.37	ppb	# 77
66) Bromofrom	10.135	173	1923	0.35	ppb	# 78
68) p-Ethyltoluene	10.836	105	15688	0.37	ppb	# 92
69) Isopropylbenzene	10.260	105	17064	0.37	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.641	83	2603	0.32	ppb	# 81
72) Bromobenzene	10.633	77	5803m	0.35	ppb	
73) trans-1,4-Dichloro-2-b...	10.683	75	3010	0.32	ppb	85
74) 1,2,3-Trichloropropane	10.686	110	914m	0.37	ppb	
75) n-Propylbenzene	10.713	91	18718	0.37	ppb	98
76) 2-Chlorotoluene	10.830	91	12077	0.35	ppb	97
77) 4-Chlorotoluene	10.950	91	11342	0.36	ppb	98
78) 1,3,5-Trimethylbenzene	10.903	105	13614	0.37	ppb	95
79) tert-Butylbenzene	11.267	119	11922	0.39	ppb	89
80) 1,2,4-Trimethylbenzene	11.331	105	13305	0.36	ppb	# 76
81) sec-Butylbenzene	11.509	105	14768	0.38	ppb	95
82) 1,3-Dichlorobenzene	11.670	146	7759	0.37	ppb	96
83) p-Isopropyltoluene	11.673	119	13521	0.38	ppb	# 90
84) 1,4-Dichlorobenzene	11.771	146	7973	0.38	ppb	94
85) 1,2,3-Trimethylbenzene	11.807	105	14072	0.34	ppb	90
86) p-Diethylbenzene	12.107	105	6137	0.36	ppb	# 75
87) 1,2-Dichlorobenzene	12.191	146	6796	0.37	ppb	# 85
88) n-Butylbenzene	12.135	91	11762	0.37	ppb	85
89) 1,2-Dibromo-3-chloropr...	13.092	75	325	0.32	ppb	# 62
90) 1,2,4,5-Tetramethylben...	12.998	119	10095	0.33	ppb	# 91
91) 1,2,4-Trichlorobenzene	14.013	180	2899	0.33	ppb	# 89
92) Hexachloro-1,3-Butadiene	14.180	225	775	0.38	ppb	# 57
93) Naphthalene	14.311	128	16928	1.13	ppb	# 88
94) 1,2,3-Trichlorobenzene	14.589	180	2304	0.45	ppb	# 91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
Data File : QV604445.D  
Acq On : 26 Feb 2018 6:39 pm  
InstName : QVOA6  
Operator : AS  
Sample : SEQ-CAL1  
Misc : QBQV6022618A 0.5ppb STND AQU  
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 27 12:07:05 2018  
Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
Quant Title : Volatile Organics EPA 8260C-Waters  
QLast Update : Thu Feb 15 11:43:21 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604446.D  
 Acq On : 26 Feb 2018 7:05 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL2  
 Misc : QBQV6022618A 2.0ppb STND AQU  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 27 12:12:12 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:07:59 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	57438	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.191	117	224845	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	90471	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.831	65	75270	10.21	ppb	0.00
Spiked Amount	10.000	Range	69 - 130	Recovery	=	102.10%
51) Toluene-d8 (SURR)	7.684	98	282078	10.00	ppb	0.00
Spiked Amount	10.000	Range	81 - 117	Recovery	=	100.00%
70) p-Bromofluorobenzene (...)	10.460	95	93118	9.20	ppb	0.00
Spiked Amount	10.000	Range	79 - 122	Recovery	=	92.00%
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.524	85	14206m	2.28	ppb	
3) Chloromethane	1.752	50	19256	1.87	ppb	92
4) Vinyl Chloride	1.852	62	16784m	1.91	ppb	
5) Bromomethane	2.236	94	3334m	0.87	ppb	
6) Chloroethane	2.364	64	10930m	1.81	ppb	
7) Trichlorofluoromethane	2.645	101	24639	2.02	ppb	100
8) Ethanol	2.951	45	4406m	68.91	ppb	
9) Freon-113	3.210	101	15227	1.99	ppb	# 79
10) 1,1-Dichloroethylene	3.215	61	25566	1.89	ppb	# 96
11) Acrolein	3.157	56	1382m	1.52	ppb	
12) Acetone	3.335	43	6055m	2.16	ppb	
13) Iodomethane	3.396	142	2755	0.54	ppb	97
14) Methyl Acetate	3.663	43	8746m	1.61	ppb	
15) Carbon disulfide	3.446	76	32619	1.90	ppb	100
16) tert-Butyl Alcohol (TBA)	3.919	59	1266m	1.46	ppb	
17) Methylene Chloride	3.763	49	22116	1.71	ppb	# 79
18) Acrylonitrile	4.044	53	4028	1.54	ppb	99
19) trans-1,2-Dichloroethy...	4.019	61	22568	1.70	ppb	99
20) tert-Butyl Methyl Ethe...	4.017	73	38954	1.71	ppb	95
21) 1,1-Dichloroethane	4.456	63	30893	1.76	ppb	99
22) Vinyl Acetate	4.503	43	50028	1.54	ppb	100
23) Diisopropyl ether (DIPE)	4.487	45	63736	1.60	ppb	96
24) Ethyl-tert-Butyl ether...	4.843	59	56791	1.60	ppb	# 89
25) cis-1,2-Dichloroethylene	5.029	61	27699	1.74	ppb	94
26) 2-Butanone	5.065	72	1178m	1.47	ppb	
27) 2,2-Dichloropropane	5.010	77	23686	1.78	ppb	# 83
28) Tetrahydrofuran	5.335	42	4129	1.68	ppb	# 64
29) Bromochloromethane	5.269	49	14991	1.84	ppb	94
30) Chloroform	5.346	83	27056	1.79	ppb	# 68
31) 1,1,1-Trichloroethane	5.502	97	24365	1.81	ppb	# 87
32) Cyclohexane	5.533	56	33540	1.88	ppb	84
33) 1,1-Dichloropropylene	5.658	75	21109	1.76	ppb	# 64
35) Carbon Tetrachloride	5.650	117	22289	1.83	ppb	97
36) tert-Amyl alcohol (TAA)	5.883	59	12794	15.32	ppb	# 74
37) 1,2-Dichloroethane	5.906	62	19309	1.77	ppb	99
38) Benzene	5.864	78	61506	1.74	ppb	# 36
39) tert-Amyl methyl ether...	5.945	73	41761	1.60	ppb	# 92
41) Trichloroethylene	6.484	95	16335	1.77	ppb	87
42) Methyl Cyclohexane	6.643	83	24692	1.89	ppb	# 81
43) Methyl Methacrylate	6.807	69	8063	1.58	ppb	# 68
44) Dibromomethane	6.857	93	7870	1.73	ppb	# 87
45) Bromodichloromethane	7.002	83	19594	1.67	ppb	# 95
46) 1,2-Dichloropropane	6.715	63	17991	1.68	ppb	94

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604446.D  
 Acq On : 26 Feb 2018 7:05 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL2  
 Misc : QBQV6022618A 2.0ppb STND AQU  
 ALS Vial : 5 Sample Multiplier: 1

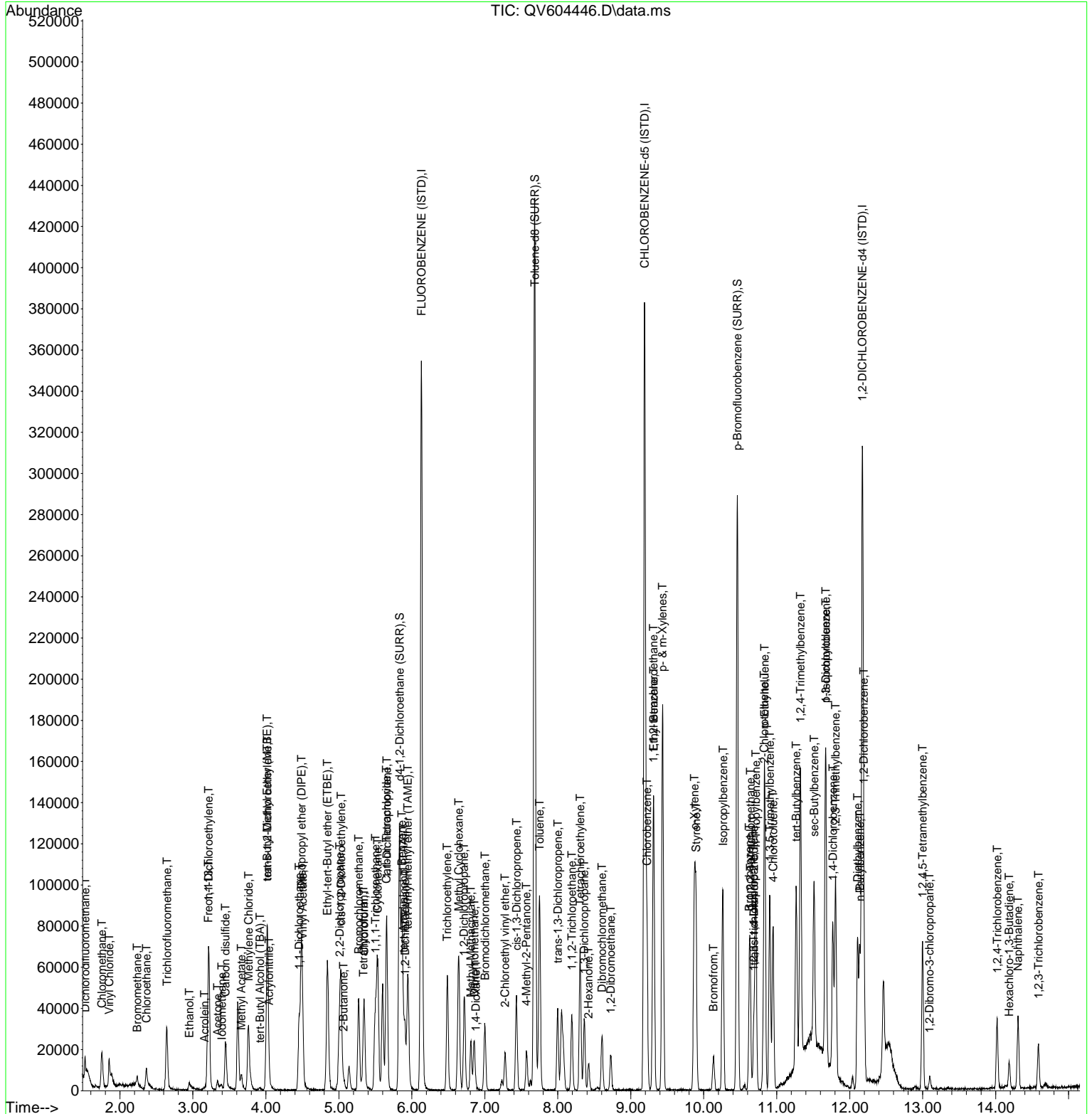
Quant Time: Feb 27 12:12:12 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:07:59 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.877	88	1462m	32.20	ppb	
48) 2-Chloroethyl vinyl ether	7.277	63	7565	1.58	ppb	# 93
49) cis-1,3-Dichloropropene	7.433	75	24186	1.65	ppb	90
50) 4-Methyl-2-Pentanone	7.569	43	13101	1.60	ppb	# 88
52) Toluene	7.750	91	67780	1.78	ppb	98
53) trans-1,3-Dichloropropene	7.998	75	19796	1.61	ppb	# 88
54) 1,1,2-Trichloroethane	8.193	97	11302	1.72	ppb	# 82
55) 1,3-Dichloropropane	8.362	76	19329	1.70	ppb	94
56) Tetrachloroethylene	8.304	166	21912	1.85	ppb	97
57) 2-Hexanone	8.421	43	8993	1.54	ppb	# 67
58) Dibromochloromethane	8.604	129	14492	1.73	ppb	97
59) 1,2-Dibromoethane	8.727	107	11451	1.74	ppb	89
60) Chlorobenzene	9.222	112	43885	1.80	ppb	96
61) 1,1,1,2-tetrachloroethane	9.308	131	15997	1.80	ppb	95
62) Ethyl Benzene	9.314	91	71872	1.79	ppb	94
63) p- & m-Xylenes	9.434	91	109983	3.62	ppb	91
64) o-Xylene	9.870	91	54555	1.77	ppb	97
65) Styrene	9.895	104	46539	1.79	ppb	# 77
66) Bromofrom	10.135	173	8729	1.75	ppb	98
68) p-Ethyltoluene	10.836	105	64445m	1.70	ppb	
69) Isopropylbenzene	10.263	105	72035	1.75	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.638	83	11524	1.64	ppb	# 97
72) Bromobenzene	10.624	77	23847	1.62	ppb	# 68
73) trans-1,4-Dichloro-2-b...	10.688	75	12614	1.54	ppb	# 91
74) 1,2,3-Trichloropropane	10.686	110	3565	1.66	ppb	# 54
75) n-Propylbenzene	10.713	91	75566	1.69	ppb	97
76) 2-Chlorotoluene	10.827	91	52027	1.73	ppb	98
77) 4-Chlorotoluene	10.950	91	47430	1.72	ppb	98
78) 1,3,5-Trimethylbenzene	10.908	105	55532	1.71	ppb	96
79) tert-Butylbenzene	11.267	119	47684	1.77	ppb	88
80) 1,2,4-Trimethylbenzene	11.325	105	56148	1.73	ppb	# 80
81) sec-Butylbenzene	11.512	105	58790	1.71	ppb	# 91
82) 1,3-Dichlorobenzene	11.670	146	32104	1.73	ppb	95
83) p-Isopropyltoluene	11.670	119	55438	1.74	ppb	95
84) 1,4-Dichlorobenzene	11.771	146	31997	1.71	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	58780	1.65	ppb	# 91
86) p-Diethylbenzene	12.107	105	24719	1.61	ppb	# 50
87) 1,2-Dichlorobenzene	12.194	146	28241	1.74	ppb	98
88) n-Butylbenzene	12.138	91	45994	1.63	ppb	89
89) 1,2-Dibromo-3-chloropr...	13.092	75	1446	1.57	ppb	# 67
90) 1,2,4,5-Tetramethylben...	12.998	119	41675	1.58	ppb	92
91) 1,2,4-Trichlorobenzene	14.019	180	12106	1.67	ppb	96
92) Hexachloro-1,3-Butadiene	14.186	225	2715	1.60	ppb	# 74
93) Naphthalene	14.305	128	29344	2.10	ppb	98
94) 1,2,3-Trichlorobenzene	14.589	180	7679	1.63	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
Data File : QV604446.D  
Acq On : 26 Feb 2018 7:05 pm  
InstName : QVOA6  
Operator : AS  
Sample : SEQ-CAL2  
Misc : QBQV6022618A 2.0ppb STND AQU  
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 27 12:12:12 2018  
Quant Method : C:\msdchem\2\METHODS\VQ6L0020.M  
Quant Title : Volatile Organics EPA 8260C-Waters  
QLast Update : Tue Feb 27 11:07:59 2018  
Response via : Initial Calibration





Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604447.D  
 Acq On : 26 Feb 2018 7:31 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL3  
 Misc : QBQV6022618A 4.0ppb STND AQU  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 27 12:16:10 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:12:58 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.134	70	59185	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.188	117	237719	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	95478	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.833	65	80319	10.57	ppb	0.00
Spiked Amount 10.000	Range	69 - 130	Recovery	=	105.70%	
51) Toluene-d8 (SURR)	7.683	98	294292	9.87	ppb	0.00
Spiked Amount 10.000	Range	81 - 117	Recovery	=	98.70%	
70) p-Bromofluorobenzene (...)	10.460	95	97183	9.22	ppb	0.00
Spiked Amount 10.000	Range	79 - 122	Recovery	=	92.20%	
Target Compounds						
2) Dichlorodifluoromethane	1.523	85	27725m	4.30	ppb	Qvalue
3) Chloromethane	1.754	50	35622	3.42	ppb	94
4) Vinyl Chloride	1.852	62	30914	3.48	ppb	98
5) Bromomethane	2.241	94	7039m	1.89	ppb	
6) Chloroethane	2.366	64	20597m	3.40	ppb	
7) Trichlorofluoromethane	2.642	101	46791	3.81	ppb	100
8) Ethanol	2.945	45	10400m	170.41	ppb	
9) Freon-113	3.209	101	28362	3.62	ppb	94
10) 1,1-Dichloroethylene	3.218	61	47452	3.46	ppb	# 95
11) Acrolein	3.157	56	2207	2.47	ppb	91
12) Acetone	3.337	43	9430	3.47	ppb	98
13) Iodomethane	3.393	142	7065	1.40	ppb	90
14) Methyl Acetate	3.663	43	16142	2.99	ppb	99
15) Carbon disulfide	3.449	76	61753	3.55	ppb	100
16) tert-Butyl Alcohol (TBA)	3.916	59	2717	3.21	ppb	# 97
17) Methylene Chloride	3.760	49	41541	3.22	ppb	83
18) Acrylonitrile	4.039	53	8192	3.18	ppb	# 65
19) trans-1,2-Dichloroethy...	4.022	61	43387	3.27	ppb	98
20) tert-Butyl Methyl Ethe...	4.013	73	73969	3.25	ppb	96
21) 1,1-Dichloroethane	4.456	63	58238	3.30	ppb	99
22) Vinyl Acetate	4.503	43	94604	2.99	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	118018	3.06	ppb	97
24) Ethyl-tert-Butyl ether...	4.843	59	106991	3.10	ppb	97
25) cis-1,2-Dichloroethylene	5.032	61	51115	3.20	ppb	# 70
26) 2-Butanone	5.062	72	2610m	3.34	ppb	
27) 2,2-Dichloropropane	5.010	77	45035	3.38	ppb	# 90
28) Tetrahydrofuran	5.330	42	7628m	3.19	ppb	
29) Bromochloromethane	5.271	49	28313	3.48	ppb	93
30) Chloroform	5.346	83	49780	3.26	ppb	# 96
31) 1,1,1-Trichloroethane	5.502	97	46151	3.40	ppb	# 86
32) Cyclohexane	5.530	56	61748	3.41	ppb	84
33) 1,1-Dichloropropylene	5.655	75	40199	3.33	ppb	# 65
35) Carbon Tetrachloride	5.652	117	42739	3.46	ppb	98
36) tert-Amyl alcohol (TAA)	5.880	59	25240	31.48	ppb	# 75
37) 1,2-Dichloroethane	5.908	62	36393	3.32	ppb	99
38) Benzene	5.864	78	115554	3.26	ppb	# 79
39) tert-Amyl methyl ether...	5.944	73	78039	3.08	ppb	97
41) Trichloroethylene	6.487	95	30313	3.17	ppb	86
42) Methyl Cyclohexane	6.643	83	47110	3.46	ppb	85
43) Methyl Methacrylate	6.810	69	15643	3.03	ppb	# 70
44) Dibromomethane	6.851	93	15097	3.22	ppb	# 41
45) Bromodichloromethane	7.002	83	37651	3.13	ppb	# 96
46) 1,2-Dichloropropane	6.721	63	33338	3.03	ppb	95

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604447.D  
 Acq On : 26 Feb 2018 7:31 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL3  
 Misc : QBQV6022618A 4.0ppb STND AQU  
 ALS Vial : 6 Sample Multiplier: 1

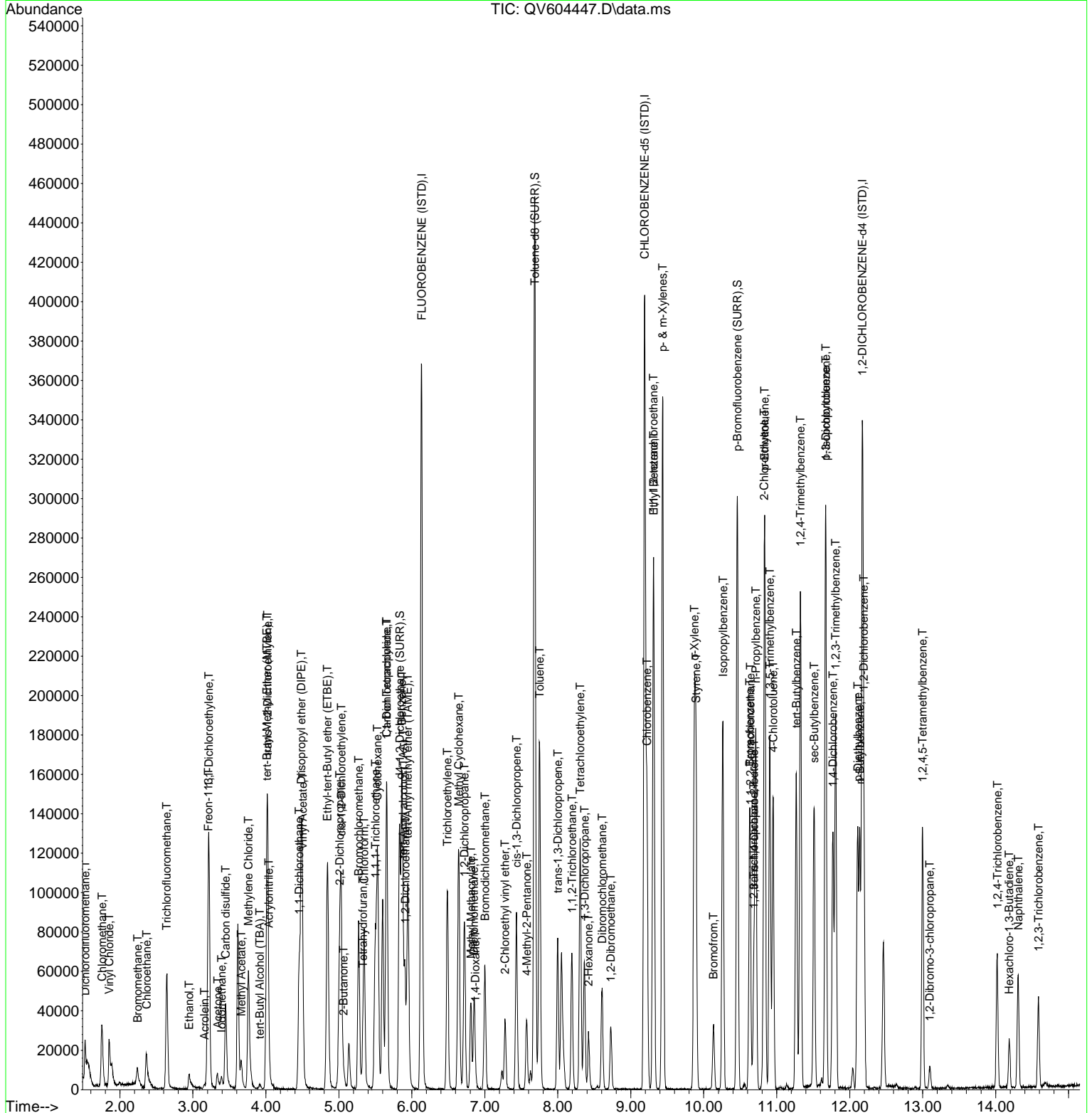
Quant Time: Feb 27 12:16:10 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:12:58 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.871	88	2957	65.76	ppb	91
48) 2-Chloroethyl vinyl ether	7.277	63	13892	2.87	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	45623	3.03	ppb	89
50) 4-Methyl-2-Pentanone	7.575	43	25064	3.02	ppb	# 88
52) Toluene	7.750	91	126045	3.21	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	38544	3.06	ppb	# 88
54) 1,1,2-Trichloroethane	8.195	97	21300	3.16	ppb	95
55) 1,3-Dichloropropane	8.368	76	36411	3.12	ppb	94
56) Tetrachloroethylene	8.304	166	41379	3.35	ppb	# 81
57) 2-Hexanone	8.421	43	18224	3.10	ppb	# 95
58) Dibromochloromethane	8.607	129	28376	3.28	ppb	96
59) 1,2-Dibromoethane	8.727	107	21922	3.24	ppb	88
60) Chlorobenzene	9.222	112	83445	3.31	ppb	93
61) 1,1,1,2-tetrachloroethane	9.311	131	30751	3.35	ppb	95
62) Ethyl Benzene	9.314	91	134293	3.25	ppb	94
63) p- & m-Xylenes	9.436	91	208668	6.66	ppb	91
64) o-Xylene	9.870	91	103810	3.27	ppb	98
65) Styrene	9.895	104	87270	3.27	ppb	# 77
66) Bromofrom	10.134	173	16787	3.25	ppb	# 78
68) p-Ethyltoluene	10.836	105	120005m	3.10	ppb	
69) Isopropylbenzene	10.262	105	136595	3.24	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.638	83	21946	3.10	ppb	# 97
72) Bromobenzene	10.630	77	45105	3.01	ppb	# 70
73) trans-1,4-Dichloro-2-b...	10.688	75	24589	2.98	ppb	# 71
74) 1,2,3-Trichloropropane	10.685	110	7268	3.33	ppb	# 91
75) n-Propylbenzene	10.713	91	144338	3.16	ppb	97
76) 2-Chlorotoluene	10.830	91	95771	3.12	ppb	98
77) 4-Chlorotoluene	10.950	91	86101	3.05	ppb	98
78) 1,3,5-Trimethylbenzene	10.902	105	104479	3.15	ppb	94
79) tert-Butylbenzene	11.270	119	89342	3.22	ppb	88
80) 1,2,4-Trimethylbenzene	11.325	105	103387	3.11	ppb	# 76
81) sec-Butylbenzene	11.512	105	110856	3.15	ppb	96
82) 1,3-Dichlorobenzene	11.670	146	61586	3.22	ppb	95
83) p-Isopropyltoluene	11.670	119	105466	3.23	ppb	94
84) 1,4-Dichlorobenzene	11.770	146	60502	3.14	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	118130	3.28	ppb	# 90
86) p-Diethylbenzene	12.110	105	46619	2.97	ppb	# 81
87) 1,2-Dichlorobenzene	12.193	146	52745	3.15	ppb	98
88) n-Butylbenzene	12.138	91	87216	3.02	ppb	89
89) 1,2-Dibromo-3-chloropr...	13.095	75	2585	2.79	ppb	# 56
90) 1,2,4,5-Tetramethylben...	12.997	119	77835	2.88	ppb	93
91) 1,2,4-Trichlorobenzene	14.021	180	23883	3.18	ppb	96
92) Hexachloro-1,3-Butadiene	14.185	225	5405	3.08	ppb	90
93) Naphthalene	14.311	128	51425	3.65	ppb	98
94) 1,2,3-Trichlorobenzene	14.586	180	16582	3.39	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
Data File : QV604447.D  
Acq On : 26 Feb 2018 7:31 pm  
InstName : QVOA6  
Operator : AS  
Sample : SEQ-CAL3  
Misc : QBQV6022618A 4.0ppb STND AQU  
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 27 12:16:10 2018  
Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
Quant Title : Volatile Organics EPA 8260C-Waters  
QLast Update : Tue Feb 27 11:12:58 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604448.D  
 Acq On : 26 Feb 2018 7:58 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL4  
 Misc : QBQV6022618A 10ppb STND AQU  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 27 12:20:31 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:17:28 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	54341	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	219468	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.171	152	87396	10.00	ppb	-0.01
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.831	65	74334	10.56	ppb	0.00
Spiked Amount 10.000	Range 69	- 130	Recovery	=	105.60%	
51) Toluene-d8 (SURR)	7.681	98	273096	9.93	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery	=	99.30%	
70) p-Bromofluorobenzene (...)	10.457	95	90890	9.55	ppb	-0.01
Spiked Amount 10.000	Range 79	- 122	Recovery	=	95.50%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	63872m	10.76	ppb	
3) Chloromethane	1.757	50	88522	9.49	ppb	95
4) Vinyl Chloride	1.855	62	77124m	9.69	ppb	
5) Bromomethane	2.244	94	19624m	6.12	ppb	
6) Chloroethane	2.361	64	51609	9.59	ppb	95
7) Trichlorofluoromethane	2.642	101	114187	10.36	ppb	100
8) Ethanol	2.937	45	23271	417.43	ppb	100
9) Freon-113	3.210	101	70524	9.92	ppb	# 78
10) 1,1-Dichloroethylene	3.221	61	120847	9.83	ppb	# 96
11) Acrolein	3.154	56	6655m	8.63	ppb	
12) Acetone	3.329	43	25290	10.57	ppb	100
13) Iodomethane	3.393	142	30305	6.91	ppb	99
14) Methyl Acetate	3.660	43	43563	9.13	ppb	99
15) Carbon disulfide	3.452	76	153558	9.81	ppb	100
16) tert-Butyl Alcohol (TBA)	3.908	59	7196	9.53	ppb	# 97
17) Methylene Chloride	3.758	49	106564	9.27	ppb	83
18) Acrylonitrile	4.036	53	22175	9.74	ppb	97
19) trans-1,2-Dichloroethy...	4.022	61	110974	9.38	ppb	# 71
20) tert-Butyl Methyl Ethe...	4.014	73	191596	9.46	ppb	95
21) 1,1-Dichloroethane	4.456	63	150603	9.58	ppb	99
22) Vinyl Acetate	4.495	43	250869	9.11	ppb	100
23) Diisopropyl ether (DIPE)	4.487	45	311285	9.27	ppb	96
24) Ethyl-tert-Butyl ether...	4.843	59	282823	9.38	ppb	# 89
25) cis-1,2-Dichloroethylene	5.032	61	133552	9.42	ppb	# 81
26) 2-Butanone	5.060	72	6999	10.00	ppb	# 1
27) 2,2-Dichloropropane	5.013	77	115282	9.67	ppb	# 83
28) Tetrahydrofuran	5.324	42	18045	8.53	ppb	76
29) Bromochloromethane	5.271	49	69575	9.64	ppb	93
30) Chloroform	5.344	83	128849	9.46	ppb	# 97
31) 1,1,1-Trichloroethane	5.499	97	117622	9.64	ppb	# 86
32) Cyclohexane	5.530	56	153191	9.43	ppb	84
33) 1,1-Dichloropropylene	5.658	75	98010	9.08	ppb	# 60
35) Carbon Tetrachloride	5.652	117	109467	9.85	ppb	# 59
36) tert-Amyl alcohol (TAA)	5.881	59	65443	93.10	ppb	# 74
37) 1,2-Dichloroethane	5.903	62	94064	9.57	ppb	98
38) Benzene	5.864	78	293121	9.28	ppb	# 96
39) tert-Amyl methyl ether...	5.942	73	207659	9.36	ppb	97
41) Trichloroethylene	6.490	95	76588	8.95	ppb	86
42) Methyl Cyclohexane	6.643	83	110811	8.98	ppb	82
43) Methyl Methacrylate	6.807	69	39523	8.61	ppb	# 57
44) Dibromomethane	6.854	93	37813	9.02	ppb	# 85
45) Bromodichloromethane	7.002	83	96669	9.02	ppb	# 95
46) 1,2-Dichloropropane	6.718	63	85405	8.74	ppb	95

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604448.D  
 Acq On : 26 Feb 2018 7:58 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL4  
 Misc : QBQV6022618A 10ppb STND AQU  
 ALS Vial : 7 Sample Multiplier: 1

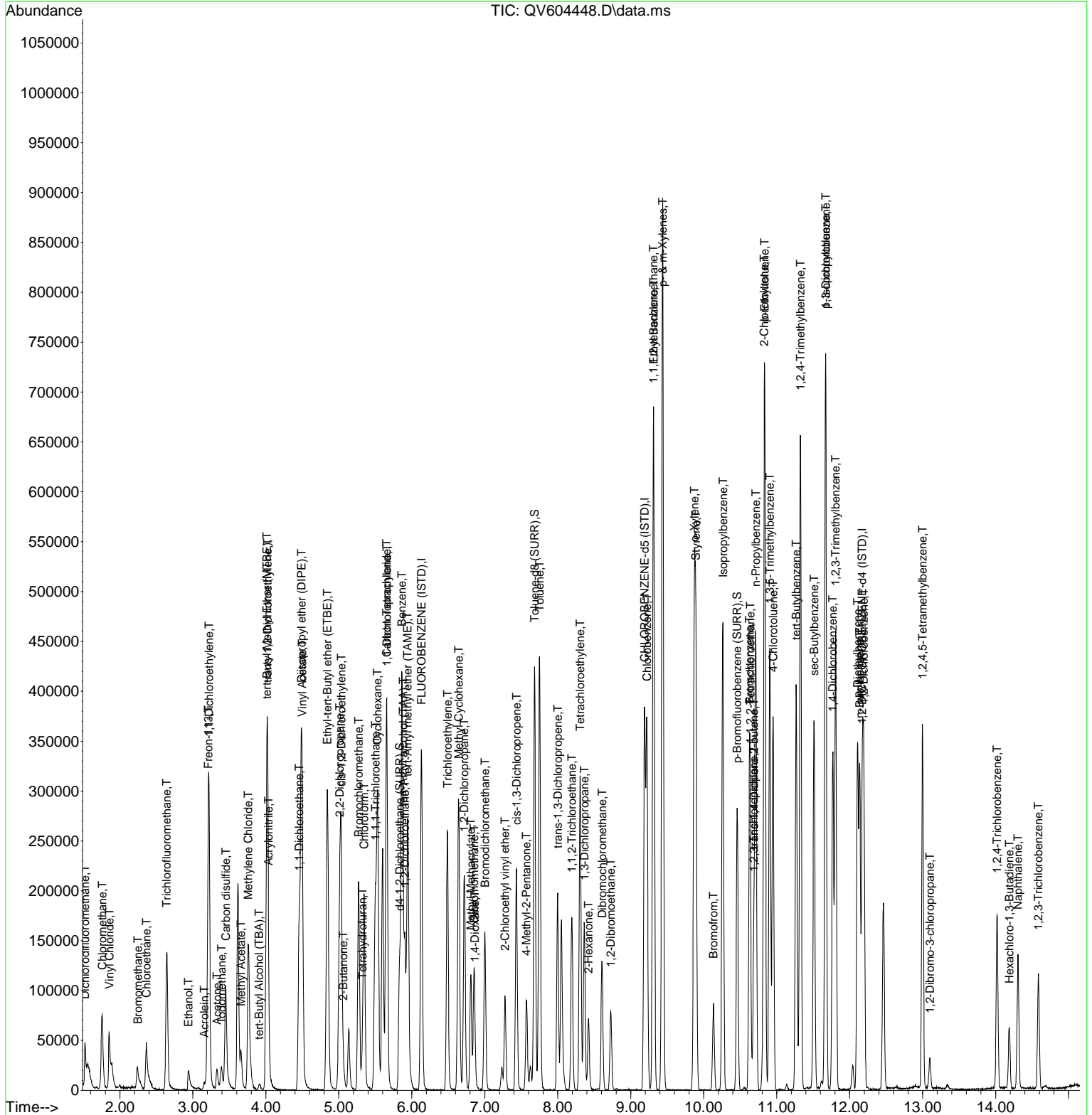
Quant Time: Feb 27 12:20:31 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:17:28 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.866	88	7137	180.03	ppb	87
48) 2-Chloroethyl vinyl ether	7.277	63	36578	8.53	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	118385	8.85	ppb	91
50) 4-Methyl-2-Pentanone	7.569	43	64915	8.84	ppb	95
52) Toluene	7.750	91	319424	9.12	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	99813	8.92	ppb	98
54) 1,1,2-Trichloroethane	8.193	97	55026	9.17	ppb	95
55) 1,3-Dichloropropane	8.365	76	92568	8.90	ppb	93
56) Tetrachloroethylene	8.304	166	103990	9.31	ppb	# 82
57) 2-Hexanone	8.421	43	48722	9.37	ppb	# 94
58) Dibromochloromethane	8.607	129	73704	9.49	ppb	97
59) 1,2-Dibromoethane	8.727	107	56306	9.28	ppb	92
60) Chlorobenzene	9.222	112	214751	9.50	ppb	91
61) 1,1,1,2-tetrachloroethane	9.308	131	77990	9.47	ppb	94
62) Ethyl Benzene	9.314	91	342635	9.29	ppb	94
63) p- & m-Xylenes	9.436	91	523900	18.69	ppb	92
64) o-Xylene	9.870	91	266924	9.43	ppb	98
65) Styrene	9.893	104	225189	9.47	ppb	# 77
66) Bromofrom	10.135	173	43968	9.48	ppb	# 78
68) p-Ethyltoluene	10.836	105	304463	8.93	ppb	# 92
69) Isopropylbenzene	10.263	105	345056	9.27	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.638	83	53819	8.66	ppb	# 69
72) Bromobenzene	10.627	77	112855	8.59	ppb	# 66
73) trans-1,4-Dichloro-2-b...	10.688	75	61604	8.51	ppb	# 81
74) 1,2,3-Trichloropropane	10.686	110	17742	9.17	ppb	# 34
75) n-Propylbenzene	10.713	91	361186	8.97	ppb	97
76) 2-Chlorotoluene	10.830	91	240439	8.90	ppb	97
77) 4-Chlorotoluene	10.950	91	219332	8.82	ppb	98
78) 1,3,5-Trimethylbenzene	10.905	105	263972	9.01	ppb	94
79) tert-Butylbenzene	11.267	119	222977	9.08	ppb	90
80) 1,2,4-Trimethylbenzene	11.326	105	264981	9.05	ppb	# 78
81) sec-Butylbenzene	11.512	105	280197	8.98	ppb	95
82) 1,3-Dichlorobenzene	11.671	146	154817	9.12	ppb	96
83) p-Isopropyltoluene	11.671	119	263150	9.07	ppb	94
84) 1,4-Dichlorobenzene	11.768	146	155798	9.10	ppb	96
85) 1,2,3-Trimethylbenzene	11.807	105	281764	8.94	ppb	# 91
86) p-Diethylbenzene	12.107	105	120489	8.70	ppb	# 52
87) 1,2-Dichlorobenzene	12.194	146	133840	9.01	ppb	# 75
88) n-Butylbenzene	12.135	91	221880	8.69	ppb	89
89) 1,2-Dibromo-3-chloropr...	13.101	75	6998	8.61	ppb	# 57
90) 1,2,4,5-Tetramethylben...	12.998	119	211642	8.88	ppb	92
91) 1,2,4-Trichlorobenzene	14.016	180	63968	9.47	ppb	96
92) Hexachloro-1,3-Butadiene	14.188	225	14123	8.95	ppb	90
93) Naphthalene	14.305	128	115367	9.16	ppb	97
94) 1,2,3-Trichlorobenzene	14.584	180	41538	9.35	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604448.D  
 Acq On : 26 Feb 2018 7:58 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL4  
 Misc : QBQV6022618A 10ppb STND AQU  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 27 12:20:31 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:17:28 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604449.D  
 Acq On : 26 Feb 2018 8:24 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL5  
 Misc : QBQV6022618A 20ppb STND AQU  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 27 12:24:00 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:22:28 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	59413	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	233156	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	91822	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.833	65	78431	10.10	ppb	0.00
Spiked Amount 10.000	Range 69	- 130	Recovery =	101.00%		
51) Toluene-d8 (SURR)	7.683	98	293910	10.06	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery =	100.60%		
70) p-Bromofluorobenzene (...)	10.460	95	95036	9.60	ppb	0.00
Spiked Amount 10.000	Range 79	- 122	Recovery =	96.00%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.523	85	138374m	21.20	ppb	
3) Chloromethane	1.754	50	201215	20.04	ppb	94
4) Vinyl Chloride	1.855	62	177731	20.74	ppb	98
5) Bromomethane	2.244	94	57239m	17.34	ppb	
6) Chloroethane	2.364	64	113747	19.74	ppb	98
7) Trichlorofluoromethane	2.645	101	242300	20.36	ppb	99
8) Ethanol	2.934	45	50336	853.51	ppb	100
9) Freon-113	3.209	101	158823	20.61	ppb	96
10) 1,1-Dichloroethylene	3.221	61	274630	20.83	ppb	# 96
11) Acrolein	3.151	56	13885	17.05	ppb	91
12) Acetone	3.326	43	45673	18.13	ppb	99
13) Iodomethane	3.393	142	100955	22.20	ppb	99
14) Methyl Acetate	3.652	43	91779	18.13	ppb	99
15) Carbon disulfide	3.449	76	365508	21.63	ppb	100
16) tert-Butyl Alcohol (TBA)	3.908	59	14996	18.69	ppb	# 97
17) Methylene Chloride	3.760	49	228540	18.63	ppb	83
18) Acrylonitrile	4.036	53	45319	18.70	ppb	# 93
19) trans-1,2-Dichloroethy...	4.022	61	251000	19.86	ppb	98
20) tert-Butyl Methyl Ethe...	4.011	73	406796	18.76	ppb	96
21) 1,1-Dichloroethane	4.456	63	328916	19.58	ppb	99
22) Vinyl Acetate	4.498	43	531570	18.19	ppb	100
23) Diisopropyl ether (DIPE)	4.487	45	662801	18.54	ppb	# 88
24) Ethyl-tert-Butyl ether...	4.843	59	596125	18.52	ppb	# 89
25) cis-1,2-Dichloroethylene	5.032	61	295298	19.51	ppb	94
26) 2-Butanone	5.057	72	13313	18.05	ppb	# 55
27) 2,2-Dichloropropane	5.012	77	261266	20.47	ppb	# 75
28) Tetrahydrofuran	5.318	42	38226	17.00	ppb	75
29) Bromochloromethane	5.274	49	143036	18.62	ppb	94
30) Chloroform	5.343	83	280864	19.26	ppb	# 98
31) 1,1,1-Trichloroethane	5.499	97	269288	20.55	ppb	# 86
32) Cyclohexane	5.530	56	344567	19.73	ppb	84
33) 1,1-Dichloropropylene	5.655	75	225631	19.56	ppb	# 60
35) Carbon Tetrachloride	5.652	117	248531	20.73	ppb	# 91
36) tert-Amyl alcohol (TAA)	5.880	59	133218	178.69	ppb	89
37) 1,2-Dichloroethane	5.903	62	194537	18.39	ppb	99
38) Benzene	5.864	78	648110	19.24	ppb	# 87
39) tert-Amyl methyl ether...	5.942	73	431105	18.19	ppb	# 92
41) Trichloroethylene	6.487	95	174853	19.75	ppb	85
42) Methyl Cyclohexane	6.643	83	278086	21.68	ppb	82
43) Methyl Methacrylate	6.807	69	85292	18.17	ppb	# 68
44) Dibromomethane	6.851	93	81219	18.73	ppb	# 41
45) Bromodichloromethane	7.002	83	208086	18.77	ppb	# 94
46) 1,2-Dichloropropane	6.721	63	183466	18.27	ppb	95

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604449.D  
 Acq On : 26 Feb 2018 8:24 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL5  
 Misc : QBQV6022618A 20ppb STND AQU  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 27 12:24:00 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:22:28 2018  
 Response via : Initial Calibration

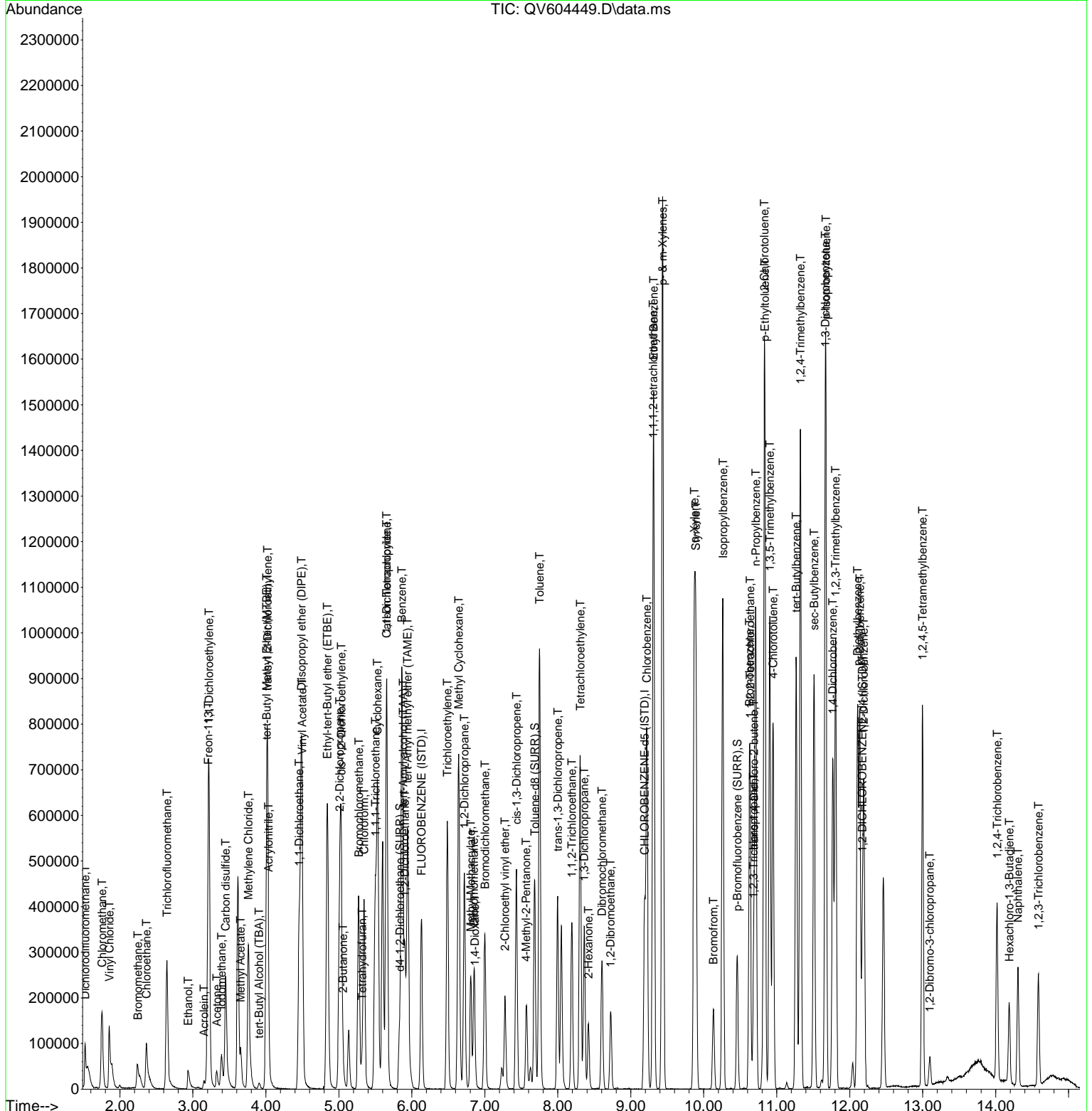
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.865	88	16018	394.48	ppb	92
48) 2-Chloroethyl vinyl ether	7.277	63	76130	17.38	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	256239	18.60	ppb	91
50) 4-Methyl-2-Pentanone	7.566	43	132281	17.59	ppb	# 92
52) Toluene	7.750	91	695932	19.20	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	213457	18.54	ppb	# 92
54) 1,1,2-Trichloroethane	8.192	97	115143	18.61	ppb	95
55) 1,3-Dichloropropane	8.362	76	196324	18.36	ppb	# 83
56) Tetrachloroethylene	8.307	166	238404	20.46	ppb	# 82
57) 2-Hexanone	8.421	43	96484	18.13	ppb	# 95
58) Dibromochloromethane	8.604	129	156596	19.37	ppb	96
59) 1,2-Dibromoethane	8.724	107	118441	18.86	ppb	92
60) Chlorobenzene	9.219	112	459162	19.56	ppb	92
61) 1,1,1,2-tetrachloroethane	9.305	131	167401	19.57	ppb	94
62) Ethyl Benzene	9.314	91	759725	19.93	ppb	94
63) p- & m-Xylenes	9.436	91	1158412	40.02	ppb	92
64) o-Xylene	9.870	91	572832	19.58	ppb	98
65) Styrene	9.890	104	474532	19.30	ppb	# 77
66) Bromofrom	10.132	173	93076	19.27	ppb	97
68) p-Ethyltoluene	10.838	105	694378	20.06	ppb	# 92
69) Isopropylbenzene	10.262	105	776227	20.48	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.635	83	110244	17.56	ppb	# 97
72) Bromobenzene	10.627	77	238275	17.97	ppb	# 66
73) trans-1,4-Dichloro-2-b...	10.688	75	127946	17.55	ppb	# 78
74) 1,2,3-Trichloropropane	10.683	110	36339	18.45	ppb	# 30
75) n-Propylbenzene	10.713	91	833251	20.39	ppb	97
76) 2-Chlorotoluene	10.833	91	527306	19.22	ppb	98
77) 4-Chlorotoluene	10.950	91	475790	18.86	ppb	98
78) 1,3,5-Trimethylbenzene	10.905	105	597487	20.05	ppb	95
79) tert-Butylbenzene	11.267	119	525587	20.99	ppb	90
80) 1,2,4-Trimethylbenzene	11.325	105	585153	19.65	ppb	# 77
81) sec-Butylbenzene	11.512	105	687069	21.63	ppb	95
82) 1,3-Dichlorobenzene	11.665	146	338078	19.50	ppb	96
83) p-Isopropyltoluene	11.673	119	632399	21.40	ppb	95
84) 1,4-Dichlorobenzene	11.768	146	337427	19.27	ppb	97
85) 1,2,3-Trimethylbenzene	11.804	105	615380	19.18	ppb	# 91
86) p-Diethylbenzene	12.107	105	291381	20.69	ppb	# 80
87) 1,2-Dichlorobenzene	12.193	146	287297	18.93	ppb	# 74
88) n-Butylbenzene	12.138	91	546941	21.08	ppb	90
89) 1,2-Dibromo-3-chloropr...	13.098	75	14832	18.00	ppb	# 63
90) 1,2,4,5-Tetramethylben...	12.997	119	476994	19.69	ppb	93
91) 1,2,4-Trichlorobenzene	14.019	180	140468	20.15	ppb	96
92) Hexachloro-1,3-Butadiene	14.188	225	40197	24.74	ppb	92
93) Naphthalene	14.305	128	228531	17.65	ppb	98
94) 1,2,3-Trichlorobenzene	14.586	180	89427	19.41	ppb	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\2\DATA\022618A\  
Data File : QV604449.D  
Acq On : 26 Feb 2018 8:24 pm  
InstName : QVOA6  
Operator : AS  
Sample : SEQ-CAL5  
Misc : QBQV6022618A 20ppb STND AQU  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 27 12:24:00 2018  
Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
Quant Title : Volatile Organics EPA 8260C-Waters  
QLast Update : Tue Feb 27 11:22:28 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604450.D  
 Acq On : 26 Feb 2018 8:51 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL6  
 Misc : QBQV6022618A 40ppb STND AQU  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 27 12:26:24 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:25:27 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	54928	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	216585	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	83877	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.833	65	72744	10.10	ppb	0.00
Spiked Amount 10.000	Range 69	- 130	Recovery =	101.00%		
51) Toluene-d8 (SURR)	7.683	98	272602	10.03	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery =	100.30%		
70) p-Bromofluorobenzene (...)	10.457	95	85332	9.53	ppb	-0.01
Spiked Amount 10.000	Range 79	- 122	Recovery =	95.30%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	276398m	45.64	ppb	
3) Chloromethane	1.752	50	395105	43.03	ppb	95
4) Vinyl Chloride	1.852	62	350377	44.63	ppb	99
5) Bromomethane	2.236	94	135858	46.91	ppb	97
6) Chloroethane	2.358	64	222672	42.71	ppb	98
7) Trichlorofluoromethane	2.642	101	463465	42.52	ppb	99
8) Ethanol	2.934	45	97196	1858.22	ppb	100
9) Freon-113	3.207	101	312910	44.23	ppb	94
10) 1,1-Dichloroethylene	3.218	61	520505	43.51	ppb	# 96
11) Acrolein	3.151	56	28363	39.09	ppb	91
12) Acetone	3.321	43	70118	31.31	ppb	99
13) Iodomethane	3.390	142	224087	55.99	ppb	99
14) Methyl Acetate	3.652	43	178319	39.49	ppb	99
15) Carbon disulfide	3.446	76	694163	44.60	ppb	100
16) tert-Butyl Alcohol (TBA)	3.905	59	28107	39.22	ppb	# 97
17) Methylene Chloride	3.758	49	439351	39.87	ppb	84
18) Acrylonitrile	4.033	53	86560	40.06	ppb	# 93
19) trans-1,2-Dichloroethy...	4.022	61	476108	41.70	ppb	99
20) tert-Butyl Methyl Ethe...	4.008	73	776197	39.91	ppb	96
21) 1,1-Dichloroethane	4.453	63	634694	42.02	ppb	99
22) Vinyl Acetate	4.495	43	1006732	38.68	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	1214180	38.00	ppb	96
24) Ethyl-tert-Butyl ether...	4.840	59	1102583	38.26	ppb	97
25) cis-1,2-Dichloroethylene	5.029	61	558299	40.95	ppb	94
26) 2-Butanone	5.049	72	26624	40.84	ppb	# 72
27) 2,2-Dichloropropane	5.010	77	495720	42.78	ppb	# 83
28) Tetrahydrofuran	5.313	42	69297	34.67	ppb	78
29) Bromochloromethane	5.271	49	260413	37.90	ppb	95
30) Chloroform	5.344	83	540675	41.08	ppb	# 97
31) 1,1,1-Trichloroethane	5.499	97	515261	43.19	ppb	# 86
32) Cyclohexane	5.530	56	670497	42.14	ppb	84
33) 1,1-Dichloropropylene	5.658	75	431667	41.40	ppb	# 58
35) Carbon Tetrachloride	5.650	117	488022	44.59	ppb	98
36) tert-Amyl alcohol (TAA)	5.878	59	252125	380.45	ppb	88
37) 1,2-Dichloroethane	5.903	62	390263	41.08	ppb	99
38) Benzene	5.864	78	1236185	40.79	ppb	# 90
39) tert-Amyl methyl ether...	5.942	73	803373	37.92	ppb	# 92
41) Trichloroethylene	6.487	95	339092	42.05	ppb	86
42) Methyl Cyclohexane	6.643	83	549335	46.08	ppb	82
43) Methyl Methacrylate	6.807	69	163336	38.91	ppb	# 67
44) Dibromomethane	6.852	93	157264	40.14	ppb	# 41
45) Bromodichloromethane	7.002	83	409780	40.93	ppb	# 95
46) 1,2-Dichloropropane	6.721	63	356022	39.41	ppb	# 80

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604450.D  
 Acq On : 26 Feb 2018 8:51 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL6  
 Misc : QBQV6022618A 40ppb STND AQU  
 ALS Vial : 9 Sample Multiplier: 1

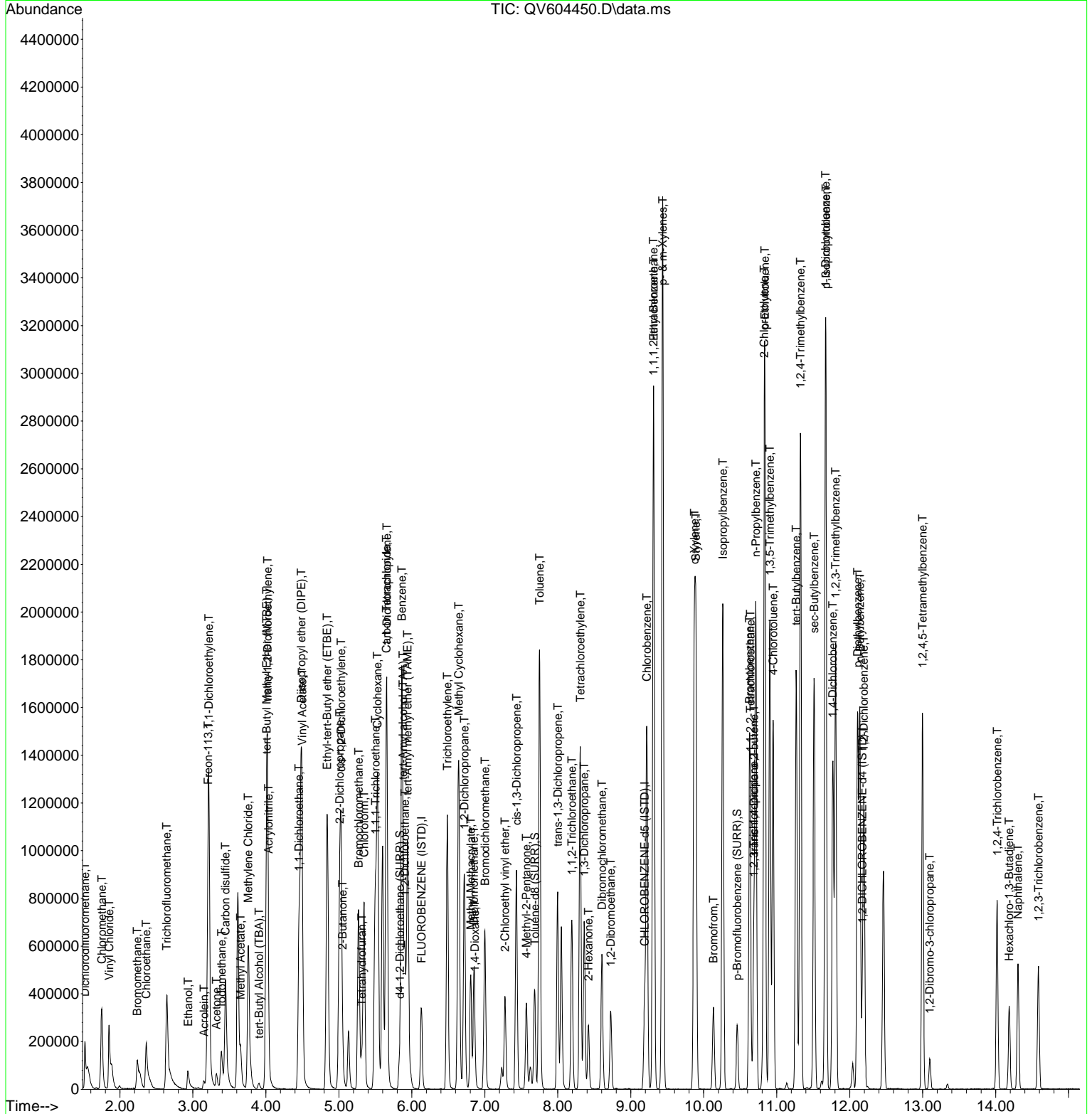
Quant Time: Feb 27 12:26:24 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:25:27 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.865	88	28541	778.52	ppb	91
48) 2-Chloroethyl vinyl ether	7.277	63	146282	37.36	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	490064	39.48	ppb	90
50) 4-Methyl-2-Pentanone	7.569	43	255807	38.14	ppb	95
52) Toluene	7.750	91	1335686	40.61	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	415492	40.12	ppb	98
54) 1,1,2-Trichloroethane	8.193	97	223852	40.13	ppb	96
55) 1,3-Dichloropropane	8.362	76	381079	39.64	ppb	# 83
56) Tetrachloroethylene	8.307	166	463429	43.30	ppb	# 71
57) 2-Hexanone	8.421	43	180396	37.92	ppb	# 95
58) Dibromochloromethane	8.604	129	307893	41.94	ppb	97
59) 1,2-Dibromoethane	8.727	107	230563	40.62	ppb	92
60) Chlorobenzene	9.219	112	879776	41.20	ppb	92
61) 1,1,1,2-tetrachloroethane	9.308	131	326167	41.89	ppb	95
62) Ethyl Benzene	9.314	91	1461966	42.21	ppb	94
63) p- & m-Xylenes	9.436	91	2218636	84.31	ppb	92
64) o-Xylene	9.870	91	1096266	41.38	ppb	98
65) Styrene	9.893	104	905545	40.72	ppb	# 77
66) Bromofrom	10.135	173	185683	42.36	ppb	# 78
68) p-Ethyltoluene	10.838	105	1317659	42.55	ppb	# 92
69) Isopropylbenzene	10.260	105	1472621	43.41	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.638	83	212284	38.59	ppb	# 97
72) Bromobenzene	10.627	77	461748	39.56	ppb	# 66
73) trans-1,4-Dichloro-2-b...	10.688	75	246956	38.73	ppb	# 77
74) 1,2,3-Trichloropropane	10.685	110	70280	40.27	ppb	# 73
75) n-Propylbenzene	10.713	91	1571681	43.00	ppb	97
76) 2-Chlorotoluene	10.830	91	1009116	41.41	ppb	98
77) 4-Chlorotoluene	10.950	91	912649	40.80	ppb	98
78) 1,3,5-Trimethylbenzene	10.905	105	1141937	42.87	ppb	95
79) tert-Butylbenzene	11.267	119	1000859	44.39	ppb	89
80) 1,2,4-Trimethylbenzene	11.325	105	1121476	42.23	ppb	# 77
81) sec-Butylbenzene	11.512	105	1319337	45.99	ppb	96
82) 1,3-Dichlorobenzene	11.668	146	651296	42.07	ppb	96
83) p-Isopropyltoluene	11.673	119	1212162	45.45	ppb	95
84) 1,4-Dichlorobenzene	11.768	146	652265	41.76	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	1145533	40.03	ppb	# 91
86) p-Diethylbenzene	12.107	105	558297	44.09	ppb	# 51
87) 1,2-Dichlorobenzene	12.193	146	562078	41.61	ppb	98
88) n-Butylbenzene	12.138	91	1052998	45.11	ppb	91
89) 1,2-Dibromo-3-chloropr...	13.098	75	29545	40.65	ppb	# 50
90) 1,2,4,5-Tetramethylben...	12.998	119	927206	42.85	ppb	93
91) 1,2,4-Trichlorobenzene	14.019	180	283886	45.19	ppb	96
92) Hexachloro-1,3-Butadiene	14.186	225	80447	53.38	ppb	91
93) Naphthalene	14.305	128	457330	39.52	ppb	98
94) 1,2,3-Trichlorobenzene	14.586	180	185335	44.56	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
Data File : QV604450.D  
Acq On : 26 Feb 2018 8:51 pm  
InstName : QVOA6  
Operator : AS  
Sample : SEQ-CAL6  
Misc : QBQV6022618A 40ppb STND AQU  
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 27 12:26:24 2018  
Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
Quant Title : Volatile Organics EPA 8260C-Waters  
QLast Update : Tue Feb 27 11:25:27 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604451.D  
 Acq On : 26 Feb 2018 9:17 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL7  
 Misc : QBQV6022618A 80ppb STND AQU  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 27 12:28:41 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:27:45 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	57387	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	221669	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	87220	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.833	65	77372	10.24	ppb	0.00
Spiked Amount 10.000	Range 69	- 130	Recovery =	102.40%		
51) Toluene-d8 (SURR)	7.681	98	280865	10.09	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery =	100.90%		
70) p-Bromofluorobenzene (...)	10.457	95	87382	9.50	ppb	-0.01
Spiked Amount 10.000	Range 79	- 122	Recovery =	95.00%		
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	592889m	91.66	ppb	
3) Chloromethane	1.752	50	858456	88.94	ppb	94
4) Vinyl Chloride	1.852	62	748830	90.39	ppb	99
5) Bromomethane	2.236	94	340317m	115.17	ppb	
6) Chloroethane	2.361	64	463732	85.34	ppb	98
7) Trichlorofluoromethane	2.645	101	971956	84.81	ppb	99
8) Ethanol	2.931	45	207985	3844.59	ppb	100
9) Freon-113	3.210	101	673296	90.36	ppb	95
10) 1,1-Dichloroethylene	3.221	61	1059472	84.72	ppb	# 96
11) Acrolein	3.151	56	67521	91.27	ppb	92
12) Acetone	3.321	43	144609	62.54	ppb	98
13) Iodomethane	3.393	142	466349	114.50	ppb	99
14) Methyl Acetate	3.652	43	367995	79.12	ppb	99
15) Carbon disulfide	3.449	76	1468047	89.29	ppb	100
16) tert-Butyl Alcohol (TBA)	3.902	59	61475	83.44	ppb	# 97
17) Methylene Chloride	3.760	49	931943	81.72	ppb	84
18) Acrylonitrile	4.033	53	186832	83.89	ppb	# 60
19) trans-1,2-Dichloroethy...	4.022	61	1034925	87.27	ppb	98
20) tert-Butyl Methyl Ethe...	4.008	73	1680368	83.46	ppb	96
21) 1,1-Dichloroethane	4.453	63	1357279	86.67	ppb	100
22) Vinyl Acetate	4.492	43	2129454	79.68	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	2564454	78.25	ppb	97
24) Ethyl-tert-Butyl ether...	4.840	59	2362230	79.67	ppb	# 89
25) cis-1,2-Dichloroethylene	5.029	61	1199041	84.92	ppb	93
26) 2-Butanone	5.051	72	56166	83.16	ppb	# 70
27) 2,2-Dichloropropane	5.010	77	1065482	87.81	ppb	# 83
28) Tetrahydrofuran	5.313	42	152872	74.77	ppb	76
29) Bromochloromethane	5.274	49	525842	74.23	ppb	95
30) Chloroform	5.344	83	1154590	84.40	ppb	# 96
31) 1,1,1-Trichloroethane	5.499	97	1123371	89.94	ppb	98
32) Cyclohexane	5.530	56	1434818	86.49	ppb	84
33) 1,1-Dichloropropylene	5.658	75	934928	86.33	ppb	# 58
35) Carbon Tetrachloride	5.652	117	1059349	92.00	ppb	99
36) tert-Amyl alcohol (TAA)	5.878	59	542186	794.71	ppb	88
37) 1,2-Dichloroethane	5.906	62	846679	85.70	ppb	99
38) Benzene	5.861	78	2630559	83.77	ppb	# 91
39) tert-Amyl methyl ether...	5.942	73	1715414	78.78	ppb	# 92
41) Trichloroethylene	6.487	95	729216	88.48	ppb	86
42) Methyl Cyclohexane	6.640	83	1175535	95.19	ppb	82
43) Methyl Methacrylate	6.807	69	350406	82.73	ppb	# 68
44) Dibromomethane	6.851	93	333472	83.66	ppb	# 41
45) Bromodichloromethane	6.999	83	877491	86.14	ppb	# 95
46) 1,2-Dichloropropane	6.721	63	759308	83.20	ppb	# 81

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604451.D  
 Acq On : 26 Feb 2018 9:17 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL7  
 Misc : QBQV6022618A 80ppb STND AQU  
 ALS Vial : 10 Sample Multiplier: 1

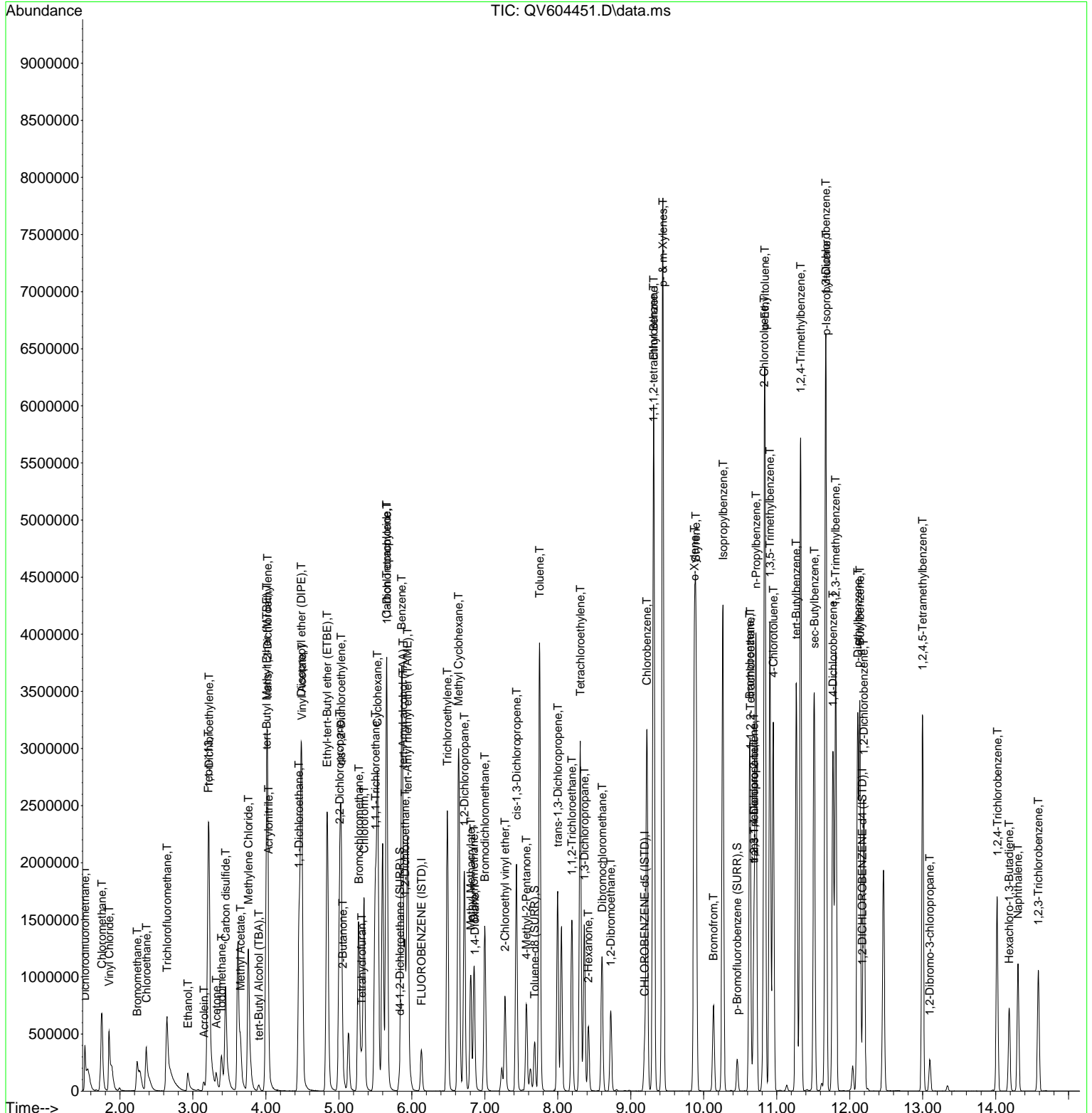
Quant Time: Feb 27 12:28:41 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:27:45 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.863	88	58810	1584.29	ppb	88
48) 2-Chloroethyl vinyl ether	7.277	63	306984	78.25	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	1031131	82.12	ppb	89
50) 4-Methyl-2-Pentanone	7.569	43	536389	79.54	ppb	96
52) Toluene	7.750	91	2814786	84.06	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	885348	84.43	ppb	# 88
54) 1,1,2-Trichloroethane	8.193	97	466745	82.38	ppb	95
55) 1,3-Dichloropropane	8.365	76	789397	81.08	ppb	# 83
56) Tetrachloroethylene	8.307	166	987008	89.70	ppb	# 71
57) 2-Hexanone	8.418	43	378244	78.84	ppb	# 95
58) Dibromochloromethane	8.607	129	658915	87.75	ppb	97
59) 1,2-Dibromoethane	8.727	107	485223	83.86	ppb	92
60) Chlorobenzene	9.219	112	1819744	83.51	ppb	92
61) 1,1,1,2-tetrachloroethane	9.308	131	678983	85.33	ppb	95
62) Ethyl Benzene	9.314	91	3005761	85.01	ppb	94
63) p- & m-Xylenes	9.439	91	4553823	169.60	ppb	92
64) o-Xylene	9.870	91	2240094	83.09	ppb	98
65) Styrene	9.893	104	1856370	82.09	ppb	# 77
66) Bromofrom	10.135	173	393807	87.67	ppb	# 78
68) p-Ethyltoluene	10.838	105	2708642	84.68	ppb	# 92
69) Isopropylbenzene	10.263	105	3020979	85.80	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.638	83	443372	78.79	ppb	# 97
72) Bromobenzene	10.630	77	959319	80.31	ppb	# 66
73) trans-1,4-Dichloro-2-b...	10.688	75	520586	79.93	ppb	# 78
74) 1,2,3-Trichloropropane	10.688	110	147065	81.54	ppb	# 74
75) n-Propylbenzene	10.716	91	3237631	85.53	ppb	97
76) 2-Chlorotoluene	10.830	91	2081417	82.93	ppb	98
77) 4-Chlorotoluene	10.953	91	1901076	82.59	ppb	98
78) 1,3,5-Trimethylbenzene	10.908	105	2366343	85.78	ppb	95
79) tert-Butylbenzene	11.267	119	2058099	87.55	ppb	90
80) 1,2,4-Trimethylbenzene	11.328	105	2335110	85.09	ppb	# 77
81) sec-Butylbenzene	11.515	105	2718050	90.61	ppb	96
82) 1,3-Dichlorobenzene	11.670	146	1377086	85.97	ppb	96
83) p-Isopropyltoluene	11.676	119	2511914	90.21	ppb	95
84) 1,4-Dichlorobenzene	11.771	146	1380633	85.38	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	2377985	80.90	ppb	# 91
86) p-Diethylbenzene	12.110	105	1172192	89.37	ppb	# 51
87) 1,2-Dichlorobenzene	12.193	146	1183406	84.65	ppb	98
88) n-Butylbenzene	12.138	91	2201095	90.62	ppb	91
89) 1,2-Dibromo-3-chloropr...	13.098	75	66289	88.63	ppb	# 67
90) 1,2,4,5-Tetramethylben...	12.997	119	1955272	87.66	ppb	93
91) 1,2,4-Trichlorobenzene	14.021	180	610648	92.90	ppb	96
92) Hexachloro-1,3-Butadiene	14.185	225	173070	106.70	ppb	91
93) Naphthalene	14.305	128	973906	80.62	ppb	98
94) 1,2,3-Trichlorobenzene	14.583	180	395998	90.58	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
Data File : QV604451.D  
Acq On : 26 Feb 2018 9:17 pm  
InstName : QVOA6  
Operator : AS  
Sample : SEQ-CAL7  
Misc : QBQV6022618A 80ppb STND AQU  
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Feb 27 12:28:41 2018  
Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
Quant Title : Volatile Organics EPA 8260C-Waters  
QLast Update : Tue Feb 27 11:27:45 2018  
Response via : Initial Calibration



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604452.D  
 Acq On : 26 Feb 2018 9:43 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL8  
 Misc : QBQV6022618A 120ppb STND AQU  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 27 12:31:30 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:30:22 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	55386	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.191	117	209615	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	85159	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.833	65	74086	10.09	ppb	0.00
Spiked Amount 10.000	Range	69 - 130	Recovery	=	100.90%	
51) Toluene-d8 (SURR)	7.683	98	269161	10.22	ppb	0.00
Spiked Amount 10.000	Range	81 - 117	Recovery	=	102.20%	
70) p-Bromofluorobenzene (...)	10.457	95	83352	9.38	ppb	-0.01
Spiked Amount 10.000	Range	79 - 122	Recovery	=	93.80%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	874235m	137.39	ppb	
3) Chloromethane	1.752	50	1313816	141.42	ppb	95
4) Vinyl Chloride	1.852	62	1089967	135.43	ppb	99
5) Bromomethane	2.230	94	537352m	192.45	ppb	
6) Chloroethane	2.358	64	689087	132.45	ppb	98
7) Trichlorofluoromethane	2.645	101	1461110	131.56	ppb	99
8) Ethanol	2.929	45	340890	6770.16	ppb	100
9) Freon-113	3.210	101	987683	136.47	ppb	# 78
10) 1,1-Dichloroethylene	3.221	61	1560566	129.66	ppb	# 96
11) Acrolein	3.146	56	106625	153.67	ppb	92
12) Acetone	3.321	43	221833	102.50	ppb	98
13) Iodomethane	3.390	142	632536	166.66	ppb	99
14) Methyl Acetate	3.652	43	540397	123.59	ppb	99
15) Carbon disulfide	3.449	76	2254893	141.41	ppb	100
16) tert-Butyl Alcohol (TBA)	3.902	59	93631	135.54	ppb	# 97
17) Methylene Chloride	3.758	49	1387337	128.26	ppb	84
18) Acrylonitrile	4.033	53	275075	130.87	ppb	# 60
19) trans-1,2-Dichloroethy...	4.022	61	1553002	136.99	ppb	98
20) tert-Butyl Methyl Ethe...	4.008	73	2515300	131.61	ppb	96
21) 1,1-Dichloroethane	4.456	63	1888159	126.68	ppb	100
22) Vinyl Acetate	4.492	43	3148642	125.51	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	3755987	121.93	ppb	97
24) Ethyl-tert-Butyl ether...	4.843	59	3520077	125.87	ppb	# 89
25) cis-1,2-Dichloroethylene	5.032	61	1735113	129.28	ppb	93
26) 2-Butanone	5.051	72	82957	130.12	ppb	# 70
27) 2,2-Dichloropropane	5.010	77	1610330	138.07	ppb	# 83
28) Tetrahydrofuran	5.310	42	229805	120.20	ppb	77
29) Bromochloromethane	5.274	49	773351	115.77	ppb	95
30) Chloroform	5.346	83	1717883	131.66	ppb	# 97
31) 1,1,1-Trichloroethane	5.499	97	1681475	139.57	ppb	# 86
32) Cyclohexane	5.530	56	2100425	131.76	ppb	85
33) 1,1-Dichloropropylene	5.655	75	1395321	134.70	ppb	# 58
35) Carbon Tetrachloride	5.652	117	1588502	142.25	ppb	99
36) tert-Amyl alcohol (TAA)	5.878	59	818004	1278.32	ppb	# 75
37) 1,2-Dichloroethane	5.906	62	1254566	133.23	ppb	99
38) Benzene	5.864	78	3882271	129.84	ppb	# 91
39) tert-Amyl methyl ether...	5.942	73	2574622	125.75	ppb	# 92
41) Trichloroethylene	6.487	95	1093717	141.43	ppb	86
42) Methyl Cyclohexane	6.643	83	1729841	146.60	ppb	82
43) Methyl Methacrylate	6.807	69	515131	132.11	ppb	# 57
44) Dibromomethane	6.854	93	497249	134.30	ppb	# 84
45) Bromodichloromethane	6.999	83	1307654	137.88	ppb	# 94
46) 1,2-Dichloropropane	6.721	63	1123390	132.95	ppb	95



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604452.D  
 Acq On : 26 Feb 2018 9:43 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL8  
 Misc : QBQV6022618A 120ppb STND AQU  
 ALS Vial : 11 Sample Multiplier: 1

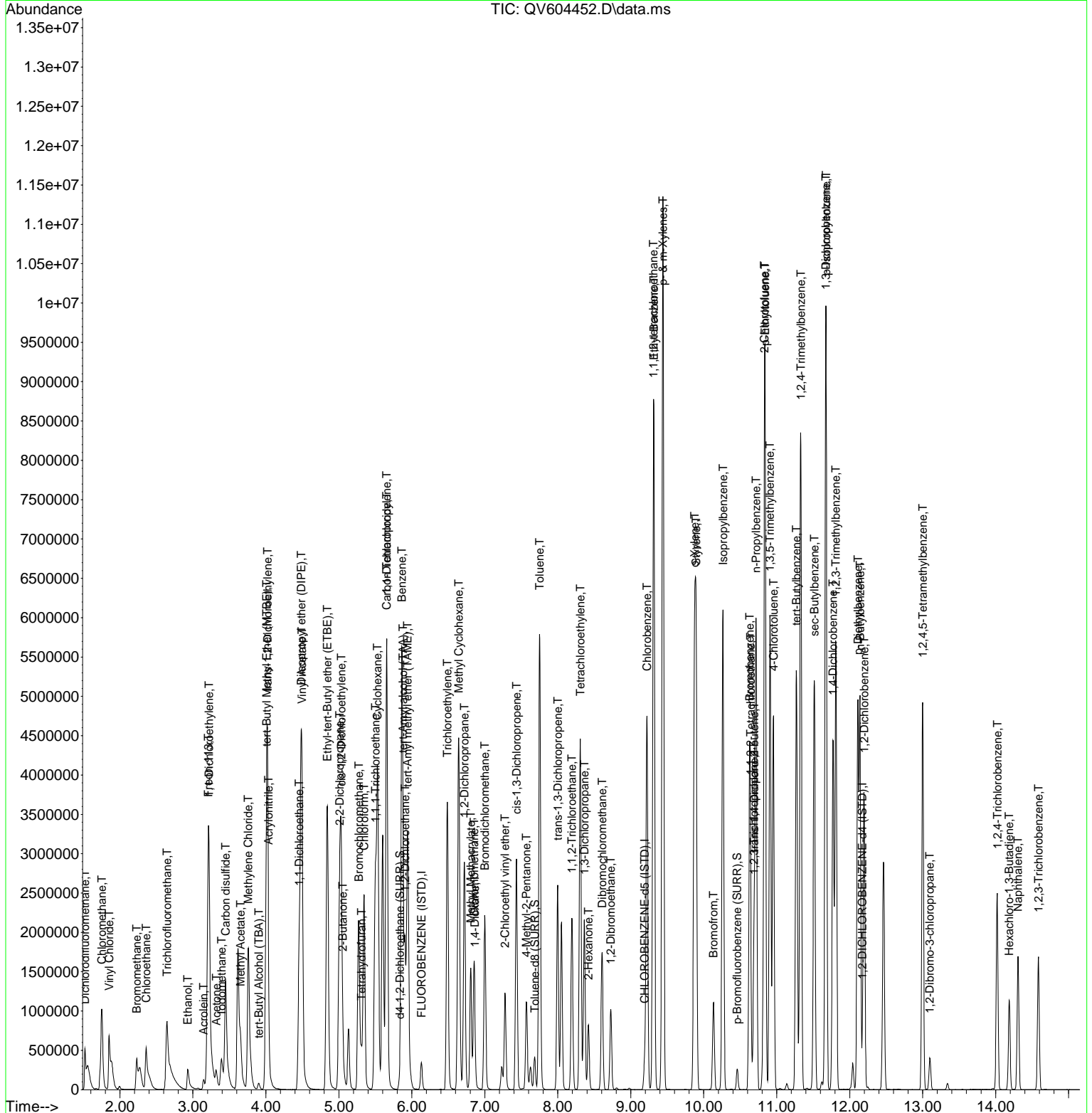
Quant Time: Feb 27 12:31:30 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:30:22 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.863	88	100789	2947.27	ppb	90
48) 2-Chloroethyl vinyl ether	7.277	63	446087	124.39	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	1533462	132.12	ppb	90
50) 4-Methyl-2-Pentanone	7.569	43	783891	126.69	ppb	96
52) Toluene	7.750	91	4118605	131.67	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	1304006	134.29	ppb	98
54) 1,1,2-Trichloroethane	8.193	97	687391	130.83	ppb	95
55) 1,3-Dichloropropane	8.365	76	1159257	128.85	ppb	# 83
56) Tetrachloroethylene	8.309	166	1470695	141.38	ppb	# 81
57) 2-Hexanone	8.421	43	548002	124.18	ppb	# 95
58) Dibromochloromethane	8.607	129	969655	137.91	ppb	97
59) 1,2-Dibromoethane	8.727	107	709831	131.77	ppb	93
60) Chlorobenzene	9.222	112	2674070	131.17	ppb	92
61) 1,1,1,2-tetrachloroethane	9.311	131	996996	133.67	ppb	95
62) Ethyl Benzene	9.317	91	4373846	132.08	ppb	94
63) p- & m-Xylenes	9.442	91	6613955	262.88	ppb	92
64) o-Xylene	9.873	91	3275011	130.14	ppb	98
65) Styrene	9.895	104	2716964	128.91	ppb	# 77
66) Bromofrom	10.132	173	584274	139.00	ppb	97
68) p-Ethyltoluene	10.841	105	3980422	129.27	ppb	# 92
69) Isopropylbenzene	10.263	105	4416080	129.57	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.641	83	651609	122.15	ppb	# 68
72) Bromobenzene	10.630	77	1412127	124.30	ppb	# 65
73) trans-1,4-Dichloro-2-b...	10.691	75	771436	125.12	ppb	# 78
74) 1,2,3-Trichloropropane	10.688	110	215043	124.39	ppb	# 29
75) n-Propylbenzene	10.716	91	4759984	130.27	ppb	97
76) 2-Chlorotoluene	10.833	91	3076236	127.77	ppb	98
77) 4-Chlorotoluene	10.955	91	2805917	127.25	ppb	98
78) 1,3,5-Trimethylbenzene	10.908	105	3482553	130.75	ppb	95
79) tert-Butylbenzene	11.270	119	3045980	133.32	ppb	90
80) 1,2,4-Trimethylbenzene	11.331	105	3455888	130.73	ppb	# 78
81) sec-Butylbenzene	11.515	105	3998450	136.72	ppb	96
82) 1,3-Dichlorobenzene	11.670	146	2039989	132.04	ppb	96
83) p-Isopropyltoluene	11.676	119	3702798	136.49	ppb	95
84) 1,4-Dichlorobenzene	11.771	146	2047695	131.55	ppb	97
85) 1,2,3-Trimethylbenzene	11.810	105	3539066	125.97	ppb	91
86) p-Diethylbenzene	12.113	105	1734881	136.78	ppb	# 51
87) 1,2-Dichlorobenzene	12.199	146	1764215	131.22	ppb	# 74
88) n-Butylbenzene	12.141	91	3260119	138.17	ppb	91
89) 1,2-Dibromo-3-chloropr...	13.098	75	97313	135.61	ppb	# 64
90) 1,2,4,5-Tetramethylben...	13.000	119	2914484	135.95	ppb	93
91) 1,2,4-Trichlorobenzene	14.021	180	925050	144.17	ppb	96
92) Hexachloro-1,3-Butadiene	14.186	225	264925	162.79	ppb	92
93) Naphthalene	14.305	128	1487635	126.53	ppb	98
94) 1,2,3-Trichlorobenzene	14.586	180	612196	143.03	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604452.D  
 Acq On : 26 Feb 2018 9:43 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL8  
 Misc : QBQV6022618A 120ppb STND AQU  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: Feb 27 12:31:30 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:30:22 2018  
 Response via : Initial Calibration



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604453.D  
 Acq On : 26 Feb 2018 10:10 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL9  
 Misc : QBQV6022618A 160ppb STND AQU  
 ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 27 12:36:35 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:33:10 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.128	70	55457	10.00	ppb	0.00
40) CHLOROBENZENE-d5 (ISTD)	9.191	117	208158	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.177	152	85593	10.00	ppb	# 0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.833	65	75656	10.25	ppb	0.00
Spiked Amount 10.000	Range	69 - 130	Recovery	=	102.50%	
51) Toluene-d8 (SURR)	7.684	98	270791	10.34	ppb	0.00
Spiked Amount 10.000	Range	81 - 117	Recovery	=	103.40%	
70) p-Bromofluorobenzene (...)	10.463	95	84985	9.64	ppb	0.00
Spiked Amount 10.000	Range	79 - 122	Recovery	=	96.40%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	1222445m	185.93	ppb	
3) Chloromethane	1.752	50	1815575	191.77	ppb	94
4) Vinyl Chloride	1.852	62	1453132	177.09	ppb	99
5) Bromomethane	2.228	94	752987m	265.83	ppb	
6) Chloroethane	2.358	64	935914	177.92	ppb	98
7) Trichlorofluoromethane	2.645	101	2014060	177.74	ppb	100
8) Ethanol	2.931	45	456862	8995.04	ppb	100
9) Freon-113	3.207	101	1386164	188.03	ppb	# 67
10) 1,1-Dichloroethylene	3.218	61	2113252	173.14	ppb	# 96
11) Acrolein	3.146	56	147895	214.35	ppb	91
12) Acetone	3.318	43	297174	138.02	ppb	98
13) Iodomethane	3.390	142	847476	226.73	ppb	99
14) Methyl Acetate	3.652	43	733395	168.77	ppb	99
15) Carbon disulfide	3.446	76	3049378	186.60	ppb	100
16) tert-Butyl Alcohol (TBA)	3.900	59	128399	185.80	ppb	# 97
17) Methylene Chloride	3.758	49	1865470	172.17	ppb	84
18) Acrylonitrile	4.033	53	375147	178.94	ppb	# 60
19) trans-1,2-Dichloroethy...	4.022	61	2005548	174.94	ppb	98
20) tert-Butyl Methyl Ethe...	4.005	73	3420745	178.33	ppb	96
21) 1,1-Dichloroethane	4.456	63	2446071	163.00	ppb	100
22) Vinyl Acetate	4.495	43	4207040	168.94	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	5007161	163.66	ppb	97
24) Ethyl-tert-Butyl ether...	4.840	59	4765118	170.95	ppb	# 89
25) cis-1,2-Dichloroethylene	5.032	61	2307429	171.08	ppb	93
26) 2-Butanone	5.051	72	111522	175.15	ppb	# 69
27) 2,2-Dichloropropane	5.010	77	2172882	183.36	ppb	# 83
28) Tetrahydrofuran	5.307	42	294332	155.46	ppb	79
29) Bromochloromethane	5.274	49	1018919	152.85	ppb	96
30) Chloroform	5.344	83	2280908	173.68	ppb	# 97
31) 1,1,1-Trichloroethane	5.499	97	2290089	186.83	ppb	# 86
32) Cyclohexane	5.530	56	2913574	181.19	ppb	85
33) 1,1-Dichloropropylene	5.658	75	1904929	182.24	ppb	# 58
35) Carbon Tetrachloride	5.655	117	2178710	190.84	ppb	# 91
36) tert-Amyl alcohol (TAA)	5.881	59	1104420	1728.96	ppb	88
37) 1,2-Dichloroethane	5.906	62	1707709	180.23	ppb	99
38) Benzene	5.864	78	5205526	173.25	ppb	# 91
39) tert-Amyl methyl ether...	5.942	73	3470539	170.25	ppb	97
41) Trichloroethylene	6.487	95	1488459	191.90	ppb	86
42) Methyl Cyclohexane	6.643	83	2413557	201.37	ppb	82
43) Methyl Methacrylate	6.807	69	699059	181.81	ppb	# 67
44) Dibromomethane	6.852	93	668011	181.25	ppb	# 85
45) Bromodichloromethane	7.002	83	1775672	187.88	ppb	# 95
46) 1,2-Dichloropropane	6.721	63	1504284	179.67	ppb	96

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604453.D  
 Acq On : 26 Feb 2018 10:10 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CAL9  
 Misc : QBQV6022618A 160ppb STND AQU  
 ALS Vial : 12 Sample Multiplier: 1

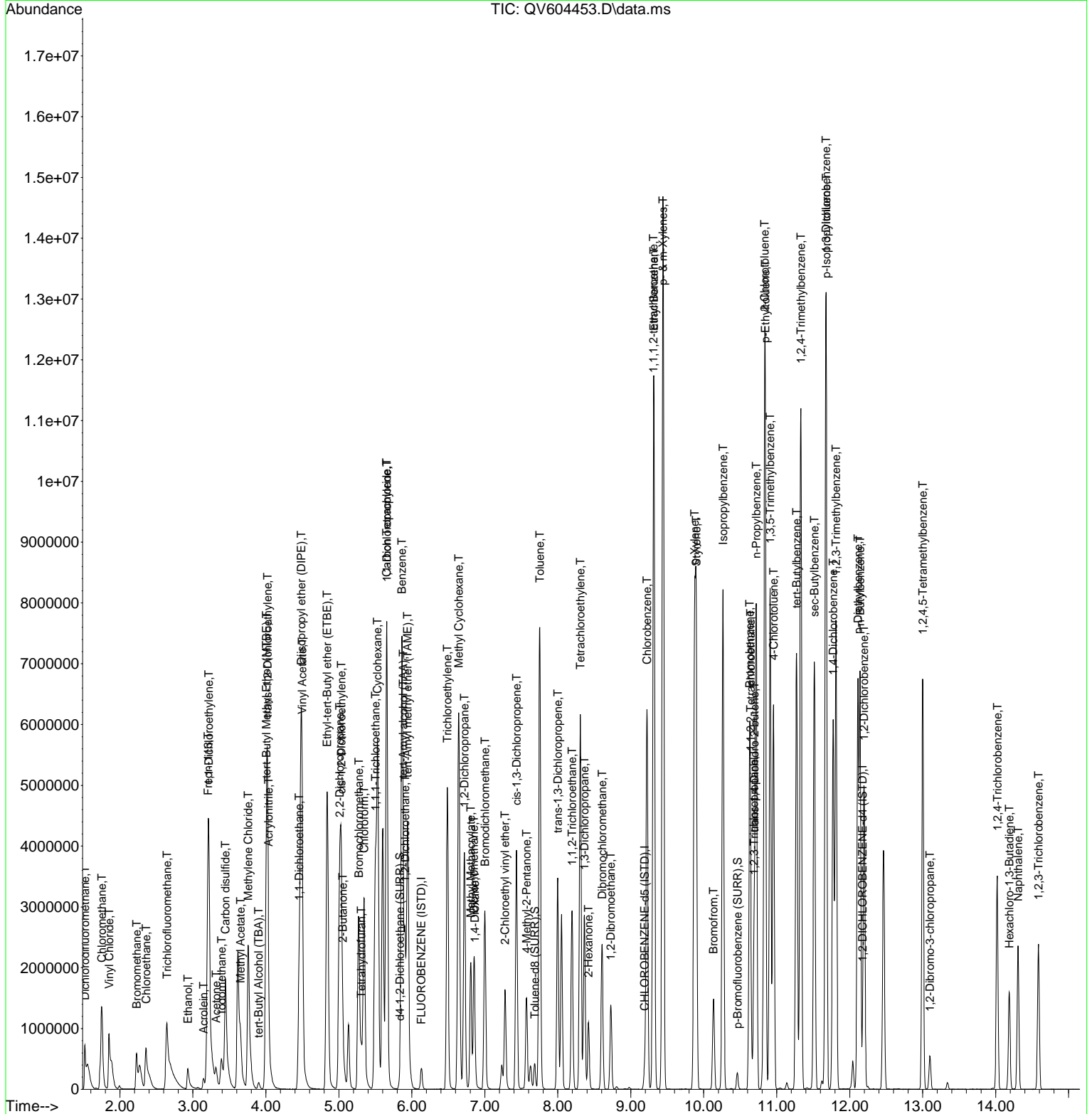
Quant Time: Feb 27 12:36:35 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:33:10 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.863	88	130318	3764.81	ppb	89
48) 2-Chloroethyl vinyl ether	7.277	63	598450	170.55	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	2056873	178.79	ppb	90
50) 4-Methyl-2-Pentanone	7.572	43	1048999	172.25	ppb	96
52) Toluene	7.753	91	5527340	176.82	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	1756888	182.18	ppb	98
54) 1,1,2-Trichloroethane	8.195	97	921308	176.48	ppb	95
55) 1,3-Dichloropropane	8.365	76	1540256	172.80	ppb	93
56) Tetrachloroethylene	8.310	166	1992048	189.73	ppb #	71
57) 2-Hexanone	8.421	43	733419	168.53	ppb #	95
58) Dibromochloromethane	8.607	129	1303821	185.11	ppb	97
59) 1,2-Dibromoethane	8.727	107	947055	176.35	ppb	92
60) Chlorobenzene	9.222	112	3563598	174.67	ppb	93
61) 1,1,1,2-tetrachloroethane	9.311	131	1334081	178.23	ppb	96
62) Ethyl Benzene	9.317	91	5842920	176.01	ppb	94
63) p- & m-Xylenes	9.442	91	8764334	347.10	ppb	92
64) o-Xylene	9.873	91	4360573	173.36	ppb	98
65) Styrene	9.898	104	3636740	172.89	ppb #	77
66) Bromofrom	10.135	173	794677	188.70	ppb #	78
68) p-Ethyltoluene	10.844	105	5327345	171.64	ppb #	92
69) Isopropylbenzene	10.263	105	5916410	171.44	ppb	92
71) 1,1,2,2-Tetrachloroethane	10.641	83	878860	165.62	ppb #	97
72) Bromobenzene	10.630	77	1911504	168.77	ppb #	65
73) trans-1,4-Dichloro-2-b...	10.694	75	1043568	170.29	ppb #	78
74) 1,2,3-Trichloropropane	10.688	110	292107	168.33	ppb #	28
75) n-Propylbenzene	10.719	91	6369218	172.52	ppb	96
76) 2-Chlorotoluene	10.836	91	4122939	170.27	ppb	98
77) 4-Chlorotoluene	10.955	91	3776320	170.62	ppb	98
78) 1,3,5-Trimethylbenzene	10.911	105	4686886	174.10	ppb	95
79) tert-Butylbenzene	11.273	119	4105382	176.76	ppb	91
80) 1,2,4-Trimethylbenzene	11.331	105	4673043	175.12	ppb #	78
81) sec-Butylbenzene	11.515	105	5404225	181.48	ppb	96
82) 1,3-Dichlorobenzene	11.673	146	2744335	175.89	ppb	97
83) p-Isopropyltoluene	11.679	119	4971924	179.95	ppb	95
84) 1,4-Dichlorobenzene	11.773	146	2782276	177.38	ppb	97
85) 1,2,3-Trimethylbenzene	11.812	105	4758387	168.99	ppb	91
86) p-Diethylbenzene	12.113	105	2371998	185.23	ppb #	80
87) 1,2-Dichlorobenzene	12.196	146	2391056	176.55	ppb	98
88) n-Butylbenzene	12.141	91	4427827	185.12	ppb	89
89) 1,2-Dibromo-3-chloropr...	13.101	75	135145	187.96	ppb #	59
90) 1,2,4,5-Tetramethylben...	13.000	119	3991645	185.22	ppb	93
91) 1,2,4-Trichlorobenzene	14.021	180	1293601	198.45	ppb	96
92) Hexachloro-1,3-Butadiene	14.188	225	378503	223.80	ppb	91
93) Naphthalene	14.308	128	2063420	172.97	ppb	98
94) 1,2,3-Trichlorobenzene	14.586	180	881344	202.29	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
Data File : QV604453.D  
Acq On : 26 Feb 2018 10:10 pm  
InstName : QVOA6  
Operator : AS  
Sample : SEQ-CAL9  
Misc : QBQV6022618A 160ppb STND AQU  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Feb 27 12:36:35 2018  
Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
Quant Title : Volatile Organics EPA 8260C-Waters  
QLast Update : Tue Feb 27 11:33:10 2018  
Response via : Initial Calibration



# SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0189

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900 - Kingston CVS Investi

**Calibration:** YB80032

**Laboratory ID:** Y8B2822-SCV1

**Sequence:** Y8B2822

**Standard ID:** Y18B241

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
1,1,1,2-Tetrachloroethane	10.0	9.45	-5.5	30.00
1,1,1-Trichloroethane	10.0	9.27	-7.3	30.00
1,1,2,2-Tetrachloroethane	10.0	9.50	-5.0	30.00
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.41	-5.9	30.00
1,1,2-Trichloroethane	10.0	9.43	-5.7	30.00
1,1-Dichloroethane	10.0	9.52	-4.8	30.00
1,1-Dichloroethylene	10.0	9.66	-3.4	30.00
1,2,3-Trichlorobenzene	10.0	12.8	27.9	30.00
1,2,3-Trichloropropane	10.0	9.28	-7.2	30.00
1,2,4-Trichlorobenzene	10.0	9.98	-0.2	30.00
1,2,4-Trimethylbenzene	10.0	9.55	-4.5	30.00
1,2-Dibromo-3-chloropropane	10.0	9.12	-8.8	30.00
1,2-Dibromoethane	10.0	9.53	-4.7	30.00
1,2-Dichlorobenzene	10.0	9.36	-6.4	30.00
1,2-Dichloroethane	10.0	9.06	-9.4	30.00
1,2-Dichloropropane	10.0	9.32	-6.8	30.00
1,3,5-Trimethylbenzene	10.0	9.73	-2.7	30.00
1,3-Dichlorobenzene	10.0	9.39	-6.1	30.00
1,4-Dichlorobenzene	10.0	9.41	-5.9	30.00
1,4-Dioxane	200	188	-6.0	30.00
2-Butanone	10.0	8.45	-15.5	30.00
2-Hexanone	10.0	8.84	-11.6	30.00
4-Methyl-2-pentanone	10.0	9.09	-9.1	30.00
Acetone	10.0	8.21	-17.9	30.00
Acrolein	10.0	8.79	-12.1	30.00
Acrylonitrile	10.0	8.99	-10.1	30.00
Benzene	10.0	9.39	-6.1	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investi

Calibration: YB80032

Laboratory ID: Y8B2822-SCV1

Sequence: Y8B2822

Standard ID: Y18B241

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
Bromochloromethane	10.0	9.55	-4.5	30.00
Bromodichloromethane	10.0	9.05	-9.5	30.00
Bromoform	10.0	9.03	-9.7	30.00
Bromomethane	10.0	9.44	-5.6	30.00
Carbon disulfide	10.0	9.92	-0.8	30.00
Carbon tetrachloride	10.0	9.32	-6.8	30.00
Chlorobenzene	10.0	9.55	-4.5	30.00
Chloroethane	10.0	9.21	-7.9	30.00
Chloroform	10.0	9.29	-7.1	30.00
Chloromethane	10.0	9.27	-7.3	30.00
cis-1,2-Dichloroethylene	10.0	9.36	-6.4	30.00
cis-1,3-Dichloropropylene	10.0	9.15	-8.5	30.00
Cyclohexane	10.0	9.54	-4.6	30.00
Dibromochloromethane	10.0	9.18	-8.2	30.00
Dibromomethane	10.0	9.30	-7.0	30.00
Dichlorodifluoromethane	10.0	9.75	-2.5	30.00
Ethyl Benzene	10.0	9.69	-3.1	30.00
Hexachlorobutadiene	10.0	10.8	8.2	30.00
Isopropylbenzene	10.0	9.89	-1.1	30.00
Methyl acetate	10.0	9.28	-7.2	30.00
Methyl tert-butyl ether (MTBE)	10.0	9.16	-8.4	30.00
Methylcyclohexane	10.0	9.95	-0.5	30.00
Methylene chloride	10.0	9.04	-9.6	30.00
n-Butylbenzene	10.0	9.80	-2.0	30.00
n-Propylbenzene	10.0	9.90	-1.0	30.00
o-Xylene	10.0	9.73	-2.7	30.00
p- & m- Xylenes	20.0	19.3	-3.7	30.00

# SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investi

Calibration: YB80032

Laboratory ID: Y8B2822-SCV1

Sequence: Y8B2822

Standard ID: Y18B241

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DIFF	QC LIMIT
p-Isopropyltoluene	10.0	9.70	-3.0	30.00
sec-Butylbenzene	10.0	9.86	-1.4	30.00
Styrene	10.0	9.74	-2.6	30.00
tert-Butyl alcohol (TBA)	10.0	9.77	-2.3	30.00
tert-Butylbenzene	10.0	9.92	-0.8	30.00
Tetrachloroethylene	10.0	9.61	-3.9	30.00
Toluene	10.0	9.48	-5.2	30.00
trans-1,2-Dichloroethylene	10.0	9.43	-5.7	30.00
trans-1,3-Dichloropropylene	10.0	9.19	-8.1	30.00
trans-1,4-dichloro-2-butene	10.0	9.42	-5.8	30.00
Trichloroethylene	10.0	9.35	-6.5	30.00
Trichlorofluoromethane	10.0	9.75	-2.5	30.00
Vinyl Chloride	10.0	8.44	-15.6	30.00

\* Values outside of QC limits



Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604455.D  
 Acq On : 26 Feb 2018 11:03 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-SCV1  
 Misc : QBQV6022618A ICV 10ppb AQU  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 12:00:31 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.128	70	60746	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	234213	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.171	152	92409	10.00	ppb	-0.01
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.828	65	78958	9.69	ppb	-0.01
Spiked Amount 10.000	Range 69	- 130	Recovery	=	96.90%	
51) Toluene-d8 (SURR)	7.681	98	296719	10.04	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery	=	100.40%	
70) p-Bromofluorobenzene (...)	10.457	95	95920	10.22	ppb	-0.01
Spiked Amount 10.000	Range 79	- 122	Recovery	=	102.20%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	72759m	9.75	ppb	
3) Chloromethane	1.755	50	97969	9.27	ppb	94
4) Vinyl Chloride	1.852	62	77465	8.44	ppb	# 89
5) Bromomethane	2.236	94	26678m	9.44	ppb	
6) Chloroethane	2.364	64	53737	9.21	ppb	95
7) Trichlorofluoromethane	2.639	101	123811	9.75	ppb	100
8) Ethanol	2.937	45	23406m	428.37	ppb	
9) Freon-113	3.207	101	77864	9.41	ppb	94
10) 1,1-Dichloroethylene	3.218	61	131082	9.66	ppb	# 95
11) Acrolein	3.154	56	6129	8.79	ppb	91
12) Acetone	3.327	43	19195m	8.21	ppb	
13) Iodomethane	3.396	142	17420m	5.05	ppb	
14) Methyl Acetate	3.660	43	43839	9.28	ppb	99
15) Carbon disulfide	3.446	76	181881	9.92	ppb	100
16) tert-Butyl Alcohol (TBA)	3.908	59	7344	9.77	ppb	# 97
17) Methylene Chloride	3.761	49	107384	9.04	ppb	84
18) Acrylonitrile	4.036	53	20561	8.99	ppb	# 60
19) trans-1,2-Dichloroethy...	4.019	61	119478	9.43	ppb	99
20) tert-Butyl Methyl Ethe...	4.011	73	193291	9.16	ppb	96
21) 1,1-Dichloroethane	4.453	63	157320	9.52	ppb	# 88
22) Vinyl Acetate	4.495	43	244931	9.05	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	309276	9.29	ppb	96
24) Ethyl-tert-Butyl ether...	4.843	59	282613	9.28	ppb	# 89
25) cis-1,2-Dichloroethylene	5.029	61	138957	9.36	ppb	94
26) 2-Butanone	5.060	72	5862	8.45	ppb	# 59
27) 2,2-Dichloropropane	5.013	77	119382	9.04	ppb	# 91
28) Tetrahydrofuran	5.321	42	17778	8.72	ppb	78
29) Bromochloromethane	5.271	49	69452	9.55	ppb	95
30) Chloroform	5.344	83	134425	9.29	ppb	# 69
31) 1,1,1-Trichloroethane	5.494	97	126661	9.27	ppb	98
32) Cyclohexane	5.527	56	170369	9.54	ppb	85
33) 1,1-Dichloropropylene	5.658	75	109657	9.48	ppb	# 63
35) Carbon Tetrachloride	5.650	117	119373	9.32	ppb	99
36) tert-Amyl alcohol (TAA)	5.878	59	64959	93.52	ppb	# 75
37) 1,2-Dichloroethane	5.903	62	94613	9.06	ppb	99
38) Benzene	5.861	78	310575	9.39	ppb	# 96
39) tert-Amyl methyl ether...	5.942	73	208443	9.38	ppb	# 92
41) Trichloroethylene	6.487	95	82648	9.35	ppb	85
42) Methyl Cyclohexane	6.640	83	138593	9.95	ppb	83
43) Methyl Methacrylate	6.807	69	39355	9.15	ppb	# 68
44) Dibromomethane	6.854	93	38711	9.30	ppb	# 86
45) Bromodichloromethane	6.996	83	96744	9.05	ppb	# 93
46) 1,2-Dichloropropane	6.715	63	87708	9.32	ppb	95

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604455.D  
 Acq On : 26 Feb 2018 11:03 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-SCV1  
 Misc : QBQV6022618A ICV 10ppb AQU  
 ALS Vial : 14 Sample Multiplier: 1

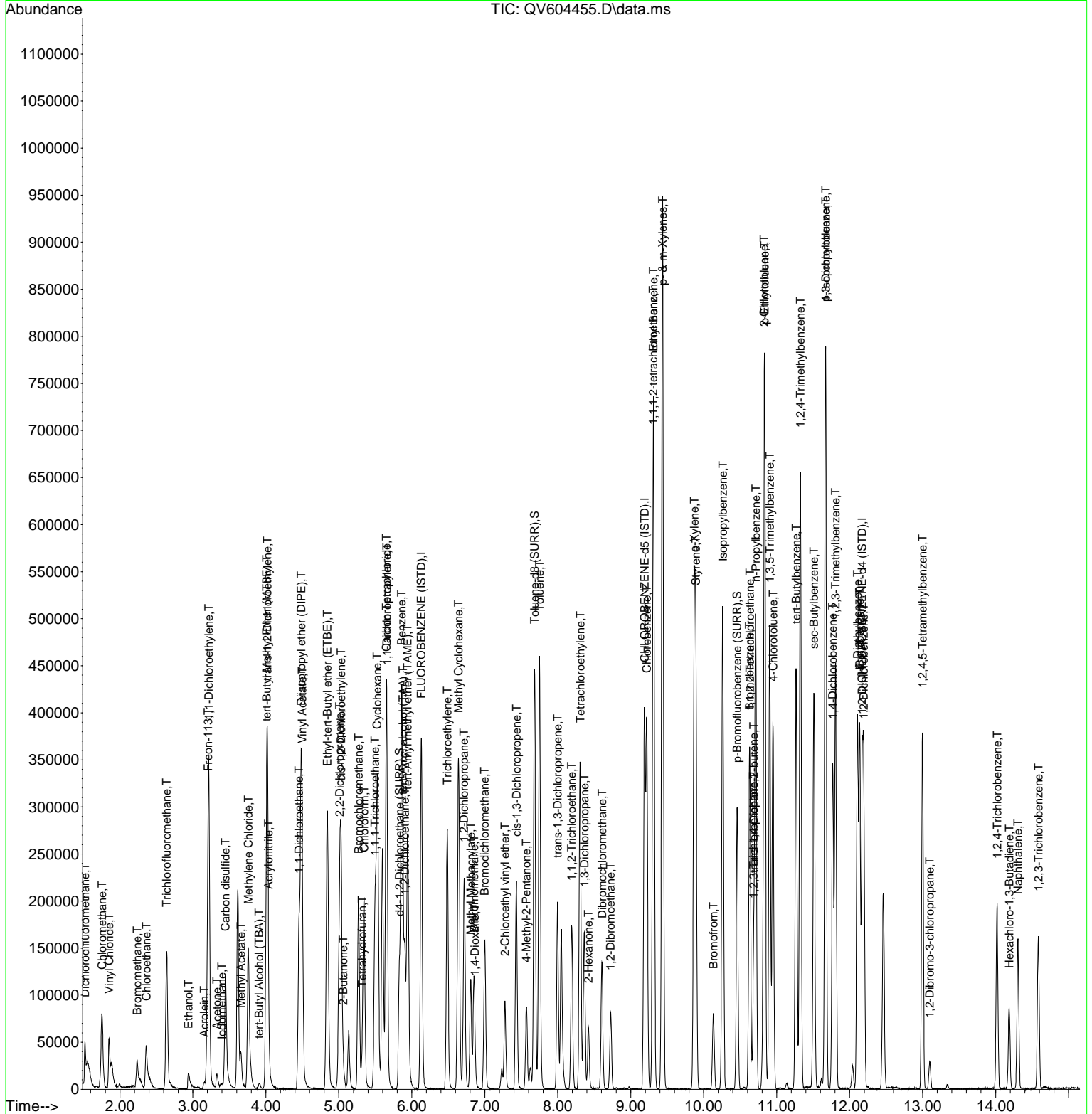
Quant Time: Feb 27 12:00:31 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.866	88	7272	188.04	ppb	89
48) 2-Chloroethyl vinyl ether	7.277	63	37315	9.59	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	118417	9.15	ppb	90
50) 4-Methyl-2-Pentanone	7.569	43	61662	9.09	ppb	95
52) Toluene	7.750	91	336522	9.48	ppb	99
53) trans-1,3-Dichloropropene	7.995	75	99934	9.19	ppb	98
54) 1,1,2-Trichloroethane	8.190	97	55506	9.43	ppb	95
55) 1,3-Dichloropropane	8.365	76	94361	9.42	ppb	94
56) Tetrachloroethylene	8.307	166	115581	9.61	ppb #	71
57) 2-Hexanone	8.421	43	42935	8.84	ppb #	97
58) Dibromochloromethane	8.607	129	73549	9.18	ppb	97
59) 1,2-Dibromoethane	8.721	107	57851	9.53	ppb	94
60) Chlorobenzene	9.219	112	221269	9.55	ppb	92
61) 1,1,1,2-tetrachloroethane	9.306	131	80659	9.45	ppb	96
62) Ethyl Benzene	9.311	91	366953	9.69	ppb	95
63) p- & m-Xylenes	9.436	91	555169	19.26	ppb	92
64) o-Xylene	9.870	91	277793	9.73	ppb	98
65) Styrene	9.893	104	232479	9.74	ppb #	77
66) Bromofrom	10.132	173	43230	9.03	ppb #	78
68) p-Ethyltoluene	10.836	105	334403m	9.93	ppb	
69) Isopropylbenzene	10.260	105	371710	9.89	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.633	83	53744	9.50	ppb #	97
72) Bromobenzene	10.627	77	116371	9.59	ppb #	68
73) trans-1,4-Dichloro-2-b...	10.686	75	61568	9.42	ppb #	80
74) 1,2,3-Trichloropropane	10.683	110	17346	9.28	ppb #	76
75) n-Propylbenzene	10.713	91	397705	9.90	ppb	97
76) 2-Chlorotoluene	10.830	91	252405	9.64	ppb	97
77) 4-Chlorotoluene	10.950	91	228877	9.58	ppb	98
78) 1,3,5-Trimethylbenzene	10.905	105	284962	9.73	ppb	95
79) tert-Butylbenzene	11.264	119	252115	9.92	ppb	89
80) 1,2,4-Trimethylbenzene	11.326	105	277029	9.55	ppb #	77
81) sec-Butylbenzene	11.509	105	322243	9.86	ppb	95
82) 1,3-Dichlorobenzene	11.671	146	159189	9.39	ppb	96
83) p-Isopropyltoluene	11.671	119	294304	9.70	ppb	95
84) 1,4-Dichlorobenzene	11.768	146	160146	9.41	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	281071	9.25	ppb #	91
86) p-Diethylbenzene	12.107	105	137320	9.84	ppb #	51
87) 1,2-Dichlorobenzene	12.194	146	137339	9.36	ppb #	86
88) n-Butylbenzene	12.135	91	256369	9.80	ppb	92
89) 1,2-Dibromo-3-chloropr...	13.095	75	7047	9.12	ppb #	65
90) 1,2,4,5-Tetramethylben...	12.998	119	225536	9.64	ppb	93
91) 1,2,4-Trichlorobenzene	14.019	180	71336	9.98	ppb	95
92) Hexachloro-1,3-Butadiene	14.188	225	20586	10.82	ppb	91
93) Naphthalene	14.305	128	138299	10.64	ppb	98
94) 1,2,3-Trichlorobenzene	14.586	180	61168	12.79	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604455.D  
 Acq On : 26 Feb 2018 11:03 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-SCV1  
 Misc : QBQV6022618A ICV 10ppb AQU  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Feb 27 12:00:31 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration



## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Instrument ID: QVOA6 Calibration: YB80032  
 Lab File ID: QV604735.D Calibration Date: 02/26/18 17:46  
 Sequence: Y8C1238 Injection Date: 03/12/18  
 Lab Sample ID: Y8C1238-CCV1 Injection Time: 13:02

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	10.0	10.0	0.3644087	0.3656636		0.3	20
1,1,1-Trichloroethane	A	10.0	9.97	2.249906	2.244084	0.1	-0.3	20
1,1,2,2-Tetrachloroethane	A	10.0	10.2	0.6124902	0.6244623	0.3	2.0	20
1,1,2-Trichloro-1,2,2-trifluoroethane	A	10.0	9.67	1.362583	1.317442	0.1	-3.3	20
1,1,2-Trichloroethane	A	10.0	9.99	0.2513558	0.2511481	0.1	-0.08	20
1,1-Dichloroethane	A	10.0	9.94	2.719512	2.702399	0.2	-0.6	20
1,1-Dichloroethylene	A	10.0	9.44	2.233247	2.107198	0.1	-5.6	20
1,2,3-Trichlorobenzene	A	10.0	14.3	0.5176558	0.7385597		42.7	20 *
1,2,3-Trichloropropane	A	10.0	10.6	0.2023141	0.2155457		6.5	20
1,2,4-Trichlorobenzene	A	10.0	11.0	0.7734069	0.8478331	0.2	9.6	20
1,2,4-Trimethylbenzene	A	10.0	10.3	3.139754	3.237509		3.1	20
1,2-Dibromo-3-chloropropane	A	10.0	10.5	0.0836098	8.798782E-02	0.05	5.2	20
1,2-Dibromoethane	A	10.0	9.86	0.2592322	0.2555093	0.1	-1.4	20
1,2-Dichlorobenzene	A	10.0	10.2	1.58711	1.615659	0.4	1.8	20
1,2-Dichloroethane	A	10.0	9.90	1.718969	1.70216	0.1	-1.0	20
1,2-Dichloropropane	A	10.0	9.31	0.4016542	0.3740877	0.1	-6.9	20
1,3,5-Trimethylbenzene	A	10.0	10.3	3.168186	3.2714		3.3	20
1,3-Dichlorobenzene	A	10.0	10.4	1.835066	1.900752	0.6	3.6	20
1,4-Dichlorobenzene	A	10.0	10.3	1.841818	1.902131	0.5	3.3	20
1,4-Dioxane	A	200	229	1.651189E-03	1.89398E-03		14.7	20
2-Butanone	A	10.0	12.4	0.114201	0.1421774	0.1	24.5	20 *
2-Hexanone	A	10.0	10.8	0.2073589	0.2231212	0.1	7.6	20
4-Methyl-2-pentanone	A	10.0	9.50	0.2896502	0.2751922	0.1	-5.0	20
Acetone	A	10.0	12.9	0.3847483	0.4948927	0.1	28.6	20 *
Acrolein	Q	10.0	11.1	0.1320147	0.1314117		10.6	20
Acrylonitrile	A	10.0	9.57	0.376685	0.3603028		-4.3	20
Benzene	A	10.0	9.88	5.445402	5.381191	0.5	-1.2	20
Bromochloromethane	A	10.0	9.98	1.197781	1.195455		-0.2	20
Bromodichloromethane	A	10.0	9.43	0.4565907	0.430649	0.2	-5.7	20

## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Instrument ID: QVOA6 Calibration: YB80032  
 Lab File ID: QV604735.D Calibration Date: 02/26/18 17:46  
 Sequence: Y8C1238 Injection Date: 03/12/18  
 Lab Sample ID: Y8C1238-CCV1 Injection Time: 13:02

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Bromoform	A	10.0	10.0	0.2043173	0.2050758	0.1	0.4	20
Bromomethane	Q	10.0	6.64	0.5558901	0.2539683	0.1	-33.6	20 *
Carbon disulfide	A	10.0	8.58	3.018642	2.590406	0.1	-14.2	20
Carbon tetrachloride	A	10.0	9.92	2.108711	2.091601	0.1	-0.8	20
Chlorobenzene	A	10.0	9.96	0.9896858	0.9856038	0.5	-0.4	20
Chloroethane	A	10.0	9.29	0.9601424	0.8914976	0.1	-7.1	20
Chloroform	A	10.0	10.1	2.3829	2.41279	0.2	1.3	20
Chloromethane	A	10.0	6.78	1.740579	1.180206	0.1	-32.2	20 *
cis-1,2-Dichloroethylene	A	10.0	9.88	2.444991	2.415105	0.1	-1.2	20
cis-1,3-Dichloropropylene	A	10.0	9.54	0.5526069	0.527088	0.2	-4.6	20
Cyclohexane	A	10.0	9.24	2.941362	2.718034	0.1	-7.6	20
Dibromochloromethane	A	10.0	9.69	0.3420503	0.3315577	0.1	-3.1	20
Dibromomethane	A	10.0	9.62	0.1776767	0.1709522		-3.8	20
Dichlorodifluoromethane	A	10.0	7.04	1.228433	0.8649508	0.1	-29.6	20 *
Ethyl Benzene	A	10.0	10.0	1.616647	1.621311	0.1	0.3	20
Hexachlorobutadiene	Q	10.0	10.5	0.2061613	0.2157569		5.2	20
Isopropylbenzene	A	10.0	10.5	4.068324	4.279925	0.1	5.2	20
Methyl acetate	A	10.0	9.69	0.7773039	0.7531415	0.1	-3.1	20
Methyl tert-butyl ether (MTBE)	A	10.0	9.92	3.473229	3.447108	0.1	-0.8	20
Methylcyclohexane	A	10.0	9.50	0.5944871	0.564705	0.1	-5.0	20
Methylene chloride	A	10.0	9.35	1.955747	1.829328	0.1	-6.5	20
n-Butylbenzene	A	10.0	10.2	2.831854	2.877322		1.6	20
n-Propylbenzene	A	10.0	10.4	4.346909	4.519413		4.0	20
o-Xylene	A	10.0	10.2	1.219287	1.246351	0.3	2.2	20
p- & m- Xylenes	A	20.0	20.2	1.23103	1.241598	0.1	0.9	20
p-Isopropyltoluene	A	10.0	10.3	3.281936	3.385308		3.1	20
sec-Butylbenzene	A	10.0	10.3	3.537086	3.652006		3.2	20
Styrene	A	10.0	10.3	1.019064	1.045988	0.3	2.6	20
tert-Butyl alcohol (TBA)	A	10.0	11.1	0.1236826	0.1371987		10.9	20

## FORM VII

## CONTINUING CALIBRATION CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Instrument ID: QVOA6 Calibration: YB80032  
 Lab File ID: QV604735.D Calibration Date: 02/26/18 17:46  
 Sequence: Y8C1238 Injection Date: 03/12/18  
 Lab Sample ID: Y8C1238-CCV1 Injection Time: 13:02

COMPOUND	TYPE	CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
tert-Butylbenzene	A	10.0	10.4	2.751079	2.848533		3.5	20
Tetrachloroethylene	A	10.0	10.0	0.5135346	0.5133593	0.2	-0.03	20
Toluene	A	10.0	9.55	1.515062	1.44618	0.4	-4.5	20
trans-1,2-Dichloroethylene	A	10.0	9.51	2.086456	1.984476	0.1	-4.9	20
trans-1,3-Dichloropropylene	A	10.0	9.62	0.464316	0.4467318	0.1	-3.8	20
trans-1,4-dichloro-2-butene	A	10.0	10.2	0.7069842	0.7172741		1.5	20
Trichloroethylene	A	10.0	9.52	0.3772631	0.3590774	0.2	-4.8	20
Trichlorofluoromethane	A	10.0	9.65	2.089604	2.016553	0.1	-3.5	20
Vinyl Chloride	A	10.0	8.61	1.511216	1.301569	0.1	-13.9	20

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604735.D  
 Acq On : 12 Mar 2018 1:02 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CCV1  
 Misc : QBQV6031218A CCV AQU  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 13:38:37 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) FLUOROBENZENE (ISTD)	6.131	70	54432	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.188	117	224712	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	89967	10.00	ppb	0.00
<b>System Monitoring Compounds</b>						
34) d4-1,2-Dichloroethane ...	5.830	65	72677	9.96	ppb	0.00
Spiked Amount 10.000	Range 69	- 130	Recovery	=	99.60%	
51) Toluene-d8 (SURR)	7.683	98	271546	9.58	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery	=	95.80%	
70) p-Bromofluorobenzene (...)	10.460	95	92682	10.14	ppb	0.00
Spiked Amount 10.000	Range 79	- 122	Recovery	=	101.40%	
<b>Target Compounds</b>						
						Qvalue
2) Dichlorodifluoromethane	1.523	85	47081m	7.04	ppb	
3) Chloromethane	1.752	50	64241	6.78	ppb	95
4) Vinyl Chloride	1.855	62	70847	8.61	ppb	# 89
5) Bromomethane	2.233	94	13824m	6.64	ppb	
6) Chloroethane	2.364	64	48526	9.29	ppb	97
7) Trichlorofluoromethane	2.642	101	109765	9.65	ppb	100
8) Ethanol	2.940	45	24102	492.28	ppb	100
9) Freon-113	3.212	101	71711	9.67	ppb	95
10) 1,1-Dichloroethylene	3.221	61	114699	9.44	ppb	# 94
11) Acrolein	3.148	56	7153	11.06	ppb	92
12) Acetone	3.326	43	26938	12.86	ppb	98
13) Iodomethane	3.388	142	16687m	5.24	ppb	
14) Methyl Acetate	3.657	43	40995	9.69	ppb	99
15) Carbon disulfide	3.449	76	141001	8.58	ppb	100
16) tert-Butyl Alcohol (TBA)	3.911	59	7468	11.09	ppb	# 97
17) Methylene Chloride	3.760	49	99574	9.35	ppb	87
18) Acrylonitrile	4.036	53	19612	9.57	ppb	# 95
19) trans-1,2-Dichloroethy...	4.022	61	108019	9.51	ppb	# 90
20) tert-Butyl Methyl Ethe...	4.008	73	187633	9.92	ppb	# 93
21) 1,1-Dichloroethane	4.456	63	147097	9.94	ppb	# 97
22) Vinyl Acetate	4.495	43	224050	9.24	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	277367	9.30	ppb	97
24) Ethyl-tert-Butyl ether...	4.843	59	267289	9.79	ppb	98
25) cis-1,2-Dichloroethylene	5.032	61	131459	9.88	ppb	# 70
26) 2-Butanone	5.060	72	7739	12.45	ppb	# 1
27) 2,2-Dichloropropane	5.010	77	119410	10.09	ppb	# 93
28) Tetrahydrofuran	5.324	42	17665m	9.67	ppb	
29) Bromochloromethane	5.274	49	65071	9.98	ppb	# 67
30) Chloroform	5.346	83	131333	10.13	ppb	# 69
31) 1,1,1-Trichloroethane	5.496	97	122150	9.97	ppb	98
32) Cyclohexane	5.530	56	147948	9.24	ppb	86
33) 1,1-Dichloropropylene	5.658	75	100240	9.67	ppb	# 60
35) Carbon Tetrachloride	5.649	117	113850	9.92	ppb	99
36) tert-Amyl alcohol (TAA)	5.880	59	69599	111.83	ppb	# 75
37) 1,2-Dichloroethane	5.905	62	92652	9.90	ppb	# 86
38) Benzene	5.861	78	292909	9.88	ppb	# 97
39) tert-Amyl methyl ether...	5.944	73	200363	10.06	ppb	97
41) Trichloroethylene	6.487	95	80689	9.52	ppb	85
42) Methyl Cyclohexane	6.640	83	126896	9.50	ppb	86
43) Methyl Methacrylate	6.810	69	39291	9.52	ppb	# 68
44) Dibromomethane	6.851	93	38415	9.62	ppb	# 41
45) Bromodichloromethane	7.002	83	96772	9.43	ppb	95
46) 1,2-Dichloropropane	6.718	63	84062	9.31	ppb	95

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604735.D  
 Acq On : 12 Mar 2018 1:02 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CCV1  
 Misc : QBQV6031218A CCV AQU  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 13:38:37 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

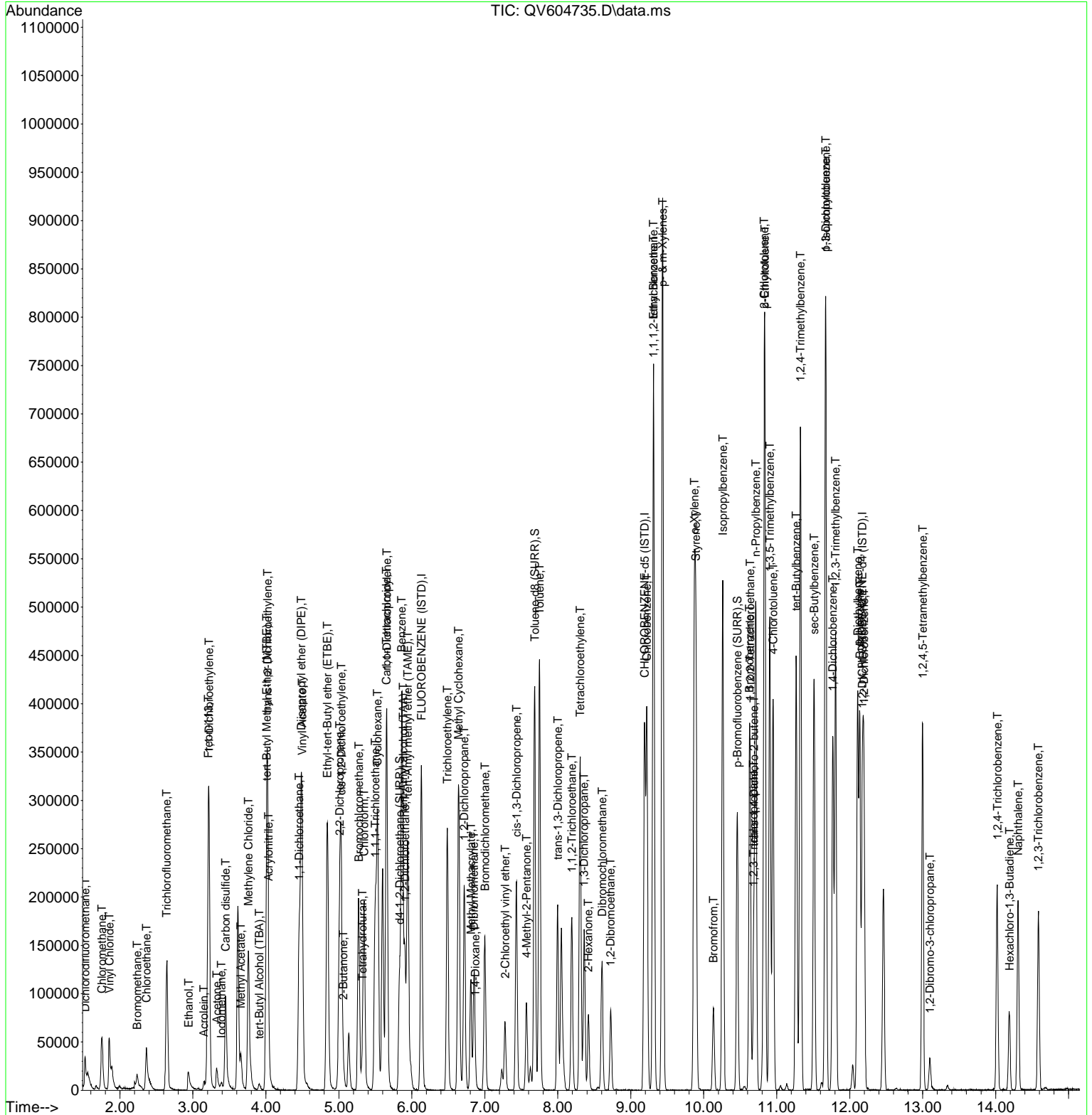
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.871	88	8512m	229.41	ppb	
48) 2-Chloroethyl vinyl ether	7.280	63	26787	7.17	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	118443	9.54	ppb	93
50) 4-Methyl-2-Pentanone	7.572	43	61839	9.50	ppb	96
52) Toluene	7.750	91	324974	9.55	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	100386	9.62	ppb	98
54) 1,1,2-Trichloroethane	8.192	97	56436	9.99	ppb	97
55) 1,3-Dichloropropane	8.359	76	93704	9.75	ppb	95
56) Tetrachloroethylene	8.304	166	115358	10.00	ppb	97
57) 2-Hexanone	8.418	43	50138	10.76	ppb	# 96
58) Dibromochloromethane	8.607	129	74505	9.69	ppb	96
59) 1,2-Dibromoethane	8.724	107	57416	9.86	ppb	93
60) Chlorobenzene	9.219	112	221477	9.96	ppb	91
61) 1,1,1,2-tetrachloroethane	9.308	131	82169	10.03	ppb	94
62) Ethyl Benzene	9.311	91	364328	10.03	ppb	94
63) p- & m-Xylenes	9.436	91	558004	20.17	ppb	92
64) o-Xylene	9.870	91	280070	10.22	ppb	98
65) Styrene	9.892	104	235046	10.26	ppb	# 77
66) Bromofrom	10.132	173	46083	10.04	ppb	# 79
68) p-Ethyltoluene	10.838	105	344865	10.52	ppb	# 92
69) Isopropylbenzene	10.260	105	385052	10.52	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.635	83	56181	10.20	ppb	# 97
72) Bromobenzene	10.627	77	119109	10.09	ppb	# 66
73) trans-1,4-Dichloro-2-b...	10.688	75	64531	10.15	ppb	# 71
74) 1,2,3-Trichloropropane	10.683	110	19392	10.65	ppb	# 36
75) n-Propylbenzene	10.713	91	406598	10.40	ppb	97
76) 2-Chlorotoluene	10.830	91	261963	10.27	ppb	97
77) 4-Chlorotoluene	10.950	91	239227	10.29	ppb	98
78) 1,3,5-Trimethylbenzene	10.905	105	294318	10.33	ppb	96
79) tert-Butylbenzene	11.267	119	256274	10.35	ppb	89
80) 1,2,4-Trimethylbenzene	11.325	105	291269	10.31	ppb	# 77
81) sec-Butylbenzene	11.512	105	328560	10.32	ppb	95
82) 1,3-Dichlorobenzene	11.670	146	171005	10.36	ppb	95
83) p-Isopropyltoluene	11.670	119	304566	10.31	ppb	95
84) 1,4-Dichlorobenzene	11.768	146	171129	10.33	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	291874	9.87	ppb	# 90
86) p-Diethylbenzene	12.110	105	138877	10.22	ppb	# 80
87) 1,2-Dichlorobenzene	12.196	146	145356	10.18	ppb	# 86
88) n-Butylbenzene	12.138	91	258864	10.16	ppb	89
89) 1,2-Dibromo-3-chloropr...	13.100	75	7916	10.52	ppb	# 59
90) 1,2,4,5-Tetramethylben...	13.000	119	224186	9.85	ppb	92
91) 1,2,4-Trichlorobenzene	14.021	180	76277	10.96	ppb	95
92) Hexachloro-1,3-Butadiene	14.191	225	19411	10.52	ppb	# 84
93) Naphthalene	14.308	128	169537	13.40	ppb	98
94) 1,2,3-Trichlorobenzene	14.583	180	66446	14.27	ppb	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604735.D  
 Acq On : 12 Mar 2018 1:02 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : SEQ-CCV1  
 Misc : QBQV6031218A CCV AQU  
 ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 12 13:38:37 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

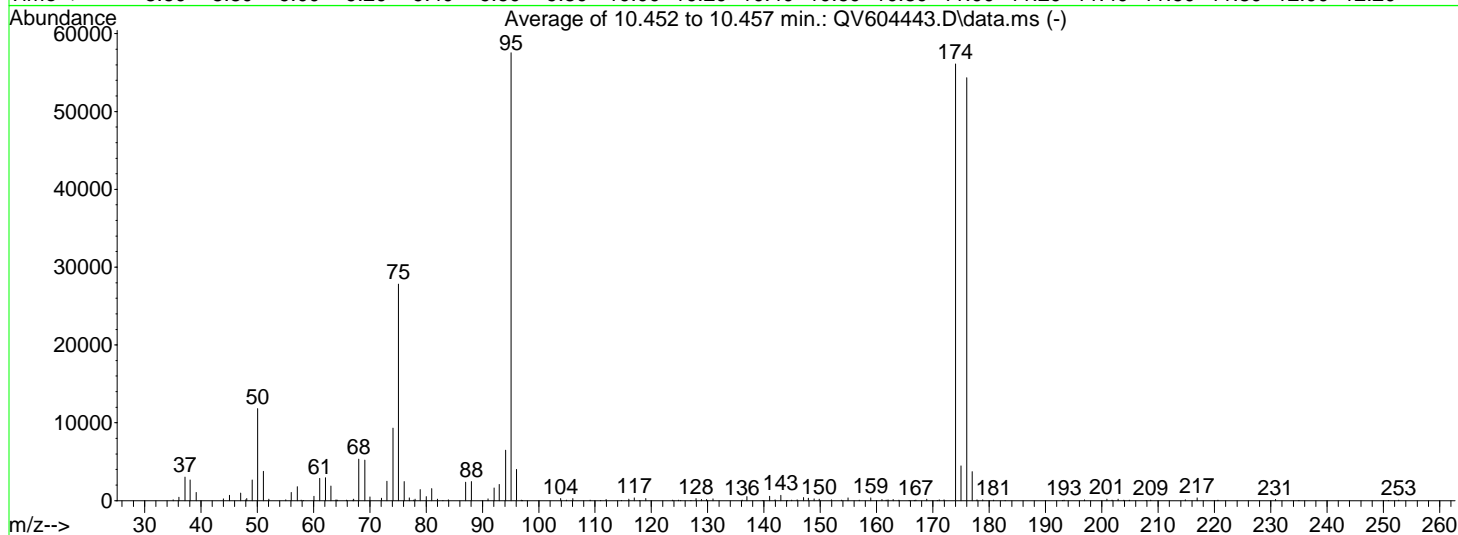
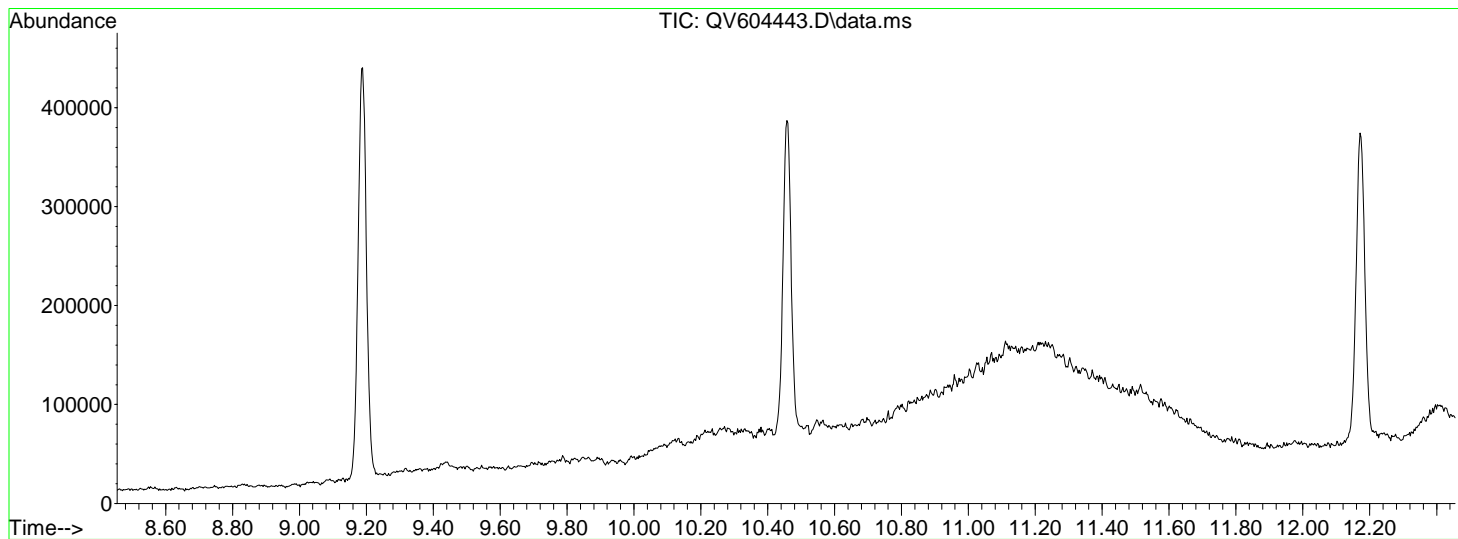


# VOA Raw QC Data

Data Path : C:\msdchem\2\DATA\022618A\  
 Data File : QV604443.D  
 Acq On : 26 Feb 2018 5:46 pm  
 Operator : AS  
 InstName : QVOA6  
 Sample : SEQ-TUN1  
 Misc : QBQV6022618A TUNE AQU  
 ALS Vial : 3 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Title : Volatile Organics EPA 8260C-Waters  
 Last Update : Tue Feb 27 11:52:18 2018



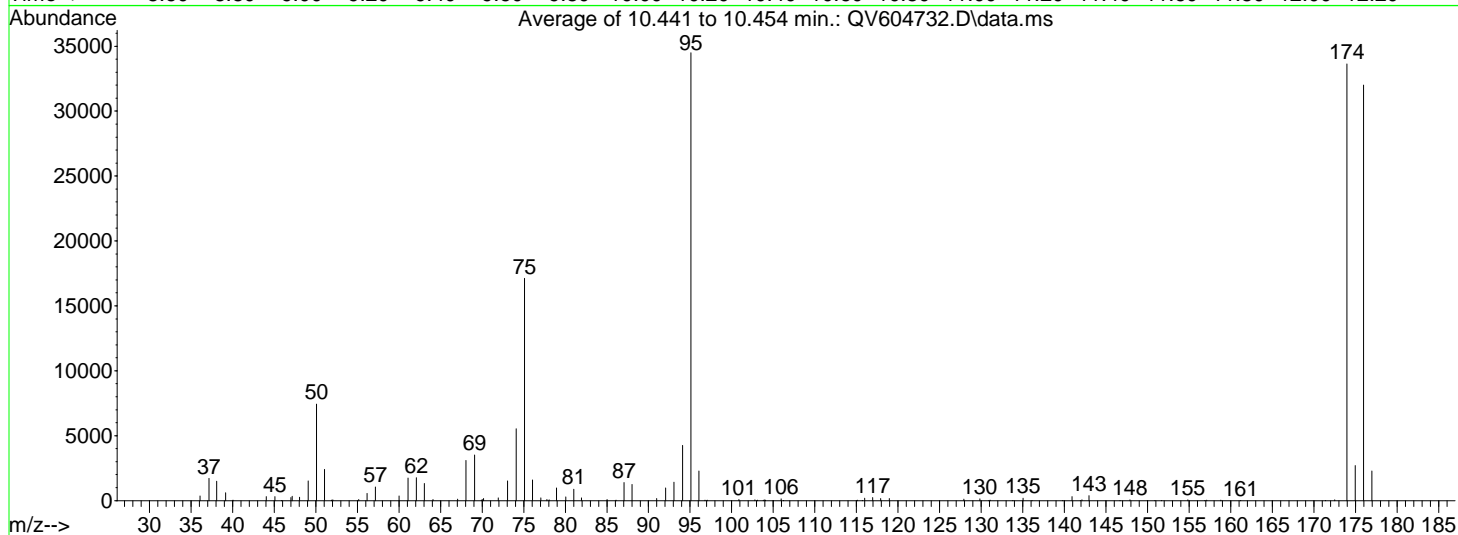
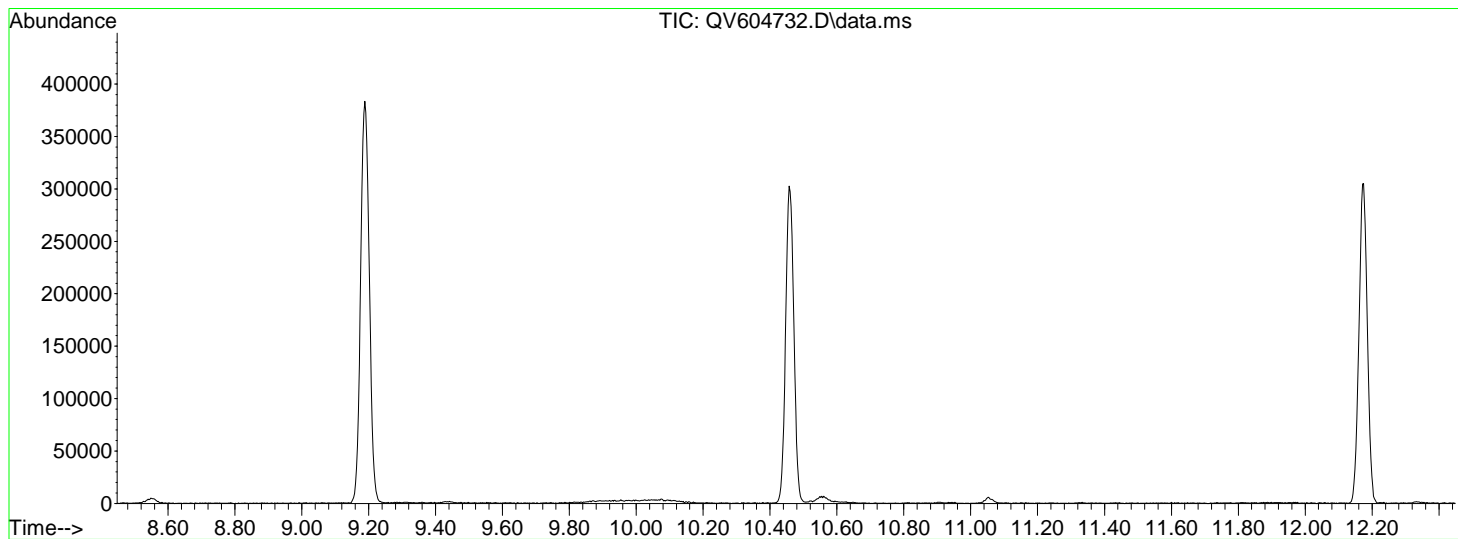
AutoFind: Scans 3223, 3224, 3225; Background Corrected with Scan 3207

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	11814	PASS
75	95	30	60	48.3	27808	PASS
95	95	100	100	100.0	57571	PASS
96	95	5	9	7.0	4009	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	97.5	56133	PASS
175	174	5	9	7.9	4448	PASS
176	174	95	101	96.8	54363	PASS
177	176	5	9	6.8	3722	PASS

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604732.D  
 Acq On : 12 Mar 2018 11:41 am  
 Operator : AS  
 InstName : QVOA6  
 Sample : SEQ-TUN1  
 Misc : QBQV6031218A TUNE AQU  
 ALS Vial : 2 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Title : Volatile Organics EPA 8260C-Waters  
 Last Update : Tue Feb 27 11:52:18 2018



Spectrum Information: Average of 10.441 to 10.454 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.5	7427	PASS
75	95	30	60	49.6	17112	PASS
95	95	100	100	100.0	34507	PASS
96	95	5	9	6.6	2288	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	97.5	33637	PASS
175	174	5	9	8.0	2707	PASS
176	174	95	101	95.2	32011	PASS
177	176	5	9	7.1	2277	PASS

# METHOD BLANK RAW DATA

SDG: 18C0189  
CLASS: VOA  
METHOD: EPA 8260C

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.51	B
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	0.50	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U

**FORM I**

**METHOD BLANK DATA SHEET  
EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-88-3	Toluene	0.50	U
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.94	99.4	69 - 130	
Toluene-d8	10.0	9.73	97.3	81 - 117	
p-Bromofluorobenzene	10.0	9.94	99.4	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	57774	6.134	54432	6.131	
Chlorobenzene-d5	236992	9.186	224712	9.188	
1,2-Dichlorobenzene-d4	96405	12.174	89967	12.174	



Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604739.D  
 Acq On : 12 Mar 2018 2:58 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BLK1  
 Misc : QBQV6031218A BLK AQU  
 ALS Vial : 8 Sample Multiplier: 1

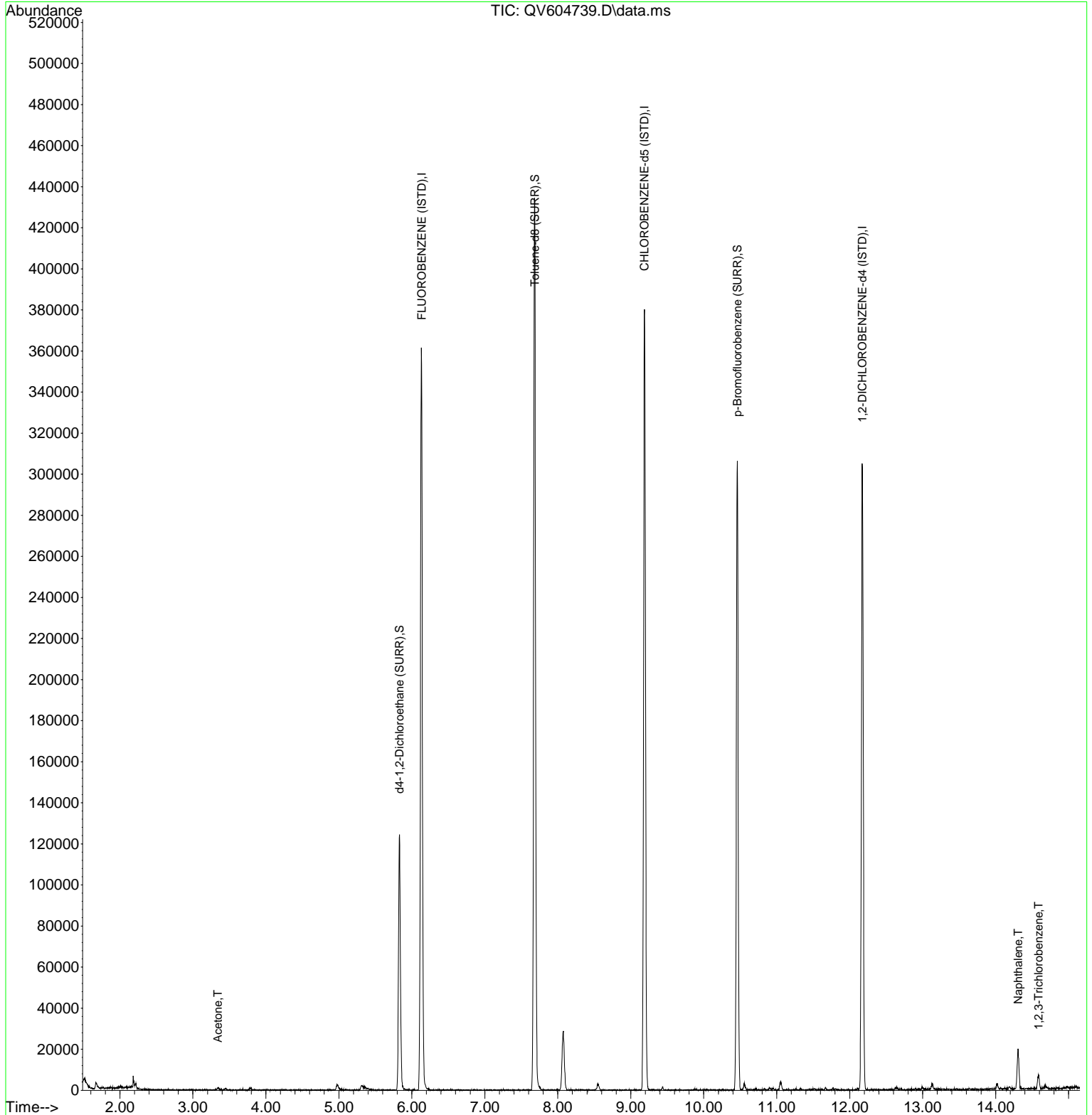
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 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

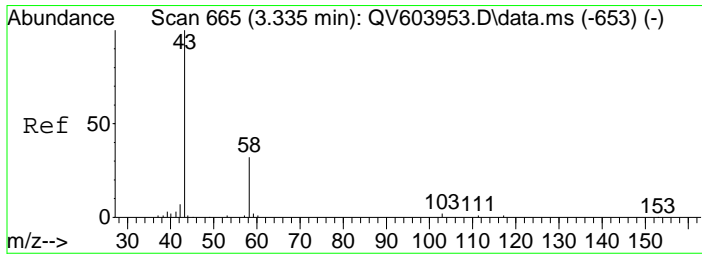
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.134	70	57774	10.00	ppb	0.00
40) CHLOROBENZENE-d5 (ISTD)	9.186	117	236992	10.00	ppb	-0.01
67) 1,2-DICHLOROBENZENE-d4...	12.174	152	96405	10.00	ppb	0.00
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.828	65	76966	9.94	ppb	-0.01
Spiked Amount	10.000	Range 69 - 130	Recovery	=	99.40%	
51) Toluene-d8 (SURR)	7.683	98	290796	9.73	ppb	0.00
Spiked Amount	10.000	Range 81 - 117	Recovery	=	97.30%	
70) p-Bromofluorobenzene (...)	10.460	95	97390	9.94	ppb	0.00
Spiked Amount	10.000	Range 79 - 122	Recovery	=	99.40%	
Target Compounds						
12) Acetone	3.343	43	848	0.38	ppb	96
93) Naphthalene	14.308	128	17279	1.27	ppb	# 89
94) 1,2,3-Trichlorobenzene	14.589	180	2536	0.51	ppb	# 86
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604739.D  
 Acq On : 12 Mar 2018 2:58 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BLK1  
 Misc : QBQV6031218A BLK AQU  
 ALS Vial : 8 Sample Multiplier: 1

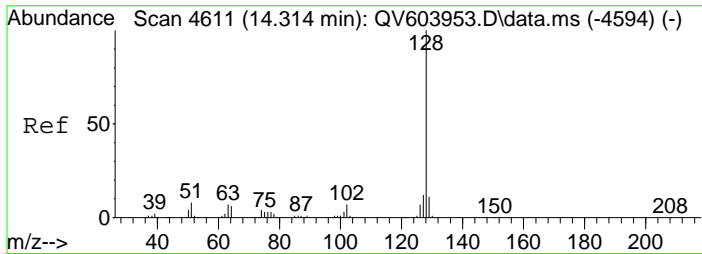
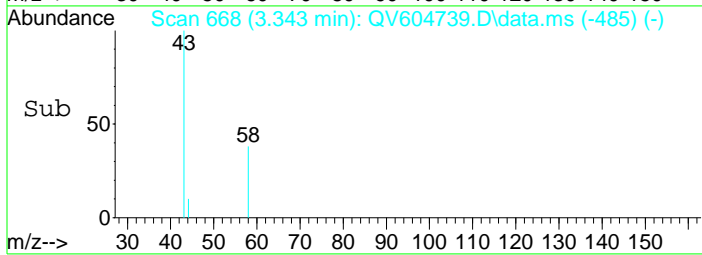
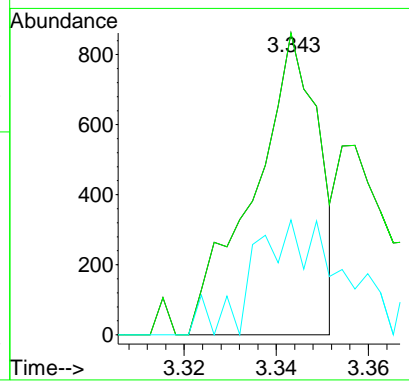
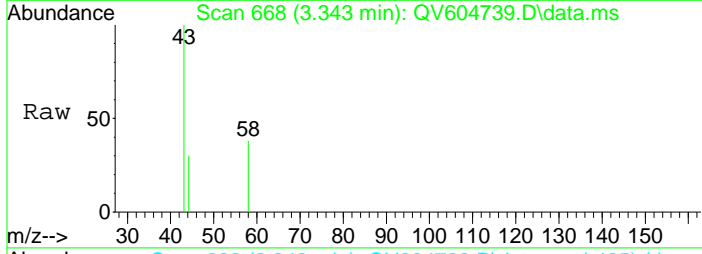
Quant Time: Mar 12 15:20:21 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration





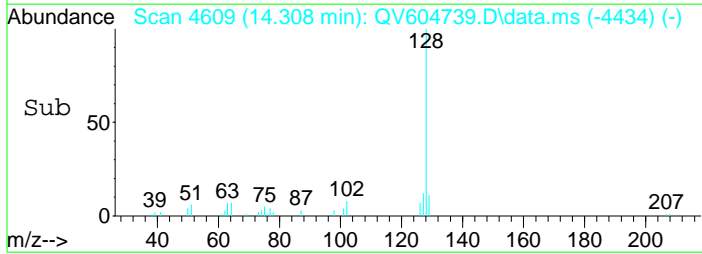
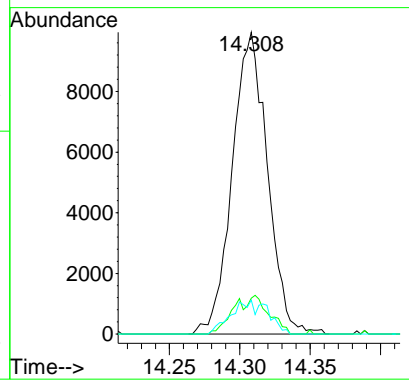
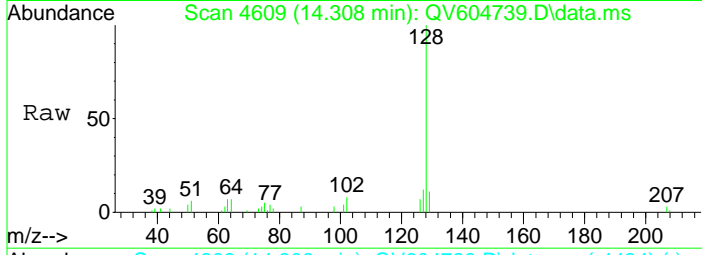
#12  
 Acetone  
 Concen: 0.38 ppb  
 RT: 3.343 min Scan# 668  
 Delta R.T. 0.008 min  
 Lab File: QV604739.D  
 Acq: 12 Mar 2018 2:58 pm

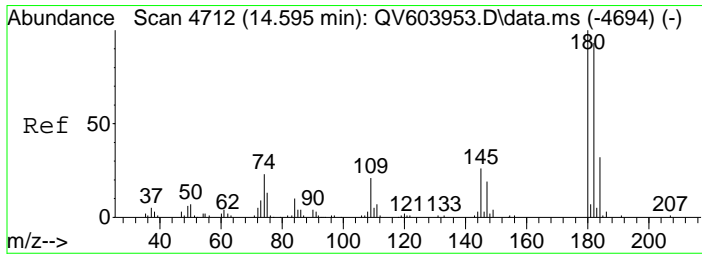
Tgt Ion	Resp	Lower	Upper
43	100		
43	100.0	80.0	120.0
58	16.9	13.9	41.6



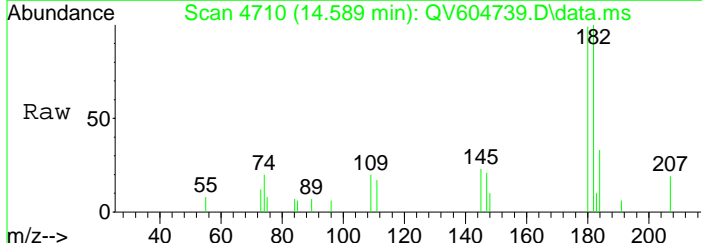
#93  
 Naphthalene  
 Concen: 1.27 ppb  
 RT: 14.308 min Scan# 4609  
 Delta R.T. -0.014 min  
 Lab File: QV604739.D  
 Acq: 12 Mar 2018 2:58 pm

Tgt Ion	Resp	Lower	Upper
128	100		
127	7.0	8.5	17.6#
129	7.4	6.1	12.7



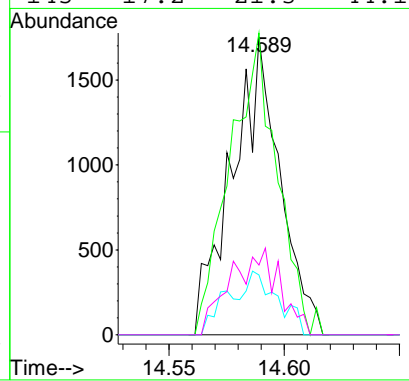
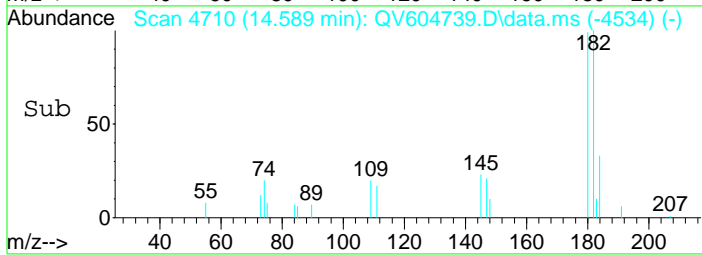


#94  
 1,2,3-Trichlorobenzene  
 Concen: 0.51 ppb  
 RT: 14.589 min Scan# 4710  
 Delta R.T. -0.011 min  
 Lab File: QV604739.D  
 Acq: 12 Mar 2018 2:58 pm



Tgt Ion:180 Resp: 2536

Ion	Ratio	Lower	Upper
180	100		
182	98.3	60.5	125.7
74	14.1	17.6	36.6#
145	17.2	21.3	44.1#



## LCS RAW DATA

SDG: 18C0189  
CLASS: VOA  
METHOD: EPA 8260C

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604736.D  
 Acq On : 12 Mar 2018 1:39 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BS1  
 Misc : QBQV6031218A ICV AQU  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 14:24:51 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	53111	10.00	ppb	# 0.00
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	223874	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.171	152	86307	10.00	ppb	-0.01
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.828	65	71347	10.02	ppb	-0.01
Spiked Amount	10.000	Range	69 - 130	Recovery	=	100.20%
51) Toluene-d8 (SURR)	7.681	98	266578	9.44	ppb	0.00
Spiked Amount	10.000	Range	81 - 117	Recovery	=	94.40%
70) p-Bromofluorobenzene (...)	10.457	95	90629	10.34	ppb	-0.01
Spiked Amount	10.000	Range	79 - 122	Recovery	=	103.40%
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	52126m	7.99	ppb	
3) Chloromethane	1.749	50	67023	7.25	ppb	94
4) Vinyl Chloride	1.852	62	71681	8.93	ppb	99
5) Bromomethane	2.239	94	12624	6.40	ppb	92
6) Chloroethane	2.361	64	46109	9.04	ppb	98
7) Trichlorofluoromethane	2.639	101	106631	9.61	ppb	99
8) Ethanol	2.937	45	20093m	420.60	ppb	
9) Freon-113	3.204	101	68115	9.41	ppb	94
10) 1,1-Dichloroethylene	3.221	61	108736	9.17	ppb	# 95
11) Acrolein	3.151	56	6761	10.76	ppb	93
12) Acetone	3.324	43	24403	11.94	ppb	98
13) Iodomethane	3.393	142	17068m	5.37	ppb	
14) Methyl Acetate	3.652	43	35378	8.57	ppb	100
15) Carbon disulfide	3.446	76	139994	8.73	ppb	100
16) tert-Butyl Alcohol (TBA)	3.905	59	6517m	9.92	ppb	
17) Methylene Chloride	3.755	49	94199	9.07	ppb	87
18) Acrylonitrile	4.033	53	18057	9.03	ppb	96
19) trans-1,2-Dichloroethy...	4.019	61	101462	9.16	ppb	99
20) tert-Butyl Methyl Ethe...	4.008	73	174813	9.48	ppb	96
21) 1,1-Dichloroethane	4.453	63	136220	9.43	ppb	# 88
22) Vinyl Acetate	4.495	43	211122	8.92	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	265956	9.14	ppb	97
24) Ethyl-tert-Butyl ether...	4.840	59	253543	9.52	ppb	# 89
25) cis-1,2-Dichloroethylene	5.026	61	122462	9.43	ppb	95
26) 2-Butanone	5.057	72	6897	11.37	ppb	# 1
27) 2,2-Dichloropropane	5.007	77	110171	9.54	ppb	# 92
28) Tetrahydrofuran	5.321	42	15403	8.64	ppb	79
29) Bromochloromethane	5.268	49	62490	9.82	ppb	96
30) Chloroform	5.346	83	122635	9.69	ppb	# 96
31) 1,1,1-Trichloroethane	5.497	97	111825	9.36	ppb	# 86
32) Cyclohexane	5.527	56	137559	8.81	ppb	87
33) 1,1-Dichloropropylene	5.655	75	93576	9.25	ppb	# 61
35) Carbon Tetrachloride	5.650	117	104113	9.30	ppb	99
36) tert-Amyl alcohol (TAA)	5.881	59	60578	99.75	ppb	88
37) 1,2-Dichloroethane	5.900	62	84216	9.22	ppb	99
38) Benzene	5.861	78	270567	9.36	ppb	# 96
39) tert-Amyl methyl ether...	5.942	73	189073	9.73	ppb	# 92
41) Trichloroethylene	6.487	95	73759	8.73	ppb	85
42) Methyl Cyclohexane	6.640	83	111747	8.40	ppb	87
43) Methyl Methacrylate	6.807	69	36468	8.87	ppb	# 57
44) Dibromomethane	6.854	93	35476	8.92	ppb	# 86
45) Bromodichloromethane	6.999	83	89821	8.79	ppb	96
46) 1,2-Dichloropropane	6.721	63	78186	8.70	ppb	# 81

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604736.D  
 Acq On : 12 Mar 2018 1:39 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BS1  
 Misc : QBQV6031218A ICV AQU  
 ALS Vial : 6 Sample Multiplier: 1

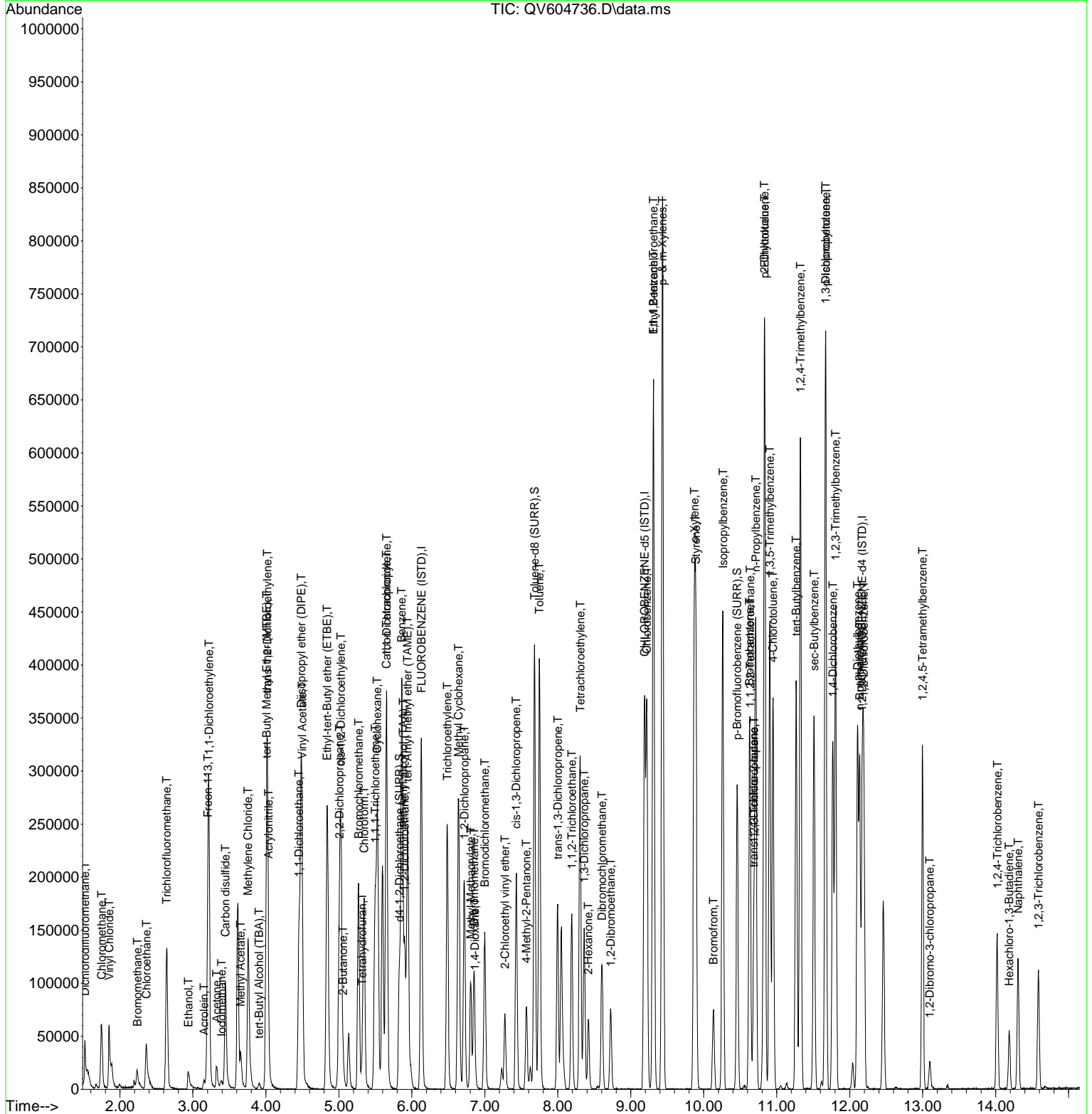
Quant Time: Mar 12 14:24:51 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.865	88	6597	178.46	ppb	# 71
48) 2-Chloroethyl vinyl ether	7.277	63	28418	7.64	ppb	99
49) cis-1,3-Dichloropropene	7.430	75	109731	8.87	ppb	92
50) 4-Methyl-2-Pentanone	7.569	43	54281	8.37	ppb	97
52) Toluene	7.747	91	299525	8.83	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	91849	8.84	ppb	98
54) 1,1,2-Trichloroethane	8.193	97	51319	9.12	ppb	95
55) 1,3-Dichloropropane	8.362	76	86621	9.05	ppb	# 85
56) Tetrachloroethylene	8.307	166	104372	9.08	ppb	97
57) 2-Hexanone	8.418	43	43309	9.33	ppb	# 96
58) Dibromochloromethane	8.604	129	68017	8.88	ppb	96
59) 1,2-Dibromoethane	8.727	107	52901	9.12	ppb	92
60) Chlorobenzene	9.219	112	206410	9.32	ppb	92
61) 1,1,1,2-tetrachloroethane	9.311	131	75777	9.29	ppb	95
62) Ethyl Benzene	9.311	91	329794	9.11	ppb	94
63) p- & m-Xylenes	9.434	91	506617	18.38	ppb	92
64) o-Xylene	9.870	91	257877	9.45	ppb	98
65) Styrene	9.893	104	215238	9.43	ppb	# 77
66) Bromofrom	10.135	173	40445	8.84	ppb	97
68) p-Ethyltoluene	10.836	105	306049	9.73	ppb	# 92
69) Isopropylbenzene	10.263	105	335350	9.55	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.635	83	49747	9.41	ppb	# 97
72) Bromobenzene	10.627	77	108535	9.58	ppb	# 65
73) trans-1,4-Dichloro-2-b...	10.686	75	56544	9.27	ppb	# 77
74) 1,2,3-Trichloropropane	10.688	110	17261	9.89	ppb	# 84
75) n-Propylbenzene	10.713	91	353849	9.43	ppb	97
76) 2-Chlorotoluene	10.833	91	238006	9.73	ppb	98
77) 4-Chlorotoluene	10.947	91	217189	9.73	ppb	98
78) 1,3,5-Trimethylbenzene	10.905	105	261183	9.55	ppb	95
79) tert-Butylbenzene	11.267	119	215843	9.09	ppb	89
80) 1,2,4-Trimethylbenzene	11.325	105	259406	9.57	ppb	# 77
81) sec-Butylbenzene	11.512	105	268960	8.81	ppb	95
82) 1,3-Dichlorobenzene	11.668	146	154038	9.73	ppb	96
83) p-Isopropyltoluene	11.670	119	254693	8.99	ppb	94
84) 1,4-Dichlorobenzene	11.771	146	154843	9.74	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	274929	9.69	ppb	# 91
86) p-Diethylbenzene	12.107	105	116053	8.90	ppb	# 54
87) 1,2-Dichlorobenzene	12.193	146	128832	9.41	ppb	# 74
88) n-Butylbenzene	12.135	91	209671	8.58	ppb	89
89) 1,2-Dibromo-3-chloropr...	13.095	75	6468	8.96	ppb	# 69
90) 1,2,4,5-Tetramethylben...	12.998	119	186735	8.55	ppb	93
91) 1,2,4-Trichlorobenzene	14.021	180	54734	8.20	ppb	96
92) Hexachloro-1,3-Butadiene	14.186	225	12767	7.56	ppb	91
93) Naphthalene	14.308	128	108799	8.96	ppb	98
94) 1,2,3-Trichlorobenzene	14.589	180	40058	8.97	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604736.D  
 Acq On : 12 Mar 2018 1:39 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BS1  
 Misc : QBQV6031218A ICV AQU  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 14:24:51 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration





Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604737.D  
 Acq On : 12 Mar 2018 2:05 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BSD1  
 Misc : QBQV6031218A ICV AQU  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 14:27:21 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) FLUOROBENZENE (ISTD)	6.131	70	53595	10.00	ppb	0.00
40) CHLOROBENZENE-d5 (ISTD)	9.189	117	221309	10.00	ppb	0.00
67) 1,2-DICHLOROBENZENE-d4...	12.171	152	91943	10.00	ppb	-0.01
System Monitoring Compounds						
34) d4-1,2-Dichloroethane ...	5.830	65	72995	10.16	ppb	0.00
Spiked Amount 10.000	Range 69	- 130	Recovery	=	101.60%	
51) Toluene-d8 (SURR)	7.683	98	265169	9.50	ppb	0.00
Spiked Amount 10.000	Range 81	- 117	Recovery	=	95.00%	
70) p-Bromofluorobenzene (...)	10.457	95	93348	9.99	ppb	-0.01
Spiked Amount 10.000	Range 79	- 122	Recovery	=	99.90%	
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.521	85	50019m	7.60	ppb	
3) Chloromethane	1.749	50	66243	7.10	ppb	96
4) Vinyl Chloride	1.852	62	68999	8.52	ppb	99
5) Bromomethane	2.238	94	14828m	6.99	ppb	
6) Chloroethane	2.361	64	47203	9.17	ppb	95
7) Trichlorofluoromethane	2.642	101	103651	9.26	ppb	99
8) Ethanol	2.940	45	21273	441.28	ppb	100
9) Freon-113	3.209	101	65442	8.96	ppb	94
10) 1,1-Dichloroethylene	3.218	61	105913	8.85	ppb	# 95
11) Acrolein	3.148	56	6824	10.76	ppb	92
12) Acetone	3.326	43	25108	12.18	ppb	99
13) Iodomethane	3.390	142	15153m	5.01	ppb	
14) Methyl Acetate	3.655	43	39606	9.51	ppb	100
15) Carbon disulfide	3.449	76	136261	8.42	ppb	100
16) tert-Butyl Alcohol (TBA)	3.908	59	7114	10.73	ppb	# 97
17) Methylene Chloride	3.760	49	92206	8.80	ppb	87
18) Acrylonitrile	4.033	53	19992	9.90	ppb	# 64
19) trans-1,2-Dichloroethy...	4.022	61	100626	9.00	ppb	99
20) tert-Butyl Methyl Ethe...	4.011	73	180165	9.68	ppb	96
21) 1,1-Dichloroethane	4.456	63	135722	9.31	ppb	# 97
22) Vinyl Acetate	4.495	43	212624	8.90	ppb	100
23) Diisopropyl ether (DIPE)	4.484	45	263751	8.98	ppb	97
24) Ethyl-tert-Butyl ether...	4.843	59	254558	9.47	ppb	# 89
25) cis-1,2-Dichloroethylene	5.029	61	120393	9.19	ppb	96
26) 2-Butanone	5.060	72	7343	12.00	ppb	# 68
27) 2,2-Dichloropropane	5.010	77	109050	9.36	ppb	# 83
28) Tetrahydrofuran	5.321	42	16323	9.07	ppb	81
29) Bromochloromethane	5.271	49	62902	9.80	ppb	95
30) Chloroform	5.343	83	120015	9.40	ppb	# 96
31) 1,1,1-Trichloroethane	5.496	97	111286	9.23	ppb	99
32) Cyclohexane	5.527	56	134141	8.51	ppb	87
33) 1,1-Dichloropropylene	5.658	75	91505	8.96	ppb	# 61
35) Carbon Tetrachloride	5.652	117	102087	9.03	ppb	# 59
36) tert-Amyl alcohol (TAA)	5.875	59	67087	109.48	ppb	89
37) 1,2-Dichloroethane	5.903	62	86555	9.40	ppb	# 97
38) Benzene	5.861	78	270949	9.28	ppb	# 96
39) tert-Amyl methyl ether...	5.942	73	192649	9.82	ppb	# 88
41) Trichloroethylene	6.484	95	74051	8.87	ppb	86
42) Methyl Cyclohexane	6.643	83	114569	8.71	ppb	86
43) Methyl Methacrylate	6.804	69	39132	9.63	ppb	# 75
44) Dibromomethane	6.851	93	36250	9.22	ppb	# 41
45) Bromodichloromethane	6.999	83	89895	8.90	ppb	# 96
46) 1,2-Dichloropropane	6.721	63	78654	8.85	ppb	95

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604737.D  
 Acq On : 12 Mar 2018 2:05 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BSD1  
 Misc : QBQV6031218A ICV AQU  
 ALS Vial : 6 Sample Multiplier: 1

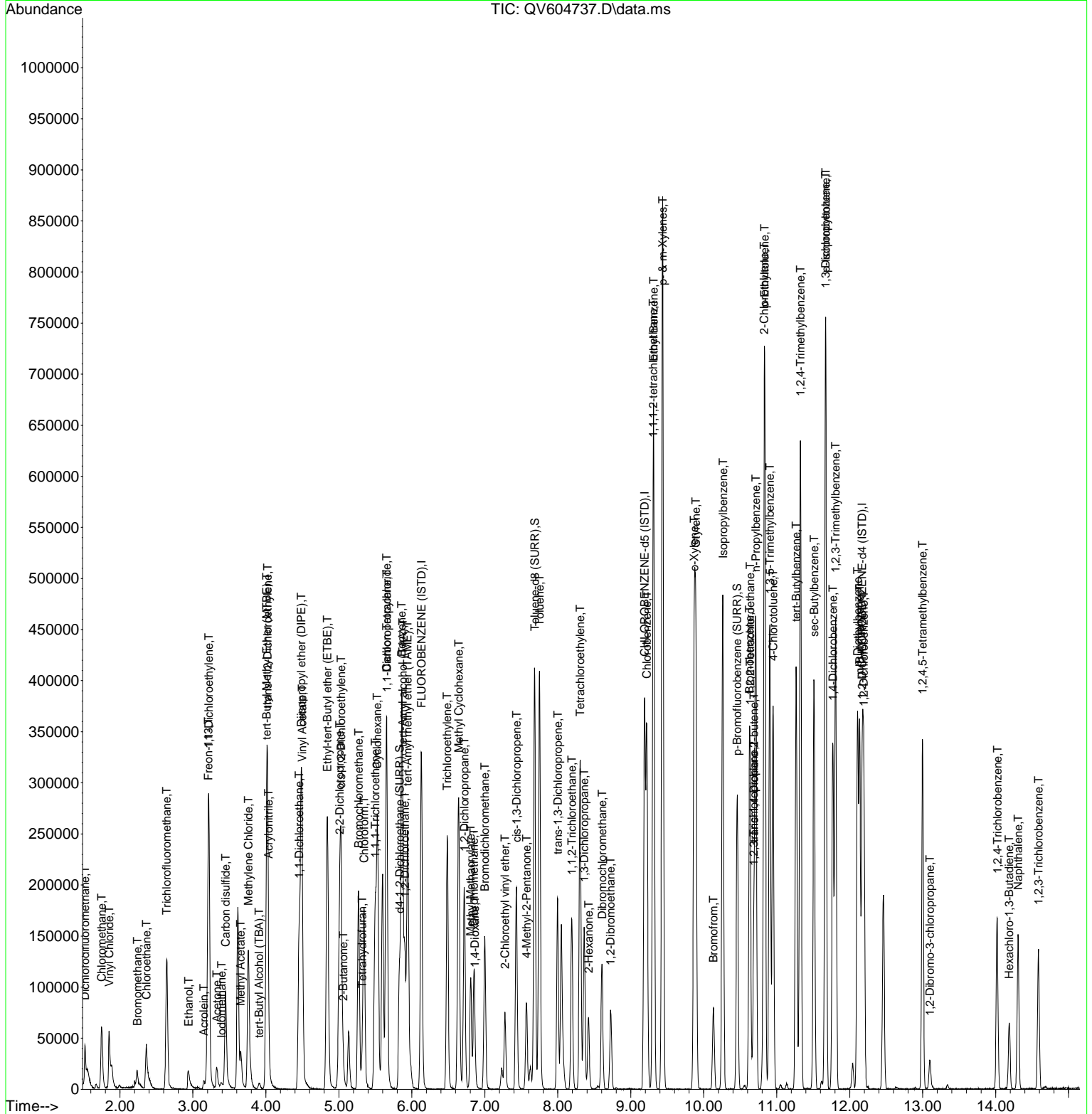
Quant Time: Mar 12 14:27:21 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
47) 1,4-Dioxane	6.865	88	7370	201.68	ppb	88
48) 2-Chloroethyl vinyl ether	7.274	63	29675	8.07	ppb	99
49) cis-1,3-Dichloropropene	7.433	75	110603	9.04	ppb	94
50) 4-Methyl-2-Pentanone	7.572	43	59047	9.21	ppb	95
52) Toluene	7.750	91	299349	8.93	ppb	99
53) trans-1,3-Dichloropropene	7.998	75	94668	9.21	ppb	# 88
54) 1,1,2-Trichloroethane	8.192	97	53206	9.56	ppb	95
55) 1,3-Dichloropropane	8.362	76	88963	9.40	ppb	95
56) Tetrachloroethylene	8.304	166	106310	9.35	ppb	97
57) 2-Hexanone	8.423	43	47440	10.34	ppb	# 97
58) Dibromochloromethane	8.607	129	69687	9.21	ppb	97
59) 1,2-Dibromoethane	8.724	107	54969	9.58	ppb	92
60) Chlorobenzene	9.219	112	204757	9.35	ppb	91
61) 1,1,1,2-tetrachloroethane	9.305	131	76104	9.44	ppb	95
62) Ethyl Benzene	9.314	91	335728	9.38	ppb	94
63) p- & m-Xylenes	9.436	91	511830	18.79	ppb	92
64) o-Xylene	9.867	91	258577	9.58	ppb	98
65) Styrene	9.890	104	216497	9.60	ppb	# 77
66) Bromofrom	10.132	173	42923	9.49	ppb	98
68) p-Ethyltoluene	10.836	105	314611m	9.39	ppb	
69) Isopropylbenzene	10.262	105	351312	9.39	ppb	91
71) 1,1,2,2-Tetrachloroethane	10.635	83	53529	9.51	ppb	# 97
72) Bromobenzene	10.627	77	110449	9.15	ppb	# 65
73) trans-1,4-Dichloro-2-b...	10.688	75	60784	9.35	ppb	# 74
74) 1,2,3-Trichloropropane	10.685	110	18305	9.84	ppb	# 82
75) n-Propylbenzene	10.713	91	371631	9.30	ppb	97
76) 2-Chlorotoluene	10.830	91	242604	9.31	ppb	98
77) 4-Chlorotoluene	10.950	91	219750	9.25	ppb	98
78) 1,3,5-Trimethylbenzene	10.908	105	268840	9.23	ppb	94
79) tert-Butylbenzene	11.267	119	237987	9.41	ppb	89
80) 1,2,4-Trimethylbenzene	11.325	105	268536	9.30	ppb	# 78
81) sec-Butylbenzene	11.512	105	303855	9.34	ppb	95
82) 1,3-Dichlorobenzene	11.668	146	156946	9.30	ppb	95
83) p-Isopropyltoluene	11.670	119	281022	9.31	ppb	94
84) 1,4-Dichlorobenzene	11.770	146	158417	9.35	ppb	97
85) 1,2,3-Trimethylbenzene	11.807	105	285294	9.44	ppb	# 91
86) p-Diethylbenzene	12.107	105	127054	9.15	ppb	# 81
87) 1,2-Dichlorobenzene	12.193	146	135278	9.27	ppb	# 74
88) n-Butylbenzene	12.135	91	235854	9.06	ppb	89
89) 1,2-Dibromo-3-chloropr...	13.100	75	7515	9.78	ppb	# 63
90) 1,2,4,5-Tetramethylben...	12.997	119	204111	8.77	ppb	93
91) 1,2,4-Trichlorobenzene	14.021	180	63255	8.90	ppb	95
92) Hexachloro-1,3-Butadiene	14.185	225	15782	8.60	ppb	92
93) Naphthalene	14.308	128	130621	10.10	ppb	98
94) 1,2,3-Trichlorobenzene	14.586	180	49132	10.32	ppb	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\2\DATA\031218A\  
 Data File : QV604737.D  
 Acq On : 12 Mar 2018 2:05 pm  
 InstName : QVOA6  
 Operator : AS  
 Sample : BC80492-BSD1  
 Misc : QBQV6031218A ICV AQU  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 12 14:27:21 2018  
 Quant Method : C:\msdchem\2\METHODS\VQ6LO020.M  
 Quant Title : Volatile Organics EPA 8260C-Waters  
 QLast Update : Tue Feb 27 11:50:39 2018  
 Response via : Initial Calibration



# BENCHSHEETS

SDG: 18C0189

CLASS: VOA

METHOD: EPA 8260C

**PREPARATION BENCH SHEET-AQUEOUS: BC80492**

Prepared: **03/12/2018 10:00**

York Analytical Laboratories, Inc.

Printed: 4/27/2018 4:13:05PM

Matrix: Water

Preparation EPA 5030B

Surrogate used: Y17H086

1 ul

Lab Number	Analysis	Initial (mL)	Final (mL)	Spike 1 ID	ul Spike 1	Spike 2 ID	ul Spike 2	Source ID	pH Data			Decanted Y/N	Comments
									Initial	Acid	Basic		
18C0073-03RE1 E	Volatile Organics, C	25	25							<-2	NA		waters
18C0073-07 B	Volatile Organics, C	25	25							<-2	NA		waters
18C0132-01RE1 E	Volatile Organics, X	25	25							<-2	NA		1X VOC analysis required
18C0132-03RE1 A	Volatile Organics, X	25	25							<-2	NA		1X VOC analysis required
18C0189-01 B	Volatile Organics, X	25	25							<-2	NA		
18C0189-02 B	Volatile Organics, X	25	25							<-2	NA		
18C0189-03 B	Volatile Organics, X	25	25							<-2	NA		
18C0189-04 B	Volatile Organics, X	25	25							<-2	NA		
18C0189-05 B	Volatile Organics, X	25	25							<-2	NA		
18C0209-01 B	Volatile Organics, C	25	25							<-2	NA		waters
18C0209-04RE1 E	Volatile Organics, C	25	25							<-2	NA		waters
18C0285-06RE1 E	Volatile Organics, X	25	25							<-2	NA		From BC80568 by AS on 03/13/2018
BC80492-BLK1	QC	25	25								NA		
BC80492-BS1	QC	25	25	Y18B241	5						NA		
BC80492-BSD1	QC	25	25	Y18B241	5						NA		

From BC80350 on 3/12/2018 by AS

**Reagents:**

ID Number	Description	Lot Number	ID Number	Description	Lot Number
-----------	-------------	------------	-----------	-------------	------------

York Analytical Laboratories, Inc.

SDG: 18C0189

CLASS: METALS

METHOD: EPA 6010C

# DATA PACKAGE COVER PAGE

EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

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**Client Sample Id:**

KC-MW-01 (0318)

KC-MW-02 (0318)

KC-MW-05 (0318)

KC-MW-DUP2 (0318)

**Lab Sample Id:**

18C0189-01

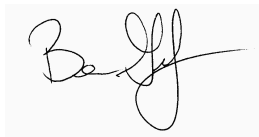
18C0189-02

18C0189-03

18C0189-04

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the project narrative. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the

Signature:



Name:

Benjamin Gulizia

Date:

4/30/2018

Title:

Laboratory Director

# METALS QC Summary





**DUPLICATES****KC-MW-01 (0318)****EPA 6010C**Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestiMatrix: WaterLaboratory ID: BC80552-DUP1Batch: BC80552Lab Source ID: 18C0189-01Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLSource Sample Name: KC-MW-01 (0318)

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Antimony	20	ND		0.009				EPA 6010C
Arsenic	20	ND		ND				EPA 6010C
Beryllium	20	ND		ND				EPA 6010C
Cadmium	20	0.077		0.077		0.0408		EPA 6010C
Chromium	20	0.011		0.010		3.98		EPA 6010C
Copper	20	0.009		0.010		4.05		EPA 6010C
Lead	20	ND		ND				EPA 6010C
Nickel	20	0.190		0.188		1.10		EPA 6010C
Selenium	20	0.050		0.057		11.8		EPA 6010C
Silver	20	ND		ND				EPA 6010C
Thallium	20	ND		ND				EPA 6010C
Zinc	20	0.154		0.155		0.485		EPA 6010C

\* Values outside of QC limits

# STANDARD REFERENCE MATERIAL RECOVERY

## EPA 6010C

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0189

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900 - Kingston CVS Investi

**Matrix:** Water

**Batch:** BC80552

**Laboratory ID:** BC80552-SRM1

**Preparation:** EPA 3015A

**Initial/Final:** 45 mL / 50 mL

ANALYTE	TRUE (ug/mL)	FOUND (ug/mL)	SRM % REC.	QC LIMITS REC.
Antimony	0.420	0.419	99.7	76.9 - 119.2
Arsenic	0.740	0.737	99.6	84.3 - 114.3
Beryllium	0.460	0.478	104	85 - 115
Cadmium	0.240	0.232	96.8	84.9 - 115
Chromium	0.860	0.854	99.3	85 - 115
Copper	0.320	0.316	98.9	85 - 115
Lead	0.640	0.651	102	85 - 115
Nickel	1.78	1.78	100	87 - 113.7
Selenium	0.680	0.716	105	85.1 - 115.1
Silver	0.600	0.574	95.7	85 - 115
Thallium	0.680	0.724	107	82.8 - 115.4
Zinc	1.62	1.54	95.0	84.9 - 115

\* Values outside of QC limits

**FORM IV****PREPARATION BATCH SUMMARY****EPA 6010C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
Batch: BC80552 Batch Matrix: Water Preparation: EPA 3015A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-MW-01 (0318)	18C0189-01	qbi031318aRE_3-155	03/13/18 11:43	
KC-MW-02 (0318)	18C0189-02	qbi031318aRE_3-160	03/13/18 11:43	
KC-MW-05 (0318)	18C0189-03	qbi031318aRE_3-161	03/13/18 11:43	
KC-MW-DUP2 (0318)	18C0189-04	qbi031318aRE_3-162	03/13/18 11:43	
Blank	BC80552-BLK1	qbi031318aRE_3-153	03/13/18 11:43	
KC-MW-01 (0318)	BC80552-DUP1	qbi031318aRE_3-158	03/13/18 11:43	
KC-MW-01 (0318)	BC80552-MS1	qbi031318aRE_3-159	03/13/18 11:43	
Reference	BC80552-SRM1	qbi031318aRE_3-154	03/13/18 11:43	

**FORM I**

**BLANKS  
EPA 6010C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Instrument ID: WinLabICP

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Sequence: Y8C1403

Calibration: 03/13/18 1

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
Y8C1403-ICB1	Antimony	0.004	0.005	ug/mL		EPA 6010C
	Arsenic	0.002	0.004	ug/mL		EPA 6010C
	Beryllium	0.0003	0.001	ug/mL		EPA 6010C
	Cadmium	0.0004	0.003	ug/mL		EPA 6010C
	Chromium	0.001	0.005	ug/mL		EPA 6010C
	Copper	0.002	0.003	ug/mL		EPA 6010C
	Lead	-0.002	0.005	ug/mL		EPA 6010C
	Nickel	0.002	0.005	ug/mL		EPA 6010C
	Selenium	0.0007	0.010	ug/mL		EPA 6010C
	Silver	0.002	0.005	ug/mL		EPA 6010C
	Thallium	0.004	0.005	ug/mL		EPA 6010C
	Zinc	0.005	0.015	ug/mL		EPA 6010C
Y8C1403-CCB1	Antimony	0.003	0.005	ug/mL		EPA 6010C
	Arsenic	0.003	0.004	ug/mL		EPA 6010C
	Beryllium	0.00008	0.001	ug/mL		EPA 6010C
	Cadmium	0.0003	0.003	ug/mL		EPA 6010C
	Chromium	-0.0005	0.005	ug/mL		EPA 6010C
	Copper	-0.0001	0.003	ug/mL		EPA 6010C
	Lead	-0.002	0.005	ug/mL		EPA 6010C
	Nickel	-0.002	0.005	ug/mL		EPA 6010C
	Selenium	-0.001	0.010	ug/mL		EPA 6010C
	Silver	0.0002	0.005	ug/mL		EPA 6010C
	Thallium	0.006	0.005	ug/mL	*	EPA 6010C
	Zinc	-0.002	0.015	ug/mL		EPA 6010C
Y8C1403-CCBD	Antimony	0.0001	0.005	ug/mL		EPA 6010C
	Arsenic	0.005	0.004	ug/mL	*	EPA 6010C
	Beryllium	0.0005	0.001	ug/mL		EPA 6010C
	Cadmium	0.00009	0.003	ug/mL		EPA 6010C
	Chromium	-0.0001	0.005	ug/mL		EPA 6010C
	Copper	-0.002	0.003	ug/mL		EPA 6010C
	Lead	-0.003	0.005	ug/mL		EPA 6010C
	Nickel	0.002	0.005	ug/mL		EPA 6010C
	Selenium	0.003	0.010	ug/mL		EPA 6010C

**FORM I**

**BLANKS  
EPA 6010C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Instrument ID: WinLabICP

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Sequence: Y8C1403

Calibration: 03/13/18 1

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
Y8C1403-CCBD	Silver	-0.0004	0.005	ug/mL		EPA 6010C
	Thallium	0.007	0.005	ug/mL	*	EPA 6010C
	Zinc	-0.004	0.015	ug/mL		EPA 6010C
BC80552-BLK1	Antimony	0.002	0.006	mg/L		EPA 6010C
	Arsenic	-0.003	0.004	mg/L		EPA 6010C
	Beryllium	0.0003	0.001	mg/L		EPA 6010C
	Cadmium	-0.00002	0.003	mg/L		EPA 6010C
	Chromium	0.00001	0.006	mg/L		EPA 6010C
	Copper	-0.0004	0.003	mg/L		EPA 6010C
	Lead	-0.002	0.006	mg/L		EPA 6010C
	Nickel	-0.006	0.006	mg/L		EPA 6010C
	Selenium	0.010	0.011	mg/L		EPA 6010C
	Silver	0.0001	0.006	mg/L		EPA 6010C
	Thallium	0.00004	0.006	mg/L		EPA 6010C
	Zinc	-0.004	0.017	mg/L		EPA 6010C
Y8C1403-CCBE	Antimony	-0.003	0.005	ug/mL		EPA 6010C
	Arsenic	0.005	0.004	ug/mL	*	EPA 6010C
	Beryllium	0.0005	0.001	ug/mL		EPA 6010C
	Cadmium	0.0001	0.003	ug/mL		EPA 6010C
	Chromium	-0.0002	0.005	ug/mL		EPA 6010C
	Copper	-0.002	0.003	ug/mL		EPA 6010C
	Lead	-0.002	0.005	ug/mL		EPA 6010C
	Nickel	0.003	0.005	ug/mL		EPA 6010C
	Selenium	0.006	0.010	ug/mL		EPA 6010C
	Silver	0.0005	0.005	ug/mL		EPA 6010C
	Thallium	0.006	0.005	ug/mL	*	EPA 6010C
	Zinc	-0.003	0.015	ug/mL		EPA 6010C
Y8C1403-CCBF	Antimony	0.001	0.005	ug/mL		EPA 6010C
	Arsenic	0.005	0.004	ug/mL	*	EPA 6010C
	Beryllium	0.0004	0.001	ug/mL		EPA 6010C
	Cadmium	0.0002	0.003	ug/mL		EPA 6010C
	Chromium	-0.0001	0.005	ug/mL		EPA 6010C
	Copper	-0.001	0.003	ug/mL		EPA 6010C

**FORM I****BLANKS  
EPA 6010C**Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Instrument ID: WinLabICPProject: 41103.00 Task 0900 - Kingston CVS InvestigationSequence: Y8C1403Calibration: 03/13/18 1

<b>Lab Sample ID</b>	<b>Analyte</b>	<b>Found</b>	<b>MRL</b>	<b>Units</b>	<b>C</b>	<b>Method</b>
Y8C1403-CCBF	Lead	-0.002	0.005	ug/mL		EPA 6010C
	Nickel	-0.001	0.005	ug/mL		EPA 6010C
	Selenium	0.0007	0.010	ug/mL		EPA 6010C
	Silver	0.0004	0.005	ug/mL		EPA 6010C
	Thallium	0.004	0.005	ug/mL		EPA 6010C
	Zinc	0.00008	0.015	ug/mL		EPA 6010C

**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 6010C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1403 Instrument: WinLabICP  
 Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	Y8C1403-ICV1	qbi031318aRE_3-001	03/13/18 10:29
Initial Cal Blank	Y8C1403-ICB1	qbi031318aRE_3-002	03/13/18 10:32
Instrument RL Check	Y8C1403-CRL1	qbi031318aRE_3-004	03/13/18 10:36
Interference Check A	Y8C1403-IFA1	qbi031318aRE_3-006	03/13/18 10:41
Interference Check B	Y8C1403-IFB1	qbi031318aRE_3-007	03/13/18 10:43
Calibration Check	Y8C1403-CCV1	qbi031318aRE_3-008	03/13/18 10:45
Calibration Blank	Y8C1403-CCB1	qbi031318aRE_3-009	03/13/18 10:47
Calibration Check	Y8C1403-CCVD	qbi031318aRE_3-151	03/13/18 15:46
Calibration Blank	Y8C1403-CCBD	qbi031318aRE_3-152	03/13/18 15:48
Blank	BC80552-BLK1	qbi031318aRE_3-153	03/13/18 15:50
Reference	BC80552-SRM1	qbi031318aRE_3-154	03/13/18 15:52
KC-MW-01 (0318)	18C0189-01	qbi031318aRE_3-155	03/13/18 15:55
Calibration Check	Y8C1403-CCVE	qbi031318aRE_3-156	03/13/18 15:57
Calibration Blank	Y8C1403-CCBE	qbi031318aRE_3-157	03/13/18 15:59
KC-MW-01 (0318)	BC80552-DUP1	qbi031318aRE_3-158	03/13/18 16:02
KC-MW-01 (0318)	BC80552-MS1	qbi031318aRE_3-159	03/13/18 16:04
KC-MW-02 (0318)	18C0189-02	qbi031318aRE_3-160	03/13/18 16:06
KC-MW-05 (0318)	18C0189-03	qbi031318aRE_3-161	03/13/18 16:09
KC-MW-DUP2 (0318)	18C0189-04	qbi031318aRE_3-162	03/13/18 16:11
Calibration Check	Y8C1403-CCVF	qbi031318aRE_3-168	03/13/18 16:25
Calibration Blank	Y8C1403-CCBF	qbi031318aRE_3-169	03/13/18 16:28



# HOLDING TIME SUMMARY

## EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
KC-MW-01 (0318)	03/05/18 12:30	03/06/18 15:40	03/13/18 11:43	7.97	180.00	03/13/18 15:55	8.14	180.00	
KC-MW-02 (0318)	03/05/18 18:25	03/06/18 15:40	03/13/18 11:43	7.72	180.00	03/13/18 16:06	7.90	180.00	
KC-MW-05 (0318)	03/05/18 15:00	03/06/18 15:40	03/13/18 11:43	7.86	180.00	03/13/18 16:09	8.05	180.00	
KC-MW-DUP2 (0318)	03/05/18 15:00	03/06/18 15:40	03/13/18 11:43	7.86	180.00	03/13/18 16:11	8.05	180.00	

# METHOD DETECTION AND REPORTING LIMITS

## EPA 6010C

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0189

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900 - Kingston CVS Invest

**Matrix:** Water

**Instrument:** WinLabICP

Analyte	LOD	LOQ	Units
Antimony	0.005	0.005	mg/L
Arsenic	0.004	0.004	mg/L
Beryllium	0.001	0.001	mg/L
Cadmium	0.003	0.003	mg/L
Chromium	0.005	0.005	mg/L
Copper	0.003	0.003	mg/L
Lead	0.005	0.005	mg/L
Nickel	0.005	0.005	mg/L
Selenium	0.010	0.010	mg/L
Silver	0.005	0.005	mg/L
Thallium	0.005	0.005	mg/L
Zinc	0.015	0.015	mg/L

# METALS Sample Data

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-01File ID: qbi031318aRE\_3-155Sampled: 03/05/18 12:30Prepared: 03/13/18 11:43Analyzed: 03/13/18 15:55Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552Sequence: Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.006	1	U	EPA 6010C
7440-38-2	Arsenic	0.004	1	U	EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.077	1		EPA 6010C
7440-47-3	Chromium	0.011	1		EPA 6010C
7440-50-8	Copper	0.009	1		EPA 6010C
7439-92-1	Lead	0.006	1	U	EPA 6010C
7440-02-0	Nickel	0.190	1		EPA 6010C
7782-49-2	Selenium	0.050	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.006	1	U	EPA 6010C
7440-66-6	Zinc	0.154	1		EPA 6010C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-02File ID: qbi031318aRE\_3-160Sampled: 03/05/18 18:25Prepared: 03/13/18 11:43Analyzed: 03/13/18 16:06Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552Sequence: Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.006	1	U	EPA 6010C
7440-38-2	Arsenic	0.004	1	U	EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.003	1	U	EPA 6010C
7440-47-3	Chromium	0.006	1	U	EPA 6010C
7440-50-8	Copper	0.011	1		EPA 6010C
7439-92-1	Lead	0.006	1	U	EPA 6010C
7440-02-0	Nickel	0.006	1	U	EPA 6010C
7782-49-2	Selenium	0.080	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.034	1		EPA 6010C
7440-66-6	Zinc	0.017	1	U	EPA 6010C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-03File ID: qbi031318aRE\_3-161Sampled: 03/05/18 15:00Prepared: 03/13/18 11:43Analyzed: 03/13/18 16:09Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552Sequence: Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.009	1		EPA 6010C
7440-38-2	Arsenic	0.004	1	U	EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.003	1	U	EPA 6010C
7440-47-3	Chromium	0.006	1	U	EPA 6010C
7440-50-8	Copper	0.013	1		EPA 6010C
7439-92-1	Lead	0.006	1	U	EPA 6010C
7440-02-0	Nickel	0.006	1	U	EPA 6010C
7782-49-2	Selenium	0.099	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.006	1	U	EPA 6010C
7440-66-6	Zinc	0.017	1	U	EPA 6010C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-04File ID: qbi031318aRE\_3-162Sampled: 03/05/18 15:00Prepared: 03/13/18 11:43Analyzed: 03/13/18 16:11Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552Sequence: Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.006	1	U	EPA 6010C
7440-38-2	Arsenic	0.005	1		EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.078	1		EPA 6010C
7440-47-3	Chromium	0.023	1		EPA 6010C
7440-50-8	Copper	0.017	1		EPA 6010C
7439-92-1	Lead	0.006	1		EPA 6010C
7440-02-0	Nickel	0.184	1		EPA 6010C
7782-49-2	Selenium	0.051	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.006	1	U	EPA 6010C
7440-66-6	Zinc	0.168	1		EPA 6010C

# METALS Standards Data



# INITIAL AND CONTINUING CALIBRATION CHECK

## EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: WinLabICP

Calibration: 03/13/18

Control Limit: +/- 10.00%

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R	Units	Method
Y8C1403-ICV1	Antimony	0.250	0.245	98.1	ug/mL	EPA 6010C
	Arsenic	0.250	0.243	97.3	ug/mL	EPA 6010C
	Beryllium	0.250	0.253	101	ug/mL	EPA 6010C
	Cadmium	0.125	0.120	96.4	ug/mL	EPA 6010C
	Chromium	1.00	0.997	99.7	ug/mL	EPA 6010C
	Copper	1.25	1.23	98.5	ug/mL	EPA 6010C
	Lead	0.250	0.246	98.3	ug/mL	EPA 6010C
	Nickel	2.50	2.46	98.3	ug/mL	EPA 6010C
	Selenium	0.250	0.259	103	ug/mL	EPA 6010C
	Silver	1.25	1.23	98.4	ug/mL	EPA 6010C
	Thallium	0.250	0.232	92.8	ug/mL	EPA 6010C
	Zinc	2.50	2.47	98.7	ug/mL	EPA 6010C
Y8C1403-CCV1	Antimony	0.250	0.250	100	ug/mL	EPA 6010C
	Arsenic	0.500	0.486	97.1	ug/mL	EPA 6010C
	Beryllium	0.250	0.252	101	ug/mL	EPA 6010C
	Cadmium	0.250	0.243	97.0	ug/mL	EPA 6010C
	Chromium	1.00	0.964	96.4	ug/mL	EPA 6010C
	Copper	1.25	1.19	95.5	ug/mL	EPA 6010C
	Lead	0.500	0.498	99.6	ug/mL	EPA 6010C
	Nickel	2.50	2.43	97.3	ug/mL	EPA 6010C
	Selenium	0.500	0.489	97.9	ug/mL	EPA 6010C
	Silver	1.25	1.19	95.3	ug/mL	EPA 6010C
	Thallium	0.500	0.498	99.7	ug/mL	EPA 6010C
	Zinc	2.50	2.44	97.7	ug/mL	EPA 6010C
Y8C1403-CCVD	Antimony	0.250	0.246	98.4	ug/mL	EPA 6010C
	Arsenic	0.500	0.486	97.1	ug/mL	EPA 6010C
	Beryllium	0.250	0.258	103	ug/mL	EPA 6010C
	Cadmium	0.250	0.242	96.6	ug/mL	EPA 6010C
	Chromium	1.00	0.963	96.3	ug/mL	EPA 6010C
	Copper	1.25	1.18	94.8	ug/mL	EPA 6010C
	Lead	0.500	0.496	99.2	ug/mL	EPA 6010C
	Nickel	2.50	2.43	97.3	ug/mL	EPA 6010C
	Selenium	0.500	0.493	98.7	ug/mL	EPA 6010C
	Silver	1.25	1.19	94.8	ug/mL	EPA 6010C
	Thallium	0.500	0.527	105	ug/mL	EPA 6010C
	Zinc	2.50	2.45	98.2	ug/mL	EPA 6010C
Y8C1403-CCVE	Antimony	0.250	0.251	101	ug/mL	EPA 6010C

# INITIAL AND CONTINUING CALIBRATION CHECK

## EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: WinLabICP

Calibration: 03/13/18

Control Limit: +/- 10.00%

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R	Units	Method
Y8C1403-CCVE	Arsenic	0.500	0.497	99.4	ug/mL	EPA 6010C
	Beryllium	0.250	0.260	104	ug/mL	EPA 6010C
	Cadmium	0.250	0.242	96.9	ug/mL	EPA 6010C
	Chromium	1.00	0.966	96.6	ug/mL	EPA 6010C
	Copper	1.25	1.18	94.8	ug/mL	EPA 6010C
	Lead	0.500	0.510	102	ug/mL	EPA 6010C
	Nickel	2.50	2.45	97.8	ug/mL	EPA 6010C
	Selenium	0.500	0.506	101	ug/mL	EPA 6010C
	Silver	1.25	1.19	94.9	ug/mL	EPA 6010C
	Thallium	0.500	0.529	106	ug/mL	EPA 6010C
	Zinc	2.50	2.47	98.8	ug/mL	EPA 6010C
Y8C1403-CCVF	Antimony	0.250	0.256	102	ug/mL	EPA 6010C
	Arsenic	0.500	0.492	98.5	ug/mL	EPA 6010C
	Beryllium	0.250	0.262	105	ug/mL	EPA 6010C
	Cadmium	0.250	0.239	95.6	ug/mL	EPA 6010C
	Chromium	1.00	0.976	97.6	ug/mL	EPA 6010C
	Copper	1.25	1.21	96.7	ug/mL	EPA 6010C
	Lead	0.500	0.507	101	ug/mL	EPA 6010C
	Nickel	2.50	2.46	98.6	ug/mL	EPA 6010C
	Selenium	0.500	0.506	101	ug/mL	EPA 6010C
	Silver	1.25	1.20	96.3	ug/mL	EPA 6010C
	Thallium	0.500	0.533	107	ug/mL	EPA 6010C
	Zinc	2.50	2.46	98.5	ug/mL	EPA 6010C

\* Values outside of QC limits

# CRDL STANDARD

## EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: WinLabICP

Calibration: 03/13/18

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limits
Y8C1403-CRL1	Antimony	0.0250	0.022	87.6	ug/mL	70 - 130
	Arsenic	0.0150	0.021	142 *	ug/mL	70 - 130
	Beryllium	0.000500	0.0004	84.9	ug/mL	70 - 130
	Cadmium	0.00300	0.003	101	ug/mL	70 - 130
	Chromium	0.00500	0.005	96.0	ug/mL	70 - 130
	Copper	0.0400	0.037	92.9	ug/mL	70 - 130
	Lead	0.00500	0.005	104	ug/mL	70 - 130
	Nickel	0.0100	0.009	88.4	ug/mL	70 - 130
	Selenium	0.0250	0.026	104	ug/mL	70 - 130
	Silver	0.0100	0.010	102	ug/mL	70 - 130
	Thallium	0.0250	0.030	118	ug/mL	70 - 130
	Zinc	0.0250	0.031	126	ug/mL	70 - 130

\* Values outside of QC limits

# ICP INTERFERENCE CHECK SAMPLE

## EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investiga

Instrument ID: WinLabICP

Calibration: 03/13/18

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R	Units
Y8C1403-IFA1	Antimony		0.00		ug/mL
	Arsenic		0.00		ug/mL
	Beryllium		0.00		ug/mL
	Cadmium		0.00		ug/mL
	Chromium		0.00		ug/mL
	Copper		0.00		ug/mL
	Lead		0.00		ug/mL
	Nickel		0.00		ug/mL
	Selenium		0.00		ug/mL
	Silver		0.00		ug/mL
	Thallium		0.00		ug/mL
	Zinc		0.00		ug/mL
Y8C1403-IFB1	Antimony	0.500	0.52	103	ug/mL
	Arsenic	0.500	0.50	100	ug/mL
	Beryllium	0.500	0.53	105	ug/mL
	Cadmium	1.00	0.98	98.0	ug/mL
	Chromium	0.500	0.49	98.1	ug/mL
	Copper	0.500	0.53	107	ug/mL
	Lead	1.00	0.97	97.3	ug/mL
	Nickel	1.00	1.01	101	ug/mL
	Selenium	0.500	0.47	93.2	ug/mL
	Silver	1.00	1.06	106	ug/mL
	Thallium	0.500	0.52	104	ug/mL
	Zinc	1.00	0.97	96.8	ug/mL

\* Values outside of QC limits

# METALS Raw QC Data

# Metals Linear Dynamic Range

## EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument: WinLabICP

<b>CAS NO.</b>	<b>Analyte</b>	<b>Concentration mg/L</b>
7440-36-0	Antimony	50
7440-38-2	Arsenic	250
7440-41-7	Beryllium	12.5
7440-43-9	Cadmium	30
7440-47-3	Chromium	50
7440-50-8	Copper	62.5
7439-92-1	Lead	150
7440-02-0	Nickel	125
7782-49-2	Selenium	100
7440-22-4	Silver	62.5
7440-28-0	Thallium	125
7440-66-6	Zinc	30

## Interfering Analytes

	Analytes	Al RADIAL	Ca RADIAL	Fe RADIAL	Mg RADIAL
1	Ag 338.289	0	0.011281	-0.04	0
2	Al 308.215	0	0.0245069	-0.0817898	0.0376104
3	Al RADIAL	n/a	0.0296996	-0.105128	0
4	As 188.979	0	0	-0.13	0
7	Ca 227.546	-0.675005	0	-8.62387	-0.0625929
9	Cd 226.502	0	0	0.04	0
10	Co 228.616	0	0	-0.03	0
11	Cr 267.716	0	0	-0.03	0
12	Cu 324.752	0	0	-0.03	0
16	Mg 279.077	0	0	0.161547	0
17	Mg RADIAL	0	0	0.0994223	n/a
18	Mn 257.610	0	0	-0.07	0
19	Na 330.237	0	-0.983571	-4.63141	0
21	Ni 232.003	0	0	0.07	0
22	Pb 220.353	-0.129664	-0.0141428	0.1	0
23	Sb 206.836	0.000505	0	-0.07	0
24	Se 196.026	0	0	0.32	0
25	Tl 190.801	0	0	-0.08	0
26	V 292.402	0	0	0.17	0
27	Y 371.029	9.77357	9.1591	24.475	8.93015
28	Y RADIAL	10.2987	9.68204	24.8989	9.399
29	Zn 206.200	0	0	-0.03	0

# BENCHSHEETS

SDG: 18C0189  
CLASS: METALS  
METHOD: EPA 6010C



**PREPARATION BENCH SHEET-AQUEOUS: BC80552**

Prepared: 03/13/2018 11:43

York Analytical Laboratories, Inc.

Printed: 4/3/2018 12:28:00PM

Matrix: Water

Preparation EPA 3015A

(No Surrogate)

ul

Lab Number	Analysis	Initial (mL)	Final (mL)	Spike 1 ID	ul Spike 1	Spike 2 ID	ul Spike 2	Source ID	pH Data			Decanted Y/N	Comments
									Initial	Acid	Basic		
18C0189-01 D	Metals, Priority Po	45	50							NA			
18C0189-01 D	Metals, RCRA	45	50							NA			Added for BatchQC in: BC80552
18C0189-01 D	Metals, Target Anal	45	50							NA			Added for BatchQC in: BC80552
18C0189-01 D	Sodium by EPA 6C	45	50							NA			Added for BatchQC in: BC80552
18C0189-01 D	Iron by EPA 6010	45	50							NA			Added for BatchQC in: BC80552
18C0189-02 D	Metals, Priority Po	45	50							NA			
18C0189-03 D	Metals, Priority Po	45	50							NA			
18C0189-04 D	Metals, Priority Po	45	50							NA			
18C0210-22 G	Metals, Target Anal	45	50							NA			Use for soils
18C0407-01 H	Sodium by EPA 6C	45	50							NA			
18C0407-01 H	Iron by EPA 6010	45	50							NA			
18C0407-02 H	Iron by EPA 6010	45	50							NA			
18C0407-02 H	Sodium by EPA 6C	45	50							NA			
18C0407-03 H	Iron by EPA 6010	45	50							NA			
18C0407-03 H	Sodium by EPA 6C	45	50							NA			
18C0420-01 A	Metals, RCRA	45	50							NA			
BC80552-BLK1	QC	45	50							NA			
BC80552-DUP1	QC	45	50					18C0189-01		NA			
BC80552-MS1	QC	45	50	Y17D079	500			18C0189-01		NA			
BC80552-SRM1	QC	45	50	Y17L139	1					NA			

**Reagents:**

ID Number	Description	Lot Number	ID Number	Description	Lot Number
Y17K005	Hydrochloric Acid	0000175645	Y18B220	Nitric Acid	0000190545

# METALS Raw Sample Data

**Sample Information Detail Report**  
**Document Name: 031318a**

**File Description**  
Sample Information File

**Parameters Common to All Samples**

Batch ID                   qbi031318a  
Analyst Name               KML  
Volume Units               mL  
Weight Units               g

**Parameters That Vary By Sample**

Sample No	A/S Location	Sample ID	Remarks
1	3	SEQ-ICV1	
2	1	SEQ-ICB1	
3	1	SEQ-ICB2	
4	5	SEQ-CRL1	
5	6	SEQ-CRL2	
6	7	SEQ-IFA1	
7	8	SEQ-IFB1	
8	9	SEQ-CCV1	
9	4	SEQ-CCB1	
10	101	18C0024-03RE1	10X
11	102	18C0901-01RE1	10X
12	103	18C0226-13RE1	10X
13	104	BC80487-BLK1	
14	105	BC80487-SRM1	
15	106	18B0916-01	
16	107	BC80487-DUP1	
17	108	BC80487-MS1	
18	109	18B0916-02	
19	110	18B0916-03	
20	9	SEQ-CCV2	
21	1	SEQ-CCB2	
22	111	18B0916-04	
23	112	18B0916-05	
24	113	18B0916-06	
25	114	18B0916-07	
26	115	18B0916-08	
27	116	18C0210-21	
28	117	18C0222-01	
29	118	18C0223-01	
30	119	18C0223-02	
31	120	18C0223-03	
32	9	SEQ-CCV3	
33	1	SEQ-CCB3	
34	121	18C0223-04	
35	122	18C0223-05	
36	123	18C0300-01	
37	124	18C0300-05	
38	125	18C0300-09	
39	126	18C0360-01	
40	127	BC80541-BLK1	
41	128	BC80541-SRM1	
42	129	18C0138-01	
43	130	18C0156-01	
44	9	SEQ-CCV4	
45	1	SEQ-CCB4	
46	131	18C0156-02	
47	132	18C0167-01	
48	133	18C0171-01	
49	134	18C0179-04	
50	135	BC80541-DUP1	
51	136	BC80541-MS1	
52	137	18C0203-04	

Sample Information Detail Report  
Document Name: 031318a

53	138	18C0212-01
54	139	18C0215-01
55	140	18C0215-02
56	9	SEQ-CCV5
57	1	SEQ-CCB5
58	141	18C0215-03
59	142	18C0239-01
60	143	18C0239-02
61	144	18C0422-01
62	145	BC80540-BLK1
63	146	BC80540-LBK1
64	147	BC80540-SRM1
65	148	18C0056-01
66	149	BC80540-DUP1
67	150	BC80540-MS1
68	9	SEQ-CCV6
69	1	SEQ-CCB6
70	151	BC80485-BLK1
71	152	BC80485-SRM1
72	153	18C0162-01
73	154	BC80485-DUP1
74	155	BC80485-MS1
75	156	18C0169-01
76	157	18C0182-05
77	158	18C0182-06
78	159	18C0182-07
79	160	18C0182-08
80	10	SEQ-CCV7
81	4	SEQ-CCB7
82	201	18C0188-01
83	202	18C0188-02
84	203	18C0188-03
85	204	18C0188-04
86	205	18C0188-05
87	206	18C0188-06
88	207	18C0188-07
89	208	18C0188-08
90	209	18C0188-09
91	210	18C0188-10
92	10	SEQ-CCV8
93	4	SEQ-CCB8
94	211	18C0188-11
95	212	18C0190-01
96	213	18C0190-02
97	214	18C0190-03
98	215	BC80486-BLK1
99	216	BC80486-SRM1
100	217	18C0210-01
101	218	BC80486-DUP1
102	219	BC80486-MS1
103	220	18C0210-02
104	10	SEQ-CCV9
105	4	SEQ-CCB9
106	221	18C0210-03
107	222	18C0210-04
108	223	18C0210-05
109	224	18C0210-06
110	225	18C0210-07
111	226	18C0210-08
112	227	18C0210-09
113	228	18C0210-10
114	229	18C0210-11
115	230	18C0210-12
116	10	SEQ-CCVA
117	4	SEQ-CCBA

Sample Information Detail Report  
 Document Name: 031318a

118	231	18C0210-13	
119	232	18C0210-14	
120	233	18C0210-15	
121	234	18C0210-16	
122	235	18C0210-17	
123	236	18C0210-18	
124	237	18C0210-19	
125	238	18C0210-20	
126	239	BC80537-BLK1	
127	240	BC80537-SRM1	
128	10	SEQ-CCVB	
129	4	SEQ-CCBB	
130	241	18C0221-01	
131	242	BC80537-DUP1	
132	243	BC80537-MS1	
133	244	18C0221-03	
134	245	18C0221-05	
135	246	18C0221-07	
136	247	18C0221-09	
137	248	18C0379-01	
138	249	BC80551-BLK1	
139	250	BC80551-LBK1	
140	10	SEQ-CCVC	
141	4	SEQ-CCBC	
142	251	BC80551-SRM1	
143	252	18C0300-01	
144	253	18C0300-05	
145	254	18C0300-09	
146	255	18C0360-01	
147	256	BC80551-DUP1	
148	257	BC80551-MS1	
149	102	18C0901-01RE1	10X
150	103	18C0226-13RE1	10X
151	10	SEQ-CCVD	
152	4	SEQ-CCBD	
153	258	BC80552-BLK1	
154	259	BC80552-SRM1	
155	260	18C0189-01	
156	10	SEQ-CCVE	
157	4	SEQ-CCBE	
158	301	BC80552-DUP1	
159	302	BC80552-MS1	
160	303	18C0189-02	
161	304	18C0189-03	
162	305	18C0189-04	
163	306	18C0210-22	
164	307	18C0407-01	
165	308	18C0407-02	
166	309	18C0407-03	
167	310	18C0420-01	
168	9	SEQ-CCVF	
169	1	SEQ-CCBF	
170	311	BC80501-BLK1	
171	312	BC80501-SRM1	
172	313	18C0180-01	
173	314	18C0184-01	
174	315	18C0184-02	
175	316	18C0184-03	
176	317	18C0184-04	
177	318	18C0187-01	
178	319	18C0195-01	
179	320	18C0210-09RE1	10X
180	9	SEQ-CCVG	
181	1	SEQ-CCBG	
182	321	18C0221-01RE1	20X

Sample Information Detail Report  
Document Name: 031318a

183	9	SEQ-CCVH
184	4	SEQ-CCBH
185	5	SEQ-CRL3
186	6	SEQ-CRL4
187	7	SEQ-IFA2
188	8	SEQ-IFB2
189	9	SEQ-CCVI
190	4	SEQ-CCBI
207		

Reprocessing Begun

Logged In Analyst: john

Technique: ICP Continuous

Results Data Set (original): qbi031318a

Results Library (original): C:\pe\rqb\Results\Results 030218.mdb

Results Data Set (reprocessed): qbi031318aRE\_1

Results Library (reprocessed): C:\pe\john\Results\Results 030218.mdb

Method Loaded

Method Name: TAL METHOD\_012518FAS

Method Last Saved: 3/5/2018 11:45:38 AM

IEC File: IEC 030318A.iec

MSF File:

Method Description: TAL METALS

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blank 1

Date Collected: 3/13/2018 10:25:31 AM

Analyst:

Data Type: Reprocessed on 3/13/2018 2:28:36 PM

Logged In Analyst (Original) : rqb

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected		Std.Dev.	RSD	Calib	
	Intensity				Conc.	Units
Y 371.029	17371708.7		393610.24	2.27%	5.000	mg/L
Y RADIAL	231682.2		1686.23	0.73%	5.000	mg/L
As 188.979†	-52.1		3.06	5.87%	[0.00]	mg/L
Tl 190.801†	-176.8		12.33	6.97%	[0.00]	mg/L
Se 196.026†	21.9		13.92	63.47%	[0.00]	mg/L
Zn 206.200†	294.1		12.97	4.41%	[0.00]	mg/L
Sb 206.836†	121.0		12.36	10.22%	[0.00]	mg/L
Pb 220.353†	492.3		4.84	0.98%	[0.00]	mg/L
Cd 226.502†	-438.7		33.78	7.70%	[0.00]	mg/L
Co 228.616†	-210.0		12.44	5.92%	[0.00]	mg/L
Ni 232.003†	-1458.6		5.81	0.40%	[0.00]	mg/L
Ba 233.527†	-70.6		22.10	31.32%	[0.00]	mg/L
Mn 257.610†	766.0		28.21	3.68%	[0.00]	mg/L
Cr 267.716†	396.7		42.20	10.64%	[0.00]	mg/L
Fe 273.955†	230.1		18.59	8.08%	[0.00]	mg/L
Mg 279.077†	249.8		47.76	19.12%	[0.00]	mg/L
V 292.402†	-261.8		61.49	23.49%	[0.00]	mg/L
Al 308.215†	9290.0		262.62	2.83%	[0.00]	mg/L
Be 313.107†	-12738.2		361.90	2.84%	[0.00]	mg/L
Cu 324.752†	1914.5		107.31	5.61%	[0.00]	mg/L
Ag 338.289†	-368.8		17.25	4.68%	[0.00]	mg/L
Na 330.237†	544.6		177.75	32.64%	[0.00]	mg/L
Ca 227.546†	-571.2		14.25	2.50%	[0.00]	mg/L
Al RADIAL†	-7.3		17.67	242.47%	[0.00]	mg/L
Fe RADIAL†	21.0		3.10	14.77%	[0.00]	mg/L
Ca RADIAL†	1420.0		24.92	1.75%	[0.00]	mg/L
K RADIAL†	1092.1		40.67	3.72%	[0.00]	mg/L
Mg RADIAL†	31.9		1.51	4.72%	[0.00]	mg/L
Na RADIAL†	-90.9		84.07	92.49%	[0.00]	mg/L

Sequence No.: 2  
 Sample ID: CAL STD 1  
 Analyst:  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 2  
 Date Collected: 3/13/2018 10:27:55 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:38 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CAL STD 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	16293941.9	36247.37	0.22%	4.690	mg/L
Y RADIAL	228828.6	2096.23	0.92%	4.938	mg/L
As 188.979†	2402.7	10.13	0.42%	[1.0000]	mg/L
Tl 190.801†	3175.2	24.30	0.77%	[1.0000]	mg/L
Se 196.026†	3102.8	31.59	1.02%	[1.0000]	mg/L
Zn 206.200†	315226.6	7213.32	2.29%	[5.0000]	mg/L
Sb 206.836†	2050.6	14.18	0.69%	[0.5000]	mg/L
Pb 220.353†	15142.8	175.15	1.16%	[1.0000]	mg/L
Cd 226.502†	96405.5	2292.56	2.38%	[0.5000]	mg/L
Co 228.616†	272481.8	6143.83	2.25%	[5.0000]	mg/L
Ni 232.003†	129262.2	2932.49	2.27%	[5.0000]	mg/L
Ba 233.527†	2174849.6	12258.78	0.56%	[20.0000]	mg/L
Mn 257.610†	4808870.6	20307.95	0.42%	[5.0000]	mg/L
Cr 267.716†	322691.1	6967.19	2.16%	[2.0000]	mg/L
Fe 273.955†	315037.2	6828.28	2.17%	[10.0000]	mg/L
Mg 279.077†	1437397.8	10287.70	0.72%	[50.0000]	mg/L
V 292.402†	1286075.4	7776.85	0.60%	[5.0000]	mg/L
Al 308.215†	528899.3	12426.37	2.35%	[20.0000]	mg/L
Be 313.107†	2014481.5	9591.79	0.48%	[0.5000]	mg/L
Cu 324.752†	564389.1	12643.80	2.24%	[2.5000]	mg/L
Ag 338.289†	325112.9	6850.57	2.11%	[2.5000]	mg/L
Na 330.237†	42377.2	966.19	2.28%	[50.0000]	mg/L
Ca 227.546†	18218.2	123.15	0.68%	[50.0000]	mg/L
Al RADIAL†	21498.0	638.12	2.97%	[20.0000]	mg/L
Fe RADIAL†	4001.0	116.81	2.92%	[10.0000]	mg/L
Ca RADIAL†	225418.7	2004.78	0.89%	[50.0000]	mg/L
K RADIAL†	7778.9	156.98	2.02%	[10.0000]	mg/L
Mg RADIAL†	22665.3	595.94	2.63%	[50.0000]	mg/L
Na RADIAL†	338563.0	2912.11	0.86%	[50.0000]	mg/L



Sequence No.: 3  
 Sample ID: SEQ-ICV1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 3  
 Date Collected: 3/13/2018 10:29:56 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:39 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-ICV1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	16640609.8	4.790 mg/L	0.0264			0.55%
Y RADIAL	232900.9	5.026 mg/L	0.0115			0.23%
As 188.979†	582.7	0.2432 mg/L	0.00397	0.2432 mg/L	0.00397	1.63%
Tl 190.801†	735.4	0.2320 mg/L	0.00263	0.2320 mg/L	0.00263	1.13%
Se 196.026†	807.4	0.2586 mg/L	0.00564	0.2586 mg/L	0.00564	2.18%
Zn 206.200†	155490.0	2.466 mg/L	0.0361	2.466 mg/L	0.0361	1.46%
Sb 206.836†	1004.7	0.2453 mg/L	0.00215	0.2453 mg/L	0.00215	0.88%
Pb 220.353†	3703.8	0.2457 mg/L	0.00238	0.2457 mg/L	0.00238	0.97%
Cd 226.502†	23270.1	0.1205 mg/L	0.00158	0.1205 mg/L	0.00158	1.31%
Co 228.616†	134448.4	2.467 mg/L	0.0307	2.467 mg/L	0.0307	1.24%
Ni 232.003†	63511.9	2.456 mg/L	0.0312	2.456 mg/L	0.0312	1.27%
Ba 233.527†	1096281.1	10.08 mg/L	0.074	10.08 mg/L	0.074	0.73%
Mn 257.610†	2413280.2	2.510 mg/L	0.0208	2.510 mg/L	0.0208	0.83%
Cr 267.716†	160894.5	0.9974 mg/L	0.01231	0.9974 mg/L	0.01231	1.23%
Fe 273.955†	155173.8	4.926 mg/L	0.0659	4.926 mg/L	0.0659	1.34%
Mg 279.077†	717743.7	24.97 mg/L	0.221	24.97 mg/L	0.221	0.89%
V 292.402†	640239.5	2.488 mg/L	0.0222	2.488 mg/L	0.0222	0.89%
Al 308.215†	252560.1	9.549 mg/L	0.1168	9.549 mg/L	0.1168	1.22%
Be 313.107†	1018931.4	0.25290 mg/L	0.003155	0.25290 mg/L	0.003155	1.25%
Cu 324.752†	277926.6	1.231 mg/L	0.0155	1.231 mg/L	0.0155	1.26%
Ag 338.289†	159921.6	1.230 mg/L	0.0140	1.230 mg/L	0.0140	1.14%
Na 330.237†	19383.4	22.92 mg/L	0.378	22.92 mg/L	0.378	1.65%
Ca 227.546†	8634.4	23.75 mg/L	0.288	23.75 mg/L	0.288	1.21%
Al RADIAL†	10596.1	9.858 mg/L	0.1331	9.858 mg/L	0.1331	1.35%
Fe RADIAL†	1964.5	4.910 mg/L	0.0531	4.910 mg/L	0.0531	1.08%
Ca RADIAL†	106008.2	23.51 mg/L	0.595	23.51 mg/L	0.595	2.53%
K RADIAL†	3482.7	4.477 mg/L	0.1694	4.477 mg/L	0.1694	3.78%
Mg RADIAL†	11160.7	24.62 mg/L	0.261	24.62 mg/L	0.261	1.06%
Na RADIAL†	163260.7	24.11 mg/L	0.554	24.11 mg/L	0.554	2.30%

Sequence No.: 4  
 Sample ID: SEQ-ICB1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 3/13/2018 10:32:20 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:40 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-ICB1

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Y 371.029	17298749.3		4.979 mg/L	0.0288			0.58%
Y RADIAL	236554.8		5.105 mg/L	0.0668			1.31%
As 188.979†	4.8		0.0020 mg/L	0.00171	0.0020 mg/L	0.00171	85.37%
Tl 190.801†	11.8		0.0037 mg/L	0.00280	0.0037 mg/L	0.00280	75.16%
Se 196.026†	2.1		0.0007 mg/L	0.00318	0.0007 mg/L	0.00318	468.90%
Zn 206.200†	285.5		0.0045 mg/L	0.00060	0.0045 mg/L	0.00060	13.15%
Sb 206.836†	14.8		0.0036 mg/L	0.00443	0.0036 mg/L	0.00443	122.41%
Pb 220.353†	-23.9		-0.0016 mg/L	0.00103	-0.0016 mg/L	0.00103	65.55%
Cd 226.502†	76.0		0.0004 mg/L	0.00017	0.0004 mg/L	0.00017	42.31%
Co 228.616†	203.9		0.0037 mg/L	0.00060	0.0037 mg/L	0.00060	15.93%
Ni 232.003†	58.6		0.0023 mg/L	0.00109	0.0023 mg/L	0.00109	48.04%
Ba 233.527†	1805.2		0.0166 mg/L	0.00305	0.0166 mg/L	0.00305	18.39%
Mn 257.610†	4240.9		0.0044 mg/L	0.00103	0.0044 mg/L	0.00103	23.33%
Cr 267.716†	213.7		0.0013 mg/L	0.00049	0.0013 mg/L	0.00049	37.16%
Fe 273.955†	243.3		0.0077 mg/L	0.00205	0.0077 mg/L	0.00205	26.53%
Mg 279.077†	1189.3		0.0414 mg/L	0.01093	0.0414 mg/L	0.01093	26.42%
V 292.402†	1241.2		0.0048 mg/L	0.00102	0.0048 mg/L	0.00102	21.07%
Al 308.215†	713.0		0.0270 mg/L	0.00362	0.0270 mg/L	0.00362	13.42%
Be 313.107†	1409.0		0.00035 mg/L	0.000113	0.00035 mg/L	0.000113	32.21%
Cu 324.752†	558.8		0.0025 mg/L	0.00065	0.0025 mg/L	0.00065	26.36%
Ag 338.289†	313.1		0.0024 mg/L	0.00098	0.0024 mg/L	0.00098	40.80%
Na 330.237†	170.8		0.2014 mg/L	0.18178	0.2014 mg/L	0.18178	90.25%
Ca 227.546†	15.1		0.0414 mg/L	0.06980	0.0414 mg/L	0.06980	168.70%
Al RADIAL†	63.3		0.0589 mg/L	0.04064	0.0589 mg/L	0.04064	69.05%
Fe RADIAL†	-7.0		-0.0175 mg/L	0.00838	-0.0175 mg/L	0.00838	47.91%
Ca RADIAL†	23.5		0.0052 mg/L	0.01434	0.0052 mg/L	0.01434	274.83%
K RADIAL†	-45.0		-0.0579 mg/L	0.03201	-0.0579 mg/L	0.03201	55.32%
Mg RADIAL†	14.7		0.0325 mg/L	0.00398	0.0325 mg/L	0.00398	12.25%
Na RADIAL†	-4.3		-0.0006 mg/L	0.01301	-0.0006 mg/L	0.01301	>999.9%

Sequence No.: 6  
 Sample ID: SEQ-CRL1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 5  
 Date Collected: 3/13/2018 10:36:56 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:42 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-CRL1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	17462725.8	5.026 mg/L	0.0816			1.62%
Y RADIAL	239922.0	5.178 mg/L	0.0751			1.45%
As 188.979†	50.9	0.0213 mg/L	0.00460	0.0213 mg/L	0.00460	21.62%
Tl 190.801†	93.9	0.0296 mg/L	0.00354	0.0296 mg/L	0.00354	11.96%
Se 196.026†	81.0	0.0259 mg/L	0.00553	0.0259 mg/L	0.00553	21.34%
Zn 206.200†	1983.8	0.0315 mg/L	0.00119	0.0315 mg/L	0.00119	3.78%
Sb 206.836†	89.7	0.0219 mg/L	0.00366	0.0219 mg/L	0.00366	16.71%
Pb 220.353†	78.6	0.0052 mg/L	0.00086	0.0052 mg/L	0.00086	16.49%
Cd 226.502†	586.6	0.0030 mg/L	0.00007	0.0030 mg/L	0.00007	2.32%
Co 228.616†	239.2	0.0044 mg/L	0.00067	0.0044 mg/L	0.00067	15.22%
Ni 232.003†	229.4	0.0088 mg/L	0.00102	0.0088 mg/L	0.00102	11.55%
Ba 233.527†	2968.3	0.0273 mg/L	0.00054	0.0273 mg/L	0.00054	1.96%
Mn 257.610†	9784.2	0.0102 mg/L	0.00012	0.0102 mg/L	0.00012	1.21%
Cr 267.716†	772.3	0.0048 mg/L	0.00027	0.0048 mg/L	0.00027	5.57%
Fe 273.955†	15999.0	0.5078 mg/L	0.00554	0.5078 mg/L	0.00554	1.09%
Mg 279.077†	14719.3	0.5119 mg/L	0.00481	0.5119 mg/L	0.00481	0.94%
V 292.402†	2594.6	0.0100 mg/L	0.00003	0.0100 mg/L	0.00003	0.30%
Al 308.215†	11645.9	0.4404 mg/L	0.01146	0.4404 mg/L	0.01146	2.60%
Be 313.107†	1711.0	0.00042 mg/L	0.000094	0.00042 mg/L	0.000094	22.22%
Cu 324.752†	8385.9	0.0372 mg/L	0.00053	0.0372 mg/L	0.00053	1.42%
Ag 338.289†	1330.3	0.0102 mg/L	0.00076	0.0102 mg/L	0.00076	7.45%
Na 330.237†	448.3	0.5319 mg/L	0.11672	0.5319 mg/L	0.11672	21.94%
Ca 227.546†	153.5	0.4260 mg/L	0.03446	0.4260 mg/L	0.03446	8.09%
Al RADIAL†	550.8	0.5125 mg/L	0.02261	0.5125 mg/L	0.02261	4.41%
Fe RADIAL†	203.9	0.5096 mg/L	0.00399	0.5096 mg/L	0.00399	0.78%
Ca RADIAL†	2827.5	0.6272 mg/L	0.01414	0.6272 mg/L	0.01414	2.25%
K RADIAL†	288.9	0.3714 mg/L	0.05913	0.3714 mg/L	0.05913	15.92%
Mg RADIAL†	228.6	0.5042 mg/L	0.00582	0.5042 mg/L	0.00582	1.15%
Na RADIAL†	3119.2	0.4606 mg/L	0.00700	0.4606 mg/L	0.00700	1.52%

Sequence No.: 8  
 Sample ID: SEQ-IFAL  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 7  
 Date Collected: 3/13/2018 10:41:31 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:45 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-IFAL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	13863575.2	3.990 mg/L	0.4063			10.18%
Y RADIAL	210086.0	4.534 mg/L	0.0771			1.70%
As 188.979†	-73.3	-0.0045 mg/L	0.00291	-0.0045 mg/L	0.00291	65.42%
Tl 190.801†	-53.7	-0.0009 mg/L	0.00462	-0.0009 mg/L	0.00462	523.32%
Se 196.026†	197.3	-0.0006 mg/L	0.01449	-0.0006 mg/L	0.01449	>999.9%
Zn 206.200†	-152.1	0.0036 mg/L	0.00032	0.0036 mg/L	0.00032	8.79%
Sb 206.836†	-51.3	0.0013 mg/L	0.01028	0.0013 mg/L	0.01028	816.44%
Pb 220.353†	-786.1	0.0004 mg/L	0.00081	0.0004 mg/L	0.00081	197.85%
Cd 226.502†	1909.3	0.0019 mg/L	0.00077	0.0019 mg/L	0.00077	40.97%
Co 228.616†	-294.6	0.0006 mg/L	0.00052	0.0006 mg/L	0.00052	85.23%
Ni 232.003†	348.5	-0.0006 mg/L	0.00812	-0.0006 mg/L	0.00812	>999.9%
Ba 233.527†	228.6	0.0021 mg/L	0.00019	0.0021 mg/L	0.00019	8.95%
Mn 257.610†	-13675.4	-0.0002 mg/L	0.00114	-0.0002 mg/L	0.00114	619.44%
Cr 267.716†	-721.6	0.0015 mg/L	0.00059	0.0015 mg/L	0.00059	38.52%
Fe 273.955†	6368030.9	202.1 mg/L	24.18	202.1 mg/L	24.18	11.96%
Mg 279.077†	16286949.5	566.5 mg/L	66.18	566.5 mg/L	66.18	11.68%
V 292.402†	8308.4	-0.0018 mg/L	0.00285	-0.0018 mg/L	0.00285	160.02%
Al 308.215†	14360484.1	543.0 mg/L	65.82	543.0 mg/L	65.82	12.12%
Be 313.107†	-3737.4	-0.00093 mg/L	0.000420	-0.00093 mg/L	0.000420	45.32%
Cu 324.752†	-2237.7	-0.0039 mg/L	0.00094	-0.0039 mg/L	0.00094	24.16%
Ag 338.289†	-509.0	-0.0015 mg/L	0.00095	-0.0015 mg/L	0.00095	65.07%
Na 330.237†	-981.2	0.2560 mg/L	0.11596	0.2560 mg/L	0.11596	45.29%
Ca 227.546†	196314.0	540.9 mg/L	46.07	540.9 mg/L	46.07	8.52%
Al RADIAL†	542112.2	504.3 mg/L	7.96	504.3 mg/L	7.96	1.58%
Fe RADIAL†	80219.4	200.5 mg/L	2.88	200.5 mg/L	2.88	1.44%
Ca RADIAL†	2223497.1	493.2 mg/L	4.82	493.2 mg/L	4.82	0.98%
K RADIAL†	45.0	0.0579 mg/L	0.05401	0.0579 mg/L	0.05401	93.32%
Mg RADIAL†	227212.1	501.2 mg/L	6.05	501.2 mg/L	6.05	1.21%
Na RADIAL†	48.2	0.0071 mg/L	0.00399	0.0071 mg/L	0.00399	55.98%

Sequence No.: 9  
 Sample ID: SEQ-IFB1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 8  
 Date Collected: 3/13/2018 10:43:24 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:46 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-IFB1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	14402614.5	4.145 mg/L	0.0380			0.92%
Y RADIAL	205862.5	4.443 mg/L	0.0371			0.83%
As 188.979†	1142.0	0.5016 mg/L	0.00912	0.5016 mg/L	0.00912	1.82%
Tl 190.801†	1603.3	0.5211 mg/L	0.00897	0.5211 mg/L	0.00897	1.72%
Se 196.026†	1647.1	0.4662 mg/L	0.00868	0.4662 mg/L	0.00868	1.86%
Zn 206.200†	60643.0	0.9680 mg/L	0.00466	0.9680 mg/L	0.00466	0.48%
Sb 206.836†	2056.6	0.5154 mg/L	0.00194	0.5154 mg/L	0.00194	0.38%
Pb 220.353†	13931.7	0.9731 mg/L	0.01108	0.9731 mg/L	0.01108	1.14%
Cd 226.502†	190479.0	0.9798 mg/L	0.00425	0.9798 mg/L	0.00425	0.43%
Co 228.616†	26022.2	0.4836 mg/L	0.00509	0.4836 mg/L	0.00509	1.05%
Ni 232.003†	26467.4	1.010 mg/L	0.0042	1.010 mg/L	0.0042	0.41%
Ba 233.527†	57485.4	0.5286 mg/L	0.00360	0.5286 mg/L	0.00360	0.68%
Mn 257.610†	484527.1	0.5179 mg/L	0.00298	0.5179 mg/L	0.00298	0.58%
Cr 267.716†	78198.8	0.4907 mg/L	0.00195	0.4907 mg/L	0.00195	0.40%
Fe 273.955†	5885296.5	186.8 mg/L	0.89	186.8 mg/L	0.89	0.48%
Mg 279.077†	15326797.8	533.1 mg/L	1.22	533.1 mg/L	1.22	0.23%
V 292.402†	139358.0	0.5074 mg/L	0.00196	0.5074 mg/L	0.00196	0.39%
Al 308.215†	13625909.4	515.2 mg/L	2.05	515.2 mg/L	2.05	0.40%
Be 313.107†	2118955.1	0.52593 mg/L	0.001143	0.52593 mg/L	0.001143	0.22%
Cu 324.752†	118953.7	0.5330 mg/L	0.00451	0.5330 mg/L	0.00451	0.85%
Ag 338.289†	137398.6	1.059 mg/L	0.0054	1.059 mg/L	0.0054	0.51%
Na 330.237†	-727.7	0.5616 mg/L	0.07805	0.5616 mg/L	0.07805	13.90%
Ca 227.546†	183407.6	505.5 mg/L	2.56	505.5 mg/L	2.56	0.51%
Al RADIAL†	550117.3	511.8 mg/L	9.55	511.8 mg/L	9.55	1.87%
Fe RADIAL†	80862.3	202.1 mg/L	1.42	202.1 mg/L	1.42	0.70%
Ca RADIAL†	2219593.7	492.3 mg/L	7.86	492.3 mg/L	7.86	1.60%
K RADIAL†	-20.3	-0.0261 mg/L	0.12007	-0.0261 mg/L	0.12007	460.68%
Mg RADIAL†	227861.2	502.6 mg/L	2.98	502.6 mg/L	2.98	0.59%
Na RADIAL†	203.0	0.0300 mg/L	0.00763	0.0300 mg/L	0.00763	25.46%

Sequence No.: 10  
 Sample ID: SEQ-CCV1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 9  
 Date Collected: 3/13/2018 10:45:19 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:47 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-CCV1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	16145117.1	4.647 mg/L	0.1886			4.06%
Y RADIAL	228202.5	4.925 mg/L	0.0761			1.55%
As 188.979†	1165.5	0.4857 mg/L	0.02066	0.4857 mg/L	0.02066	4.25%
Tl 190.801†	1581.3	0.4984 mg/L	0.01760	0.4984 mg/L	0.01760	3.53%
Se 196.026†	1523.0	0.4893 mg/L	0.01813	0.4893 mg/L	0.01813	3.70%
Zn 206.200†	153995.5	2.443 mg/L	0.1091	2.443 mg/L	0.1091	4.47%
Sb 206.836†	1023.8	0.2500 mg/L	0.01019	0.2500 mg/L	0.01019	4.08%
Pb 220.353†	7519.7	0.4978 mg/L	0.02120	0.4978 mg/L	0.02120	4.26%
Cd 226.502†	46808.8	0.2426 mg/L	0.01115	0.2426 mg/L	0.01115	4.60%
Co 228.616†	133164.1	2.444 mg/L	0.1143	2.444 mg/L	0.1143	4.68%
Ni 232.003†	62919.6	2.433 mg/L	0.1059	2.433 mg/L	0.1059	4.35%
Ba 233.527†	1107222.5	10.18 mg/L	0.473	10.18 mg/L	0.473	4.65%
Mn 257.610†	2461603.3	2.560 mg/L	0.1209	2.560 mg/L	0.1209	4.72%
Cr 267.716†	155542.6	0.9642 mg/L	0.04352	0.9642 mg/L	0.04352	4.51%
Fe 273.955†	154175.7	4.894 mg/L	0.2320	4.894 mg/L	0.2320	4.74%
Mg 279.077†	726897.0	25.28 mg/L	1.157	25.28 mg/L	1.157	4.57%
V 292.402†	647597.8	2.517 mg/L	0.1067	2.517 mg/L	0.1067	4.24%
Al 308.215†	249223.0	9.423 mg/L	0.4496	9.423 mg/L	0.4496	4.77%
Be 313.107†	1015421.6	0.25203 mg/L	0.010247	0.25203 mg/L	0.010247	4.07%
Cu 324.752†	269400.2	1.193 mg/L	0.0552	1.193 mg/L	0.0552	4.62%
Ag 338.289†	155005.4	1.192 mg/L	0.0534	1.192 mg/L	0.0534	4.48%
Na 330.237†	19295.9	22.81 mg/L	1.189	22.81 mg/L	1.189	5.21%
Ca 227.546†	8901.8	24.48 mg/L	0.875	24.48 mg/L	0.875	3.58%
Al RADIAL†	10935.1	10.17 mg/L	0.139	10.17 mg/L	0.139	1.36%
Fe RADIAL†	1990.8	4.976 mg/L	0.0849	4.976 mg/L	0.0849	1.71%
Ca RADIAL†	109909.2	24.38 mg/L	0.619	24.38 mg/L	0.619	2.54%
K RADIAL†	3478.0	4.471 mg/L	0.0836	4.471 mg/L	0.0836	1.87%
Mg RADIAL†	11200.0	24.71 mg/L	0.471	24.71 mg/L	0.471	1.90%
Na RADIAL†	163869.1	24.20 mg/L	0.434	24.20 mg/L	0.434	1.79%

Sequence No.: 11  
 Sample ID: SEQ-CCB1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 3/13/2018 10:47:38 AM  
 Data Type: Reprocessed on 3/13/2018 2:28:48 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-CCB1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	17090793.2	4.919 mg/L	0.0189			0.39%
Y RADIAL	232715.7	5.022 mg/L	0.0771			1.53%
As 188.979†	6.6	0.0028 mg/L	0.00541	0.0028 mg/L	0.00541	195.84%
Tl 190.801†	18.6	0.0059 mg/L	0.00139	0.0059 mg/L	0.00139	23.80%
Se 196.026†	-3.4	-0.0011 mg/L	0.00587	-0.0011 mg/L	0.00587	534.47%
Zn 206.200†	-100.4	-0.0016 mg/L	0.00022	-0.0016 mg/L	0.00022	13.88%
Sb 206.836†	12.5	0.0030 mg/L	0.00179	0.0030 mg/L	0.00179	58.73%
Pb 220.353†	-31.8	-0.0021 mg/L	0.00232	-0.0021 mg/L	0.00232	110.93%
Cd 226.502†	53.2	0.0003 mg/L	0.00007	0.0003 mg/L	0.00007	25.65%
Co 228.616†	19.6	0.0004 mg/L	0.00003	0.0004 mg/L	0.00003	7.17%
Ni 232.003†	-64.5	-0.0025 mg/L	0.00082	-0.0025 mg/L	0.00082	33.04%
Ba 233.527†	113.4	0.0010 mg/L	0.00010	0.0010 mg/L	0.00010	9.96%
Mn 257.610†	258.9	0.0003 mg/L	0.00006	0.0003 mg/L	0.00006	20.66%
Cr 267.716†	-75.9	-0.0005 mg/L	0.00014	-0.0005 mg/L	0.00014	30.23%
Fe 273.955†	313.1	0.0099 mg/L	0.00136	0.0099 mg/L	0.00136	13.69%
Mg 279.077†	664.8	0.0231 mg/L	0.00407	0.0231 mg/L	0.00407	17.61%
V 292.402†	141.7	0.0005 mg/L	0.00013	0.0005 mg/L	0.00013	24.02%
Al 308.215†	453.1	0.0171 mg/L	0.00347	0.0171 mg/L	0.00347	20.26%
Be 313.107†	310.2	0.00008 mg/L	0.000034	0.00008 mg/L	0.000034	43.67%
Cu 324.752†	-21.6	-0.0001 mg/L	0.00043	-0.0001 mg/L	0.00043	454.83%
Ag 338.289†	27.1	0.0002 mg/L	0.00187	0.0002 mg/L	0.00187	895.79%
Na 330.237†	116.6	0.1376 mg/L	0.21631	0.1376 mg/L	0.21631	157.15%
Ca 227.546†	-32.5	-0.0891 mg/L	0.06405	-0.0891 mg/L	0.06405	71.86%
Al RADIAL†	79.8	0.0742 mg/L	0.01627	0.0742 mg/L	0.01627	21.93%
Fe RADIAL†	6.9	0.0173 mg/L	0.00951	0.0173 mg/L	0.00951	54.97%
Ca RADIAL†	41.5	0.0092 mg/L	0.01452	0.0092 mg/L	0.01452	157.56%
K RADIAL†	2.1	0.0027 mg/L	0.05799	0.0027 mg/L	0.05799	>999.9%
Mg RADIAL†	29.0	0.0639 mg/L	0.00714	0.0639 mg/L	0.00714	11.17%
Na RADIAL†	126.0	0.0186 mg/L	0.00490	0.0186 mg/L	0.00490	26.35%

Sequence No.: 153  
 Sample ID: SEQ-CCVD  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 10  
 Date Collected: 3/13/2018 3:46:00 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:10 PM

Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: SEQ-CCVD

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	16629656.1	4.786 mg/L	0.0423			0.88%
Y RADIAL	229170.8	4.946 mg/L	0.0084			0.17%
As 188.979†	1165.2	0.4856 mg/L	0.00467	0.4856 mg/L	0.00467	0.96%
Tl 190.801†	1672.5	0.5271 mg/L	0.00811	0.5271 mg/L	0.00811	1.54%
Se 196.026†	1535.9	0.4934 mg/L	0.00805	0.4934 mg/L	0.00805	1.63%
Zn 206.200†	154752.9	2.455 mg/L	0.0163	2.455 mg/L	0.0163	0.67%
Sb 206.836†	1007.4	0.2460 mg/L	0.00577	0.2460 mg/L	0.00577	2.34%
Pb 220.353†	7493.9	0.4961 mg/L	0.00630	0.4961 mg/L	0.00630	1.27%
Cd 226.502†	46619.0	0.2416 mg/L	0.00182	0.2416 mg/L	0.00182	0.75%
Co 228.616†	133670.5	2.453 mg/L	0.0169	2.453 mg/L	0.0169	0.69%
Ni 232.003†	62920.2	2.433 mg/L	0.0138	2.433 mg/L	0.0138	0.57%
Ba 233.527†	1098832.0	10.10 mg/L	0.075	10.10 mg/L	0.075	0.74%
Mn 257.610†	2510394.9	2.611 mg/L	0.0140	2.611 mg/L	0.0140	0.54%
Cr 267.716†	155281.5	0.9626 mg/L	0.00642	0.9626 mg/L	0.00642	0.67%
Fe 273.955†	153282.0	4.866 mg/L	0.0351	4.866 mg/L	0.0351	0.72%
Mg 279.077†	723037.6	25.15 mg/L	0.214	25.15 mg/L	0.214	0.85%
V 292.402†	650945.9	2.530 mg/L	0.0160	2.530 mg/L	0.0160	0.63%
Al 308.215†	244642.1	9.250 mg/L	0.0695	9.250 mg/L	0.0695	0.75%
Be 313.107†	1041145.9	0.25842 mg/L	0.001417	0.25842 mg/L	0.001417	0.55%
Cu 324.752†	267365.5	1.184 mg/L	0.0085	1.184 mg/L	0.0085	0.72%
Ag 338.289†	154176.7	1.185 mg/L	0.0082	1.185 mg/L	0.0082	0.69%
Na 330.237†	19574.4	23.14 mg/L	0.249	23.14 mg/L	0.249	1.08%
Ca 227.546†	8566.6	23.56 mg/L	0.212	23.56 mg/L	0.212	0.90%
Al RADIAL†	11252.2	10.47 mg/L	0.030	10.47 mg/L	0.030	0.29%
Fe RADIAL†	2005.0	5.011 mg/L	0.0196	5.011 mg/L	0.0196	0.39%
Ca RADIAL†	109703.2	24.33 mg/L	0.353	24.33 mg/L	0.353	1.45%
K RADIAL†	3253.7	4.183 mg/L	0.1072	4.183 mg/L	0.1072	2.56%
Mg RADIAL†	11207.1	24.72 mg/L	0.141	24.72 mg/L	0.141	0.57%
Na RADIAL†	163037.2	24.08 mg/L	0.336	24.08 mg/L	0.336	1.39%



Sequence No.: 154  
 Sample ID: SEQ-CCBD  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 3/13/2018 3:48:20 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:12 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-CCBD

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	17903860.4	5.153 mg/L	0.0386			0.75%
Y RADIAL	240386.8	5.188 mg/L	0.0494			0.95%
As 188.979†	13.2	0.0055 mg/L	0.00118	0.0055 mg/L	0.00118	21.51%
Tl 190.801†	22.2	0.0070 mg/L	0.00183	0.0070 mg/L	0.00183	26.29%
Se 196.026†	9.7	0.0031 mg/L	0.00407	0.0031 mg/L	0.00407	129.97%
Zn 206.200†	-228.0	-0.0036 mg/L	0.00012	-0.0036 mg/L	0.00012	3.38%
Sb 206.836†	0.5	0.0001 mg/L	0.00261	0.0001 mg/L	0.00261	>999.9%
Pb 220.353†	-52.5	-0.0035 mg/L	0.00105	-0.0035 mg/L	0.00105	30.37%
Cd 226.502†	17.2	0.0001 mg/L	0.00017	0.0001 mg/L	0.00017	191.12%
Co 228.616†	37.4	0.0007 mg/L	0.00030	0.0007 mg/L	0.00030	44.36%
Ni 232.003†	62.4	0.0024 mg/L	0.00091	0.0024 mg/L	0.00091	37.73%
Ba 233.527†	115.7	0.0011 mg/L	0.00012	0.0011 mg/L	0.00012	10.81%
Mn 257.610†	238.1	0.0002 mg/L	0.00007	0.0002 mg/L	0.00007	29.82%
Cr 267.716†	-17.2	-0.0001 mg/L	0.00020	-0.0001 mg/L	0.00020	191.15%
Fe 273.955†	-14.7	-0.0005 mg/L	0.00051	-0.0005 mg/L	0.00051	109.91%
Mg 279.077†	-49.4	-0.0017 mg/L	0.00469	-0.0017 mg/L	0.00469	272.75%
V 292.402†	-15.7	-0.0001 mg/L	0.00020	-0.0001 mg/L	0.00020	320.74%
Al 308.215†	-529.4	-0.0200 mg/L	0.00364	-0.0200 mg/L	0.00364	18.16%
Be 313.107†	2029.7	0.00050 mg/L	0.000065	0.00050 mg/L	0.000065	12.99%
Cu 324.752†	-419.8	-0.0019 mg/L	0.00068	-0.0019 mg/L	0.00068	36.78%
Ag 338.289†	-54.6	-0.0004 mg/L	0.00081	-0.0004 mg/L	0.00081	192.29%
Na 330.237†	-38.7	-0.0457 mg/L	0.10969	-0.0457 mg/L	0.10969	239.85%
Ca 227.546†	-40.5	-0.1110 mg/L	0.08577	-0.1110 mg/L	0.08577	77.29%
Al RADIAL†	28.3	0.0263 mg/L	0.02078	0.0263 mg/L	0.02078	79.04%
Fe RADIAL†	1.3	0.0033 mg/L	0.02085	0.0033 mg/L	0.02085	627.68%
Ca RADIAL†	-225.5	-0.0500 mg/L	0.00256	-0.0500 mg/L	0.00256	5.12%
K RADIAL†	-1.4	-0.0018 mg/L	0.02987	-0.0018 mg/L	0.02987	>999.9%
Mg RADIAL†	7.8	0.0171 mg/L	0.00614	0.0171 mg/L	0.00614	35.88%
Na RADIAL†	-85.4	-0.0126 mg/L	0.01274	-0.0126 mg/L	0.01274	101.09%

Sequence No.: 155  
 Sample ID: BC80552-BLK1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 258  
 Date Collected: 3/13/2018 3:50:38 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:13 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

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 Mean Data: BC80552-BLK1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	16838901.0	4.847 mg/L		0.0172			0.36%
Y RADIAL	225517.7	4.867 mg/L		0.0319			0.66%
As 188.979†	-7.0	-0.0029 mg/L		0.00402	-0.0029 mg/L	0.00402	138.18%
Tl 190.801†	0.1	0.0000 mg/L		0.00240	0.0000 mg/L	0.00240	>999.9%
Se 196.026†	26.9	0.0087 mg/L		0.00511	0.0087 mg/L	0.00511	58.87%
Zn 206.200†	-199.7	-0.0032 mg/L		0.00012	-0.0032 mg/L	0.00012	3.83%
Sb 206.836†	8.9	0.0022 mg/L		0.00329	0.0022 mg/L	0.00329	151.06%
Pb 220.353†	-29.6	-0.0020 mg/L		0.00114	-0.0020 mg/L	0.00114	58.50%
Cd 226.502†	-3.4	0.0000 mg/L		0.00003	0.0000 mg/L	0.00003	174.75%
Co 228.616†	-3.2	-0.0001 mg/L		0.00023	-0.0001 mg/L	0.00023	388.18%
Ni 232.003†	-148.7	-0.0058 mg/L		0.00212	-0.0058 mg/L	0.00212	36.86%
Ba 233.527†	39.7	0.0004 mg/L		0.00005	0.0004 mg/L	0.00005	13.90%
Mn 257.610†	233.5	0.0002 mg/L		0.00003	0.0002 mg/L	0.00003	12.29%
Cr 267.716†	2.2	0.0000 mg/L		0.00013	0.0000 mg/L	0.00013	>999.9%
Fe 273.955†	37.5	0.0012 mg/L		0.00012	0.0012 mg/L	0.00012	9.82%
Mg 279.077†	-28.5	-0.0010 mg/L		0.00144	-0.0010 mg/L	0.00144	145.23%
V 292.402†	27.3	0.0001 mg/L		0.00030	0.0001 mg/L	0.00030	277.83%
Al 308.215†	276.9	0.0105 mg/L		0.00306	0.0105 mg/L	0.00306	29.22%
Be 313.107†	1064.3	0.00026 mg/L		0.000076	0.00026 mg/L	0.000076	28.89%
Cu 324.752†	-75.7	-0.0003 mg/L		0.00031	-0.0003 mg/L	0.00031	91.49%
Ag 338.289†	13.9	0.0001 mg/L		0.00065	0.0001 mg/L	0.00065	601.86%
Na 330.237†	33.9	0.0400 mg/L		0.16712	0.0400 mg/L	0.16712	418.19%
Ca 227.546†	-88.4	-0.2427 mg/L		0.02307	-0.2427 mg/L	0.02307	9.51%
Al RADIAL†	-0.1	-0.0001 mg/L		0.03809	-0.0001 mg/L	0.03809	>999.9%
Fe RADIAL†	-1.4	-0.0034 mg/L		0.01816	-0.0034 mg/L	0.01816	529.85%
Ca RADIAL†	-268.1	-0.0595 mg/L		0.00530	-0.0595 mg/L	0.00530	8.91%
K RADIAL†	77.8	0.1000 mg/L		0.10529	0.1000 mg/L	0.10529	105.24%
Mg RADIAL†	10.0	0.0220 mg/L		0.00460	0.0220 mg/L	0.00460	20.86%
Na RADIAL†	-152.3	-0.0225 mg/L		0.00699	-0.0225 mg/L	0.00699	31.07%

Sequence No.: 156

Sample ID: BC80552-SRML

Analyst: KML

Logged In Analyst (Original) : rqb

Initial Sample Wt:

Dilution:

Autosampler Location: 259

Date Collected: 3/13/2018 3:52:56 PM

Data Type: Reprocessed on 3/13/2018 5:30:14 PM

Initial Sample Vol:

Sample Prep Vol:

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Mean Data: BC80552-SRML

Analyte	Mean Corrected		Calib.		Sample		RSD	
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units		
Y 371.029	15997269.1	4.604	mg/L	0.0479			1.04%	
Y RADIAL	221249.1	4.775	mg/L	0.0374			0.78%	
As 188.979†	1770.3	0.7370	mg/L	0.00990	0.7370	mg/L	0.00990	1.34%
Tl 190.801†	2299.5	0.7243	mg/L	0.01739	0.7243	mg/L	0.01739	2.40%
Se 196.026†	2222.7	0.7159	mg/L	0.01706	0.7159	mg/L	0.01706	2.38%
Zn 206.200†	97019.6	1.539	mg/L	0.0113	1.539	mg/L	0.0113	0.73%
Sb 206.836†	1716.3	0.4186	mg/L	0.00440	0.4186	mg/L	0.00440	1.05%
Pb 220.353†	9852.3	0.6511	mg/L	0.00778	0.6511	mg/L	0.00778	1.19%
Cd 226.502†	44788.8	0.2322	mg/L	0.00199	0.2322	mg/L	0.00199	0.86%
Co 228.616†	32575.0	0.5978	mg/L	0.00777	0.5978	mg/L	0.00777	1.30%
Ni 232.003†	46012.9	1.780	mg/L	0.0111	1.780	mg/L	0.0111	0.62%
Ba 233.527†	54596.2	0.5021	mg/L	0.00435	0.5021	mg/L	0.00435	0.87%
Mn 257.610†	1089427.2	1.133	mg/L	0.0086	1.133	mg/L	0.0086	0.76%
Cr 267.716†	137720.5	0.8536	mg/L	0.00468	0.8536	mg/L	0.00468	0.55%
Fe 273.955†	42292.5	1.342	mg/L	0.0087	1.342	mg/L	0.0087	0.65%
Mg 279.077†	2359751.3	82.08	mg/L	0.547	82.08	mg/L	0.547	0.67%
V 292.402†	433787.5	1.686	mg/L	0.0133	1.686	mg/L	0.0133	0.79%
Al 308.215†	22048.9	0.8302	mg/L	0.00657	0.8302	mg/L	0.00657	0.79%
Be 313.107†	1925980.1	0.47803	mg/L	0.003827	0.47803	mg/L	0.003827	0.80%
Cu 324.752†	71407.1	0.3163	mg/L	0.00280	0.3163	mg/L	0.00280	0.89%
Ag 338.289†	74697.8	0.5741	mg/L	0.00462	0.5741	mg/L	0.00462	0.81%
Na 330.237†	17699.6	20.92	mg/L	0.213	20.92	mg/L	0.213	1.02%
Ca 227.546†	11051.5	30.35	mg/L	0.417	30.35	mg/L	0.417	1.37%
Al RADIAL†	1006.2	0.9353	mg/L	0.02722	0.9353	mg/L	0.02722	2.91%
Fe RADIAL†	553.4	1.383	mg/L	0.0078	1.383	mg/L	0.0078	0.57%
Ca RADIAL†	144318.7	32.01	mg/L	0.784	32.01	mg/L	0.784	2.45%
K RADIAL†	6885.9	8.852	mg/L	0.2389	8.852	mg/L	0.2389	2.70%
Mg RADIAL†	35501.0	78.32	mg/L	1.999	78.32	mg/L	1.999	2.55%
Na RADIAL†	151639.1	22.39	mg/L	0.526	22.39	mg/L	0.526	2.35%

Sequence No.: 157  
 Sample ID: 18C0189-01  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 260  
 Date Collected: 3/13/2018 3:55:14 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:15 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 18C0189-01

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	15795808.2	4.546 mg/L	0.0257			0.56%
Y RADIAL	215093.4	4.642 mg/L	0.0370			0.80%
As 188.979†	3.3	0.0014 mg/L	0.00079	0.0014 mg/L	0.00079	56.22%
Tl 190.353†	-18.8	-0.0059 mg/L	0.00452	-0.0059 mg/L	0.00452	76.67%
Se 196.026†	141.1	0.0454 mg/L	0.00114	0.0454 mg/L	0.00114	2.51%
Zn 206.200†	8734.2	0.1385 mg/L	0.00283	0.1385 mg/L	0.00283	2.05%
Sb 206.836†	19.7	0.0048 mg/L	0.00361	0.0048 mg/L	0.00361	75.17%
Pb 220.353†	-75.9	-0.0023 mg/L	0.00183	-0.0023 mg/L	0.00183	78.32%
Cd 226.502†	13377.9	0.0694 mg/L	0.00171	0.0694 mg/L	0.00171	2.46%
Co 228.616†	280.8	0.0052 mg/L	0.00024	0.0052 mg/L	0.00024	4.58%
Ni 232.003†	4420.7	0.1710 mg/L	0.00190	0.1710 mg/L	0.00190	1.11%
Ba 233.527†	8605.9	0.0791 mg/L	0.00108	0.0791 mg/L	0.00108	1.36%
Mn 257.610†	270518.1	0.2813 mg/L	0.00695	0.2813 mg/L	0.00695	2.47%
Cr 267.716†	1531.6	0.0095 mg/L	0.00020	0.0095 mg/L	0.00020	2.09%
Fe 273.955†	4280.9	0.1359 mg/L	0.00175	0.1359 mg/L	0.00175	1.29%
Mg 279.077†	986835.3	34.33 mg/L	0.910	34.33 mg/L	0.910	2.65%
V 292.402†	131.9	0.0005 mg/L	0.00010	0.0005 mg/L	0.00010	19.50%
Al 308.215†	1983.7	0.0691 mg/L	0.00757	0.0691 mg/L	0.00757	10.96%
Be 313.107†	465.6	0.00012 mg/L	0.000082	0.00012 mg/L	0.000082	70.71%
Cu 324.752†	1925.4	0.0085 mg/L	0.00010	0.0085 mg/L	0.00010	1.13%
Ag 338.289†	448.4	0.0013 mg/L	0.00069	0.0013 mg/L	0.00069	52.42%
Na 330.237†	89211.1	105.4 mg/L	2.45	105.4 mg/L	2.45	2.32%
Ca 227.546†	64776.9	177.8 mg/L	3.69	177.8 mg/L	3.69	2.07%
Al RADIAL†	31.6	0.0238 mg/L	0.01689	0.0238 mg/L	0.01689	70.94%
Fe RADIAL†	51.7	0.1293 mg/L	0.02115	0.1293 mg/L	0.02115	16.35%
Ca RADIAL†	855510.0	189.8 mg/L	3.31	189.8 mg/L	3.31	1.74%
K RADIAL†	6377.8	8.199 mg/L	0.1189	8.199 mg/L	0.1189	1.45%
Mg RADIAL†	15365.1	33.90 mg/L	0.221	33.90 mg/L	0.221	0.65%
Na RADIAL†	703687.9	103.9 mg/L	2.03	103.9 mg/L	2.03	1.95%

Sequence No.: 158  
 Sample ID: SEQ-CCVE  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 10  
 Date Collected: 3/13/2018 3:57:36 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:17 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-CCVE

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	16660948.9	4.795 mg/L	0.1219			2.54%
Y RADIAL	228093.0	4.923 mg/L	0.0279			0.57%
As 188.979†	1192.9	0.4972 mg/L	0.00854	0.4972 mg/L	0.00854	1.72%
Tl 190.801†	1678.9	0.5292 mg/L	0.01228	0.5292 mg/L	0.01228	2.32%
Se 196.026†	1574.2	0.5057 mg/L	0.01753	0.5057 mg/L	0.01753	3.47%
Zn 206.200†	155662.6	2.469 mg/L	0.1175	2.469 mg/L	0.1175	4.76%
Sb 206.836†	1029.9	0.2515 mg/L	0.01048	0.2515 mg/L	0.01048	4.17%
Pb 220.353†	7700.8	0.5098 mg/L	0.01277	0.5098 mg/L	0.01277	2.50%
Cd 226.502†	46730.0	0.2422 mg/L	0.01107	0.2422 mg/L	0.01107	4.57%
Co 228.616†	134636.8	2.471 mg/L	0.1141	2.471 mg/L	0.1141	4.62%
Ni 232.003†	63249.2	2.446 mg/L	0.1102	2.446 mg/L	0.1102	4.51%
Ba 233.527†	1103514.1	10.15 mg/L	0.457	10.15 mg/L	0.457	4.50%
Mn 257.610†	2518418.9	2.619 mg/L	0.1194	2.619 mg/L	0.1194	4.56%
Cr 267.716†	155883.2	0.9663 mg/L	0.04291	0.9663 mg/L	0.04291	4.44%
Fe 273.955†	153882.5	4.885 mg/L	0.2211	4.885 mg/L	0.2211	4.53%
Mg 279.077†	728279.9	25.33 mg/L	1.207	25.33 mg/L	1.207	4.76%
V 292.402†	653299.8	2.539 mg/L	0.1152	2.539 mg/L	0.1152	4.54%
Al 308.215†	244780.2	9.255 mg/L	0.4173	9.255 mg/L	0.4173	4.51%
Be 313.107†	1046723.4	0.25980 mg/L	0.011817	0.25980 mg/L	0.011817	4.55%
Cu 324.752†	267421.1	1.185 mg/L	0.0519	1.185 mg/L	0.0519	4.38%
Ag 338.289†	154311.2	1.187 mg/L	0.0521	1.187 mg/L	0.0521	4.39%
Na 330.237†	19531.9	23.09 mg/L	1.229	23.09 mg/L	1.229	5.32%
Ca 227.546†	8763.8	24.11 mg/L	0.612	24.11 mg/L	0.612	2.54%
Al RADIAL†	11462.3	10.66 mg/L	0.086	10.66 mg/L	0.086	0.81%
Fe RADIAL†	2057.0	5.141 mg/L	0.0278	5.141 mg/L	0.0278	0.54%
Ca RADIAL†	112353.3	24.92 mg/L	0.649	24.92 mg/L	0.649	2.60%
K RADIAL†	3347.0	4.303 mg/L	0.1941	4.303 mg/L	0.1941	4.51%
Mg RADIAL†	11560.1	25.50 mg/L	0.304	25.50 mg/L	0.304	1.19%
Na RADIAL†	166233.5	24.55 mg/L	0.527	24.55 mg/L	0.527	2.15%

Sequence No.: 159  
 Sample ID: SEQ-CCBE  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 3/13/2018 3:59:56 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:18 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: SEQ-CCBE

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	18049088.7	5.195 mg/L	0.1800			3.46%
Y RADIAL	244588.4	5.279 mg/L	0.0378			0.72%
As 188.979†	11.7	0.0049 mg/L	0.00664	0.0049 mg/L	0.00664	136.19%
Tl 190.801†	20.3	0.0064 mg/L	0.00095	0.0064 mg/L	0.00095	14.83%
Se 196.026†	18.2	0.0059 mg/L	0.00233	0.0059 mg/L	0.00233	39.58%
Zn 206.200†	-216.3	-0.0034 mg/L	0.00018	-0.0034 mg/L	0.00018	5.23%
Sb 206.836†	-11.0	-0.0027 mg/L	0.00475	-0.0027 mg/L	0.00475	176.40%
Pb 220.353†	-33.0	-0.0022 mg/L	0.00193	-0.0022 mg/L	0.00193	88.69%
Cd 226.502†	20.9	0.0001 mg/L	0.00019	0.0001 mg/L	0.00019	178.59%
Co 228.616†	34.8	0.0006 mg/L	0.00036	0.0006 mg/L	0.00036	56.62%
Ni 232.003†	85.3	0.0033 mg/L	0.00181	0.0033 mg/L	0.00181	54.75%
Ba 233.527†	134.1	0.0012 mg/L	0.00025	0.0012 mg/L	0.00025	19.95%
Mn 257.610†	251.1	0.0003 mg/L	0.00004	0.0003 mg/L	0.00004	13.49%
Cr 267.716†	-33.7	-0.0002 mg/L	0.00009	-0.0002 mg/L	0.00009	40.67%
Fe 273.955†	-15.4	-0.0005 mg/L	0.00044	-0.0005 mg/L	0.00044	89.68%
Mg 279.077†	90.5	0.0031 mg/L	0.00120	0.0031 mg/L	0.00120	38.18%
V 292.402†	109.9	0.0004 mg/L	0.00013	0.0004 mg/L	0.00013	29.20%
Al 308.215†	-810.5	-0.0306 mg/L	0.01138	-0.0306 mg/L	0.01138	37.12%
Be 313.107†	2177.8	0.00054 mg/L	0.000116	0.00054 mg/L	0.000116	21.40%
Cu 324.752†	-411.9	-0.0018 mg/L	0.00036	-0.0018 mg/L	0.00036	19.98%
Ag 338.289†	68.1	0.0005 mg/L	0.00056	0.0005 mg/L	0.00056	107.09%
Na 330.237†	-35.7	-0.0422 mg/L	0.08143	-0.0422 mg/L	0.08143	192.91%
Ca 227.546†	-21.3	-0.0585 mg/L	0.13939	-0.0585 mg/L	0.13939	238.26%
Al RADIAL†	46.7	0.0434 mg/L	0.02558	0.0434 mg/L	0.02558	58.93%
Fe RADIAL†	-3.3	-0.0082 mg/L	0.01692	-0.0082 mg/L	0.01692	205.89%
Ca RADIAL†	-225.8	-0.0501 mg/L	0.00611	-0.0501 mg/L	0.00611	12.19%
K RADIAL†	-59.3	-0.0763 mg/L	0.11880	-0.0763 mg/L	0.11880	155.78%
Mg RADIAL†	9.7	0.0215 mg/L	0.02417	0.0215 mg/L	0.02417	112.55%
Na RADIAL†	18.9	0.0028 mg/L	0.01262	0.0028 mg/L	0.01262	452.79%

Sequence No.: 160  
 Sample ID: BC80552-DUP1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 301  
 Date Collected: 3/13/2018 4:02:14 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:19 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

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 Mean Data: BC80552-DUP1

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	15352766.9	4.419 mg/L	0.0456			1.03%
Y RADIAL	213305.4	4.603 mg/L	0.0640			1.39%
As 188.979†	-8.9	-0.0037 mg/L	0.00447	-0.0037 mg/L	0.00447	120.62%
Tl 190.801†	-10.4	-0.0033 mg/L	0.00235	-0.0033 mg/L	0.00235	71.85%
Se 196.026†	158.9	0.0512 mg/L	0.00772	0.0512 mg/L	0.00772	15.09%
Zn 206.200†	8776.7	0.1392 mg/L	0.00078	0.1392 mg/L	0.00078	0.56%
Sb 206.836†	33.2	0.0081 mg/L	0.00336	0.0081 mg/L	0.00336	41.45%
Pb 220.353†	-31.8	0.0005 mg/L	0.00391	0.0005 mg/L	0.00391	730.85%
Cd 226.502†	13383.3	0.0694 mg/L	0.00049	0.0694 mg/L	0.00049	0.71%
Co 228.616†	299.8	0.0055 mg/L	0.00039	0.0055 mg/L	0.00039	7.14%
Ni 232.003†	4372.4	0.1691 mg/L	0.00295	0.1691 mg/L	0.00295	1.74%
Ba 233.527†	8672.8	0.0798 mg/L	0.00035	0.0798 mg/L	0.00035	0.44%
Mn 257.610†	271706.4	0.2825 mg/L	0.00132	0.2825 mg/L	0.00132	0.47%
Cr 267.716†	1471.9	0.0091 mg/L	0.00052	0.0091 mg/L	0.00052	5.71%
Fe 273.955†	3750.4	0.1190 mg/L	0.00160	0.1190 mg/L	0.00160	1.34%
Mg 279.077†	975363.2	33.93 mg/L	0.153	33.93 mg/L	0.153	0.45%
V 292.402†	142.6	0.0005 mg/L	0.00035	0.0005 mg/L	0.00035	65.01%
Al 308.215†	1828.8	0.0633 mg/L	0.00449	0.0633 mg/L	0.00449	7.08%
Be 313.107†	184.8	0.00005 mg/L	0.000103	0.00005 mg/L	0.000103	224.86%
Cu 324.752†	2005.0	0.0089 mg/L	0.00072	0.0089 mg/L	0.00072	8.07%
Ag 338.289†	242.2	-0.0002 mg/L	0.00053	-0.0002 mg/L	0.00053	222.26%
Na 330.237†	88314.7	104.4 mg/L	0.43	104.4 mg/L	0.43	0.41%
Ca 227.546†	64624.8	177.4 mg/L	1.00	177.4 mg/L	1.00	0.56%
Al RADIAL†	38.8	0.0306 mg/L	0.06559	0.0306 mg/L	0.06559	214.40%
Fe RADIAL†	50.4	0.1259 mg/L	0.01010	0.1259 mg/L	0.01010	8.02%
Ca RADIAL†	842310.0	186.8 mg/L	3.76	186.8 mg/L	3.76	2.01%
K RADIAL†	6259.2	8.046 mg/L	0.2042	8.046 mg/L	0.2042	2.54%
Mg RADIAL†	14932.9	32.94 mg/L	0.715	32.94 mg/L	0.715	2.17%
Na RADIAL†	695126.3	102.7 mg/L	1.85	102.7 mg/L	1.85	1.80%

Sequence No.: 161  
 Sample ID: BC80552-MS1  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 302  
 Date Collected: 3/13/2018 4:04:38 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:21 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

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 Mean Data: BC80552-MS1

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	15351364.3	4.418 mg/L	0.0527			1.19%
Y RADIAL	213493.3	4.607 mg/L	0.0685			1.49%
As 188.979†	4758.3	1.981 mg/L	0.0362	1.981 mg/L	0.0362	1.83%
Tl 190.801†	6829.6	2.151 mg/L	0.0318	2.151 mg/L	0.0318	1.48%
Se 196.026†	5893.4	1.899 mg/L	0.0374	1.899 mg/L	0.0374	1.97%
Zn 206.200†	37791.2	0.5995 mg/L	0.00671	0.5995 mg/L	0.00671	1.12%
Sb 206.836†	1028.1	0.2508 mg/L	0.00458	0.2508 mg/L	0.00458	1.83%
Pb 220.353†	7325.3	0.4865 mg/L	0.00768	0.4865 mg/L	0.00768	1.58%
Cd 226.502†	22722.3	0.1178 mg/L	0.00180	0.1178 mg/L	0.00180	1.53%
Co 228.616†	27855.1	0.5112 mg/L	0.00723	0.5112 mg/L	0.00723	1.41%
Ni 232.003†	17539.5	0.6784 mg/L	0.01124	0.6784 mg/L	0.01124	1.66%
Ba 233.527†	224413.3	2.064 mg/L	0.0202	2.064 mg/L	0.0202	0.98%
Mn 257.610†	767419.2	0.7980 mg/L	0.00728	0.7980 mg/L	0.00728	0.91%
Cr 267.716†	32171.1	0.1994 mg/L	0.00189	0.1994 mg/L	0.00189	0.95%
Fe 273.955†	35458.6	1.126 mg/L	0.0168	1.126 mg/L	0.0168	1.50%
Mg 279.077†	941223.0	32.74 mg/L	0.327	32.74 mg/L	0.327	1.00%
V 292.402†	130439.6	0.5069 mg/L	0.00420	0.5069 mg/L	0.00420	0.83%
Al 308.215†	51664.0	1.948 mg/L	0.0208	1.948 mg/L	0.0208	1.07%
Be 313.107†	204013.8	0.05064 mg/L	0.000264	0.05064 mg/L	0.000264	0.52%
Cu 324.752†	57477.5	0.2546 mg/L	0.00170	0.2546 mg/L	0.00170	0.67%
Ag 338.289†	6143.5	0.0452 mg/L	0.00120	0.0452 mg/L	0.00120	2.65%
Na 330.237†	85899.4	101.5 mg/L	0.32	101.5 mg/L	0.32	0.32%
Ca 227.546†	62744.4	172.2 mg/L	2.10	172.2 mg/L	2.10	1.22%
Al RADIAL†	2355.3	2.186 mg/L	0.0326	2.186 mg/L	0.0326	1.49%
Fe RADIAL†	448.7	1.121 mg/L	0.0234	1.121 mg/L	0.0234	2.09%
Ca RADIAL†	825394.7	183.1 mg/L	4.25	183.1 mg/L	4.25	2.32%
K RADIAL†	5746.2	7.387 mg/L	0.2006	7.387 mg/L	0.2006	2.71%
Mg RADIAL†	14476.1	31.93 mg/L	0.753	31.93 mg/L	0.753	2.36%
Na RADIAL†	687859.5	101.6 mg/L	2.32	101.6 mg/L	2.32	2.28%



Sequence No.: 162  
 Sample ID: 18C0189-02  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 303  
 Date Collected: 3/13/2018 4:06:54 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:22 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

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 Mean Data: 18C0189-02

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	14738356.3	4.242 mg/L		0.0076			0.18%
Y RADIAL	213662.8	4.611 mg/L		0.0814			1.76%
As 188.979†	-2.3	-0.0008 mg/L		0.00499	-0.0008 mg/L	0.00499	632.81%
Tl 190.801†	97.0	0.0306 mg/L		0.00171	0.0306 mg/L	0.00171	5.57%
Se 196.026†	225.6	0.0723 mg/L		0.00290	0.0723 mg/L	0.00290	4.02%
Zn 206.200†	636.6	0.0101 mg/L		0.00026	0.0101 mg/L	0.00026	2.59%
Sb 206.836†	14.6	0.0037 mg/L		0.00166	0.0037 mg/L	0.00166	45.28%
Pb 220.353†	-3.9	0.0035 mg/L		0.00102	0.0035 mg/L	0.00102	29.56%
Cd 226.502†	380.3	0.0019 mg/L		0.00009	0.0019 mg/L	0.00009	4.47%
Co 228.616†	211.0	0.0039 mg/L		0.00025	0.0039 mg/L	0.00025	6.43%
Ni 232.003†	76.7	0.0029 mg/L		0.00022	0.0029 mg/L	0.00022	7.62%
Ba 233.527†	16608.6	0.1527 mg/L		0.00069	0.1527 mg/L	0.00069	0.45%
Mn 257.610†	11692064.9	12.16 mg/L		0.049	12.16 mg/L	0.049	0.40%
Cr 267.716†	723.9	0.0045 mg/L		0.00008	0.0045 mg/L	0.00008	1.66%
Fe 273.955†	40082.7	1.272 mg/L		0.0110	1.272 mg/L	0.0110	0.86%
Mg 279.077†	1110722.1	38.64 mg/L		0.290	38.64 mg/L	0.290	0.75%
V 292.402†	-105.8	-0.0006 mg/L		0.00036	-0.0006 mg/L	0.00036	57.10%
Al 308.215†	5358.7	0.1947 mg/L		0.00556	0.1947 mg/L	0.00556	2.85%
Be 313.107†	-200.1	-0.00005 mg/L		0.000127	-0.00005 mg/L	0.000127	255.71%
Cu 324.752†	2133.5	0.0095 mg/L		0.00046	0.0095 mg/L	0.00046	4.84%
Ag 338.289†	371.2	-0.0001 mg/L		0.00121	-0.0001 mg/L	0.00121	847.75%
Na 330.237†	350032.9	413.3 mg/L		3.43	413.3 mg/L	3.43	0.83%
Ca 227.546†	102313.7	280.8 mg/L		1.56	280.8 mg/L	1.56	0.56%
Al RADIAL†	168.5	0.1488 mg/L		0.00219	0.1488 mg/L	0.00219	1.47%
Fe RADIAL†	533.8	1.334 mg/L		0.0050	1.334 mg/L	0.0050	0.37%
Ca RADIAL†	1218979.4	270.4 mg/L		1.14	270.4 mg/L	1.14	0.42%
K RADIAL†	7910.4	10.17 mg/L		0.166	10.17 mg/L	0.166	1.63%
Mg RADIAL†	16581.9	36.58 mg/L		0.487	36.58 mg/L	0.487	1.33%
Na RADIAL†	2243931.1	331.4 mg/L		1.86	331.4 mg/L	1.86	0.56%

Sequence No.: 163  
 Sample ID: 18C0189-03  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 304  
 Date Collected: 3/13/2018 4:09:18 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:23 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

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 Mean Data: 18C0189-03

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	13635610.9	3.925 mg/L		0.0110			0.28%
Y RADIAL	195035.3	4.209 mg/L		0.0059			0.14%
As 188.979†	1.8	0.0008 mg/L		0.00612	0.0008 mg/L	0.00612	768.05%
Tl 190.801†	-17.2	-0.0054 mg/L		0.00369	-0.0054 mg/L	0.00369	68.32%
Se 196.026†	275.9	0.0888 mg/L		0.00558	0.0888 mg/L	0.00558	6.28%
Zn 206.200†	444.5	0.0071 mg/L		0.00015	0.0071 mg/L	0.00015	2.14%
Sb 206.836†	33.3	0.0081 mg/L		0.00209	0.0081 mg/L	0.00209	25.71%
Pb 220.353†	-51.6	0.0039 mg/L		0.00349	0.0039 mg/L	0.00349	89.49%
Cd 226.502†	16.8	0.0001 mg/L		0.00009	0.0001 mg/L	0.00009	119.19%
Co 228.616†	10.1	0.0002 mg/L		0.00011	0.0002 mg/L	0.00011	58.81%
Ni 232.003†	-311.9	-0.0121 mg/L		0.00103	-0.0121 mg/L	0.00103	8.50%
Ba 233.527†	28957.6	0.2663 mg/L		0.00263	0.2663 mg/L	0.00263	0.99%
Mn 257.610†	2212377.1	2.300 mg/L		0.0070	2.300 mg/L	0.0070	0.30%
Cr 267.716†	233.5	0.0015 mg/L		0.00079	0.0015 mg/L	0.00079	54.34%
Fe 273.955†	8554.0	0.2715 mg/L		0.00080	0.2715 mg/L	0.00080	0.30%
Mg 279.077†	1849238.4	64.33 mg/L		0.230	64.33 mg/L	0.230	0.36%
V 292.402†	38.0	0.0001 mg/L		0.00018	0.0001 mg/L	0.00018	185.25%
Al 308.215†	5710.3	0.2008 mg/L		0.01094	0.2008 mg/L	0.01094	5.45%
Be 313.107†	-1456.3	-0.00036 mg/L		0.000058	-0.00036 mg/L	0.000058	16.15%
Cu 324.752†	2619.6	0.0116 mg/L		0.00062	0.0116 mg/L	0.00062	5.36%
Ag 338.289†	603.5	-0.0012 mg/L		0.00139	-0.0012 mg/L	0.00139	117.27%
Na 330.237†	2221479.9	2622 mg/L		8.7	2622 mg/L	8.7	0.33%
Ca 227.546†	195881.0	537.6 mg/L		4.87	537.6 mg/L	4.87	0.91%
Al RADIAL†	167.6	0.1406 mg/L		0.01971	0.1406 mg/L	0.01971	14.02%
Fe RADIAL†	117.5	0.2936 mg/L		0.02238	0.2936 mg/L	0.02238	7.62%
Ca RADIAL†	2333537.8	517.6 mg/L		1.85	517.6 mg/L	1.85	0.36%
K RADIAL†	12347.7	15.87 mg/L		0.133	15.87 mg/L	0.133	0.84%
Mg RADIAL†	29605.8	65.31 mg/L		1.294	65.31 mg/L	1.294	1.98%
Na RADIAL†	11930993.4	1762 mg/L		23.1	1762 mg/L	23.1	1.31%

Sequence No.: 164  
 Sample ID: 18C0189-04  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 305  
 Date Collected: 3/13/2018 4:11:55 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:24 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 18C0189-04

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	15765161.2	4.538 mg/L		0.0363			0.80%
Y RADIAL	210180.8	4.536 mg/L		0.0636			1.40%
As 188.979†	10.6	0.0047 mg/L		0.00113	0.0047 mg/L	0.00113	24.24%
Tl 190.801†	-8.1	-0.0024 mg/L		0.00106	-0.0024 mg/L	0.00106	43.85%
Se 196.026†	143.9	0.0458 mg/L		0.00635	0.0458 mg/L	0.00635	13.84%
Zn 206.200†	9540.2	0.1514 mg/L		0.00144	0.1514 mg/L	0.00144	0.95%
Sb 206.836†	15.2	0.0038 mg/L		0.00356	0.0038 mg/L	0.00356	93.22%
Pb 220.353†	38.9	0.0052 mg/L		0.00171	0.0052 mg/L	0.00171	32.98%
Cd 226.502†	13598.4	0.0705 mg/L		0.00095	0.0705 mg/L	0.00095	1.34%
Co 228.616†	353.1	0.0065 mg/L		0.00019	0.0065 mg/L	0.00019	2.84%
Ni 232.003†	4283.3	0.1656 mg/L		0.00112	0.1656 mg/L	0.00112	0.67%
Ba 233.527†	9175.3	0.0844 mg/L		0.00073	0.0844 mg/L	0.00073	0.87%
Mn 257.610†	418624.4	0.4354 mg/L		0.00453	0.4354 mg/L	0.00453	1.04%
Cr 267.716†	3264.6	0.0203 mg/L		0.00063	0.0203 mg/L	0.00063	3.10%
Fe 273.955†	47809.5	1.518 mg/L		0.0186	1.518 mg/L	0.0186	1.23%
Mg 279.077†	938838.3	32.66 mg/L		0.357	32.66 mg/L	0.357	1.09%
V 292.402†	357.8	0.0011 mg/L		0.00028	0.0011 mg/L	0.00028	25.36%
Al 308.215†	9381.8	0.3489 mg/L		0.00972	0.3489 mg/L	0.00972	2.78%
Be 313.107†	1084.0	0.00027 mg/L		0.000019	0.00027 mg/L	0.000019	7.04%
Cu 324.752†	3488.8	0.0155 mg/L		0.00055	0.0155 mg/L	0.00055	3.54%
Ag 338.289†	234.7	-0.0003 mg/L		0.00108	-0.0003 mg/L	0.00108	345.94%
Na 330.237†	81656.6	96.54 mg/L		1.251	96.54 mg/L	1.251	1.30%
Ca 227.546†	63493.1	174.3 mg/L		1.71	174.3 mg/L	1.71	0.98%
Al RADIAL†	438.9	0.4027 mg/L		0.01281	0.4027 mg/L	0.01281	3.18%
Fe RADIAL†	688.6	1.721 mg/L		0.0284	1.721 mg/L	0.0284	1.65%
Ca RADIAL†	873648.1	193.8 mg/L		3.33	193.8 mg/L	3.33	1.72%
K RADIAL†	6044.3	7.770 mg/L		0.1273	7.770 mg/L	0.1273	1.64%
Mg RADIAL†	14944.5	32.97 mg/L		0.691	32.97 mg/L	0.691	2.10%
Na RADIAL†	695731.8	102.7 mg/L		1.63	102.7 mg/L	1.63	1.59%

Sequence No.: 170  
 Sample ID: SEQ-CCVF

Analyst: KML

Logged In Analyst (Original) : rqb

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/13/2018 4:25:41 PM

Data Type: Reprocessed on 3/13/2018 5:30:31 PM

Initial Sample Vol:

Sample Prep Vol:

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 Mean Data: SEQ-CCVF

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	16111581.8	4.637 mg/L	0.0379			0.82%
Y RADIAL	224262.0	4.840 mg/L	0.0835			1.73%
As 188.979+	1181.6	0.4924 mg/L	0.00748	0.4924 mg/L	0.00748	1.52%
Tl 190.801+	1692.2	0.5333 mg/L	0.01147	0.5333 mg/L	0.01147	2.15%
Se 196.026+	1574.2	0.5057 mg/L	0.00991	0.5057 mg/L	0.00991	1.96%
Zn 206.200+	155163.5	2.461 mg/L	0.0506	2.461 mg/L	0.0506	2.06%
Sb 206.836+	1046.5	0.2555 mg/L	0.01026	0.2555 mg/L	0.01026	4.02%
Pb 220.353+	7664.4	0.5074 mg/L	0.00867	0.5074 mg/L	0.00867	1.71%
Cd 226.502+	46138.8	0.2391 mg/L	0.00445	0.2391 mg/L	0.00445	1.86%
Co 228.616+	135187.5	2.481 mg/L	0.0422	2.481 mg/L	0.0422	1.70%
Ni 232.003+	63723.5	2.465 mg/L	0.0407	2.465 mg/L	0.0407	1.65%
Ba 233.527+	1112601.7	10.23 mg/L	0.176	10.23 mg/L	0.176	1.72%
Mn 257.610+	2545949.2	2.647 mg/L	0.0439	2.647 mg/L	0.0439	1.66%
Cr 267.716+	157498.9	0.9763 mg/L	0.01687	0.9763 mg/L	0.01687	1.73%
Fe 273.955+	155048.6	4.922 mg/L	0.0858	4.922 mg/L	0.0858	1.74%
Mg 279.077+	724577.9	25.20 mg/L	0.452	25.20 mg/L	0.452	1.79%
V 292.402+	660913.6	2.569 mg/L	0.0405	2.569 mg/L	0.0405	1.57%
Al 308.215+	249702.4	9.441 mg/L	0.1870	9.441 mg/L	0.1870	1.98%
Be 313.107+	1054979.7	0.26185 mg/L	0.003666	0.26185 mg/L	0.003666	1.40%
Cu 324.752+	272906.0	1.209 mg/L	0.0207	1.209 mg/L	0.0207	1.72%
Ag 338.289+	156558.1	1.204 mg/L	0.0199	1.204 mg/L	0.0199	1.65%
Na 330.237+	20208.1	23.89 mg/L	0.373	23.89 mg/L	0.373	1.56%
Ca 227.546+	9022.4	24.82 mg/L	0.287	24.82 mg/L	0.287	1.16%
Al RADIAL+	11622.8	10.81 mg/L	0.278	10.81 mg/L	0.278	2.57%
Fe RADIAL+	2057.6	5.143 mg/L	0.1466	5.143 mg/L	0.1466	2.85%
Ca RADIAL+	113899.0	25.26 mg/L	0.644	25.26 mg/L	0.644	2.55%
K RADIAL+	3497.1	4.496 mg/L	0.2625	4.496 mg/L	0.2625	5.84%
Mg RADIAL+	11478.2	25.32 mg/L	0.677	25.32 mg/L	0.677	2.67%
Na RADIAL+	172027.0	25.41 mg/L	0.599	25.41 mg/L	0.599	2.36%

Sequence No.: 171  
 Sample ID: SEQ-CCBF  
 Analyst: KML  
 Logged In Analyst (Original) : rqb  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 1  
 Date Collected: 3/13/2018 4:28:01 PM  
 Data Type: Reprocessed on 3/13/2018 5:30:32 PM  
 Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: SEQ-CCBF

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	17070726.2	4.913 mg/L	0.0319			0.65%
Y RADIAL	238686.0	5.151 mg/L	0.1903			3.69%
As 188.979†	12.4	0.0052 mg/L	0.00172	0.0052 mg/L	0.00172	33.26%
Tl 190.801†	11.6	0.0036 mg/L	0.00210	0.0036 mg/L	0.00210	57.69%
Se 196.026†	2.1	0.0007 mg/L	0.00613	0.0007 mg/L	0.00613	902.02%
Zn 206.200†	5.3	0.0001 mg/L	0.00021	0.0001 mg/L	0.00021	253.95%
Sb 206.836†	5.8	0.0014 mg/L	0.00146	0.0014 mg/L	0.00146	104.13%
Pb 220.353†	-27.4	-0.0018 mg/L	0.00169	-0.0018 mg/L	0.00169	93.63%
Cd 226.502†	37.2	0.0002 mg/L	0.00017	0.0002 mg/L	0.00017	86.45%
Co 228.616†	35.4	0.0006 mg/L	0.00031	0.0006 mg/L	0.00031	47.46%
Ni 232.003†	-31.5	-0.0012 mg/L	0.00085	-0.0012 mg/L	0.00085	69.88%
Ba 233.527†	154.3	0.0014 mg/L	0.00036	0.0014 mg/L	0.00036	25.63%
Mn 257.610†	426.6	0.0004 mg/L	0.00006	0.0004 mg/L	0.00006	13.88%
Cr 267.716†	-22.2	-0.0001 mg/L	0.00025	-0.0001 mg/L	0.00025	182.48%
Fe 273.955†	15.8	0.0005 mg/L	0.00062	0.0005 mg/L	0.00062	123.57%
Mg 279.077†	84.5	0.0029 mg/L	0.00228	0.0029 mg/L	0.00228	77.59%
V 292.402†	152.2	0.0006 mg/L	0.00050	0.0006 mg/L	0.00050	84.06%
Al 308.215†	-47.5	-0.0018 mg/L	0.00157	-0.0018 mg/L	0.00157	87.63%
Be 313.107†	1693.7	0.00042 mg/L	0.000053	0.00042 mg/L	0.000053	12.72%
Cu 324.752†	-274.6	-0.0012 mg/L	0.00036	-0.0012 mg/L	0.00036	29.59%
Ag 338.289†	53.1	0.0004 mg/L	0.00041	0.0004 mg/L	0.00041	99.98%
Na 330.237†	10.9	0.0128 mg/L	0.11825	0.0128 mg/L	0.11825	924.09%
Ca 227.546†	-7.4	-0.0204 mg/L	0.01770	-0.0204 mg/L	0.01770	86.68%
Al RADIAL†	18.9	0.0176 mg/L	0.02213	0.0176 mg/L	0.02213	125.74%
Fe RADIAL†	-5.2	-0.0130 mg/L	0.01381	-0.0130 mg/L	0.01381	106.20%
Ca RADIAL†	101.3	0.0225 mg/L	0.00685	0.0225 mg/L	0.00685	30.49%
K RADIAL†	-36.5	-0.0470 mg/L	0.07453	-0.0470 mg/L	0.07453	158.70%
Mg RADIAL†	-2.5	-0.0056 mg/L	0.01759	-0.0056 mg/L	0.01759	315.02%
Na RADIAL†	1257.2	0.1857 mg/L	0.03040	0.1857 mg/L	0.03040	16.37%

York Analytical Laboratories, Inc.

SDG: 18C0189

CLASS: HG

METHOD: EPA 7473

**DATA PACKAGE COVER PAGE**

**EPA 7473**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

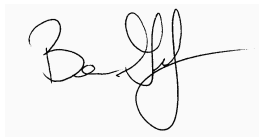
Project: 41103.00 Task 0900 - Kingston CVS Investigation

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<b>Client Sample Id:</b>	<b>Lab Sample Id:</b>
<u>KC-MW-01 (0318)</u>	<u>18C0189-01</u>
<u>KC-MW-02 (0318)</u>	<u>18C0189-02</u>
<u>KC-MW-05 (0318)</u>	<u>18C0189-03</u>
<u>KC-MW-DUP2 (0318)</u>	<u>18C0189-04</u>

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the project narrative. Release of the data contained in this hardcopy data package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the

Signature:



Name: Benjamin Gulizia

Date: 4/27/2018

Title: Laboratory Director

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-01File ID: QBHgDMA80-01\_031318a-021Sampled: 03/05/18 12:30Prepared: 03/13/18 09:12Analyzed: 03/13/18 15:58Solids: 0.00Preparation: EPA 7473 waterInitial/Final: 0.25 mL / 0.25 mLBatch: BC80531Sequence: Y8C1335Calibration: 03/13/18 1Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473



Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-02File ID: QBHgDMA80-01\_031318a-022Sampled: 03/05/18 18:25Prepared: 03/13/18 09:12Analyzed: 03/13/18 16:09Solids: 0.00Preparation: EPA 7473 waterInitial/Final: 0.25 mL / 0.25 mLBatch: BC80531Sequence: Y8C1335Calibration: 03/13/18 1Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-03File ID: QBHgDMA80-01\_031318a-023Sampled: 03/05/18 15:00Prepared: 03/13/18 09:12Analyzed: 03/13/18 16:20Solids: 0.00Preparation: EPA 7473 waterInitial/Final: 0.25 mL / 0.25 mLBatch: BC80531Sequence: Y8C1335Calibration: 03/13/18 1Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-04File ID: QBHgDMA80-01\_031318a-024Sampled: 03/05/18 15:00Prepared: 03/13/18 09:12Analyzed: 03/13/18 16:31Solids: 0.00Preparation: EPA 7473 waterInitial/Final: 0.25 mL / 0.25 mLBatch: BC80531Sequence: Y8C1335Calibration: 03/13/18 1Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473

**FORM I****METHOD BLANK DATA SHEET  
EPA 7473**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
Matrix: Water Laboratory ID: BC80531-BLK1 File ID: QBHgDMA80-01\_031318a-013  
Prepared: 03/13/18 09:12 Preparation: EPA 7473 water Initial/Final: 0.25 mL / 0.25 mL  
Analyzed: 03/13/18 14:01 Instrument: DMA 80-01  
Batch: BC80531 Sequence: Y8C1335 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	Q
7439-97-6	Mercury	0.00020	U

# STANDARD REFERENCE MATERIAL RECOVERY

## EPA 7473

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investi

Matrix: Water

Batch: BC80531

Laboratory ID: BC80531-SRM1

Preparation: EPA 7473 water

Initial/Final: 0.1 mL / 0.1 mL

ANALYTE	TRUE (mg/L)	FOUND (mg/L)	SRM % REC.	QC LIMITS REC.
Mercury	0.0100	0.0100	100	70 - 130

\* Values outside of QC limits

# METHOD DETECTION AND REPORTING LIMITS

EPA 7473

**Laboratory:** York Analytical Laboratories, Inc.

**SDG:** 18C0189

**Client:** Chazen Environmental Services (Poughkeepsie)

**Project:** 41103.00 Task 0900 - Kingston CVS Invest

**Matrix:** Water

**Instrument:** DMA 80-01

Analyte	LOD	LOQ	Units
Mercury	0.00020	0.00020	mg/L

**FORM IV****PREPARATION BATCH SUMMARY****EPA 7473**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
Batch: BC80531 Batch Matrix: Water Preparation: EPA 7473 water

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-MW-01 (0318)	18C0189-01	HgDMA80-01_031318a-	03/13/18 09:12	
KC-MW-02 (0318)	18C0189-02	HgDMA80-01_031318a-	03/13/18 09:12	
KC-MW-05 (0318)	18C0189-03	HgDMA80-01_031318a-	03/13/18 09:12	
KC-MW-DUP2 (0318)	18C0189-04	HgDMA80-01_031318a-	03/13/18 09:12	
Blank	BC80531-BLK1	HgDMA80-01_031318a-	03/13/18 09:12	
Reference	BC80531-SRM1	HgDMA80-01_031318a-	03/13/18 09:12	

**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 7473**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1335 Instrument: DMA 80-01  
 Matrix: Water Calibration: UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	Y8C1335-CCV1	QBHgDMA80-01_031318a-002	03/13/18 10:32
Calibration Blank	Y8C1335-CCB1	QBHgDMA80-01_031318a-003	03/13/18 11:14
Blank	BC80531-BLK1	QBHgDMA80-01_031318a-013	03/13/18 14:01
Reference	BC80531-SRM1	QBHgDMA80-01_031318a-014	03/13/18 14:11
Calibration Check	Y8C1335-CCV2	QBHgDMA80-01_031318a-018	03/13/18 15:15
Calibration Blank	Y8C1335-CCB2	QBHgDMA80-01_031318a-019	03/13/18 15:38
KC-MW-01 (0318)	18C0189-01	QBHgDMA80-01_031318a-021	03/13/18 15:58
KC-MW-02 (0318)	18C0189-02	QBHgDMA80-01_031318a-022	03/13/18 16:09
KC-MW-05 (0318)	18C0189-03	QBHgDMA80-01_031318a-023	03/13/18 16:20
KC-MW-DUP2 (0318)	18C0189-04	QBHgDMA80-01_031318a-024	03/13/18 16:31
Calibration Check	Y8C1335-CCV3	QBHgDMA80-01_031318a-028	03/13/18 17:19
Calibration Blank	Y8C1335-CCB3	QBHgDMA80-01_031318a-029	03/13/18 17:27
Calibration Check	Y8C1335-CCV4	QBHgDMA80-01_031318a-039	03/13/18 19:26
Calibration Blank	Y8C1335-CCB4	QBHgDMA80-01_031318a-040	03/13/18 19:35



# CONTINUING CALIBRATION CHECK

## EPA 7473

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: DMA 80-01

Calibration: 03/13/18

Control Limit: +/- %

Sequence: Y8C1335

Lab Sample ID	Analyte	True	Found	%R	Units	Method
Y8C1335-CCV1	Mercury	0.0100	0.00909	90.9	mg/L	EPA 7473
Y8C1335-CCV2	Mercury	0.0100	0.0103	103	mg/L	EPA 7473
Y8C1335-CCV3	Mercury	0.0100	0.00986	98.6	mg/L	EPA 7473
Y8C1335-CCV4	Mercury	0.0100	0.00987	98.7	mg/L	EPA 7473

\* Values outside of QC limits

**FORM I****BLANKS  
EPA 7473**Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Instrument ID: DMA 80-01Project: 41103.00 Task 0900 - Kingston CVS InvestigationSequence: Y8C1335Calibration: 03/13/18 1

<b>Lab Sample ID</b>	<b>Analyte</b>	<b>Found</b>	<b>MRL</b>	<b>Units</b>	<b>C</b>	<b>Method</b>
Y8C1335-CCB1	Mercury	0.00018	0.00020	mg/L		EPA 7473
BC80531-BLK1	Mercury	0.00004	0.00020	mg/L		EPA 7473
Y8C1335-CCB2	Mercury	0.00016	0.00020	mg/L		EPA 7473
Y8C1335-CCB3	Mercury	0.00017	0.00020	mg/L		EPA 7473
Y8C1335-CCB4	Mercury	0.00018	0.00020	mg/L		EPA 7473

# BENCHSHEETS

SDG: 18C0189  
CLASS: HG  
METHOD: EPA 7473

**PREPARATION BENCH SHEET-AQUEOUS: BC80531**

Prepared: **03/13/2018 09:12**

York Analytical Laboratories, Inc.

Printed: 3/16/2018 7:56:33PM

**Matrix: Water**

**Preparation EPA 7473 water**

**(No Surrogate)**

**ul**

Lab Number	Analysis	Initial (mL)	Final (mL)	Spike 1 ID	ul Spike 1	Spike 2 ID	ul Spike 2	Source ID	pH Data			Decanted Y/N	Comments
									Initial	Acid	Basic		
18C0180-01 D	Mercury by 7473	0.25	0.25										
18C0187-01 E	Mercury by 7473	0.25	0.25										
18C0189-01 D	Mercury by 7473	0.25	0.25										
18C0189-02 D	Mercury by 7473	0.25	0.25										
18C0189-03 D	Mercury by 7473	0.25	0.25										
18C0189-04 D	Mercury by 7473	0.25	0.25										
18C0195-01 E	Mercury by 7473	0.25	0.25										
18C0210-22 G	Mercury by 7473	0.25	0.25										Use for soils
18C0279-01 F	Mercury by 7473	0.25	0.25										
18C0279-02 F	Mercury by 7473	0.25	0.25										
18C0279-03 F	Mercury by 7473	0.25	0.25										
18C0279-04 F	Mercury by 7473	0.25	0.25										
18C0294-18 H	Mercury by 7473	0.25	0.25										Use for total water
18C0417-01 H	Mercury by 7473	0.25	0.25										
18C0417-02 H	Mercury by 7473	0.25	0.25										
18C0419-01 G	Mercury by 7473	0.25	0.25										
18C0419-02 G	Mercury by 7473	0.25	0.25										
18C0420-01 A	Mercury by 7473	0.25	0.25										
BC80531-BLK1	QC	0.25	0.25										
BC80531-DUP1	QC	0.25	0.25					18C0420-01					
BC80531-MS1	QC	0.25	0.25	Y18C036	125			18C0420-01					
BC80531-SRM1	QC	0.1	0.1	Y18C033	100								

**Reagents:**

ID Number	Description	Lot Number	ID Number	Description	Lot Number
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# Mercury Raw Data



Pos Nr	Samplename Remak	U	Creation Date	State	Height	Hg [ng]	Concentr. [µg/kg]	Cal-Factor	Calibration file Date	Method file Date
1 1	mb	g	13.03.2018 08:29:11	✓	0.0002	0.0104	0.1038	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
2 2	SEQ-CCV1	g	13.03.2018 09:32:13	✓	0.0419	0.9088	9.0879	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
3 3	SEQ-CCB1	g	13.03.2018 10:15:06	✓	0.0018	0.0442	0.1768	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
4 4	BC80550-BLK1	g	13.03.2018 10:29:20	✓	0.0003	0.0125	0.0502	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
5 5	BC80550-LBK1	g	13.03.2018 10:29:35	✓	0.0015	0.0378	0.1513	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
6 6	BC80550-SRM1	g	13.03.2018 10:50:17	✓	0.0397	0.8627	8.6270	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
7 7	18C0300-01	g	13.03.2018 11:23:17	✓	0.0014	0.0366	0.1465	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
8 8	BC80550-DUP1	g	13.03.2018 11:23:21	✓	0.0007	0.0206	0.0823	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
9 9	BC80550-MS1	g	13.03.2018 11:45:28	✓	0.0573	1.2406	9.9248	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
10 10	18C0300-05	g	13.03.2018 12:20:48	✓	0.0011	0.0299	0.1196	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
11 11	18C0300-09	g	13.03.2018 12:20:52	✓	0.0005	0.0171	0.0683	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
12 12	18C0360-01	g	13.03.2018 12:20:55	✓	0.0007	0.0214	0.0855	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
13 13	BC80531-BLK1	g	13.03.2018 13:01:26	✓	0.0002	0.0106	0.0424	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
14 14	BC80531-SRM1	g	13.03.2018 13:10:33	✓	0.0462	1.0015	10.0145	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
15 15	18C0420-01	g	13.03.2018 13:33:57	✓	0.0013	0.0339	0.1358	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
16 16	BC80531-DUP1	g	13.03.2018 13:34:52	✓	0.0011	0.0294	0.1174	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
17 17	BC80531-MS1	g	13.03.2018 14:04:57	✓	0.0521	1.1290	9.0322	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
18 18	SEQ-CCV2	g	13.03.2018 14:14:16	✓	0.0473	1.0258	10.2577	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
19 19	SEQ-CCB2	g	13.03.2018 14:35:55	✓	0.0015	0.0397	0.1586	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
20 20	18C0180-01	g	13.03.2018 14:47:55	✓	0.0011	0.0300	0.1200	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
21 21	18C0189-01	g	13.03.2018 14:48:00	✓	0.0010	0.0269	0.1076	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
22 22	18C0189-02	g	13.03.2018 14:48:03	✓	0.0009	0.0257	0.1028	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013

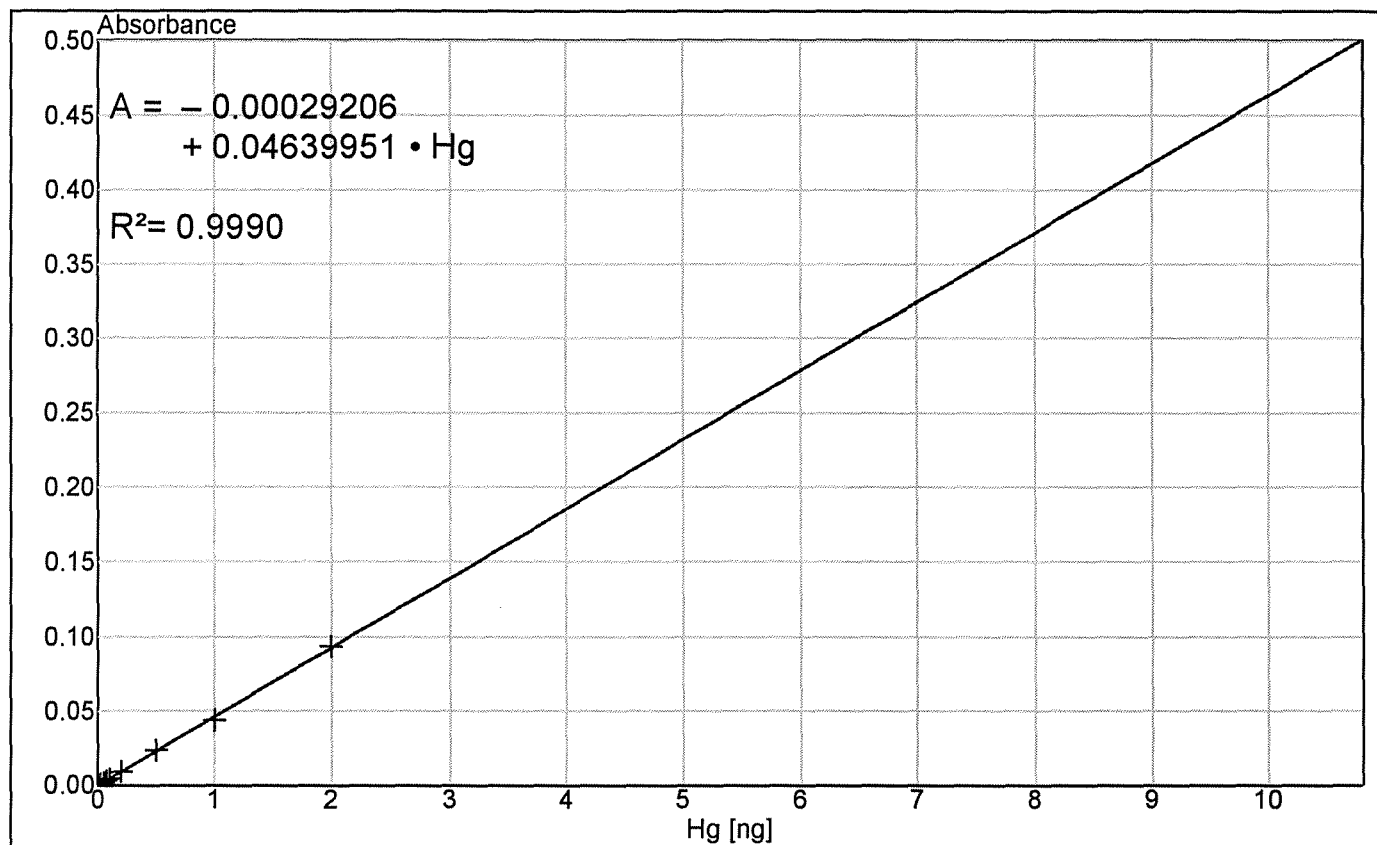


Pos Nr	Samplename Remak	Weight	U	Creation Date	State	Height	Hg [ng]	Concentr. [µg/kg]	Cal-Factor	Calibration file Date	Method file Date
23	18C0189-03	0.2500 g		13.03.2018 14:48:06	✓	0.0006	0.0187	0.0748	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
24	18C0189-04	0.2500 g		13.03.2018 14:48:09	✓	0.0005	0.0169	0.0677	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
25	18C0195-01	0.2500 g		13.03.2018 14:48:17	✓	0.0003	0.0128	0.0510	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
26	18C0210-22	0.2500 g		13.03.2018 14:48:20	✓	0.0007	0.0214	0.0855	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
27	18C0187-01 10x dilution	0.2500 g		13.03.2018 16:05:42	✓	0.0016	0.0411	0.1646	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
28	SEQ-CCV3	0.1000 g		13.03.2018 16:18:43	✓	0.0454	0.9855	9.8553	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
29	SEQ-CCB3	0.2500 g		13.03.2018 16:18:47	✓	0.0017	0.0436	0.1744	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
30	18C0279-01	0.2500 g		13.03.2018 16:43:41	✓	0.0013	0.0349	0.1396	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
31	18C0279-02	0.2500 g		13.03.2018 16:43:47	✓	0.0008	0.0243	0.0972	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
32	18C0279-03	0.2500 g		13.03.2018 16:43:50	✓	0.0009	0.0251	0.1003	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
33	18C0279-04	0.2500 g		13.03.2018 17:19:22	✓	0.0008	0.0228	0.0913	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
34	18C0294-18	0.2500 g		13.03.2018 17:20:02	✓	0.0008	0.0226	0.0905	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
35	18C0417-01	0.2500 g		13.03.2018 17:20:07	✓	0.0007	0.0214	0.0856	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
36	18C0417-02	0.2500 g		13.03.2018 17:20:14	✓	0.0005	0.0171	0.0683	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
37	18C0419-01	0.2500 g		13.03.2018 17:20:21	✓	0.0005	0.0180	0.0721	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
38	18C0419-02	0.2500 g		13.03.2018 17:20:24	✓	0.0006	0.0182	0.0730	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
39	SEQ-CCV4	0.1000 g		13.03.2018 18:25:52	✓	0.0455	0.9865	9.8654	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013
40	SEQ-CCB4	0.2500 g		13.03.2018 18:26:02	✓	0.0018	0.0451	0.1804	1.0000	DMA80_01 ical LLaq 030618a.c80 06.03.2018 12:50:02	aq samples.m80 15.11.2013

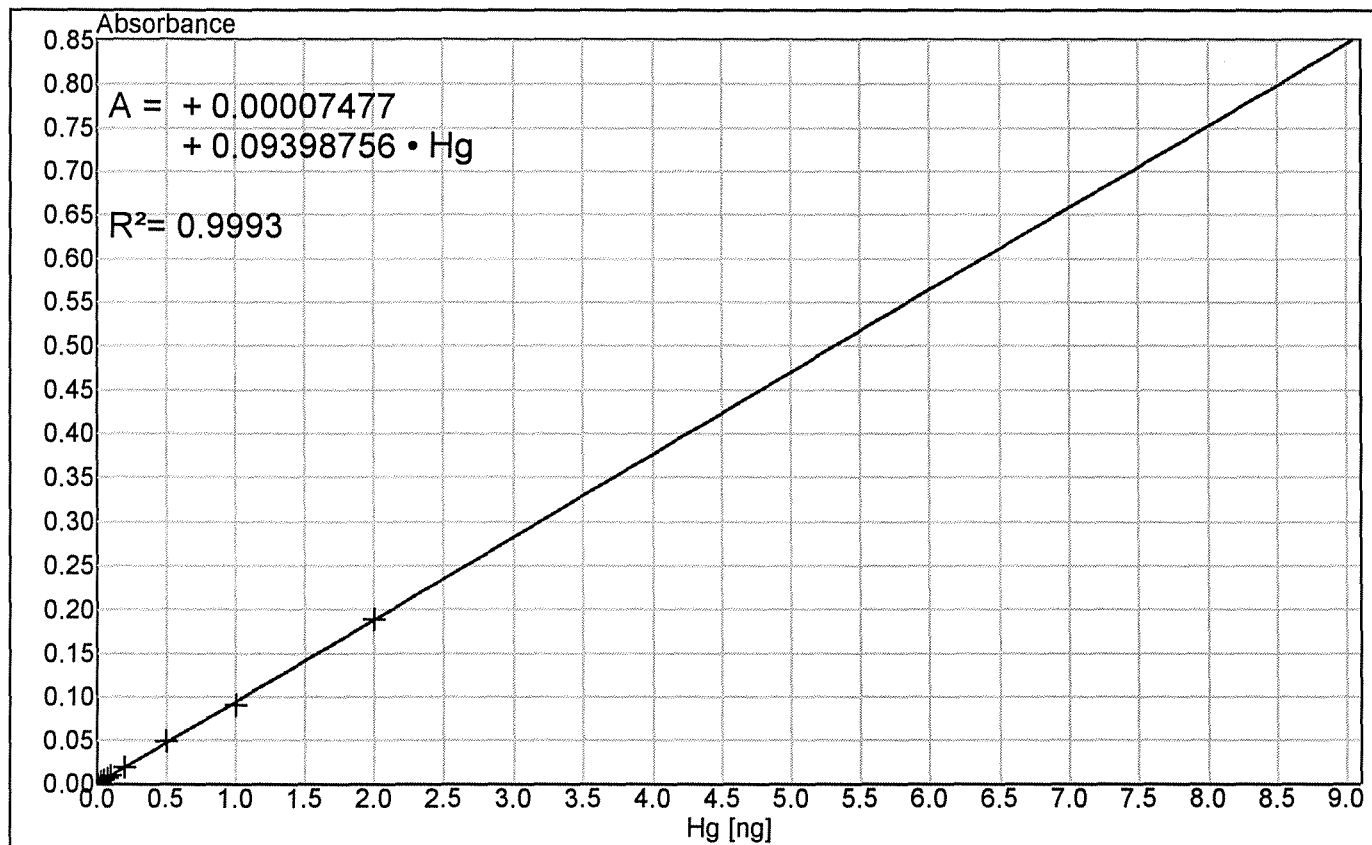
# Mercury Initial Calibration Data



Pos Nr.	Samplename Remark	Amount Date	State Date	Height	Hg [ng]	Concentr. [µg/kg]	Σ	Cal- Factor
1 (1)	0.0 ng	0.2000 g 06.03.18 11:04	✓ C 06.03.18 11:11	0.0002	0.0000	0.0001		1.0000
2 (2)	0.025 ng	0.0250 g 06.03.18 11:04	✓ C 06.03.18 11:19	0.0016	0.0250	1.0000		1.0000
3 (3)	0.050 ng	0.0500 g 06.03.18 11:05	✓ C 06.03.18 11:30	0.0020	0.0500	1.0000		1.0000
4 (4)	0.075 ng	0.0750 g 06.03.18 11:05	✓ C 06.03.18 11:41	0.0031	0.0750	1.0000		1.0000
5 (5)	0.100 ng	0.1000 g 06.03.18 11:05	✓ C 06.03.18 11:52	0.0044	0.1000	1.0000		1.0000
6 (6)	0.200 ng	0.2000 g 06.03.18 11:05	✓ C 06.03.18 12:04	0.0091	0.2000	1.0000		1.0000
7 (7)	0.500 ng	0.5000 g 06.03.18 11:06	✓ C 06.03.18 12:15	0.0239	0.5000	1.0000		1.0000
8 (8)	1.000 ng	0.1000 g 06.03.18 11:06	✓ C 06.03.18 12:26	0.0438	1.0000	10.0000		1.0000
9 (9)	2.000 ng	0.2000 g 06.03.18 11:06	✓ C 06.03.18 12:37	0.0934	2.0000	10.0000		1.0000
10 (10)	MB	0.2500 g 06.03.18 12:50	✓ 06.03.18 12:50	0.0006	0.0190	0.0759		1.0000
2 (11)	SEQ-ICV1	0.1000 g 06.03.18 13:01	✓ 06.03.18 13:02	0.0451	0.9790	9.7901		1.0000



Nr.		Hg [ng]	Height ^	Error ΔE [%]	Date	Remarks
1	✓	0.0000	0.0002	0.0005	06.03.2018 11:19:58	
2	✓	0.0250	0.0016	0.0007	06.03.2018 11:30:49	
3	✓	0.0500	0.0020	-0.0000	06.03.2018 11:41:55	
4	✓	0.0750	0.0031	-0.0001	06.03.2018 11:53:03	
5	✓	0.1000	0.0044	0.0000	06.03.2018 12:04:12	
6	✓	0.2000	0.0091	0.0001	06.03.2018 12:15:22	
7	✓	0.5000	0.0239	0.0010	06.03.2018 12:26:28	
8	✓	1.0000	0.0438	-0.0023	06.03.2018 12:37:34	
9	✓	2.0000	0.0934	0.0009	06.03.2018 12:48:43	



Nr.	Hg [ng]	Height ^	Error ΔE [%]	Date	Remarks
1	0.0000	0.0003	0.0002	06.03.2018 11:19:58	
2	0.0250	0.0034	0.0010	06.03.2018 11:30:49	
3	0.0500	0.0045	-0.0002	06.03.2018 11:41:55	
4	0.0750	0.0067	-0.0005	06.03.2018 11:53:03	
5	0.1000	0.0096	0.0001	06.03.2018 12:04:12	
6	0.2000	0.0193	0.0005	06.03.2018 12:15:22	
7	0.5000	0.0495	0.0024	06.03.2018 12:26:28	
8	1.0000	0.0903	-0.0037	06.03.2018 12:37:34	
9	2.0000	0.1893	0.0012	06.03.2018 12:48:43	

DATA USABILITY SUMMARY REPORT

for

THE CHAZEN COMPANIES

21 Fox Street

Poughkeepsie, NY 12601

KINGSTON CVS SITE  
Groundwater and Soil Samples  
SDG: 18C0104  
Sampled March 2018

VOLATILE ORGANICS and METALS

SDG 18C0104		SDG 18C0189	
KC-CB-01 (25-30')	(18C0104-1)	KC-MW-01 (0318)	(18C0189-1)
KC-CB-02 (25-30')	(18C0104-2)	KC-MW-02 (0318)	(18C0189-2)
KC-EB-01	(18C0104-3)	KC-MW-05 (0318)	(18C0189-3)
KC-MW-06 (0318)	(18C0104-4)	KC-MW-DUP2 (0318)	(18C0189-4)
KC-MW-07 (0318)	(18C0104-5)	TRIP BLANK	(18C0189-5)
KC-MW-DUP1 (0318)	(18C0104-6)		
TRIP BLANK	(18C0104-7)		

DATA ASSESSMENT

Two ASP Category B data packages containing analytical results for seven groundwater samples, two soils, an equipment blank and two trip blanks were received from The Chazen Companies on 21Apr18 and 30Apr18. The deliverables packages included formal reports, raw data, the necessary QC, and supporting information. The samples, taken from the Kingston CVS site, were identified by Chain of Custody documents and traceable through the work of York Analytical Laboratories, Inc., the laboratory contracted for analysis. Analyses, performed according to SW-846 methods, addressed determinations of volatile organics and priority pollutant metals. Laboratory data was evaluated according to the quality assurance / quality control requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol (ASP), September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP NO. HW-33, Rev. #3, March 2013, Low/Medium Volatile Data Validation; and SOP HW-2a, Rev. 15, Dec. 2012, ICP-AES Data Validation) were used as a technical reference.

The acetone concentrations found in KC-CB-01(25-30'), KC-CB-02(25-30'), KC-MW-06(0318), KC-MW-DUP1(0318) and KC-MW-02(0318); the methylene chloride found in KC-CB-01(25-30'); the tert-butyl alcohol concentrations from KC-MW-06(0318) and KC-MW-07(0318); and the arsenic concentration from KC-MW-DUP2(0318) have been removed from sample reports because they represent laboratory artifacts.

The 1,4-dioxane result from every sample except KC-EB-01 has been qualified as an estimation due to poor calibration performance. The acrolein, tert-butyl alcohol, tetrachloroethene, 1,4-dioxane, 1,4-dichlorobenzene and 1,2,3-trichlorobenzene results from KC-EB-01; the trichloroethene results from KC-CB-01(25-30') and KC-CB-02(25-30'); the 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,4-dioxane, bromomethane and tert-butyl alcohol results from KC-MW-06(0318), KC-MW-07(0318), KC-MW-DUP(0318) and the Trip Blank; and the bromomethane, 1,2,3-trichlorobenzene and 1,4-dioxane results from KC-MW-01(0318), KC-MW-02(0318), KC-MW-05(0318), KC-MW-DUP2(0318) and the Trip Blank have been similarly qualified.

The bromomethane results from KC-MW-06(0318), KC-MW-07(0318), KC-MW-06(0318), KC-MW-DUP1(0318), Trip Blank, KC-MW-01(0318), KC-MW-02(0318), KC-MW-05(0318), KC-MW-DUP2(0318) and Trip Blank; and the acrolein and 1,4-dioxane results from KC-EB-01 have been qualified as estimations due to poor spiked blank recoveries.

CORRECTNESS AND USABILITY

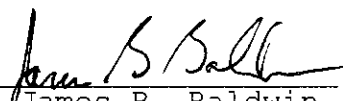
Reported data should be considered technically defensible and completely usable in its present form. Results presenting a usable estimation of the conditions at the time of sampling have

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been flagged "J", "U" or "UJ". Estimated data should be used with caution. A detailed discussion of the review process follows.

Two facts should be considered by all data users. No compound concentration, even if it has passed strict QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly, DATAVAL, Inc. guarantees the quality of this data assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature:

  
James B. Baldwin  
DATAVAL, Inc.

Date: 08 May 18

### SAMPLE HISTORY

Analyte concentrations can deteriorate with time due to chemical instability, bacterial degradation or volatility. Samples that are not properly preserved or are not analyzed within established holding times may no longer be considered representative. Holding times are calculated from the time of collection. Samples must remain chilled to 4°C between the time of collection and the time of analysis. Acid preserved VOC samples must be analyzed within 14 days, unpreserved VOC samples within 7 days. The holding time for VOC soils is 14 days. The holding time for mercury samples is 28 days. Metals samples must be analyzed within six months.

SDG 18C0104 included two soil samples and an equipment blank that were collected on 01Mar18 and two groundwater samples and a blind duplicate were collected on 05Mar18. The entire group of samples was packaged with a trip blank and shipped to the laboratory, via a lab courier, on 05Mar18. The shipment was received the following morning. At the time of receipt the cooler of samples was found to be intact and properly chilled, with custody seals in place. A cooler temperature of 1.1°C was recorded at the time of receipt. The proper preservation of the aqueous samples was documented in the field custody record and verified at the time of analysis. Each VOC sample produced a pH<2 at that time. It is noted that the samples collected on 01Mar18 were maintained in secure, cold storage until they were shipped to the laboratory on 05Mar18.

SDG 18C0189 included three groundwater samples and a blind duplicate that were collected on 05Mar18. The samples were packaged with a trip blank and shipped to the laboratory, via a lab courier, on the day of collection and were received the following morning. At the time of receipt the cooler of samples was found to be intact and properly chilled, with custody seals in place. A cooler temperature of 3.6°C was recorded at the time of receipt. The proper preservation of each sample was verified at the time of analysis.

### VOLATILE ORGANICS

The samples from SDG 18C0104 were analyzed between 09Mar18 and 10Mar18. SDG 18C0189 was analyzed on 12Mar18. The SW-846 holding time limitations were satisfied.

#### Blanks

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Method blanks are analyzed to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

Three method blanks, two trip blanks, and an equipment blank were analyzed with this group of samples. Although each of these

blanks demonstrated acceptable chromatography one method blank contained traces of 1,2,3-trichlorobenzene, the trip blanks contained acetone, 2-butanone and tert-butyl alcohol, and the equipment blank contained traces of acetone and 2-butanone. The acetone and methylene chloride concentrations from KC-CB-01(25-30'); the acetone concentration from KC-CB-02(25-30'); the acetone and tert-butyl alcohol concentrations from KC-MW-06(0318); the tert-butyl alcohol concentration from KC-MW-07(0318); and the acetone concentrations from KC-MW-DUP1(0318) and KC-MW-02(0318) should be interpreted as undetected. A detection limit equaling the laboratory's reporting limit or the reported concentration, whichever is greater, should be assumed.

#### MS Tuning

Mass spectrometer tuning and performance criteria are established to ensure sufficient mass resolution and sensitivity to accurately detect and identify targeted analytes. Verification is accomplished using a certified standard.

An Instrument Performance Check Standard of BFB was analyzed prior to each analytical sequence that included samples from this program. An Instrument Performance Check Form is present for each BFB evaluation. The BFB tunes associated with this group of samples satisfied the program acceptance criteria.

#### Calibrations

Requirements for instrument calibration are established to ensure that laboratory equipment is capable of producing accurate, quantitative data. Initial calibrations demonstrate a range through which measurements may be made. Continuing calibration check standards verify instrument stability.

Initial instrument calibrations were performed on 14Feb18, 26Feb18, 01Mar18 and 08Mar18. The 14Feb18, 26Feb18 and 08Mar18 calibrations included standards 0.5, 2.0, 4.0, 10, 20, 40, 80, 120 and 160 µg/l. The 01Mar18 calibration, for soils, included standards of 5, 10, 20, 50, 100 and 200 µg/l. With the exception of 1,4-dioxane on 14Feb18; 1,2,3-trichlorobenzene, 1,4-dioxane, 1,4-dichlorobenzene and tert-butyl alcohol on 08Mar18; 1,4-dioxane on 26Feb18; and 1,4-dioxane and trichloroethylene (TCE) on 01Mar18, each analyte targeted by this program produced the required levels of instrument response and demonstrated an acceptable degree of linearity during these calibrations. The 1,4-dioxane results from KC-MW-06(0318), KC-MW-07(0318), KC-MW-DUP1(0318) and the Trip Blank; the 1,2,3-trichlorobenzene, 1,4-dichlorobenzene, 1,4-dioxane and tert-butyl alcohol results from KC-EB-01; the 1,4-dioxane results from KC-MW-01(0318), KC-MW-02(0318), KC-MW-05(0318), KC-MW-DUP2(0318) and the Trip Blank; and the 1,4-dioxane and trichloroethene (TCE) results from KC-CB-01(25-30') and KC-CB-02(25-30') have been qualified as estimations based on this performance.



Calibration check standards were analyzed on 09Mar18 (System V8), 09Mar18 (System V7), 12Mar18 (System V4) and 12Mar18 (System QV6), prior to the twelve-hour periods of instrument operation that included samples from this program. When compared to the initial instrument calibration, unacceptable shifts were observed in the performance of acrolein (59%), tert-butyl alcohol (83%), tetrachloroethene (65%), 1,4-dioxane (0.0015), 1,4-dichlorobenzene (0.18) and 1,2,3-trichlorobenzene (0.068) on System V8; 1,2,3-trichlorobenzene (75%), 1,2,4-trichlorobenzene (30%), 1,4-dioxane (41%) and bromomethane (60%) on System V7; tert-butyl alcohol (80%) and trichloroethene (0.208) on system V4; and bromomethane (34%), 1,2,3-trichlorobenzene (43%) and 1,4-dioxane (0.0016) on System QV6. Based on this performance, the acrolein, tert-butyl alcohol, tetrachloroethene, 1,4-dioxane, 1,4-dichlorobenzene and 1,2,3-trichlorobenzene results from KC-EB-01; the 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,4-dioxane, bromomethane and tert-butyl alcohol results from KC-MW-06(0318), KC-MW-07(0318), KC-MW-DUP1(0318) and the Trip Blank; the bromomethane, 1,2,3-trichlorobenzene and 1,4-dioxane results from KC-MW-01(0318), KC-MW-02(0318), KC-MW-05(0318), KC-MW-DUP2(0318) and the Trip Blank; and the tert-butyl alcohol and trichloroethene results from KC-CB-01(25-30') and KC-CB-02(25-30') have been qualified as estimations.

#### Surrogates

Each sample, blank and standard is spiked with surrogate compounds prior to analysis. The structures of surrogates are similar to analytes of interest, but they are not normally found in environmental samples. Surrogate recoveries are monitored to evaluate overall laboratory performance and the efficiency of laboratory technique.

Although Surrogate Summary Sheets were properly prepared, the laboratory applied its own acceptance criteria. When compared to the ASP requirements, high recoveries were reported for the toluene-d8 and p-bromofluorobenzene additions to KC-CB-01(25-30') and KC-CB-02(25-30'). These indications of positive bias, however, warrant no concern because both affected samples produced negative results.

#### Internal Standards

Internal standards are added to each sample, blank and standard just prior to injection. Analyte concentrations are calculated relative to the response of a specific internal standard. Internal standard performance criteria ensure that GC/MS sensitivity and response are stable during the analysis of each sample. The area of internal standard peaks may not vary by more than a factor of two. When compared to the preceding calibration check, retention times may not vary by more than 30 seconds.

The laboratory correctly calculated control limits for internal standard response and retention times. When compared to this

criteria, acceptable performance was reported for the internal standard additions to this group of samples.

#### Matrix Spikes

Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

Although a sample from this delivery group was not selected for matrix spiking, four pairs of spiked blanks (LCS/LCSD) were analyzed with this group of samples. The recoveries reported from these LCS samples included high results for 1,2,3-trichlorobenzene (179%,177%), 1,2,4-trichlorobenzene (131%), dichlorodifluoromethane (160%,132%) and 1,4-dioxane (133%), and low recoveries of bromomethane (55%,58%,64%,69%), 1,4-dioxane (54%) and acrolein (32%,32%). The high recoveries reported for 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, dichlorodifluoromethane and 1,4-dioxane warrant no concern because these analytes were not detected in the associated samples. The bromomethane results from KC-MW-06(0318), KC-MW-07(0318), KC-MW-DUP1(0318), the Trip Blank, KC-MW-01(0318), KC-MW-02(0318), KC-MW-05(0318), KC-MW-DUP2(0318) and the Trip Blank; and the acrolein and 1,4-dioxane (54%) results from KC-EB-01 have been qualified as estimations based on these indications of negative bias.

#### Duplicates

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. The results produced by the analysis of this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

The field split duplicate samples that were included in these delivery groups were not identified.

#### Reported Analytes

Formal reports were provided for each sample. The data package also included total ion chromatograms and raw instrument print-outs. Reference mass spectra were provided to confirm the identification of each analyte that was detected in this group of samples. Tentatively Identified Compounds (TIC) were not reported.

#### METALS

This group of samples was digested and analyzed for ICP metals and mercury on 13Mar18. The program holding time limitations were satisfied.

### Calibrations

Calibration curves are constructed, using certified materials, to define the linear range of each analytical instrument. Beyond this range, measurements cannot be made with confidence. The calibration curve is immediately tested by analyzing an initial calibration verification standard (ICV). Continuing verifications (CCV) must bracket each group of up to ten samples. ICV and CCV recoveries must meet established criteria.

Each instrument calibration was immediately verified by the analysis of an ICV standard. Continuing calibration checks were made following each group of 10 samples. Each of these checks demonstrated an acceptable level of instrument stability.

### Contract Required Detection Limit Standards (CRDL)

To verify instrument linearity near CRDL, an ICP standard at a concentration of twice CRDL (CRI) is analyzed at the beginning of each analytical sequence. A standard equaling CRDL (CRA) must be included in each atomic adsorption sequence. CRDL standards must produce recoveries between 70% and 130%.

The CRI standard associated with this group of samples produced a high arsenic recovery of 142%. This performance, however, warrants no concern because the arsenic concentration found in KC-MW-DUP2(0318), the only positive sample, exceeded the range requiring data qualifications.

### Blanks

Blanks are analyzed to evaluate various sources of sample contamination. Field blanks monitor sampling activities. Preparation blanks are carried through the digestion process with each group of samples to evaluate general laboratory technique. Calibration blanks are run periodically to verify instrument integrity. Samples are considered compromised by conditions causing contamination in any blank.

An initial blank (ICB) was analyzed following the calibration in each analytical sequence. Additional blanks were analyzed after every ten samples (CCB) and at the end of each sequence. Preparation blanks were digested and analyzed with this group of samples. These laboratory prepared blanks produced elevated levels of arsenic (0.005, 0.005, 0.005  $\mu\text{g/ml}$ ) and thallium (0.006, 0.007, 0.006  $\mu\text{g/ml}$ ). A similar artifact of arsenic was found in KC-MW-DUP2(0318). Arsenic should be interpreted as undetected in this sample, and a detection limit equaling the reported concentration should be assumed.

### Interference Check Sample (ICS)

ICS standards are analyzed at the beginning of each ICP analysis sequence to verify background and inter-element correction factors. The recoveries of specified analytes are measured in the presence of interfering concentrations of aluminum, calcium, magnesium and iron.

Interference check standards, ICSA and ICSAB, were analyzed at the beginning of each analytical sequence. The ICS performance associated with the analytes targeted by this program satisfied

#### Predigestion Spikes

The recovery of spike concentrations added to samples prior to digestion and analysis demonstrates measurement bias caused by sample matrix effects. Predigestion spikes must be recovered within control limits of 75% - 125%.

KC-MW-01(0318) was selected for matrix spiking. Each ICP metal was added to a volume of this sample. The recoveries reported for these additions demonstrated an acceptable level of measurement accuracy.

#### Duplicates

Two aliquots of the same sample are processed separately through all aspects of sample preparation and analysis. The results produced by this pair of samples are compared as a measurement of precision. Poor precision may be indicative of sample non-homogeneity, method defects, or poor laboratory technique.

KC-MW-01(0318) was analyzed as a laboratory split duplicate. The mercury and ICP metal concentrations found in this pair of samples demonstrated an acceptable degree of measurement precision.

The blind duplicate sample included in this delivery group was not identified.

#### Laboratory Control Standard

Laboratory control samples are prepared by adding analytes to clean sand or reagent water. Analyte concentrations are then determined without interferences caused by sample matrix effects.

An aqueous spiked blank (LCS) was digested and analyzed with this delivery group. This LCS produced an acceptable recovery of mercury and each ICP metal.

#### Serial Dilution Sample

Possible matrix effects are verified by the process of serial dilutions. Samples are diluted 1:5 to reduce matrix contributions that might bias measurements. The original sample result, and the corrected concentration of the diluted sample are compared. Sample data is qualified if the original concentrations are not recovered within 10%. Analytes with initial concentrations below 50 times IDL are not considered.

A serial dilution was not prepared with a sample from this program.

SUMMARY OF QUALIFIED DATA

KINGSTON CVS SITE

SAMPLED: March 2018

	BLANKS ACETONE	BLANKS METH CL	BLANK T-BUTANOL	CALIBRATE 1,4-DIOXANE	CALIBRATE CAL1*	CALIBRATE TCE
KC-CB-01 (25-30') (18C0104-1)	0.0100	0.00990		0.0990UJ		0.00490UJ
KC-CB-02 (25-30') (18C0104-2)	0.0100			0.100UJ		0.00500UJ
KC-EB-01 (18C0104-3)					ALL UJ	
KC-MW-06 (0318) (18C0104-4)	2.20		2.00	40UJ		
KC-MW-07 (0318) (18C0104-5)			2.00	40UJ		
KC-MW-DUP1 (0318) (18C0104-6)	2.00			40UJ		
TRIP BLANK (18C0104-7)				40UJ		
KC-MW-01 (0318) (18C0189-1)				400UJ		
KC-MW-02 (0318) (18C0189-2)	1.40			40UJ		
KC-MW-05 (0318) (18C0189-3)				40UJ		
KC-MW-DUP2 (0318) (18C0189-4)				400UJ		
TRIP BLANK (18C0189-5)				40UJ		

CAL1\* = acrolein, tert-butyl alcohol, tetrachloroethene, 1,4-dioxane, 1,4-dichlorobenzene  
1,2,3-trichlorobenzene

SUMMARY OF QUALIFIED DATA

KINGSTON CVS SITE

SAMPLED: March 2018

	CALIBRATE CAL2*	CALIBRATE CAL3*	SPIKES BRMANE	SPIKES ARCOLEIN	SPIKE 14DIOXANE	BLANKS ARSENIC
KC-CB-01 (25-30') (18C0104-1)						
KC-CB-02 (25-30') (18C0104-2)						
KC-EB-01 (18C0104-3)				2.0UJ	40UJ	
KC-MW-06 (0318) (18C0104-4)	ALL UJ		0.50UJ			
KC-MW-07 (0318) (18C0104-5)	ALL UJ		0.50UJ			
KC-MW-DUP1 (0318) (18C0104-6)	ALL UJ		0.50UJ			
TRIP BLANK (18C0104-7)	ALL UJ		0.50UJ			
KC-MW-01 (0318) (18C0189-1)		ALL UJ	5.0UJ			
KC-MW-02 (0318) (18C0189-2)		ALL UJ	0.50UJ			
KC-MW-05 (0318) (18C0189-3)		ALL UJ	0.50UJ			
KC-MW-DUP2 (0318) (18C0189-4)		ALL UJ	5.0UJ			0.005U
TRIP BLANK (18C0189-5)		ALL UJ	0.50UJ			

CAL2 = 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,4-dioxane, bromomethane, tert-butyl alcohol

CAL3 = bromomethane, 1,2,3-trichlorobenzene, 1,4-dioxane

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: 18C0104-01 File ID: V4781875.D  
 Sampled: 03/01/18 09:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:17  
 Solids: 77.06 Preparation: EPA 5035A Initial/Final: 6.56 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0049	U
71-55-6	1,1,1-Trichloroethane	1	0.0049	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0049	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.0049	U
79-00-5	1,1,2-Trichloroethane	1	0.0049	U
75-34-3	1,1-Dichloroethane	1	0.0049	U
75-35-4	1,1-Dichloroethylene	1	0.0049	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0049	U
96-18-4	1,2,3-Trichloropropane	1	0.0049	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0049	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0049	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.0049	U
106-93-4	1,2-Dibromoethane	1	0.0049	U
95-50-1	1,2-Dichlorobenzene	1	0.0049	U
107-06-2	1,2-Dichloroethane	1	0.0049	U
78-87-5	1,2-Dichloropropane	1	0.0049	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0049	U
541-73-1	1,3-Dichlorobenzene	1	0.0049	U
106-46-7	1,4-Dichlorobenzene	1	0.0049	U
123-91-1	1,4-Dioxane	1	0.099 U	U
78-93-3	2-Butanone	1	0.0049	U
591-78-6	2-Hexanone	1	0.0049	U
108-10-1	4-Methyl-2-pentanone	1	0.0049	U
67-64-1	Acetone	1	0.010 U	U
107-02-8	Acrolein	1	0.0099	U
107-13-1	Acrylonitrile	1	0.0049	U
71-43-2	Benzene	1	0.0049	U
74-97-5	Bromochloromethane	1	0.0049	U
75-27-4	Bromodichloromethane	1	0.0049	U
75-25-2	Bromoform	1	0.0049	U
74-83-9	Bromomethane	1	0.0049	U
75-15-0	Carbon disulfide	1	0.0049	U
56-23-5	Carbon tetrachloride	1	0.0049	U
108-90-7	Chlorobenzene	1	0.0049	U
75-00-3	Chloroethane	1	0.0049	U
67-66-3	Chloroform	1	0.0049	U
74-87-3	Chloromethane	1	0.0049	U
156-59-2	cis-1,2-Dichloroethylene	1	0.0049	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.0049	U
110-82-7	Cyclohexane	1	0.0049	U

## FORM I

## ORGANIC ANALYSIS DATA SHEET

EPA 8260C

KC-CB-01 (25-30')

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: 18C0104-01 File ID: V4781875.D  
 Sampled: 03/01/18 09:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:17  
 Solids: 77.06 Preparation: EPA 5035A Initial/Final: 6.56 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
124-48-1	Dibromochloromethane	1	0.0049	U
74-95-3	Dibromomethane	1	0.0049	U
75-71-8	Dichlorodifluoromethane	1	0.0049	U
100-41-4	Ethyl Benzene	1	0.0049	U
87-68-3	Hexachlorobutadiene	1	0.0049	U
98-82-8	Isopropylbenzene	1	0.0049	U
79-20-9	Methyl acetate	1	0.0049	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.0049	U
108-87-2	Methylcyclohexane	1	0.0049	U
75-09-2	Methylene chloride	1	0.0099 <del>0.0073</del> U	JB
104-51-8	n-Butylbenzene	1	0.0049	U
103-65-1	n-Propylbenzene	1	0.0049	U
95-47-6	o-Xylene	1	0.0049	U
179601-23-1	p- & m- Xylenes	1	0.0099	U
99-87-6	p-Isopropyltoluene	1	0.0049	U
135-98-8	sec-Butylbenzene	1	0.0049	U
100-42-5	Styrene	1	0.0049	U
75-65-0	tert-Butyl alcohol (TBA)	1	0.0099 U	U
98-06-6	tert-Butylbenzene	1	0.0049	U
127-18-4	Tetrachloroethylene	1	0.0049	U
108-88-3	Toluene	1	0.0049	U
156-60-5	trans-1,2-Dichloroethylene	1	0.0049	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.0049	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.0049	U
79-01-6	Trichloroethylene	1	0.0049 U	U
75-69-4	Trichlorofluoromethane	1	0.0049	U
75-01-4	Vinyl Chloride	1	0.0049	U
1330-20-7	Xylenes, Total	1	0.015	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	45.8	91.7	77 - 125	
Toluene-d8	50.0	62.4	125	85 - 120	*
p-Bromofluorobenzene	50.0	65.6	131	76 - 130	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	104629	5.81	115822	5.8	
Chlorobenzene-d5	331206	8.82	541028	8.82	
1,2-Dichlorobenzene-d4	65650	11.8	260151	11.8	*

\* Values outside of QC limits



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: 18C0104-02 File ID: V4781876.D  
 Sampled: 03/01/18 10:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:49  
 Solids: 75.23 Preparation: EPA 5035A Initial/Final: 6.66 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.0050	U
71-55-6	1,1,1-Trichloroethane	1	0.0050	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.0050	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.0050	U
79-00-5	1,1,2-Trichloroethane	1	0.0050	U
75-34-3	1,1-Dichloroethane	1	0.0050	U
75-35-4	1,1-Dichloroethylene	1	0.0050	U
87-61-6	1,2,3-Trichlorobenzene	1	0.0050	U
96-18-4	1,2,3-Trichloropropane	1	0.0050	U
120-82-1	1,2,4-Trichlorobenzene	1	0.0050	U
95-63-6	1,2,4-Trimethylbenzene	1	0.0050	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.0050	U
106-93-4	1,2-Dibromoethane	1	0.0050	U
95-50-1	1,2-Dichlorobenzene	1	0.0050	U
107-06-2	1,2-Dichloroethane	1	0.0050	U
78-87-5	1,2-Dichloropropane	1	0.0050	U
108-67-8	1,3,5-Trimethylbenzene	1	0.0050	U
541-73-1	1,3-Dichlorobenzene	1	0.0050	U
106-46-7	1,4-Dichlorobenzene	1	0.0050	U
123-91-1	1,4-Dioxane	1	0.10 UJ	U
78-93-3	2-Butanone	1	0.0050	U
591-78-6	2-Hexanone	1	0.0050	U
108-10-1	4-Methyl-2-pentanone	1	0.0050	U
67-64-1	Acetone	1	0.010 <del>0.0061</del> U	J
107-02-8	Acrolein	1	0.010	U
107-13-1	Acrylonitrile	1	0.0050	U
71-43-2	Benzene	1	0.0050	U
74-97-5	Bromochloromethane	1	0.0050	U
75-27-4	Bromodichloromethane	1	0.0050	U
75-25-2	Bromoform	1	0.0050	U
74-83-9	Bromomethane	1	0.0050	U
75-15-0	Carbon disulfide	1	0.0050	U
56-23-5	Carbon tetrachloride	1	0.0050	U
108-90-7	Chlorobenzene	1	0.0050	U
75-00-3	Chloroethane	1	0.0050	U
67-66-3	Chloroform	1	0.0050	U
74-87-3	Chloromethane	1	0.0050	U
156-59-2	cis-1,2-Dichloroethylene	1	0.0050	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.0050	U
110-82-7	Cyclohexane	1	0.0050	U

## FORM I

## ORGANIC ANALYSIS DATA SHEET

EPA 8260C

KC-CB-02 (25-30')

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: 18C0104-02 File ID: V4781876.D  
 Sampled: 03/01/18 10:00 Prepared: 03/12/18 07:30 Analyzed: 03/12/18 14:49  
 Solids: 75.23 Preparation: EPA 5035A Initial/Final: 6.66 g / 5 ml  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003 Instrument: GCMS-VOA4

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q
124-48-1	Dibromochloromethane	1	0.0050	U
74-95-3	Dibromomethane	1	0.0050	U
75-71-8	Dichlorodifluoromethane	1	0.0050	U
100-41-4	Ethyl Benzene	1	0.0050	U
87-68-3	Hexachlorobutadiene	1	0.0050	U
98-82-8	Isopropylbenzene	1	0.0050	U
79-20-9	Methyl acetate	1	0.0050	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.0050	U
108-87-2	Methylcyclohexane	1	0.0050	U
75-09-2	Methylene chloride	1	0.010	U
104-51-8	n-Butylbenzene	1	0.0050	U
103-65-1	n-Propylbenzene	1	0.0050	U
95-47-6	o-Xylene	1	0.0050	U
179601-23-1	p- & m- Xylenes	1	0.010	U
99-87-6	p-Isopropyltoluene	1	0.0050	U
135-98-8	sec-Butylbenzene	1	0.0050	U
100-42-5	Styrene	1	0.0050	U
75-65-0	tert-Butyl alcohol (TBA)	1	0.010	U
98-06-6	tert-Butylbenzene	1	0.0050	U
127-18-4	Tetrachloroethylene	1	0.0050	U
108-88-3	Toluene	1	0.0050	U
156-60-5	trans-1,2-Dichloroethylene	1	0.0050	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.0050	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.0050	U
79-01-6	Trichloroethylene	1	0.0050	U
75-69-4	Trichlorofluoromethane	1	0.0050	U
75-01-4	Vinyl Chloride	1	0.0050	U
1330-20-7	Xylenes, Total	1	0.015	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	45.4	90.7	77 - 125	
Toluene-d8	50.0	68.8	138	85 - 120	*
p-Bromofluorobenzene	50.0	73.4	147	76 - 130	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	106287	5.81	115822	5.8	
Chlorobenzene-d5	286110	8.82	541028	8.82	
1,2-Dichlorobenzene-d4	42335	11.8	260151	11.8	*

\* Values outside of QC limits

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-03 File ID: V804225.D  
 Sampled: 03/01/18 10:45 Prepared: 03/09/18 07:30 Analyzed: 03/09/18 13:05  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010 Instrument: VOA No. 8

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.50	U
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	2.0 <i>U</i>	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50 <i>U</i>	U
123-91-1	1,4-Dioxane	1	40 <i>U</i>	U
78-93-3	2-Butanone	1	0.21	J
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	8.8	
107-02-8	Acrolein	1	2.0 <i>U</i>	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

*AKS*

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-03 File ID: V804225.D  
 Sampled: 03/01/18 10:45 Prepared: 03/09/18 07:30 Analyzed: 03/09/18 13:05  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010 Instrument: VOA No. 8

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0 UJ	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50 UJ	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	0.50	U
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.45	94.5	69 - 130	
Toluene-d8	10.0	10.0	100	81 - 117	
p-Bromofluorobenzene	10.0	11.4	114	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	25805	4.916	27896	4.918	
Chlorobenzene-d5	90257	7.876	95832	7.876	
1,2-Dichlorobenzene-d4	26617	10.828	31465	10.831	

\* Values outside of QC limits

*MS*

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-04 File ID: V724464.D  
 Sampled: 03/05/18 12:30 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:15  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.38	J
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.29	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.2	U
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	12	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-04 File ID: V724464.D  
 Sampled: 03/05/18 12:30 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:15  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50 <i>UJ</i>	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA) -	1	2.0 <del>0.50</del> <i>U</i>	J
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene -	1	0.38	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene -	1	26	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride -	1	0.23	J
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.61	96.1	69 - 130	
Toluene-d8	10.0	10.5	105	81 - 117	
p-Bromofluorobenzene	10.0	9.98	99.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	258661	5.828	248308	5.828	
Chlorobenzene-d5	944138	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	368825	11.843	370257	11.84	

\* Values outside of QC limits

*7/25*

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-05 File ID: V724465.D  
 Sampled: 03/05/18 18:25 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:47  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	1.5	
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	3.6	
75-35-4	1,1-Dichloroethylene	1	0.25	J
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.0	U
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.32	J
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	11	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-05 File ID: V724465.D  
 Sampled: 03/05/18 18:25 Prepared: 03/09/18 07:17 Analyzed: 03/09/18 23:47  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50 UJ	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA) —	1	2.0 <del>1.0</del> U	J
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene —	1	0.35	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene ~	1	39	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride —	1	2.9	
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.58	95.8	69 - 130	
Toluene-d8	10.0	10.4	104	81 - 117	
p-Bromofluorobenzene	10.0	10.0	100	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	246616	5.828	248308	5.828	
Chlorobenzene-d5	907734	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	353263	11.84	370257	11.84	

\* Values outside of QC limits



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-06 File ID: V724466.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:19  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.39	J
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.32	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.0	J
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	13	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-06 File ID: V724466.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:19  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50 <i>UJ</i>	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	2.0 <i>UJ</i>	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.38	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	27	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.33	J
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.46	94.6	69 - 130	
Toluene-d8	10.0	10.5	105	81 - 117	
p-Bromofluorobenzene	10.0	9.97	99.7	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	251844	5.828	248308	5.828	
Chlorobenzene-d5	915028	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	358588	11.841	370257	11.84	

\* Values outside of QC limits

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-07 File ID: V724467.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.50	U
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.42	J
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	1.5	J
107-02-8	Acrolein	1	2.0	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0104-07 File ID: V724467.D  
 Sampled: 03/05/18 15:00 Prepared: 03/09/18 07:17 Analyzed: 03/10/18 00:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017 Instrument: MSVOA7

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	2.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	0.50	U
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.69	96.9	69 - 130	
Toluene-d8	10.0	10.4	104	81 - 117	
p-Bromofluorobenzene	10.0	10.2	102	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	252608	5.828	248308	5.828	
Chlorobenzene-d5	941814	8.858	917162	8.858	
1,2-Dichlorobenzene-d4	364129	11.84	370257	11.84	

\* Values outside of QC limits

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-01 File ID: QV604748.D  
 Sampled: 03/05/18 12:30 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:18  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	5.0	U
71-55-6	1,1,1-Trichloroethane →	10	2.4	JD
79-34-5	1,1,2,2-Tetrachloroethane	10	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	5.0	U
79-00-5	1,1,2-Trichloroethane	10	5.0	U
75-34-3	1,1-Dichloroethane →	10	3.7	JD
75-35-4	1,1-Dichloroethylene	10	5.0	U
87-61-6	1,2,3-Trichlorobenzene	10	5.0 UJ	U
96-18-4	1,2,3-Trichloropropane	10	5.0	U
120-82-1	1,2,4-Trichlorobenzene	10	5.0	U
95-63-6	1,2,4-Trimethylbenzene	10	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	5.0	U
106-93-4	1,2-Dibromoethane	10	5.0	U
95-50-1	1,2-Dichlorobenzene	10	5.0	U
107-06-2	1,2-Dichloroethane	10	5.0	U
78-87-5	1,2-Dichloropropane	10	5.0	U
108-67-8	1,3,5-Trimethylbenzene	10	5.0	U
541-73-1	1,3-Dichlorobenzene	10	5.0	U
106-46-7	1,4-Dichlorobenzene	10	5.0	U
123-91-1	1,4-Dioxane	10	400 UJ	U
78-93-3	2-Butanone	10	5.0	U
591-78-6	2-Hexanone	10	5.0	U
108-10-1	4-Methyl-2-pentanone	10	5.0	U
67-64-1	Acetone	10	20	U
107-02-8	Acrolein	10	5.0	U
107-13-1	Acrylonitrile	10	5.0	U
71-43-2	Benzene	10	5.0	U
74-97-5	Bromochloromethane	10	5.0	U
75-27-4	Bromodichloromethane	10	5.0	U
75-25-2	Bromoform	10	5.0	U
74-83-9	Bromomethane	10	5.0 UJ	U
75-15-0	Carbon disulfide	10	5.0	U
56-23-5	Carbon tetrachloride	10	5.0	U
108-90-7	Chlorobenzene	10	5.0	U
75-00-3	Chloroethane	10	5.0	U
67-66-3	Chloroform	10	5.0	U
74-87-3	Chloromethane	10	5.0	U
156-59-2	cis-1,2-Dichloroethylene →	10	730	D
10061-01-5	cis-1,3-Dichloropropylene	10	5.0	U
110-82-7	Cyclohexane	10	5.0	U

## FORM I

## ORGANIC ANALYSIS DATA SHEET

EPA 8260C

KC-MW-01 (0318)

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-01 File ID: QV604748.D  
 Sampled: 03/05/18 12:30 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:18  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	10	5.0	U
74-95-3	Dibromomethane	10	5.0	U
75-71-8	Dichlorodifluoromethane	10	5.0	U
100-41-4	Ethyl Benzene	10	5.0	U
87-68-3	Hexachlorobutadiene	10	5.0	U
98-82-8	Isopropylbenzene	10	5.0	U
79-20-9	Methyl acetate	10	5.0	U
1634-04-4	Methyl tert-butyl ether (MTBE)	10	5.0	U
108-87-2	Methylcyclohexane	10	5.0	U
75-09-2	Methylene chloride	10	20	U
104-51-8	n-Butylbenzene	10	5.0	U
103-65-1	n-Propylbenzene	10	5.0	U
95-47-6	o-Xylene	10	5.0	U
179601-23-1	p- & m- Xylenes	10	10	U
99-87-6	p-Isopropyltoluene	10	5.0	U
135-98-8	sec-Butylbenzene	10	5.0	U
100-42-5	Styrene	10	5.0	U
75-65-0	tert-Butyl alcohol (TBA)	10	10	U
98-06-6	tert-Butylbenzene	10	5.0	U
127-18-4	Tetrachloroethylene	10	5.0	U
108-88-3	Toluene	10	5.0	U
156-60-5	trans-1,2-Dichloroethylene -	10	20	D
10061-02-6	trans-1,3-Dichloropropylene	10	5.0	U
110-57-6	trans-1,4-dichloro-2-butene	10	5.0	U
79-01-6	Trichloroethylene -	10	780	D
75-69-4	Trichlorofluoromethane	10	5.0	U
75-01-4	Vinyl Chloride -	10	110	D
1330-20-7	Xylenes, Total	10	15	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	10.0	100	69 - 130	
Toluene-d8	10.0	9.72	97.2	81 - 117	
p-Bromofluorobenzene	10.0	9.78	97.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	51199	6.131	54432	6.131	
Chlorobenzene-d5	212955	9.188	224712	9.188	
1,2-Dichlorobenzene-d4	87617	12.171	89967	12.174	

\* Values outside of QC limits

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-02 File ID: QV604746.D  
 Sampled: 03/05/18 18:25 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:25  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.48	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	1.4	J
107-02-8	Acrolein	1	0.50	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	14	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-02 File ID: QV604746.D  
 Sampled: 03/05/18 18:25 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:25  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	1.7	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	2.2	
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.61	96.1	69 - 130	
Toluene-d8	10.0	9.71	97.1	81 - 117	
p-Bromofluorobenzene	10.0	9.88	98.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	49945	6.128	54432	6.131	
Chlorobenzene-d5	205040	9.186	224712	9.188	
1,2-Dichlorobenzene-d4	83000	12.174	89967	12.174	

\* Values outside of QC limits



Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-03 File ID: QV604747.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.35	J
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.0	U
107-02-8	Acrolein	1	0.50	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	20	
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-03 File ID: QV604747.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 18:51  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	2.0	U
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.30	J
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	51	
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	10.3	103	69 - 130	
Toluene-d8	10.0	9.51	95.1	81 - 117	
p-Bromofluorobenzene	10.0	9.82	98.2	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	48648	6.128	54432	6.131	
Chlorobenzene-d5	202965	9.186	224712	9.188	
1,2-Dichlorobenzene-d4	83840	12.171	89967	12.174	

\* Values outside of QC limits

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-04 File ID: QV604749.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:44  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	10	5.0	U
71-55-6	1,1,1-Trichloroethane	10	2.2	JD
79-34-5	1,1,2,2-Tetrachloroethane	10	5.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10	5.0	U
79-00-5	1,1,2-Trichloroethane	10	5.0	U
75-34-3	1,1-Dichloroethane	10	3.7	JD
75-35-4	1,1-Dichloroethylene	10	5.0	U
87-61-6	1,2,3-Trichlorobenzene	10	5.0	U
96-18-4	1,2,3-Trichloropropane	10	5.0	U
120-82-1	1,2,4-Trichlorobenzene	10	5.0	U
95-63-6	1,2,4-Trimethylbenzene	10	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	10	5.0	U
106-93-4	1,2-Dibromoethane	10	5.0	U
95-50-1	1,2-Dichlorobenzene	10	5.0	U
107-06-2	1,2-Dichloroethane	10	5.0	U
78-87-5	1,2-Dichloropropane	10	5.0	U
108-67-8	1,3,5-Trimethylbenzene	10	5.0	U
541-73-1	1,3-Dichlorobenzene	10	5.0	U
106-46-7	1,4-Dichlorobenzene	10	5.0	U
123-91-1	1,4-Dioxane	10	400	U
78-93-3	2-Butanone	10	5.0	U
591-78-6	2-Hexanone	10	5.0	U
108-10-1	4-Methyl-2-pentanone	10	5.0	U
67-64-1	Acetone	10	20	U
107-02-8	Acrolein	10	5.0	U
107-13-1	Acrylonitrile	10	5.0	U
71-43-2	Benzene	10	5.0	U
74-97-5	Bromochloromethane	10	5.0	U
75-27-4	Bromodichloromethane	10	5.0	U
75-25-2	Bromoform	10	5.0	U
74-83-9	Bromomethane	10	5.0	U
75-15-0	Carbon disulfide	10	5.0	U
56-23-5	Carbon tetrachloride	10	5.0	U
108-90-7	Chlorobenzene	10	5.0	U
75-00-3	Chloroethane	10	5.0	U
67-66-3	Chloroform	10	5.0	U
74-87-3	Chloromethane	10	5.0	U
156-59-2	cis-1,2-Dichloroethylene	10	780	D
10061-01-5	cis-1,3-Dichloropropylene	10	5.0	U
110-82-7	Cyclohexane	10	5.0	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-04 File ID: QV604749.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 19:44  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	10	5.0	U
74-95-3	Dibromomethane	10	5.0	U
75-71-8	Dichlorodifluoromethane	10	5.0	U
100-41-4	Ethyl Benzene	10	5.0	U
87-68-3	Hexachlorobutadiene	10	5.0	U
98-82-8	Isopropylbenzene	10	5.0	U
79-20-9	Methyl acetate	10	5.0	U
1634-04-4	Methyl tert-butyl ether (MTBE)	10	5.0	U
108-87-2	Methylcyclohexane	10	5.0	U
75-09-2	Methylene chloride	10	20	U
104-51-8	n-Butylbenzene	10	5.0	U
103-65-1	n-Propylbenzene	10	5.0	U
95-47-6	o-Xylene	10	5.0	U
179601-23-1	p- & m- Xylenes	10	10	U
99-87-6	p-Isopropyltoluene	10	5.0	U
135-98-8	sec-Butylbenzene	10	5.0	U
100-42-5	Styrene	10	5.0	U
75-65-0	tert-Butyl alcohol (TBA)	10	10	U
98-06-6	tert-Butylbenzene	10	5.0	U
127-18-4	Tetrachloroethylene	10	5.0	U
108-88-3	Toluene	10	5.0	U
156-60-5	trans-1,2-Dichloroethylene ~	10	22	D
10061-02-6	trans-1,3-Dichloropropylene	10	5.0	U
110-57-6	trans-1,4-dichloro-2-butene	10	5.0	U
79-01-6	Trichloroethylene ~	10	840	D
75-69-4	Trichlorofluoromethane	10	5.0	U
75-01-4	Vinyl Chloride ~	10	120	D
1330-20-7	Xylenes, Total	10	15	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	10.1	101	69 - 130	
Toluene-d8	10.0	9.78	97.8	81 - 117	
p-Bromofluorobenzene	10.0	9.88	98.8	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	49547	6.131	54432	6.131	
Chlorobenzene-d5	204559	9.186	224712	9.188	
1,2-Dichlorobenzene-d4	82649	12.174	89967	12.174	

\* Values outside of QC limits

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-05 File ID: QV604745.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 17:59  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	1	0.50	U
71-55-6	1,1,1-Trichloroethane	1	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	1	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1	0.50	U
79-00-5	1,1,2-Trichloroethane	1	0.50	U
75-34-3	1,1-Dichloroethane	1	0.50	U
75-35-4	1,1-Dichloroethylene	1	0.50	U
87-61-6	1,2,3-Trichlorobenzene	1	0.50	U
96-18-4	1,2,3-Trichloropropane	1	0.50	U
120-82-1	1,2,4-Trichlorobenzene	1	0.50	U
95-63-6	1,2,4-Trimethylbenzene	1	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	1	0.50	U
106-93-4	1,2-Dibromoethane	1	0.50	U
95-50-1	1,2-Dichlorobenzene	1	0.50	U
107-06-2	1,2-Dichloroethane	1	0.50	U
78-87-5	1,2-Dichloropropane	1	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1	0.50	U
541-73-1	1,3-Dichlorobenzene	1	0.50	U
106-46-7	1,4-Dichlorobenzene	1	0.50	U
123-91-1	1,4-Dioxane	1	40	U
78-93-3	2-Butanone	1	0.50	U
591-78-6	2-Hexanone	1	0.50	U
108-10-1	4-Methyl-2-pentanone	1	0.50	U
67-64-1	Acetone	1	2.0	U
107-02-8	Acrolein	1	0.50	U
107-13-1	Acrylonitrile	1	0.50	U
71-43-2	Benzene	1	0.50	U
74-97-5	Bromochloromethane	1	0.50	U
75-27-4	Bromodichloromethane	1	0.50	U
75-25-2	Bromoform	1	0.50	U
74-83-9	Bromomethane	1	0.50	U
75-15-0	Carbon disulfide	1	0.50	U
56-23-5	Carbon tetrachloride	1	0.50	U
108-90-7	Chlorobenzene	1	0.50	U
75-00-3	Chloroethane	1	0.50	U
67-66-3	Chloroform	1	0.50	U
74-87-3	Chloromethane	1	0.50	U
156-59-2	cis-1,2-Dichloroethylene	1	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	1	0.50	U
110-82-7	Cyclohexane	1	0.50	U

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: 18C0189-05 File ID: QV604745.D  
 Sampled: 03/05/18 15:00 Prepared: 03/12/18 10:00 Analyzed: 03/12/18 17:59  
 Solids: Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032 Instrument: QVOA6

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q
124-48-1	Dibromochloromethane	1	0.50	U
74-95-3	Dibromomethane	1	0.50	U
75-71-8	Dichlorodifluoromethane	1	0.50	U
100-41-4	Ethyl Benzene	1	0.50	U
87-68-3	Hexachlorobutadiene	1	0.50	U
98-82-8	Isopropylbenzene	1	0.50	U
79-20-9	Methyl acetate	1	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1	0.50	U
108-87-2	Methylcyclohexane	1	0.50	U
75-09-2	Methylene chloride	1	8.9	
104-51-8	n-Butylbenzene	1	0.50	U
103-65-1	n-Propylbenzene	1	0.50	U
95-47-6	o-Xylene	1	0.50	U
179601-23-1	p- & m- Xylenes	1	1.0	U
99-87-6	p-Isopropyltoluene	1	0.50	U
135-98-8	sec-Butylbenzene	1	0.50	U
100-42-5	Styrene	1	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1	1.0	U
98-06-6	tert-Butylbenzene	1	0.50	U
127-18-4	Tetrachloroethylene	1	0.50	U
108-88-3	Toluene	1	0.50	U
156-60-5	trans-1,2-Dichloroethylene	1	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	1	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	1	0.50	U
79-01-6	Trichloroethylene	1	0.50	U
75-69-4	Trichlorofluoromethane	1	0.50	U
75-01-4	Vinyl Chloride	1	0.50	U
1330-20-7	Xylenes, Total	1	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.77	97.7	69 - 130	
Toluene-d8	10.0	10.1	101	81 - 117	
p-Bromofluorobenzene	10.0	9.79	97.9	79 - 122	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Fluorobenzene	55611	6.125	54432	6.131	
Chlorobenzene-d5	213644	9.189	224712	9.188	
1,2-Dichlorobenzene-d4	83069	12.171	89967	12.174	

\* Values outside of QC limits

*MS*

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-01File ID: qbi031318aRE 3-155Sampled: 03/05/18 12:30Prepared: 03/13/18 11:43Analyzed: 03/13/18 15:55Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552Sequence: Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.006	1	U	EPA 6010C
7440-38-2	Arsenic	0.004	1	U	EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.077	1		EPA 6010C
7440-47-3	Chromium	0.011	1		EPA 6010C
7440-50-8	Copper	0.009	1		EPA 6010C
7439-92-1	Lead	0.006	1	U	EPA 6010C
7440-02-0	Nickel	0.190	1		EPA 6010C
7782-49-2	Selenium	0.050	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.006	1	U	EPA 6010C
7440-66-6	Zinc	0.154	1		EPA 6010C

KC-MW-01 (0318)

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Matrix: Water

Laboratory ID: 18C0189-01

File ID: QBHgDMA80-01\_031318a-021

Sampled: 03/05/18 12:30

Prepared: 03/13/18 09:12

Analyzed: 03/13/18 15:58

Solids: 0.00

Preparation: EPA 7473 water

Initial/Final: 0.25 mL / 0.25 mL

Batch: BC80531

Sequence: Y8C1335

Calibration: 03/13/18 1

Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473



Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-02File ID: qbi031318aRE 3-160Sampled: 03/05/18 18:25Prepared: 03/13/18 11:43Analyzed: 03/13/18 16:06Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552Sequence: Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.006	1	U	EPA 6010C
7440-38-2	Arsenic	0.004	1	U	EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.003	1	U	EPA 6010C
7440-47-3	Chromium	0.006	1	U	EPA 6010C
7440-50-8	Copper	0.011	1		EPA 6010C
7439-92-1	Lead	0.006	1	U	EPA 6010C
7440-02-0	Nickel	0.006	1	U	EPA 6010C
7782-49-2	Selenium	0.080	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.034	1		EPA 6010C
7440-66-6	Zinc	0.017	1	U	EPA 6010C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-02File ID: QBHgDMA80-01\_031318a-022Sampled: 03/05/18 18:25Prepared: 03/13/18 09:12Analyzed: 03/13/18 16:09Solids: 0.00Preparation: EPA 7473 waterInitial/Final: 0.25 mL / 0.25 mLBatch: BC80531Sequence: Y8C1335Calibration: 03/13/18 1Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-03File ID: qbi031318aRE 3-161Sampled: 03/05/18 15:00Prepared: 03/13/18 11:43Analyzed: 03/13/18 16:09Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552

Sequence:

Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.009	1		EPA 6010C
7440-38-2	Arsenic	0.004	1	U	EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.003	1	U	EPA 6010C
7440-47-3	Chromium	0.006	1	U	EPA 6010C
7440-50-8	Copper	0.013	1		EPA 6010C
7439-92-1	Lead	0.006	1	U	EPA 6010C
7440-02-0	Nickel	0.006	1	U	EPA 6010C
7782-49-2	Selenium	0.099	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.006	1	U	EPA 6010C
7440-66-6	Zinc	0.017	1	U	EPA 6010C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-03File ID: QBHgDMA80-01\_031318a-023Sampled: 03/05/18 15:00Prepared: 03/13/18 09:12Analyzed: 03/13/18 16:20Solids: 0.00Preparation: EPA 7473 waterInitial/Final: 0.25 mL / 0.25 mLBatch: BC80531Sequence: Y8C1335Calibration: 03/13/18 1Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterLaboratory ID: 18C0189-04File ID: qbi031318aRE\_3-162Sampled: 03/05/18 15:00Prepared: 03/13/18 11:43Analyzed: 03/13/18 16:11Solids: 0.00Preparation: EPA 3015AInitial/Final: 45 mL / 50 mLBatch: BC80552Sequence: Y8C1403Calibration: 03/13/18 1Instrument: WinLabICP

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7440-36-0	Antimony	0.006	1	U	EPA 6010C
7440-38-2	Arsenic	0.005 U	1		EPA 6010C
7440-41-7	Beryllium	0.001	1	U	EPA 6010C
7440-43-9	Cadmium	0.078	1		EPA 6010C
7440-47-3	Chromium	0.023	1		EPA 6010C
7440-50-8	Copper	0.017	1		EPA 6010C
7439-92-1	Lead	0.006	1		EPA 6010C
7440-02-0	Nickel	0.184	1		EPA 6010C
7782-49-2	Selenium	0.051	1		EPA 6010C
7440-22-4	Silver	0.006	1	U	EPA 6010C
7440-28-0	Thallium	0.006	1	U	EPA 6010C
7440-66-6	Zinc	0.168	1		EPA 6010C

KC-MW-DUP2 (0318)

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Matrix: Water

Laboratory ID: 18C0189-04

File ID: QBHgDMA80-01\_031318a-024

Sampled: 03/05/18 15:00

Prepared: 03/13/18 09:12

Analyzed: 03/13/18 16:31

Solids: 0.00

Preparation: EPA 7473 water

Initial/Final: 0.25 mL / 0.25 mL

Batch: BC80531

Sequence:

Y8C1335

Calibration: 03/13/18 1

Instrument: DMA 80-01

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
7439-97-6	Mercury	0.00020	1	U	EPA 7473

## FORM II

## SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C1237 Instrument: GCMS-VOA4  
 Matrix: Soil Calibration: YC80003

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>LCS (BC80462-BS1)</b> Lab File ID: V4781866.D Analyzed: 03/12/18 09:32								
1,2-Dichloroethane-d4	50.0	94.8 ✓	77 - 125	5.53	5.538333	-0.0083	+/-1.00	
Toluene-d8	50.0	98.0	85 - 120	7.32	7.331667	-0.0117	+/-1.00	
p-Bromofluorobenzene	50.0	97.4	76 - 130	10.08	10.09667	-0.0167	+/-1.00	
<b>LCS Dup (BC80462-BSD1)</b> Lab File ID: V4781867.D Analyzed: 03/12/18 10:04								
1,2-Dichloroethane-d4	50.0	95.5 ✓	77 - 125	5.53	5.538333	-0.0083	+/-1.00	
Toluene-d8	50.0	99.7	85 - 120	7.32	7.331667	-0.0117	+/-1.00	
p-Bromofluorobenzene	50.0	96.7	76 - 130	10.08	10.09667	-0.0167	+/-1.00	
<b>Blank (BC80462-BLK1)</b> Lab File ID: V4781868.D Analyzed: 03/12/18 10:36								
1,2-Dichloroethane-d4	50.0	89.2 ✓	77 - 125	5.54	5.538333	0.0017	+/-1.00	
Toluene-d8	50.0	98.8	85 - 120	7.33	7.331667	-0.0017	+/-1.00	
p-Bromofluorobenzene	50.0	98.3	76 - 130	10.09	10.09667	-0.0067	+/-1.00	
<b>Blank (BC80462-BLK2)</b> Lab File ID: V4781869.D Analyzed: 03/12/18 11:07								
1,2-Dichloroethane-d4	50.0	94.4 ✓	77 - 125	5.53	5.538333	-0.0083	+/-1.00	
Toluene-d8	50.0	98.1	85 - 120	7.32	7.331667	-0.0117	+/-1.00	
p-Bromofluorobenzene	50.0	96.3	76 - 130	10.09	10.09667	-0.0067	+/-1.00	
<b>KC-CB-01 (25-30') (18C0104-01)</b> Lab File ID: V4781875.D Analyzed: 03/12/18 14:17								
1,2-Dichloroethane-d4	50.0	91.7	77 - 125	5.53	5.538333	-0.0083	+/-1.00	
Toluene-d8	50.0	125	85 - 120	7.32	7.331667	-0.0117	+/-1.00	*
p-Bromofluorobenzene	50.0	131	76 - 130	10.09	10.09667	-0.0067	+/-1.00	*
<b>KC-CB-02 (25-30') (18C0104-02)</b> Lab File ID: V4781876.D Analyzed: 03/12/18 14:49								
1,2-Dichloroethane-d4	50.0	90.7	77 - 125	5.53	5.538333	-0.0083	+/-1.00	
Toluene-d8	50.0	138	85 - 120	7.32	7.331667	-0.0117	+/-1.00	*
p-Bromofluorobenzene	50.0	147	76 - 130	10.09	10.09667	-0.0067	+/-1.00	*

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	51	103	75 - 129
1,1,1-Trichloroethane	50.0	52	104	71 - 137
1,1,2,2-Tetrachloroethane	50.0	53	107	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	50.0	56	113	58 - 146
1,1,2-Trichloroethane	50.0	54	108	83 - 123
1,1-Dichloroethane	50.0	55	110	75 - 130
1,1-Dichloroethylene	50.0	55	111	64 - 137
1,2,3-Trichlorobenzene	50.0	53	105	81 - 140
1,2,3-Trichloropropane	50.0	50	100	81 - 126
1,2,4-Trichlorobenzene	50.0	52	104	80 - 141
1,2,4-Trimethylbenzene	50.0	51	103	84 - 125
1,2-Dibromo-3-chloropropane	50.0	52	104	74 - 142
1,2-Dibromoethane	50.0	53	106	86 - 123
1,2-Dichlorobenzene	50.0	49	98.6	85 - 122
1,2-Dichloroethane	50.0	53	106	71 - 133
1,2-Dichloropropane	50.0	56	112	81 - 122
1,3,5-Trimethylbenzene	50.0	51	102	82 - 126
1,3-Dichlorobenzene	50.0	50	100	84 - 124
1,4-Dichlorobenzene	50.0	49	98.8	84 - 124
1,4-Dioxane	1050	1300	127 ✓	10 - 228
2-Butanone	50.0	52	104	58 - 147
2-Hexanone	50.0	51	103	70 - 139
4-Methyl-2-pentanone	50.0	52	104	72 - 132
Acetone	50.0	39	78.9	36 - 155
Acrolein	50.0	49	97.9	10 - 238
Acrylonitrile	50.0	58	116	66 - 141
Benzene	50.0	55	110	77 - 127
Bromochloromethane	50.0	55	109	74 - 129
Bromodichloromethane	50.0	55	111	81 - 124
Bromoform	50.0	52	104	80 - 136



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BS1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. # ✓	QC LIMITS REC.
Bromomethane	50.0	59	118	32 - 177
Carbon disulfide	50.0	58	115	10 - 136
Carbon tetrachloride	50.0	54	109	66 - 143
Chlorobenzene	50.0	52	105	86 - 120
Chloroethane	50.0	58	117	51 - 142
Chloroform	50.0	55	109	76 - 131
Chloromethane	50.0	60	121	49 - 132
cis-1,2-Dichloroethylene	50.0	54	107	74 - 132
cis-1,3-Dichloropropylene	50.0	54	107	81 - 129
Cyclohexane	50.0	53	106	70 - 130
Dibromochloromethane	50.0	54	109	10 - 200
Dibromomethane	50.0	52	105	83 - 124
Dichlorodifluoromethane	50.0	60	121	28 - 158
Ethyl Benzene	50.0	55	110	84 - 125
Hexachlorobutadiene	50.0	55	109	83 - 133
Isopropylbenzene	50.0	50	100	81 - 127
Methyl acetate	50.0	49	97.3	41 - 143
Methyl tert-butyl ether (MTBE)	50.0	52	104	74 - 131
Methylcyclohexane	50.0	53	106	70 - 130
Methylene chloride	50.0	45	90.1	57 - 141
n-Butylbenzene	50.0	53	105	80 - 130
n-Propylbenzene	50.0	52	104	74 - 136
o-Xylene	50.0	55	110	83 - 123
p- & m- Xylenes	100	110	109	82 - 128
p-Isopropyltoluene	50.0	52	103	85 - 125
sec-Butylbenzene	50.0	54	108	83 - 125
Styrene	50.0	53	105	86 - 126
tert-Butyl alcohol (TBA)	250	270	109	70 - 130
tert-Butylbenzene	50.0	50	101	80 - 127
Tetrachloroethylene	50.0	50	100	80 - 129

**FORM III**

**LCS / LCS DUPLICATE RECOVERY**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil  
 Batch: BC80462 Laboratory ID: BC80462-BS1  
 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. # ✓	QC LIMITS REC.
Toluene	50.0	54	108	85 - 121
trans-1,2-Dichloroethylene	50.0	55	110	72 - 132
trans-1,3-Dichloropropylene	50.0	53	106	78 - 132
trans-1,4-dichloro-2-butene	50.0	54	107	75 - 135
Trichloroethylene	50.0	54	108	84 - 123
Trichlorofluoromethane	50.0	54	108	62 - 140
Vinyl Chloride	50.0	59	117	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. # ✓	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	50.0	51	102	1.33	30	75 - 129
1,1,1-Trichloroethane	50.0	51	103	1.58	30	71 - 137
1,1,2,2-Tetrachloroethane	50.0	52	104	2.98	30	79 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	53	107	5.76	30	58 - 146
1,1,2-Trichloroethane	50.0	52	104	3.79	30	83 - 123
1,1-Dichloroethane	50.0	53	107	2.72	30	75 - 130
1,1-Dichloroethylene	50.0	53	106	4.10	30	64 - 137
1,2,3-Trichlorobenzene	50.0	50	99.1	5.86	30	81 - 140
1,2,3-Trichloropropane	50.0	49	97.2	3.04	30	81 - 126
1,2,4-Trichlorobenzene	50.0	49	98.6	5.70	30	80 - 141
1,2,4-Trimethylbenzene	50.0	50	100	2.59	30	84 - 125
1,2-Dibromo-3-chloropropane	50.0	51	102	1.91	30	74 - 142
1,2-Dibromoethane	50.0	51	102	3.80	30	86 - 123
1,2-Dichlorobenzene	50.0	48	96.8	1.84	30	85 - 122
1,2-Dichloroethane	50.0	51	102	4.16	30	71 - 133
1,2-Dichloropropane	50.0	55	110	1.88	30	81 - 122
1,3,5-Trimethylbenzene	50.0	49	98.6	3.59	30	82 - 126
1,3-Dichlorobenzene	50.0	48	95.5	4.56	30	84 - 124
1,4-Dichlorobenzene	50.0	48	95.6	3.33	30	84 - 124
1,4-Dioxane	1050	1200	115	9.65	30	10 - 228
2-Butanone	50.0	49	98.0	6.00	30	58 - 147
2-Hexanone	50.0	50	99.1	3.43	30	70 - 139
4-Methyl-2-pentanone	50.0	50	99.2	4.47	30	72 - 132
Acetone	50.0	38	75.6	4.27	30	36 - 155
Acrolein	50.0	45	90.7	7.61	30	10 - 238
Acrylonitrile	50.0	55	110	4.76	30	66 - 141
Benzene	50.0	53	106	3.13	30	77 - 127
Bromochloromethane	50.0	53	107	2.37	30	74 - 129
Bromodichloromethane	50.0	53	106	4.25	30	81 - 124
Bromoform	50.0	51	102	2.31	30	80 - 136

**FORM III**

**LCS / LCS DUPLICATE RECOVERY**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

Matrix: Soil

Batch: BC80462

Laboratory ID: BC80462-BSD1

Preparation: EPA 5035A

Initial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	50.0	54	107	9.65	30	32 - 177
Carbon disulfide	50.0	58	115	0.104	30	10 - 136
Carbon tetrachloride	50.0	52	105	3.49	30	66 - 143
Chlorobenzene	50.0	50	99.0	5.71	30	86 - 120
Chloroethane	50.0	56	112	3.70	30	51 - 142
Chloroform	50.0	52	104	5.07	30	76 - 131
Chloromethane	50.0	56	112	7.67	30	49 - 132
cis-1,2-Dichloroethylene	50.0	52	104	3.50	30	74 - 132
cis-1,3-Dichloropropylene	50.0	52	104	3.02	30	81 - 129
Cyclohexane	50.0	52	104	1.64	30	70 - 130
Dibromochloromethane	50.0	51	102	6.34	30	10 - 200
Dibromomethane	50.0	51	102	2.80	30	83 - 124
Dichlorodifluoromethane	50.0	56	113	6.77	30	28 - 158
Ethyl Benzene	50.0	53	106	3.85	30	84 - 125
Hexachlorobutadiene	50.0	51	101	7.37	30	83 - 133
Isopropylbenzene	50.0	49	97.9	2.38	30	81 - 127
Methyl acetate	50.0	44	87.5	10.5	30	41 - 143
Methyl tert-butyl ether (MTBE)	50.0	51	101	2.46	30	74 - 131
Methylcyclohexane	50.0	51	102	2.94	30	70 - 130
Methylene chloride	50.0	42	84.0	7.03	30	57 - 141
n-Butylbenzene	50.0	50	101	4.29	30	80 - 130
n-Propylbenzene	50.0	51	101	2.63	30	74 - 136
o-Xylene	50.0	53	106	3.60	30	83 - 123
p- & m- Xylenes	100	100	105	4.04	30	82 - 128
p-Isopropyltoluene	50.0	50	99.3	3.73	30	85 - 125
sec-Butylbenzene	50.0	51	102	5.65	30	83 - 125
Styrene	50.0	51	102	3.04	30	86 - 126
tert-Butyl alcohol (TBA)	250	260	103	6.15	30	70 - 130
tert-Butylbenzene	50.0	49	97.7	2.91	30	80 - 127
Tetrachloroethylene	50.0	49	97.9	2.34	30	80 - 129

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: SoilBatch: BC80462Laboratory ID: BC80462-BSD1Preparation: EPA 5035AInitial/Final: 5 g / 5 ml

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	50.0	52	105 ✓	2.90	30	85 - 121
trans-1,2-Dichloroethylene	50.0	53	106	3.44	30	72 - 132
trans-1,3-Dichloropropylene	50.0	51	103	3.67	30	78 - 132
trans-1,4-dichloro-2-butene	50.0	52	104	3.43	30	75 - 135
Trichloroethylene	50.0	53	106	1.87	30	84 - 123
Trichlorofluoromethane	50.0	52	104	4.07	30	62 - 140
Vinyl Chloride	50.0	56	111	5.50	30	52 - 130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

**FORM IV****PREPARATION BATCH SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Batch: BC80462 Batch Matrix: Soil Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-CB-01 (25-30')	18C0104-01	V4781875.D	03/12/18 07:30	From BC80384 by TAB on 03/12/2018
KC-CB-02 (25-30')	18C0104-02	V4781876.D	03/12/18 07:30	From BC80384 by TAB on 03/12/2018
Blank	BC80462-BLK1	V4781868.D	03/12/18 07:30	
Blank	BC80462-BLK2	V4781869.D	03/12/18 07:30	
LCS	BC80462-BS1	V4781866.D	03/12/18 07:30	
LCS Dup	BC80462-BSD1	V4781867.D	03/12/18 07:30	

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc.                      SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie)              Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil                      Laboratory ID: BC80462-BLK1                      File ID: V4781868.D  
 Prepared: 03/12/18 07:30                      Preparation: EPA 5035A                      Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36                      Instrument: GCMS-VOA4  
 Batch: BC80462                      Sequence: Y8C1237                      Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.0050	U ✓
71-55-6	1,1,1-Trichloroethane	0.0050	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0050	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0050	U
79-00-5	1,1,2-Trichloroethane	0.0050	U
75-34-3	1,1-Dichloroethane	0.0050	U
75-35-4	1,1-Dichloroethylene	0.0050	U
87-61-6	1,2,3-Trichlorobenzene	0.0050	U
96-18-4	1,2,3-Trichloropropane	0.0050	U
120-82-1	1,2,4-Trichlorobenzene	0.0050	U
95-63-6	1,2,4-Trimethylbenzene	0.0050	U
96-12-8	1,2-Dibromo-3-chloropropane	0.0050	U
106-93-4	1,2-Dibromoethane	0.0050	U
95-50-1	1,2-Dichlorobenzene	0.0050	U
107-06-2	1,2-Dichloroethane	0.0050	U
78-87-5	1,2-Dichloropropane	0.0050	U
108-67-8	1,3,5-Trimethylbenzene	0.0050	U
541-73-1	1,3-Dichlorobenzene	0.0050	U
106-46-7	1,4-Dichlorobenzene	0.0050	U
123-91-1	1,4-Dioxane	0.10	U
78-93-3	2-Butanone	0.0050	U
591-78-6	2-Hexanone	0.0050	U
108-10-1	4-Methyl-2-pentanone	0.0050	U
67-64-1	Acetone	0.010	U
107-02-8	Acrolein	0.010	U
107-13-1	Acrylonitrile	0.0050	U
71-43-2	Benzene	0.0050	U
74-97-5	Bromochloromethane	0.0050	U
75-27-4	Bromodichloromethane	0.0050	U
75-25-2	Bromoform	0.0050	U

## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK1 File ID: V4781868.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
74-83-9	Bromomethane	0.0050	U ✓
75-15-0	Carbon disulfide	0.0050	U
56-23-5	Carbon tetrachloride	0.0050	U
108-90-7	Chlorobenzene	0.0050	U
75-00-3	Chloroethane	0.0050	U
67-66-3	Chloroform	0.0050	U
74-87-3	Chloromethane	0.0050	U
156-59-2	cis-1,2-Dichloroethylene	0.0050	U
10061-01-5	cis-1,3-Dichloropropylene	0.0050	U
110-82-7	Cyclohexane	0.0050	U
124-48-1	Dibromochloromethane	0.0050	U
74-95-3	Dibromomethane	0.0050	U
75-71-8	Dichlorodifluoromethane	0.0050	U
100-41-4	Ethyl Benzene	0.0050	U
87-68-3	Hexachlorobutadiene	0.0050	U
98-82-8	Isopropylbenzene	0.0050	U
79-20-9	Methyl acetate	0.0050	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.0050	U
108-87-2	Methylcyclohexane	0.0050	U
75-09-2	Methylene chloride	0.010	U
104-51-8	n-Butylbenzene	0.0050	U
103-65-1	n-Propylbenzene	0.0050	U
95-47-6	o-Xylene	0.0050	U
179601-23-1	p- & m- Xylenes	0.010	U
99-87-6	p-Isopropyltoluene	0.0050	U
135-98-8	sec-Butylbenzene	0.0050	U
100-42-5	Styrene	0.0050	U
75-65-0	tert-Butyl alcohol (TBA)	0.010	U
98-06-6	tert-Butylbenzene	0.0050	U
127-18-4	Tetrachloroethylene	0.0050	U



## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK1 File ID: V4781868.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 10:36 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
108-88-3	Toluene	0.0050	U ✓
156-60-5	trans-1,2-Dichloroethylene	0.0050	U
10061-02-6	trans-1,3-Dichloropropylene	0.0050	U
110-57-6	trans-1,4-dichloro-2-butene	0.0050	U
79-01-6	Trichloroethylene	0.0050	U
75-69-4	Trichlorofluoromethane	0.0050	U
75-01-4	Vinyl Chloride	0.0050	U
1330-20-7	Xylenes, Total	0.015	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	44.6	89.2	77 - 125	
p-Bromofluorobenzene	50.0	49.2	98.3	76 - 130	
Toluene-d8	50.0	49.4	98.8	85 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,2-Dichlorobenzene-d4	245938	11.8	260151	11.8	
Chlorobenzene-d5	521067	8.83	541028	8.82	
Fluorobenzene	112394	5.81	115822	5.8	

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	10	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	1.0	U
107-02-8	Acrolein	1.0	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
74-83-9	Bromomethane	0.50	U
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	0.97	JD
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U

## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Soil Laboratory ID: BC80462-BLK2 File ID: V4781869.D  
 Prepared: 03/12/18 07:30 Preparation: EPA 5035A Initial/Final: 5 g / 5 ml  
 Analyzed: 03/12/18 11:07 Instrument: GCMS-VOA4  
 Batch: BC80462 Sequence: Y8C1237 Calibration: YC80003

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
108-88-3	Toluene	0.50	U ✓
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	50.0	47.2	94.4	77 - 125	D
p-Bromofluorobenzene	50.0	48.1	96.3	76 - 130	D
Toluene-d8	50.0	49.0	98.1	85 - 120	D

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,2-Dichlorobenzene-d4	251170	11.8	260151	11.8	
Chlorobenzene-d5	508640	8.82	541028	8.82	
Fluorobenzene	105574	5.8	115822	5.8	

## FORM V

## MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Lab File ID: V4781550.D Injection Date: 03/01/18  
 Instrument ID: GCMS-VOA4 Injection Time: 11:55  
 Sequence: Y8C0202 Lab Sample ID: Y8C0202-TUNI

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.3	PASS ✓
75	30 - 60% of 95	41.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.05	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	95.7	PASS
175	5 - 9% of 174	8.14	PASS
176	95 - 101% of 174	99.2	PASS
177	5 - 9% of 176	6.63	PASS

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Lab File ID: V4781864.D Injection Date: 03/12/18  
 Instrument ID: GCMS-VOA4 Injection Time: 08:23 ✓  
 Sequence: Y8C1237 Lab Sample ID: Y8C1237-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.6	PASS ✓
75	30 - 60% of 95	41	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.06	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	91.8	PASS
175	5 - 9% of 174	7.96	PASS
176	95 - 101% of 174	97.2	PASS
177	5 - 9% of 176	6.49	PASS

**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C0202 Instrument: GCMS-VOA4  
Matrix: Soil Calibration: YC80003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C0202-TUN1	V4781550.D	03/01/18 11:55
Cal Standard	Y8C0202-CAL1	V4781551.D	03/01/18 12:26
Cal Standard	Y8C0202-CAL2	V4781552.D	03/01/18 12:58
Cal Standard	Y8C0202-CAL3	V4781553.D	03/01/18 13:30
Cal Standard	Y8C0202-CAL4	V4781554.D	03/01/18 14:01
Cal Standard	Y8C0202-CAL5	V4781555.D	03/01/18 14:33
Cal Standard	Y8C0202-CAL6	V4781556.D	03/01/18 15:05
Secondary Cal Check	Y8C0202-SCV1	V4781558.D	03/01/18 16:08

**FORM V****ANALYSIS BATCH (SEQUENCE) SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C1237 Instrument: GCMS-VOA4  
Matrix: Soil Calibration: YC80003

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1237-TUN1	V4781864.D	03/12/18 08:23 ✓
Calibration Check	Y8C1237-CCV1	V4781865.D	03/12/18 08:55
LCS	BC80462-BS1	V4781866.D	03/12/18 09:32
LCS Dup	BC80462-BSD1	V4781867.D	03/12/18 10:04
Blank	BC80462-BLK1	V4781868.D	03/12/18 10:36
Blank	BC80462-BLK2	V4781869.D	03/12/18 11:07
KC-CB-01 (25-30')	18C0104-01	V4781875.D	03/12/18 14:17
KC-CB-02 (25-30')	18C0104-02	V4781876.D	03/12/18 14:49 ✓



**FORM VIII**

**INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C0202 Instrument: GCMS-VOA4  
 Matrix: Soil Calibration: YC80003

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8C0202-CAL1)</b> Lab File ID: V4781551.D Analyzed: 03/01/18 12:26									
Fluorobenzene	95671	5.81 ✓	93318	5.82	103 ✓	50 - 200	-0.0100	+/-0.17	
Chlorobenzene-d5	447838	8.83	447140	8.84	100	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	204085	11.8	202922	11.81	101	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL2)</b> Lab File ID: V4781552.D Analyzed: 03/01/18 12:58									
Fluorobenzene	97713	5.81 ✓	93318	5.82	105 ✓	50 - 200	-0.0100	+/-0.17	
Chlorobenzene-d5	456166	8.83	447140	8.84	102	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	207461	11.8	202922	11.81	102	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL3)</b> Lab File ID: V4781553.D Analyzed: 03/01/18 13:30									
Fluorobenzene	92372	5.82 ✓	93318	5.82	99 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	449305	8.84	447140	8.84	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	205202	11.8	202922	11.81	101	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL4)</b> Lab File ID: V4781554.D Analyzed: 03/01/18 14:01									
Fluorobenzene	93318	5.82 ✓	93318	5.82	100 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	447140	8.84	447140	8.84	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	202922	11.81	202922	11.81	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0202-CAL5)</b> Lab File ID: V4781555.D Analyzed: 03/01/18 14:33									
Fluorobenzene	97402	5.82 ✓	93318	5.82	104 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	457090	8.83	447140	8.84	102	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	205738	11.8	202922	11.81	101	50 - 200	-0.0100	+/-0.17	
<b>Cal Standard (Y8C0202-CAL6)</b> Lab File ID: V4781556.D Analyzed: 03/01/18 15:05									
Fluorobenzene	100172	5.82 ✓	93318	5.82	107 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	463121	8.83	447140	8.84	104	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	207492	11.8	202922	11.81	102	50 - 200	-0.0100	+/-0.17	
<b>Secondary Cal Check (Y8C0202-SCV1)</b> Lab File ID: V4781558.D Analyzed: 03/01/18 16:08									
Fluorobenzene	97865	5.82 ✓	93318	5.82	105 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	464642	8.83	447140	8.84	104	50 - 200	-0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	211426	11.8	202922	11.81	104	50 - 200	-0.0100	+/-0.17	

FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C1237 Instrument: GCMS-VOA4  
 Matrix: Soil Calibration: YC80003

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1237-CCV1)</b> Lab File ID: V4781865.D Analyzed: 03/12/18 08:55									
Fluorobenzene	115822	5.8				50 - 200		+/-0.17	
Chlorobenzene-d5	541028	8.82				50 - 200		+/-0.17	
1,2-Dichlorobenzene-d4	260151	11.8				50 - 200		+/-0.17	
<b>LCS (BC80462-BS1)</b> Lab File ID: V4781866.D Analyzed: 03/12/18 09:32									
Fluorobenzene	112799	5.8	115822	5.8	97	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	534334	8.82	541028	8.82	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	257428	11.8	260151	11.8	99	50 - 200	0.0000	+/-0.17	
<b>LCS Dup (BC80462-BSD1)</b> Lab File ID: V4781867.D Analyzed: 03/12/18 10:04									
Fluorobenzene	118013	5.8	115822	5.8	102	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	556848	8.82	541028	8.82	103	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	262372	11.79	260151	11.8	101	50 - 200	-0.0100	+/-0.17	
<b>Blank (BC80462-BLK1)</b> Lab File ID: V4781868.D Analyzed: 03/12/18 10:36									
Fluorobenzene	112394	5.81	115822	5.8	97	50 - 200	0.0100	+/-0.17	
Chlorobenzene-d5	521067	8.83	541028	8.82	96	50 - 200	0.0100	+/-0.17	
1,2-Dichlorobenzene-d4	245938	11.8	260151	11.8	95	50 - 200	0.0000	+/-0.17	
<b>Blank (BC80462-BLK2)</b> Lab File ID: V4781869.D Analyzed: 03/12/18 11:07									
Fluorobenzene	105574	5.8	115822	5.8	91	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	508640	8.82	541028	8.82	94	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	251170	11.8	260151	11.8	97	50 - 200	0.0000	+/-0.17	
<b>KC-CB-01 (25-30') (18C0104-01)</b> Lab File ID: V4781875.D Analyzed: 03/12/18 14:17									
Fluorobenzene	104629	5.81	115822	5.8	90	50 - 200	0.0100	+/-0.17	
Chlorobenzene-d5	331206	8.82	541028	8.82	61	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	65650	11.8	260151	11.8	25	50 - 200	0.0000	+/-0.17	*
<b>KC-CB-02 (25-30') (18C0104-02)</b> Lab File ID: V4781876.D Analyzed: 03/12/18 14:49									
Fluorobenzene	106287	5.81	115822	5.8	92	50 - 200	0.0100	+/-0.17	
Chlorobenzene-d5	286110	8.82	541028	8.82	53	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	42335	11.8	260151	11.8	16	50 - 200	0.0000	+/-0.17	*

## FORM II

## SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationSequence: Y8C1201Instrument: VOA No. 8Matrix: WaterCalibration: YC80010

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>LCS (BC80387-BS1)</b>								
				Lab File ID: V804221.D		Analyzed: 03/09/18 11:16		
1,2-Dichloroethane-d4	10.0	89.9 ✓	69 - 130	4.66	4.657333	0.0027	+/-1.00	
Toluene-d8	10.0	104	81 - 117	6.396	6.398889	-0.0029	+/-1.00	
p-Bromofluorobenzene	10.0	105	79 - 122	9.136	9.136222	-0.0002	+/-1.00	
<b>LCS Dup (BC80387-BSD1)</b>								
				Lab File ID: V804222.D		Analyzed: 03/09/18 11:43		
1,2-Dichloroethane-d4	10.0	89.2 ✓	69 - 130	4.657	4.657333	-0.0003	+/-1.00	
Toluene-d8	10.0	101	81 - 117	6.399	6.398889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	110	79 - 122	9.139	9.136222	0.0028	+/-1.00	
<b>Blank (BC80387-BLK1)</b>								
				Lab File ID: V804224.D		Analyzed: 03/09/18 12:37		
1,2-Dichloroethane-d4	10.0	91.7 ✓	69 - 130	4.654	4.657333	-0.0033	+/-1.00	
Toluene-d8	10.0	103	81 - 117	6.399	6.398889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	113	79 - 122	9.136	9.136222	-0.0002	+/-1.00	
<b>KC-EB-01 (18C0104-03)</b>								
				Lab File ID: V804225.D		Analyzed: 03/09/18 13:05		
1,2-Dichloroethane-d4	10.0	94.5 ✓	69 - 130	4.657	4.657333	-0.0003	+/-1.00	
Toluene-d8	10.0	100	81 - 117	6.399	6.398889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	114	79 - 122	9.136	9.136222	-0.0002	+/-1.00	

**FORM II**

**SURROGATE STANDARD RECOVERY AND RT SUMMARY**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C1221 Instrument: MSVOA7  
 Matrix: Water Calibration: YB80017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>LCS (BC80386-BS1 )</b> Lab File ID: V724447.D Analyzed: 03/09/18 14:13								
1,2-Dichloroethane-d4	10.0	95.3 ✓	69 - 130	5.539	5.537889	0.0011	+/-1.00	
Toluene-d8	10.0	105	81 - 117	7.355	7.353556	0.0014	+/-1.00	
p-Bromofluorobenzene	10.0	98.7	79 - 122	10.124	10.12233	0.0017	+/-1.00	
<b>LCS Dup (BC80386-BSD1 )</b> Lab File ID: V724448.D Analyzed: 03/09/18 14:45								
1,2-Dichloroethane-d4	10.0	92.9 ✓	69 - 130	5.539	5.537889	0.0011	+/-1.00	
Toluene-d8	10.0	106	81 - 117	7.356	7.353556	0.0024	+/-1.00	
p-Bromofluorobenzene	10.0	98.9	79 - 122	10.124	10.12233	0.0017	+/-1.00	
<b>Blank (BC80386-BLK1 )</b> Lab File ID: V724451.D Analyzed: 03/09/18 16:21								
1,2-Dichloroethane-d4	10.0	96.3 ✓	69 - 130	5.539	5.537889	0.0011	+/-1.00	
Toluene-d8	10.0	105	81 - 117	7.356	7.353556	0.0024	+/-1.00	
p-Bromofluorobenzene	10.0	102	79 - 122	10.124	10.12233	0.0017	+/-1.00	
<b>KC-MW-06 (0318) (18C0104-04 )</b> Lab File ID: V724464.D Analyzed: 03/09/18 23:15								
1,2-Dichloroethane-d4	10.0	96.1 ✓	69 - 130	5.539	5.537889	0.0011	+/-1.00	
Toluene-d8	10.0	105	81 - 117	7.355	7.353556	0.0014	+/-1.00	
p-Bromofluorobenzene	10.0	99.8	79 - 122	10.124	10.12233	0.0017	+/-1.00	
<b>KC-MW-07 (0318) (18C0104-05 )</b> Lab File ID: V724465.D Analyzed: 03/09/18 23:47								
1,2-Dichloroethane-d4	10.0	95.8 ✓	69 - 130	5.539	5.537889	0.0011	+/-1.00	
Toluene-d8	10.0	104	81 - 117	7.356	7.353556	0.0024	+/-1.00	
p-Bromofluorobenzene	10.0	100	79 - 122	10.124	10.12233	0.0017	+/-1.00	
<b>KC-MW-DUP1 (0318) (18C0104-06 )</b> Lab File ID: V724466.D Analyzed: 03/10/18 00:19								
1,2-Dichloroethane-d4	10.0	94.6 ✓	69 - 130	5.539	5.537889	0.0011	+/-1.00	
Toluene-d8	10.0	105	81 - 117	7.356	7.353556	0.0024	+/-1.00	
p-Bromofluorobenzene	10.0	99.7	79 - 122	10.124	10.12233	0.0017	+/-1.00	
<b>TRIP BLANK (18C0104-07 )</b> Lab File ID: V724467.D Analyzed: 03/10/18 00:51								
1,2-Dichloroethane-d4	10.0	96.9 ✓	69 - 130	5.539	5.537889	0.0011	+/-1.00	
Toluene-d8	10.0	104	81 - 117	7.356	7.353556	0.0024	+/-1.00	
p-Bromofluorobenzene	10.0	102	79 - 122	10.124	10.12233	0.0017	+/-1.00	

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80386 Laboratory ID: BC80386-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	12	120	82 - 126
1,1,1-Trichloroethane	10.0	12	123	78 - 136
1,1,2,2-Tetrachloroethane	10.0	11	114	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	12	118	54 - 165
1,1,2-Trichloroethane	10.0	11	115	82 - 123
1,1-Dichloroethane	10.0	11	110	82 - 129
1,1-Dichloroethylene	10.0	11	110	68 - 138
1,2,3-Trichlorobenzene	10.0	18	179 *	76 - 136
1,2,3-Trichloropropane	10.0	11	111	77 - 128
1,2,4-Trichlorobenzene	10.0	13	131	70 <del>76</del> - 137 / 130
1,2,4-Trimethylbenzene	10.0	11	112	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.5	95.0	45 - 147
1,2-Dibromoethane	10.0	12	116	83 - 124
1,2-Dichlorobenzene	10.0	11	113	79 - 123
1,2-Dichloroethane	10.0	11	108	73 - 132
1,2-Dichloropropane	10.0	11	109	78 - 126
1,3,5-Trimethylbenzene	10.0	11	113	80 - 131
1,3-Dichlorobenzene	10.0	11	115	86 - 122
1,4-Dichlorobenzene	10.0	11	113	85 - 124
1,4-Dioxane	210	250	119	10 - 349
2-Butanone	10.0	10	104	49 - 152
2-Hexanone	10.0	8.2	82.4	51 - 146
4-Methyl-2-pentanone	10.0	8.4	83.8	57 - 145
Acetone	10.0	7.3	73.0	14 - 150
Acrolein	10.0	6.5	65.1	10 - 153
Acrylonitrile	10.0	8.3	83.2	51 - 150
Benzene	10.0	12	120	85 - 126
Bromochloromethane	10.0	9.4	94.5	77 - 128
Bromodichloromethane	10.0	12	119	79 - 128
Bromoform	10.0	11	113	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80386Laboratory ID: BC80386-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Bromomethane	10.0	5.5	55.1	43 - 168
Carbon disulfide	10.0	13	127	68 - 146
Carbon tetrachloride	10.0	12	122	77 - 141
Chlorobenzene	10.0	12	122	70 88- 120 130
Chloroethane	10.0	11	112	65 - 136
Chloroform	10.0	12	120	82 - 128
Chloromethane	10.0	9.1	91.0	43 - 155
cis-1,2-Dichloroethylene	10.0	11	106	83 - 129
cis-1,3-Dichloropropylene	10.0	11	111	80 - 131
Cyclohexane	10.0	10	104	63 - 149
Dibromochloromethane	10.0	11	115	80 - 130
Dibromomethane	10.0	11	109	72 - 134
Dichlorodifluoromethane	10.0	16	160 *	44 - 144
Ethyl Benzene	10.0	12	123	80 - 131
Hexachlorobutadiene	10.0	12	124	67 - 146
Isopropylbenzene	10.0	11	114	76 - 140
Methyl acetate	10.0	8.1	80.6	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	11	105	76 - 135
Methylcyclohexane	10.0	12	120	72 - 143
Methylene chloride	10.0	8.6	86.0	55 - 137
n-Butylbenzene	10.0	11	111	79 - 132
n-Propylbenzene	10.0	12	116	78 - 133
o-Xylene	10.0	12	121	78 - 130
p- & m- Xylenes	20.0	25	124	77 - 133
p-Isopropyltoluene	10.0	12	118	81 - 136
sec-Butylbenzene	10.0	12	117	79 - 137
Styrene	10.0	12	116	67 - 132
tert-Butyl alcohol (TBA)	50.0	54	109	25 - 162
tert-Butylbenzene	10.0	12	117	77 - 138
Tetrachloroethylene	10.0	11	106	82 - 131

**FORM III**

**LCS / LCS DUPLICATE RECOVERY**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80386 Laboratory ID: BC80386-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Toluene	10.0	12	120 ✓	80 - 127
trans-1,2-Dichloroethylene	10.0	11	106	80 - 132
trans-1,3-Dichloropropylene	10.0	11	107	78 - 131
trans-1,4-dichloro-2-butene	10.0	10	99.7	63 - 141
Trichloroethylene	10.0	12	122	82 - 128
Trichlorofluoromethane	10.0	13	126	67 - 139
Vinyl Chloride	10.0	11	115	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80386Laboratory ID: BC80386-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	12	116	2.80	30	82 - 126
1,1,1-Trichloroethane	10.0	11	114	7.26	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	11	110	2.95	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.8	97.5	19.4	30	54 - 165
1,1,2-Trichloroethane	10.0	11	112	2.47	30	82 - 123
1,1-Dichloroethane	10.0	10	105	4.94	30	82 - 129
1,1-Dichloroethylene	10.0	10	102	7.71	30	68 - 138
1,2,3-Trichlorobenzene	10.0	18	177 *	1.12	30	76 - 136
1,2,3-Trichloropropane	10.0	11	109	1.18	30	77 - 128
1,2,4-Trichlorobenzene	10.0	13	128	2.16	30	76 - 137
1,2,4-Trimethylbenzene	10.0	11	107	4.40	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.3	92.9	2.24	30	45 - 147
1,2-Dibromoethane	10.0	11	113	2.88	30	83 - 124
1,2-Dichlorobenzene	10.0	11	109	3.96	30	79 - 123
1,2-Dichloroethane	10.0	10	102	4.85	30	73 - 132
1,2-Dichloropropane	10.0	11	106	3.07	30	78 - 126
1,3,5-Trimethylbenzene	10.0	11	108	4.44	30	80 - 131
1,3-Dichlorobenzene	10.0	11	111	3.10	30	86 - 122
1,4-Dichlorobenzene	10.0	11	110	3.05	30	85 - 124
1,4-Dioxane	210	280	133	11.1	30	10 - 349
2-Butanone	10.0	10	101	2.53	30	49 - 152
2-Hexanone	10.0	8.0	79.6	3.46	30	51 - 146
4-Methyl-2-pentanone	10.0	8.2	81.9	2.29	30	57 - 145
Acetone	10.0	7.2	71.9	1.52	30	14 - 150
Acrolein	10.0	6.3	62.6	3.92	30	10 - 153
Acrylonitrile	10.0	7.6	76.5	8.39	30	51 - 150
Benzene	10.0	11	113	5.86	30	85 - 126
Bromochloromethane	10.0	9.0	90.3	4.55	30	77 - 128
Bromodichloromethane	10.0	12	116	2.98	30	79 - 128
Bromoform	10.0	11	108	3.80	30	78 - 133



## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80386Laboratory ID: BC80386-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	10.0	5.8	57.9	4.96	30	43 - 168
Carbon disulfide	10.0	12	118	7.61	30	68 - 146
Carbon tetrachloride	10.0	11	113	7.65	30	77 - 141
Chlorobenzene	10.0	12	117	4.18	30	88 - 120
Chloroethane	10.0	10	104	7.03	30	65 - 136
Chloroform	10.0	11	115	4.43	30	82 - 128
Chloromethane	10.0	8.4	84.5	7.41	30	43 - 155
cis-1,2-Dichloroethylene	10.0	9.8	98.5	6.96	30	83 - 129
cis-1,3-Dichloropropylene	10.0	11	107	3.12	30	80 - 131
Cyclohexane	10.0	8.9	88.6	16.0	30	63 - 149
Dibromochloromethane	10.0	11	112	2.47	30	80 - 130
Dibromomethane	10.0	11	106	2.98	30	72 - 134
Dichlorodifluoromethane	10.0	13	132	19.1	30	44 - 144
Ethyl Benzene	10.0	12	118	4.31	30	80 - 131
Hexachlorobutadiene	10.0	12	118	4.22	30	67 - 146
Isopropylbenzene	10.0	11	109	5.11	30	76 - 140
Methyl acetate	10.0	7.7	77.1	4.44	30	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	10	102	2.89	30	76 - 135
Methylcyclohexane	10.0	10	102	16.0	30	72 - 143
Methylene chloride	10.0	8.2	81.9	4.88	30	55 - 137
n-Butylbenzene	10.0	11	105	5.36	30	79 - 132
n-Propylbenzene	10.0	11	111	4.22	30	78 - 133
o-Xylene	10.0	12	117	3.53	30	78 - 130
p- & m- Xylenes	20.0	24	119	4.19	30	77 - 133
p-Isopropyltoluene	10.0	11	112	4.79	30	81 - 136
sec-Butylbenzene	10.0	11	112	4.63	30	79 - 137
Styrene	10.0	11	112	3.25	30	67 - 132
tert-Butyl alcohol (TBA)	50.0	56	113	3.77	30	25 - 162
tert-Butylbenzene	10.0	11	111	5.62	30	77 - 138
Tetrachloroethylene	10.0	9.9	99.2	6.16	30	82 - 131

**FORM III**

**LCS / LCS DUPLICATE RECOVERY**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80386 Laboratory ID: BC80386-BSD1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	10.0	12	116 ✓	3.82	30	80 - 127
trans-1,2-Dichloroethylene	10.0	10	100	5.44	30	80 - 132
trans-1,3-Dichloropropylene	10.0	10	104	2.57	30	78 - 131
trans-1,4-dichloro-2-butene	10.0	9.7	96.6	3.16	30	63 - 141
Trichloroethylene	10.0	12	117	3.60	30	82 - 128
Trichlorofluoromethane	10.0	11	110	13.0	30	67 - 139
Vinyl Chloride	10.0	11	106	7.98	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80387Laboratory ID: BC80387-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	9.5	95.4	82 - 126
1,1,1-Trichloroethane	10.0	10	99.8	78 - 136
1,1,2,2-Tetrachloroethane	10.0	8.9	89.4	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.8	98.4	54 - 165
1,1,2-Trichloroethane	10.0	9.6	96.5	82 - 123
1,1-Dichloroethane	10.0	10	100	82 - 129
1,1-Dichloroethylene	10.0	9.9	99.2	68 - 138
1,2,3-Trichlorobenzene	10.0	9.8	97.6	76 - 136
1,2,3-Trichloropropane	10.0	9.7	97.4	77 - 128
1,2,4-Trichlorobenzene	10.0	9.8	98.2	76 - 137
1,2,4-Trimethylbenzene	10.0	9.9	99.2	82 - 132
1,2-Dibromo-3-chloropropane	10.0	10	102	45 - 147
1,2-Dibromoethane	10.0	10	103	83 - 124
1,2-Dichlorobenzene	10.0	9.8	98.1	79 - 123
1,2-Dichloroethane	10.0	9.3	93.4	73 - 132
1,2-Dichloropropane	10.0	11	107	78 - 126
1,3,5-Trimethylbenzene	10.0	10	103	80 - 131
1,3-Dichlorobenzene	10.0	9.4	94.4	86 - 122
1,4-Dichlorobenzene	10.0	9.8	97.6	85 - 124
1,4-Dioxane	210	150	70.5	10 - 349
2-Butanone	10.0	10	103	49 - 152
2-Hexanone	10.0	9.7	96.8	51 - 146
4-Methyl-2-pentanone	10.0	9.5	95.4	57 - 145
Acetone	10.0	9.5	94.6	14 - 150
Acrolein	10.0	3.2	31.5	10 - 153
Acrylonitrile	10.0	11	108	51 - 150
Benzene	10.0	10	103	85 - 126
Bromochloromethane	10.0	10	100	77 - 128
Bromodichloromethane	10.0	11	106	79 - 128
Bromoform	10.0	9.4	94.4	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80387 Laboratory ID: BC80387-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. # ✓	QC LIMITS REC.
Bromomethane	10.0	12	116	43 - 168
Carbon disulfide	10.0	11	114	68 - 146
Carbon tetrachloride	10.0	10	102	77 - 141
Chlorobenzene	10.0	10	101	88 - 120
Chloroethane	10.0	10	103	65 - 136
Chloroform	10.0	10	100	82 - 128
Chloromethane	10.0	11	108	43 - 155
cis-1,2-Dichloroethylene	10.0	9.7	97.1	83 - 129
cis-1,3-Dichloropropylene	10.0	9.5	94.6	80 - 131
Cyclohexane	10.0	11	108	63 - 149
Dibromochloromethane	10.0	10	99.9	80 - 130
Dibromomethane	10.0	9.6	96.1	72 - 134
Dichlorodifluoromethane	10.0	12	119	44 - 144
Ethyl Benzene	10.0	10	103	80 - 131
Hexachlorobutadiene	10.0	11	108	67 - 146
Isopropylbenzene	10.0	11	109	76 - 140
Methyl acetate	10.0	10	104	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.0	89.8	76 - 135
Methylcyclohexane	10.0	11	112	72 - 143
Methylene chloride	10.0	9.7	96.6	55 - 137
n-Butylbenzene	10.0	10	102	79 - 132
n-Propylbenzene	10.0	11	106	78 - 133
o-Xylene	10.0	11	105	78 - 130
p- & m- Xylenes	20.0	20	99.2	77 - 133
p-Isopropyltoluene	10.0	10	101	81 - 136
sec-Butylbenzene	10.0	11	115	79 - 137
Styrene	10.0	10	99.5	67 - 132
tert-Butyl alcohol (TBA)	50.0	40	79.9	25 - 162
tert-Butylbenzene	10.0	11	109	77 - 138
Tetrachloroethylene	10.0	10	102	82 - 131

**FORM III**

**LCS / LCS DUPLICATE RECOVERY**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80387 Laboratory ID: BC80387-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Toluene	10.0	10	105 ✓	80 - 127
trans-1,2-Dichloroethylene	10.0	10	101	80 - 132
trans-1,3-Dichloropropylene	10.0	9.2	91.9	78 - 131
trans-1,4-dichloro-2-butene	10.0	10	101	63 - 141
Trichloroethylene	10.0	11	115	82 - 128
Trichlorofluoromethane	10.0	10	103	67 - 139
Vinyl Chloride	10.0	11	106	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80387Laboratory ID: BC80387-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	8.9	89.0	6.94	30	82 - 126
1,1,1-Trichloroethane	10.0	9.3	92.8	7.27	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.2	91.5	2.32	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.4	94.2	4.36	30	54 - 165
1,1,2-Trichloroethane	10.0	9.2	91.8	4.99	30	82 - 123
1,1-Dichloroethane	10.0	9.3	92.8	7.87	30	82 - 129
1,1-Dichloroethylene	10.0	9.1	91.1	8.51	30	68 - 138
1,2,3-Trichlorobenzene	10.0	10	104	6.25	30	76 - 136
1,2,3-Trichloropropane	10.0	10	104	6.46	30	77 - 128
1,2,4-Trichlorobenzene	10.0	10	101	2.81	30	76 - 137
1,2,4-Trimethylbenzene	10.0	9.6	96.0	3.28	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	10	103	0.488	30	45 - 147
1,2-Dibromoethane	10.0	9.8	98.5	4.56	30	83 - 124
1,2-Dichlorobenzene	10.0	9.7	97.4	0.716	30	79 - 123
1,2-Dichloroethane	10.0	9.0	90.0	3.71	30	73 - 132
1,2-Dichloropropane	10.0	10	101	5.95	30	78 - 126
1,3,5-Trimethylbenzene	10.0	9.9	99.1	4.15	30	80 - 131
1,3-Dichlorobenzene	10.0	9.1	91.3	3.34	30	86 - 122
1,4-Dichlorobenzene	10.0	9.9	98.9	1.32	30	85 - 124
1,4-Dioxane	210	110	53.5	27.4	30	10 - 349
2-Butanone	10.0	11	112	8.67	30	49 - 152
2-Hexanone	10.0	9.4	94.4	2.51	30	51 - 146
4-Methyl-2-pentanone	10.0	9.3	93.2	2.33	30	57 - 145
Acetone	10.0	8.9	88.8	6.32	30	14 - 150
Acrolein	10.0	3.2	32.0	1.57	30	10 - 153
Acrylonitrile	10.0	11	106	1.87	30	51 - 150
Benzene	10.0	9.5	94.9	7.99	30	85 - 126
Bromochloromethane	10.0	9.6	96.2	4.07	30	77 - 128
Bromodichloromethane	10.0	9.8	98.5	7.15	30	79 - 128
Bromoform	10.0	9.4	93.9	0.531	30	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0104Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900-Kingston CVS InvestigationMatrix: WaterBatch: BC80387Laboratory ID: BC80387-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	10.0	11	111	4.33	30	43 - 168
Carbon disulfide	10.0	11	106	7.43	30	68 - 146
Carbon tetrachloride	10.0	9.4	94.3	8.04	30	77 - 141
Chlorobenzene	10.0	9.4	94.1	7.47	30	88 - 120
Chloroethane	10.0	9.5	95.0	8.18	30	65 - 136
Chloroform	10.0	9.4	94.1	6.08	30	82 - 128
Chloromethane	10.0	9.9	98.9	8.52	30	43 - 155
cis-1,2-Dichloroethylene	10.0	9.0	90.5	7.04	30	83 - 129
cis-1,3-Dichloropropylene	10.0	8.8	88.4	6.78	30	80 - 131
Cyclohexane	10.0	10	101	6.59	30	63 - 149
Dibromochloromethane	10.0	9.5	95.2	4.82	30	80 - 130
Dibromomethane	10.0	9.4	93.5	2.74	30	72 - 134
Dichlorodifluoromethane	10.0	11	108	9.26	30	44 - 144
Ethyl Benzene	10.0	9.4	93.6	9.37	30	80 - 131
Hexachlorobutadiene	10.0	10	103	4.56	30	67 - 146
Isopropylbenzene	10.0	10	104	4.51	30	76 - 140
Methyl acetate	10.0	10	102	2.62	30	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.2	92.2	2.64	30	76 - 135
Methylcyclohexane	10.0	10	102	9.48	30	72 - 143
Methylene chloride	10.0	9.1	91.2	5.75	30	55 - 137
n-Butylbenzene	10.0	9.7	96.8	4.74	30	79 - 132
n-Propylbenzene	10.0	10	100	4.95	30	78 - 133
o-Xylene	10.0	9.6	96.4	8.73	30	78 - 130
p- & m- Xylenes	20.0	18	90.0	9.72	30	77 - 133
p-Isopropyltoluene	10.0	9.7	97.0	3.84	30	81 - 136
sec-Butylbenzene	10.0	11	108	5.56	30	79 - 137
Styrene	10.0	9.0	90.4	9.58	30	67 - 132
tert-Butyl alcohol (TBA)	50.0	50	101	23.1	30	25 - 162
tert-Butylbenzene	10.0	10	104	5.18	30	77 - 138
Tetrachloroethylene	10.0	9.2	92.1	9.91	30	82 - 131

## FORM III

## LCS / LCS DUPLICATE RECOVERY

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80387 Laboratory ID: BC80387-BSD1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	10.0	9.6	95.5 ✓	9.19	30	80 - 127
trans-1,2-Dichloroethylene	10.0	9.5	95.3	6.01	30	80 - 132
trans-1,3-Dichloropropylene	10.0	8.6	86.2	6.40	30	78 - 131
trans-1,4-dichloro-2-butene	10.0	9.7	96.7	3.95	30	63 - 141
Trichloroethylene	10.0	10	103	11.0	30	82 - 128
Trichlorofluoromethane	10.0	9.4	94.1	9.03	30	67 - 139
Vinyl Chloride	10.0	9.8	98.5	7.52	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits



## FORM IV

## PREPARATION BATCH SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Batch: BC80386 Batch Matrix: Water Preparation: EPA 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-MW-06 (0318)	18C0104-04	V724464.D	03/09/18 07:17	
KC-MW-07 (0318)	18C0104-05	V724465.D	03/09/18 07:17	
KC-MW-DUP1 (0318)	18C0104-06	V724466.D	03/09/18 07:17	
TRIP BLANK	18C0104-07	V724467.D	03/09/18 07:17	
Blank	BC80386-BLK1	V724451.D	03/09/18 07:17	
LCS	BC80386-BS1	V724447.D	03/09/18 07:17	
LCS	BC80386-BS2	V724449.D	03/09/18 07:17	
LCS Dup	BC80386-BSD1	V724448.D	03/09/18 07:17	
LCS Dup	BC80386-BSD2	V724450.D	03/09/18 07:17	

**FORM IV****PREPARATION BATCH SUMMARY****EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Batch: BC80387 Batch Matrix: Water Preparation: EPA 5030B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
KC-EB-01	18C0104-03	V804225.D	03/09/18 07:30	
Blank	BC80387-BLK1	V804224.D	03/09/18 07:30	
LCS	BC80387-BS1	V804221.D	03/09/18 07:30	
LCS Dup	BC80387-BSD1	V804222.D	03/09/18 07:30	

## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.                      SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie)                      Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water                      Laboratory ID: BC80386-BLK1                      File ID: V724451.D  
 Prepared: 03/09/18 07:17                      Preparation: EPA 5030B                      Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 16:21                      Instrument: MSVOA7  
 Batch: BC80386                      Sequence: Y8C1221                      Calibration: YB80017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U ✓
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	0.50	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80386-BLK1 File ID: V724451.D  
 Prepared: 03/09/18 07:17 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 16:21 Instrument: MSVOA7  
 Batch: BC80386 Sequence: Y8C1221 Calibration: YB80017

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U ✓
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U



## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U ✓
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	2.0	U
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	2.0	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	2.0	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

## METHOD BLANK DATA SHEET

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U ✓
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80387-BLK1 File ID: V804224.D  
 Prepared: 03/09/18 07:30 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/09/18 12:37 Instrument: VOA No. 8  
 Batch: BC80387 Sequence: Y8C1201 Calibration: YC80010

CAS NO.	COMPOUND	CONC. (ug/L)	Q
108-88-3	Toluene	0.50	U ✓
156-60-5	trans-1,2-Dichloroethylene	0.50	U
10061-02-6	trans-1,3-Dichloropropylene	0.50	U
110-57-6	trans-1,4-dichloro-2-butene	0.50	U
79-01-6	Trichloroethylene	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
1330-20-7	Xylenes, Total	1.5	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,2-Dichloroethane-d4	10.0	9.17	91.7	69 - 130	
p-Bromofluorobenzene	10.0	11.3	113	79 - 122	
Toluene-d8	10.0	10.3	103	81 - 117	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
1,2-Dichlorobenzene-d4	26377	10.831	31465	10.831	
Chlorobenzene-d5	90737	7.876	95832	7.876	
Fluorobenzene	26513	4.916	27896	4.918	



**FORM V**

**MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0104

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900-Kingston CVS Investigation

Lab File ID: V723798.D

Injection Date: 02/14/18

Instrument ID: MSVOA7

Injection Time: 00:04

Sequence: Y8B1409

Lab Sample ID: Y8B1409-TUNI

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	26.8	PASS ✓
75	30 - 60% of 95	47.4	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.62	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	76.6	PASS
175	5 - 9% of 174	8.07	PASS
176	95 - 101% of 174	96.4	PASS
177	5 - 9% of 176	6.57	PASS

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Lab File ID: V804202.D Injection Date: 03/08/18  
 Instrument ID: VOA No. 8 Injection Time: 14:07  
 Sequence: Y8C0903 Lab Sample ID: Y8C0903-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	23.7	PASS
75	30 - 60% of 95	50.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.03	PASS
173	Less than 2% of 174	0.702	PASS
174	50 - 100% of 95	87.4	PASS
175	5 - 9% of 174	7.75	PASS
176	95 - 101% of 174	95.8	PASS
177	5 - 9% of 176	6.85	PASS

## FORM V

## MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Lab File ID: V804219.D Injection Date: 03/09/18  
 Instrument ID: VOA No. 8 Injection Time: 10:10  
 Sequence: Y8C1201 Lab Sample ID: Y8C1201-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	23.1	PASS
75	30 - 60% of 95	51.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.92	PASS
173	Less than 2% of 174	1.11	PASS
174	50 - 100% of 95	89.7	PASS
175	5 - 9% of 174	8.13	PASS
176	95 - 101% of 174	95.2	PASS
177	5 - 9% of 176	6.55	PASS

## FORM V

## MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Lab File ID: V724445.D Injection Date: 03/09/18  
Instrument ID: MSVOA7 Injection Time: 12:57  
Sequence: Y8C1221 Lab Sample ID: Y8C1221-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.4	PASS ✓
75	30 - 60% of 95	46.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.69	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	77.3	PASS
175	5 - 9% of 174	7.94	PASS
176	95 - 101% of 174	98.1	PASS
177	5 - 9% of 176	6.44	PASS

## FORM V

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8B1409 Instrument: MSVOA7  
 Matrix: Water Calibration: YB80017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8B1409-TUN1	V723798.D	02/14/18 00:04
Cal Standard	Y8B1409-CAL1	V723799.D	02/14/18 00:35
Cal Standard	Y8B1409-CAL2	V723800.D	02/14/18 01:07
Cal Standard	Y8B1409-CAL3	V723801.D	02/14/18 01:38
Cal Standard	Y8B1409-CAL4	V723802.D	02/14/18 02:10
Cal Standard	Y8B1409-CAL5	V723803.D	02/14/18 02:41
Cal Standard	Y8B1409-CAL6	V723804.D	02/14/18 03:13
Cal Standard	Y8B1409-CAL7	V723805.D	02/14/18 03:44
Cal Standard	Y8B1409-CAL8	V723806.D	02/14/18 04:16
Cal Standard	Y8B1409-CAL9	V723807.D	02/14/18 04:47
Secondary Cal Check	Y8B1409-SCV1	V723811.D	02/14/18 06:53
Secondary Cal Check	Y8B1409-SCV2	V723812.D	02/14/18 07:25

## FORM V

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C0903 Instrument: VOA No. 8  
Matrix: Water Calibration: YC80010

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C0903-TUN1	V804202.D	03/08/18 14:07
Cal Standard	Y8C0903-CAL1	V804204.D	03/08/18 15:04
Cal Standard	Y8C0903-CAL2	V804205.D	03/08/18 15:31
Cal Standard	Y8C0903-CAL3	V804206.D	03/08/18 15:58
Cal Standard	Y8C0903-CAL4	V804207.D	03/08/18 16:25
Cal Standard	Y8C0903-CAL5	V804208.D	03/08/18 16:52
Cal Standard	Y8C0903-CAL6	V804209.D	03/08/18 17:19
Cal Standard	Y8C0903-CAL7	V804210.D	03/08/18 17:46
Cal Standard	Y8C0903-CAL8	V804211.D	03/08/18 18:13
Cal Standard	Y8C0903-CAL9	V804212.D	03/08/18 18:40
Secondary Cal Check	Y8C0903-SCV1	V804216.D	03/08/18 20:28

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
Sequence: Y8C1201 Instrument: VOA No. 8  
Matrix: Water Calibration: YC80010

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1201-TUN1	V804219.D	03/09/18 10:10
Calibration Check	Y8C1201-CCV1	V804220.D	03/09/18 10:37
LCS	BC80387-BS1	V804221.D	03/09/18 11:16
LCS Dup	BC80387-BSD1	V804222.D	03/09/18 11:43
Blank	BC80387-BLK1	V804224.D	03/09/18 12:37
KC-EB-01	18C0104-03	V804225.D	03/09/18 13:05

## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C1221 Instrument: MSVOA7  
 Matrix: Water Calibration: YB80017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1221-TUN1	V724445.D	03/09/18 12:57
Calibration Check	Y8C1221-CCV1	V724446.D	03/09/18 13:41
LCS	BC80386-BS1	V724447.D	03/09/18 14:13
LCS Dup	BC80386-BSD1	V724448.D	03/09/18 14:45
LCS	BC80386-BS2	V724449.D	03/09/18 15:17
LCS Dup	BC80386-BSD2	V724450.D	03/09/18 15:49
Blank	BC80386-BLK1	V724451.D	03/09/18 16:21
KC-MW-06 (0318)	18C0104-04	V724464.D	03/09/18 23:15
KC-MW-07 (0318)	18C0104-05	V724465.D	03/09/18 23:47
KC-MW-DUP1 (0318)	18C0104-06	V724466.D	03/10/18 00:19
TRIP BLANK	18C0104-07	V724467.D	03/10/18 00:51



FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8B1409 Instrument: MSVOA7  
 Matrix: Water Calibration: YB80017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8B1409-CAL1)</b>			Lab File ID: V723799.D			Analyzed: 02/14/18 00:35			
Fluorobenzene	195745	5.825	208923	5.825	94 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	734332	8.855	776850	8.855	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	277007	11.841	301800	11.841	92	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B1409-CAL2)</b>			Lab File ID: V723800.D			Analyzed: 02/14/18 01:07			
Fluorobenzene	199185	5.825	208923	5.825	95 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	742138	8.855	776850	8.855	96	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	281818	11.84	301800	11.841	93	50 - 200	-0.0010	+/-0.17	
<b>Cal Standard (Y8B1409-CAL3)</b>			Lab File ID: V723801.D			Analyzed: 02/14/18 01:38			
Fluorobenzene	203653	5.825	208923	5.825	97 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	761129	8.855	776850	8.855	98	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	287347	11.838	301800	11.841	95	50 - 200	-0.0030	+/-0.17	
<b>Cal Standard (Y8B1409-CAL4)</b>			Lab File ID: V723802.D			Analyzed: 02/14/18 02:10			
Fluorobenzene	208923	5.825	208923	5.825	100 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	776850	8.855	776850	8.855	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	301800	11.841	301800	11.841	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B1409-CAL5)</b>			Lab File ID: V723803.D			Analyzed: 02/14/18 02:41			
Fluorobenzene	202801	5.825	208923	5.825	97 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	745663	8.855	776850	8.855	96	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	294490	11.838	301800	11.841	98	50 - 200	-0.0030	+/-0.17	
<b>Cal Standard (Y8B1409-CAL6)</b>			Lab File ID: V723804.D			Analyzed: 02/14/18 03:13			
Fluorobenzene	202979	5.825	208923	5.825	97 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	739271	8.855	776850	8.855	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	284394	11.841	301800	11.841	94	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B1409-CAL7)</b>			Lab File ID: V723805.D			Analyzed: 02/14/18 03:44			
Fluorobenzene	208239	5.828	208923	5.825	100 ✓	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	762765	8.858	776850	8.855	98	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	293353	11.843	301800	11.841	97	50 - 200	0.0020	+/-0.17	
<b>Cal Standard (Y8B1409-CAL8)</b>			Lab File ID: V723806.D			Analyzed: 02/14/18 04:16			
Fluorobenzene	208450	5.828	208923	5.825	100 ✓	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	767042	8.858	776850	8.855	99	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	291582	11.843	301800	11.841	97	50 - 200	0.0020	+/-0.17	
<b>Cal Standard (Y8B1409-CAL9)</b>			Lab File ID: V723807.D			Analyzed: 02/14/18 04:47			
Fluorobenzene	210682	5.828	208923	5.825	101 ✓	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	779424	8.861	776850	8.855	100	50 - 200	0.0060	+/-0.17	
1,2-Dichlorobenzene-d4	289421	11.843	301800	11.841	96	50 - 200	0.0020	+/-0.17	



## FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C0903 Instrument: VOA No. 8  
 Matrix: Water Calibration: YC80010

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8C0903-CAL1)</b>			Lab File ID: V804204.D			Analyzed: 03/08/18 15:04			
Fluorobenzene	20085	4.919	20440	4.919	98 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	69864	7.879	70901	7.876	99	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	22668	10.831	23905	10.831	95	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL2)</b>			Lab File ID: V804205.D			Analyzed: 03/08/18 15:31			
Fluorobenzene	20128	4.916	20440	4.919	98 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	70007	7.876	70901	7.876	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	23068	10.828	23905	10.831	96	50 - 200	-0.0030	+/-0.17	
<b>Cal Standard (Y8C0903-CAL3)</b>			Lab File ID: V804206.D			Analyzed: 03/08/18 15:58			
Fluorobenzene	19359	4.916	20440	4.919	95 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	67034	7.876	70901	7.876	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	22233	10.831	23905	10.831	93	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL4)</b>			Lab File ID: V804207.D			Analyzed: 03/08/18 16:25			
Fluorobenzene	20440	4.919	20440	4.919	100 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	70901	7.876	70901	7.876	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	23905	10.831	23905	10.831	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL5)</b>			Lab File ID: V804208.D			Analyzed: 03/08/18 16:52			
Fluorobenzene	20545	4.916	20440	4.919	101 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	73752	7.876	70901	7.876	104	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	25650	10.831	23905	10.831	107	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL6)</b>			Lab File ID: V804209.D			Analyzed: 03/08/18 17:19			
Fluorobenzene	22627	4.913	20440	4.919	111 ✓	50 - 200	-0.0060	+/-0.17	
Chlorobenzene-d5	82165	7.876	70901	7.876	116	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	29375	10.831	23905	10.831	123	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8C0903-CAL7)</b>			Lab File ID: V804210.D			Analyzed: 03/08/18 17:46			
Fluorobenzene	23922	4.916	20440	4.919	117 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	88928	7.879	70901	7.876	125	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	35044	10.834	23905	10.831	147	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8C0903-CAL8)</b>			Lab File ID: V804211.D			Analyzed: 03/08/18 18:13			
Fluorobenzene	25909	4.916	20440	4.919	127 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	97264	7.879	70901	7.876	137	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	40678	10.836	23905	10.831	170	50 - 200	0.0050	+/-0.17	
<b>Cal Standard (Y8C0903-CAL9)</b>			Lab File ID: V804212.D			Analyzed: 03/08/18 18:40			
Fluorobenzene	28927	4.918	20440	4.919	142 ✓	50 - 200	-0.0010	+/-0.17	
Chlorobenzene-d5	108176	7.879	70901	7.876	153	50 - 200	0.0030	+/-0.17	
1,2-Dichlorobenzene-d4	42354	10.839	23905	10.831	177	50 - 200	0.0080	+/-0.17	





FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0104  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900-Kingston CVS Investigation  
 Sequence: Y8C1221 Instrument: MSVOA7  
 Matrix: Water Calibration: YB80017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1221-CCV1)</b> Lab File ID: V724446.D Analyzed: 03/09/18 13:41									
Fluorobenzene	248308	5.828				50 - 200		+/-0.17	
Chlorobenzene-d5	917162	8.858				50 - 200		+/-0.17	
1,2-Dichlorobenzene-d4	370257	11.84				50 - 200		+/-0.17	
<b>LCS (BC80386-BS1)</b> Lab File ID: V724447.D Analyzed: 03/09/18 14:13									
Fluorobenzene	249742	5.828 ✓	248308	5.828	101 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	910116	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	368098	11.84	370257	11.84	99	50 - 200	0.0000	+/-0.17	
<b>LCS Dup (BC80386-BS1)</b> Lab File ID: V724448.D Analyzed: 03/09/18 14:45									
Fluorobenzene	252785	5.828 ✓	248308	5.828	102 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	909122	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	369119	11.841	370257	11.84	100	50 - 200	0.0010	+/-0.17	
<b>LCS (BC80386-BS2)</b> Lab File ID: V724449.D Analyzed: 03/09/18 15:17									
Fluorobenzene	246050	5.828 ✓	248308	5.828	99 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	909153	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	350355	11.84	370257	11.84	95	50 - 200	0.0000	+/-0.17	
<b>LCS Dup (BC80386-BS2)</b> Lab File ID: V724450.D Analyzed: 03/09/18 15:49									
Fluorobenzene	247424	5.828 ✓	248308	5.828	100 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	907592	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	355509	11.84	370257	11.84	96	50 - 200	0.0000	+/-0.17	
<b>Blank (BC80386-BLK1)</b> Lab File ID: V724451.D Analyzed: 03/09/18 16:21									
Fluorobenzene	249881	5.828 ✓	248308	5.828	101 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	904244	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	348060	11.841	370257	11.84	94	50 - 200	0.0010	+/-0.17	
<b>KC-MW-06 (0318) (18C0104-04)</b> Lab File ID: V724464.D Analyzed: 03/09/18 23:15									
Fluorobenzene	258661	5.828 ✓	248308	5.828	104 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	944138	8.858	917162	8.858	103	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	368825	11.843	370257	11.84	100	50 - 200	0.0030	+/-0.17	
<b>KC-MW-07 (0318) (18C0104-05)</b> Lab File ID: V724465.D Analyzed: 03/09/18 23:47									
Fluorobenzene	246616	5.828 ✓	248308	5.828	99 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	907734	8.858	917162	8.858	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	353263	11.84	370257	11.84	95	50 - 200	0.0000	+/-0.17	
<b>KC-MW-DUP1 (0318) (18C0104-06)</b> Lab File ID: V724466.D Analyzed: 03/10/18 00:19									
Fluorobenzene	251844	5.828 ✓	248308	5.828	101 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	915028	8.858	917162	8.858	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	358588	11.841	370257	11.84	97	50 - 200	0.0010	+/-0.17	



## FORM II

## SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238 Instrument: QVOA6  
 Matrix: Water Calibration: YB80032

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1238-CCV1)</b> Lab File ID: QV604735.D Analyzed: 03/12/18 13:02								
1,2-Dichloroethane-d4	10.0	99.6 ✓	80 - 120	5.83	5.832333	-0.0023	+/-1.00	
Toluene-d8	10.0	95.8	80 - 120	7.683	7.682889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	101	80 - 120	10.46	10.459	0.0010	+/-1.00	
<b>LCS (BC80492-BS1)</b> Lab File ID: QV604736.D Analyzed: 03/12/18 13:39								
1,2-Dichloroethane-d4	10.0	100 ✓	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	94.4	81 - 117	7.681	7.682889	-0.0019	+/-1.00	
p-Bromofluorobenzene	10.0	103	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>LCS Dup (BC80492-BSD1)</b> Lab File ID: QV604737.D Analyzed: 03/12/18 14:05								
1,2-Dichloroethane-d4	10.0	102 ✓	69 - 130	5.83	5.832333	-0.0023	+/-1.00	
Toluene-d8	10.0	95.0	81 - 117	7.683	7.682889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	99.9	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>Blank (BC80492-BLK1)</b> Lab File ID: QV604739.D Analyzed: 03/12/18 14:58								
1,2-Dichloroethane-d4	10.0	99.4 ✓	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	97.3	81 - 117	7.683	7.682889	0.0001	+/-1.00	
p-Bromofluorobenzene	10.0	99.4	79 - 122	10.46	10.459	0.0010	+/-1.00	
<b>TRIP BLANK (18C0189-05)</b> Lab File ID: QV604745.D Analyzed: 03/12/18 17:59								
1,2-Dichloroethane-d4	10.0	97.7 ✓	69 - 130	5.825	5.832333	-0.0073	+/-1.00	
Toluene-d8	10.0	101	81 - 117	7.678	7.682889	-0.0049	+/-1.00	
p-Bromofluorobenzene	10.0	97.9	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>KC-MW-02 (0318) (18C0189-02)</b> Lab File ID: QV604746.D Analyzed: 03/12/18 18:25								
1,2-Dichloroethane-d4	10.0	96.1 ✓	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	97.1	81 - 117	7.681	7.682889	-0.0019	+/-1.00	
p-Bromofluorobenzene	10.0	98.8	79 - 122	10.457	10.459	-0.0020	+/-1.00	
<b>KC-MW-05 (0318) (18C0189-03)</b> Lab File ID: QV604747.D Analyzed: 03/12/18 18:51								
1,2-Dichloroethane-d4	10.0	103 ✓	69 - 130	5.825	5.832333	-0.0073	+/-1.00	
Toluene-d8	10.0	95.1	81 - 117	7.678	7.682889	-0.0049	+/-1.00	
p-Bromofluorobenzene	10.0	98.2	79 - 122	10.454	10.459	-0.0050	+/-1.00	
<b>KC-MW-01 (0318) (18C0189-01)</b> Lab File ID: QV604748.D Analyzed: 03/12/18 19:18								
1,2-Dichloroethane-d4	10.0	100 ✓	69 - 130	5.828	5.832333	-0.0043	+/-1.00	
Toluene-d8	10.0	97.2	81 - 117	7.681	7.682889	-0.0019	+/-1.00	
p-Bromofluorobenzene	10.0	97.8	79 - 122	10.457	10.459	-0.0020	+/-1.00	



FORM II

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.                      SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie)              Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238                                                              Instrument: QVOA6  
 Matrix: Water                                                                      Calibration: YB80032

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
<b>KC-MW-DUP2 (0318) (18C0189-04)</b>			Lab File ID: QV604749.D		Analyzed: 03/12/18 19:44			
1,2-Dichloroethane-d4	10.0	101 ✓	69 - 130	5.831	5.832333	-0.0013	+/-1.00	
Toluene-d8	10.0	97.8	81 - 117	7.678	7.682889	-0.0049	+/-1.00	
p-Bromofluorobenzene	10.0	98.8	79 - 122	10.457	10.459	-0.0020	+/-1.00	

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterBatch: BC80492Laboratory ID: BC80492-BS1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. # ✓	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	10.0	9.3	92.9	82 - 126
1,1,1-Trichloroethane	10.0	9.4	93.6	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.4	94.1	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.0	9.4	94.1	54 - 165
1,1,2-Trichloroethane	10.0	9.1	91.2	82 - 123
1,1-Dichloroethane	10.0	9.4	94.3	82 - 129
1,1-Dichloroethylene	10.0	9.2	91.7	68 - 138
1,2,3-Trichlorobenzene	10.0	9.0	89.7	76 - 136
1,2,3-Trichloropropane	10.0	9.9	98.9	77 - 128
1,2,4-Trichlorobenzene	10.0	8.2	82.0	76 - 137
1,2,4-Trimethylbenzene	10.0	9.6	95.7	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.0	89.6	45 - 147
1,2-Dibromoethane	10.0	9.1	91.2	83 - 124
1,2-Dichlorobenzene	10.0	9.4	94.1	79 - 123
1,2-Dichloroethane	10.0	9.2	92.2	73 - 132
1,2-Dichloropropane	10.0	8.7	87.0	78 - 126
1,3,5-Trimethylbenzene	10.0	9.6	95.5	80 - 131
1,3-Dichlorobenzene	10.0	9.7	97.3	86 - 122
1,4-Dichlorobenzene	10.0	9.7	97.4	85 - 124
1,4-Dioxane	200	180	89.2	10 - 349
2-Butanone	10.0	11	114	49 - 152
2-Hexanone	10.0	9.3	93.3	51 - 146
4-Methyl-2-pentanone	10.0	8.4	83.7	57 - 145
Acetone	10.0	12	119	14 - 150
Acrolein	10.0	11	108	10 - 153
Acrylonitrile	10.0	9.0	90.3	51 - 150
Benzene	10.0	9.4	93.6	85 - 126
Bromochloromethane	10.0	9.8	98.2	77 - 128
Bromodichloromethane	10.0	8.8	87.9	79 - 128
Bromoform	10.0	8.8	88.4	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80492 Laboratory ID: BC80492-BS1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS CONCENTRATION ppb	LCS % REC. #	QC LIMITS REC.
Bromomethane	10.0	6.4	64.0	43 - 168
Carbon disulfide	10.0	8.7	87.3	68 - 146
Carbon tetrachloride	10.0	9.3	93.0	77 - 141
Chlorobenzene	10.0	9.3	93.2	88 - 120
Chloroethane	10.0	9.0	90.4	65 - 136
Chloroform	10.0	9.7	96.9	82 - 128
Chloromethane	10.0	7.2	72.5	43 - 155
cis-1,2-Dichloroethylene	10.0	9.4	94.3	83 - 129
cis-1,3-Dichloropropylene	10.0	8.9	88.7	80 - 131
Cyclohexane	10.0	8.8	88.1	63 - 149
Dibromochloromethane	10.0	8.9	88.8	80 - 130
Dibromomethane	10.0	8.9	89.2	72 - 134
Dichlorodifluoromethane	10.0	8.0	79.9	44 - 144
Ethyl Benzene	10.0	9.1	91.1	80 - 131
Hexachlorobutadiene	10.0	7.6	75.6	67 - 146
Isopropylbenzene	10.0	9.6	95.5	76 - 140
Methyl acetate	10.0	8.6	85.7	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.5	94.8	76 - 135
Methylcyclohexane	10.0	8.4	84.0	72 - 143
Methylene chloride	10.0	9.1	90.7	55 - 137
n-Butylbenzene	10.0	8.6	85.8	79 - 132
n-Propylbenzene	10.0	9.4	94.3	78 - 133
o-Xylene	10.0	9.4	94.5	78 - 130
p- & m- Xylenes	20.0	18	91.9	77 - 133
p-Isopropyltoluene	10.0	9.0	89.9	81 - 136
sec-Butylbenzene	10.0	8.8	88.1	79 - 137
Styrene	10.0	9.4	94.3	67 - 132
tert-Butyl alcohol (TBA)	10.0	9.9	99.2	25 - 162
tert-Butylbenzene	10.0	9.1	90.9	77 - 138
Tetrachloroethylene	10.0	9.1	90.8	82 - 131



FORM III

LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Matrix: Water

Batch: BC80492

Laboratory ID: BC80492-BSD1

Preparation: EPA 5030B

Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
1,1,1,2-Tetrachloroethane	10.0	9.4	94.4	1.60	30	82 - 126
1,1,1-Trichloroethane	10.0	9.2	92.3	1.40	30	78 - 136
1,1,2,2-Tetrachloroethane	10.0	9.5	95.1	1.06	30	76 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.0	89.6	4.90	30	54 - 165
1,1,2-Trichloroethane	10.0	9.6	95.6	4.71	30	82 - 123
1,1-Dichloroethane	10.0	9.3	93.1	1.28	30	82 - 129
1,1-Dichloroethylene	10.0	8.8	88.5	3.55	30	68 - 138
1,2,3-Trichlorobenzene	10.0	10	103	14.0	30	76 - 136
1,2,3-Trichloropropane	10.0	9.8	98.4	0.507	30	77 - 128
1,2,4-Trichlorobenzene	10.0	8.9	89.0	8.19	30	76 - 137
1,2,4-Trimethylbenzene	10.0	9.3	93.0	2.86	30	82 - 132
1,2-Dibromo-3-chloropropane	10.0	9.8	97.8	8.75	30	45 - 147
1,2-Dibromoethane	10.0	9.6	95.8	4.92	30	83 - 124
1,2-Dichlorobenzene	10.0	9.3	92.7	1.50	30	79 - 123
1,2-Dichloroethane	10.0	9.4	94.0	1.93	30	73 - 132
1,2-Dichloropropane	10.0	8.8	88.5	1.71	30	78 - 126
1,3,5-Trimethylbenzene	10.0	9.2	92.3	3.41	30	80 - 131
1,3-Dichlorobenzene	10.0	9.3	93.0	4.52	30	86 - 122
1,4-Dichlorobenzene	10.0	9.4	93.5	4.09	30	85 - 124
1,4-Dioxane	200	200	101	12.2	30	10 - 349
2-Butanone	10.0	12	120	5.39	30	49 - 152
2-Hexanone	10.0	10	103	10.3	30	51 - 146
4-Methyl-2-pentanone	10.0	9.2	92.1	9.56	30	57 - 145
Acetone	10.0	12	122	1.99	30	14 - 150
Acrolein	10.0	11	108	0.00	30	10 - 153
Acrylonitrile	10.0	9.9	99.0	9.19	30	51 - 150
Benzene	10.0	9.3	92.8	0.858	30	85 - 126
Bromochloromethane	10.0	9.8	98.0	0.204	30	77 - 128
Bromodichloromethane	10.0	8.9	89.0	1.24	30	79 - 128
Bromoform	10.0	9.5	94.9	7.09	30	78 - 133

## FORM III

## LCS / LCS DUPLICATE RECOVERY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Project: 41103.00 Task 0900 - Kingston CVS InvestigationMatrix: WaterBatch: BC80492Laboratory ID: BC80492-BSD1Preparation: EPA 5030BInitial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCS D CONCENTRATION ppb	LCS D % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Bromomethane	10.0	7.0	69.9	8.81	30	43 - 168
Carbon disulfide	10.0	8.4	84.2	3.62	30	68 - 146
Carbon tetrachloride	10.0	9.0	90.3	2.95	30	77 - 141
Chlorobenzene	10.0	9.4	93.5	0.321	30	88 - 120
Chloroethane	10.0	9.2	91.7	1.43	30	65 - 136
Chloroform	10.0	9.4	94.0	3.04	30	82 - 128
Chloromethane	10.0	7.1	71.0	2.09	30	43 - 155
cis-1,2-Dichloroethylene	10.0	9.2	91.9	2.58	30	83 - 129
cis-1,3-Dichloropropylene	10.0	9.0	90.4	1.90	30	80 - 131
Cyclohexane	10.0	8.5	85.1	3.46	30	63 - 149
Dibromochloromethane	10.0	9.2	92.1	3.65	30	80 - 130
Dibromomethane	10.0	9.2	92.2	3.31	30	72 - 134
Dichlorodifluoromethane	10.0	7.6	76.0	5.00	30	44 - 144
Ethyl Benzene	10.0	9.4	93.8	2.92	30	80 - 131
Hexachlorobutadiene	10.0	8.6	86.0	12.9	30	67 - 146
Isopropylbenzene	10.0	9.4	93.9	1.69	30	76 - 140
Methyl acetate	10.0	9.5	95.1	10.4	30	51 - 139
Methyl tert-butyl ether (MTBE)	10.0	9.7	96.8	2.09	30	76 - 135
Methylcyclohexane	10.0	8.7	87.1	3.62	30	72 - 143
Methylene chloride	10.0	8.8	88.0	3.02	30	55 - 137
n-Butylbenzene	10.0	9.1	90.6	5.44	30	79 - 132
n-Propylbenzene	10.0	9.3	93.0	1.39	30	78 - 133
o-Xylene	10.0	9.6	95.8	1.37	30	78 - 130
p- & m- Xylenes	20.0	19	94.0	2.21	30	77 - 133
p-Isopropyltoluene	10.0	9.3	93.1	3.50	30	81 - 136
sec-Butylbenzene	10.0	9.3	93.4	5.84	30	79 - 137
Styrene	10.0	9.6	96.0	1.79	30	67 - 132
tert-Butyl alcohol (TBA)	10.0	11	107	7.85	30	25 - 162
tert-Butylbenzene	10.0	9.4	94.1	3.46	30	77 - 138
Tetrachloroethylene	10.0	9.4	93.5	2.93	30	82 - 131

**FORM III**

**LCS / LCS DUPLICATE RECOVERY**

**EPA 8260C**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water  
 Batch: BC80492 Laboratory ID: BC80492-BSD1  
 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL

COMPOUND	SPIKE ADDED ppb	LCSD CONCENTRATION ppb	LCSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
Toluene	10.0	8.9	89.3 ✓	1.13	30	80 - 127
trans-1,2-Dichloroethylene	10.0	9.0	90.0	1.76	30	80 - 132
trans-1,3-Dichloropropylene	10.0	9.2	92.1	4.10	30	78 - 131
trans-1,4-dichloro-2-butene	10.0	9.4	93.5	0.859	30	63 - 141
Trichloroethylene	10.0	8.9	88.7	1.59	30	82 - 128
Trichlorofluoromethane	10.0	9.3	92.6	3.71	30	67 - 139
Vinyl Chloride	10.0	8.5	85.2	4.70	30	58 - 145

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits





## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
75-35-4	1,1-Dichloroethylene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.51	B
96-18-4	1,2,3-Trichloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
123-91-1	1,4-Dioxane	40	U
78-93-3	2-Butanone	0.50	U
591-78-6	2-Hexanone	0.50	U
108-10-1	4-Methyl-2-pentanone	0.50	U
67-64-1	Acetone	2.0	U
107-02-8	Acrolein	0.50	U
107-13-1	Acrylonitrile	0.50	U
71-43-2	Benzene	0.50	U
74-97-5	Bromochloromethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
75-25-2	Bromoform	0.50	U

## FORM I

METHOD BLANK DATA SHEET  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80492-BLK1 File ID: QV604739.D  
 Prepared: 03/12/18 10:00 Preparation: EPA 5030B Initial/Final: 25 mL / 25 mL  
 Analyzed: 03/12/18 14:58 Instrument: QVOA6  
 Batch: BC80492 Sequence: Y8C1238 Calibration: YB80032

CAS NO.	COMPOUND	CONC. (ug/L)	Q
74-83-9	Bromomethane	0.50	U ✓
75-15-0	Carbon disulfide	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
108-90-7	Chlorobenzene	0.50	U
75-00-3	Chloroethane	0.50	U
67-66-3	Chloroform	0.50	U
74-87-3	Chloromethane	0.50	U
156-59-2	cis-1,2-Dichloroethylene	0.50	U
10061-01-5	cis-1,3-Dichloropropylene	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-71-8	Dichlorodifluoromethane	0.50	U
100-41-4	Ethyl Benzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-20-9	Methyl acetate	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.50	U
108-87-2	Methylcyclohexane	0.50	U
75-09-2	Methylene chloride	2.0	U
104-51-8	n-Butylbenzene	0.50	U
103-65-1	n-Propylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	p- & m- Xylenes	1.0	U
99-87-6	p-Isopropyltoluene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
100-42-5	Styrene	0.50	U
75-65-0	tert-Butyl alcohol (TBA)	1.0	U
98-06-6	tert-Butylbenzene	0.50	U
127-18-4	Tetrachloroethylene	0.50	U





**FORM V**

**MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK**

**EPA 8260C**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>18C0189</u>
Client:	<u>Chazen Environmental Services (Poughkeepsie)</u>	Project:	<u>41103.00 Task 0900 - Kingston CVS Investigation</u>
Lab File ID:	<u>QV604732.D</u>	Injection Date:	<u>03/12/18</u>
Instrument ID:	<u>QVOA6</u>	Injection Time:	<u>11:41</u>
Sequence:	<u>Y8C1238</u>	Lab Sample ID:	<u>Y8C1238-TUN1</u>

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
		Value	Result
50	15 - 40% of 95	21.5	PASS
75	30 - 60% of 95	49.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.63	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	97.5	PASS
175	5 - 9% of 174	8.05	PASS
176	95 - 101% of 174	95.2	PASS
177	5 - 9% of 176	7.11	PASS



## ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238 Instrument: QVOA6  
 Matrix: Water Calibration: YB80032

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	Y8C1238-TUN1	QV604732.D	03/12/18 11:41
Calibration Check	Y8C1238-CCV1	QV604735.D	03/12/18 13:02
LCS	BC80492-BS1	QV604736.D	03/12/18 13:39
LCS Dup	BC80492-BSD1	QV604737.D	03/12/18 14:05
Blank	BC80492-BLK1	QV604739.D	03/12/18 14:58
TRIP BLANK	18C0189-05	QV604745.D	03/12/18 17:59
KC-MW-02 (0318)	18C0189-02	QV604746.D	03/12/18 18:25
KC-MW-05 (0318)	18C0189-03	QV604747.D	03/12/18 18:51
KC-MW-01 (0318)	18C0189-01	QV604748.D	03/12/18 19:18
KC-MW-DUP2 (0318)	18C0189-04	QV604749.D	03/12/18 19:44

**FORM VIII**

**INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>18C0189</u>
Client:	<u>Chazen Environmental Services (Poughkeepsie)</u>	Project:	<u>41103.00 Task 0900 - Kingston CVS Investigation</u>
Sequence:	<u>Y8B2822</u>	Instrument:	<u>QVOA6</u>
Matrix:	<u>Water</u>	Calibration:	<u>YB80032</u>

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Cal Standard (Y8B2822-CAL1)</b> Lab File ID: QV604445.D Analyzed: 02/26/18 18:39									
Fluorobenzene	60877	6.128	54341	6.131	112 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	238915	9.191	219468	9.189	109	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	96903	12.174	87396	12.171	111	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL2)</b> Lab File ID: QV604446.D Analyzed: 02/26/18 19:05									
Fluorobenzene	57438	6.131	54341	6.131	106 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	224845	9.191	219468	9.189	102	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	90471	12.174	87396	12.171	104	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL3)</b> Lab File ID: QV604447.D Analyzed: 02/26/18 19:31									
Fluorobenzene	59185	6.134	54341	6.131	109 ✓	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	237719	9.188	219468	9.189	108	50 - 200	-0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	95478	12.174	87396	12.171	109	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL4)</b> Lab File ID: QV604448.D Analyzed: 02/26/18 19:58									
Fluorobenzene	54341	6.131	54341	6.131	100 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	219468	9.189	219468	9.189	100	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	87396	12.171	87396	12.171	100	50 - 200	0.0000	+/-0.17	
<b>Cal Standard (Y8B2822-CAL5)</b> Lab File ID: QV604449.D Analyzed: 02/26/18 20:24									
Fluorobenzene	59413	6.131	54341	6.131	109 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	233156	9.189	219468	9.189	106	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	91822	12.174	87396	12.171	105	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL6)</b> Lab File ID: QV604450.D Analyzed: 02/26/18 20:51									
Fluorobenzene	54928	6.131	54341	6.131	101 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	216585	9.189	219468	9.189	99	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	83877	12.174	87396	12.171	96	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL7)</b> Lab File ID: QV604451.D Analyzed: 02/26/18 21:17									
Fluorobenzene	57387	6.131	54341	6.131	106 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	221669	9.189	219468	9.189	101	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	87220	12.174	87396	12.171	100	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL8)</b> Lab File ID: QV604452.D Analyzed: 02/26/18 21:43									
Fluorobenzene	55386	6.131	54341	6.131	102 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	209615	9.191	219468	9.189	96	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	85159	12.174	87396	12.171	97	50 - 200	0.0030	+/-0.17	
<b>Cal Standard (Y8B2822-CAL9)</b> Lab File ID: QV604453.D Analyzed: 02/26/18 22:10									
Fluorobenzene	55457	6.128	54341	6.131	102 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	208158	9.191	219468	9.189	95	50 - 200	0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	85593	12.177	87396	12.171	98	50 - 200	0.0060	+/-0.17	





FORM VIII

INTERNAL STANDARD AREA AND RT SUMMARY  
EPA 8260C

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Sequence: Y8C1238 Instrument: QVOA6  
 Matrix: Water Calibration: YB80032

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
<b>Calibration Check (Y8C1238-CCV1)</b> Lab File ID: QV604735.D Analyzed: 03/12/18 13:02									
Fluorobenzene	54432	6.131				50 - 200		+/-0.17	
Chlorobenzene-d5	224712	9.188				50 - 200		+/-0.17	
1,2-Dichlorobenzene-d4	89967	12.174				50 - 200		+/-0.17	
<b>LCS (BC80492-BS1)</b> Lab File ID: QV604736.D Analyzed: 03/12/18 13:39									
Fluorobenzene	53111	6.131 ✓	54432	6.131	98 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	223874	9.189	224712	9.188	100	50 - 200	0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	86307	12.171	89967	12.174	96	50 - 200	-0.0030	+/-0.17	
<b>LCS Dup (BC80492-BSD1)</b> Lab File ID: QV604737.D Analyzed: 03/12/18 14:05									
Fluorobenzene	53595	6.131 ✓	54432	6.131	98 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	221309	9.189	224712	9.188	98	50 - 200	0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	91943	12.171	89967	12.174	102	50 - 200	-0.0030	+/-0.17	
<b>Blank (BC80492-BLK1)</b> Lab File ID: QV604739.D Analyzed: 03/12/18 14:58									
Fluorobenzene	57774	6.134 ✓	54432	6.131	106 ✓	50 - 200	0.0030	+/-0.17	
Chlorobenzene-d5	236992	9.186	224712	9.188	105	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	96405	12.174	89967	12.174	107	50 - 200	0.0000	+/-0.17	
<b>TRIP BLANK (18C0189-05)</b> Lab File ID: QV604745.D Analyzed: 03/12/18 17:59									
Fluorobenzene	55611	6.125 ✓	54432	6.131	102 ✓	50 - 200	-0.0060	+/-0.17	
Chlorobenzene-d5	213644	9.189	224712	9.188	95	50 - 200	0.0010	+/-0.17	
1,2-Dichlorobenzene-d4	83069	12.171	89967	12.174	92	50 - 200	-0.0030	+/-0.17	
<b>KC-MW-02 (0318) (18C0189-02)</b> Lab File ID: QV604746.D Analyzed: 03/12/18 18:25									
Fluorobenzene	49945	6.128 ✓	54432	6.131	92 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	205040	9.186	224712	9.188	91	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	83000	12.174	89967	12.174	92	50 - 200	0.0000	+/-0.17	
<b>KC-MW-05 (0318) (18C0189-03)</b> Lab File ID: QV604747.D Analyzed: 03/12/18 18:51									
Fluorobenzene	48648	6.128 ✓	54432	6.131	89 ✓	50 - 200	-0.0030	+/-0.17	
Chlorobenzene-d5	202965	9.186	224712	9.188	90	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	83840	12.171	89967	12.174	93	50 - 200	-0.0030	+/-0.17	
<b>KC-MW-01 (0318) (18C0189-01)</b> Lab File ID: QV604748.D Analyzed: 03/12/18 19:18									
Fluorobenzene	51199	6.131 ✓	54432	6.131	94 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	212955	9.188	224712	9.188	95	50 - 200	0.0000	+/-0.17	
1,2-Dichlorobenzene-d4	87617	12.171	89967	12.174	97	50 - 200	-0.0030	+/-0.17	
<b>KC-MW-DUP2 (0318) (18C0189-04)</b> Lab File ID: QV604749.D Analyzed: 03/12/18 19:44									
Fluorobenzene	49547	6.131 ✓	54432	6.131	91 ✓	50 - 200	0.0000	+/-0.17	
Chlorobenzene-d5	204559	9.186	224712	9.188	91	50 - 200	-0.0020	+/-0.17	
1,2-Dichlorobenzene-d4	82649	12.174	89967	12.174	92	50 - 200	0.0000	+/-0.17	

# INITIAL AND CONTINUING CALIBRATION CHECK

**EPA 6010C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: WinLabICP

Calibration: 03/13/18

Control Limit: +/- 10.00%

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R	Units	Method
Y8C1403-ICV1	Antimony	0.250	0.245	98.1	ug/mL	EPA 6010C
	Arsenic	0.250	0.243	97.3	ug/mL	EPA 6010C
	Beryllium	0.250	0.253	101	ug/mL	EPA 6010C
	Cadmium	0.125	0.120	96.4	ug/mL	EPA 6010C
	Chromium	1.00	0.997	99.7	ug/mL	EPA 6010C
	Copper	1.25	1.23	98.5	ug/mL	EPA 6010C
	Lead	0.250	0.246	98.3	ug/mL	EPA 6010C
	Nickel	2.50	2.46	98.3	ug/mL	EPA 6010C
	Selenium	0.250	0.259	103	ug/mL	EPA 6010C
	Silver	1.25	1.23	98.4	ug/mL	EPA 6010C
	Thallium	0.250	0.232	92.8	ug/mL	EPA 6010C
	Zinc	2.50	2.47	98.7	ug/mL	EPA 6010C
Y8C1403-CCV1	Antimony	0.250	0.250	100	ug/mL	EPA 6010C
	Arsenic	0.500	0.486	97.1	ug/mL	EPA 6010C
	Beryllium	0.250	0.252	101	ug/mL	EPA 6010C
	Cadmium	0.250	0.243	97.0	ug/mL	EPA 6010C
	Chromium	1.00	0.964	96.4	ug/mL	EPA 6010C
	Copper	1.25	1.19	95.5	ug/mL	EPA 6010C
	Lead	0.500	0.498	99.6	ug/mL	EPA 6010C
	Nickel	2.50	2.43	97.3	ug/mL	EPA 6010C
	Selenium	0.500	0.489	97.9	ug/mL	EPA 6010C
	Silver	1.25	1.19	95.3	ug/mL	EPA 6010C
	Thallium	0.500	0.498	99.7	ug/mL	EPA 6010C
	Zinc	2.50	2.44	97.7	ug/mL	EPA 6010C
Y8C1403-CCVD	Antimony	0.250	0.246	98.4	ug/mL	EPA 6010C
	Arsenic	0.500	0.486	97.1	ug/mL	EPA 6010C
	Beryllium	0.250	0.258	103	ug/mL	EPA 6010C
	Cadmium	0.250	0.242	96.6	ug/mL	EPA 6010C
	Chromium	1.00	0.963	96.3	ug/mL	EPA 6010C
	Copper	1.25	1.18	94.8	ug/mL	EPA 6010C
	Lead	0.500	0.496	99.2	ug/mL	EPA 6010C
	Nickel	2.50	2.43	97.3	ug/mL	EPA 6010C
	Selenium	0.500	0.493	98.7	ug/mL	EPA 6010C
	Silver	1.25	1.19	94.8	ug/mL	EPA 6010C
	Thallium	0.500	0.527	105	ug/mL	EPA 6010C
	Zinc	2.50	2.45	98.2	ug/mL	EPA 6010C
Y8C1403-CCVE	Antimony	0.250	0.251	101	ug/mL	EPA 6010C

# INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: WinLabICP

Calibration: 03/13/18

Control Limit: +/- 10.00%

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R ✓	Units	Method
Y8C1403-CCVE	Arsenic	0.500	0.497	99.4	ug/mL	EPA 6010C
	Beryllium	0.250	0.260	104	ug/mL	EPA 6010C
	Cadmium	0.250	0.242	96.9	ug/mL	EPA 6010C
	Chromium	1.00	0.966	96.6	ug/mL	EPA 6010C
	Copper	1.25	1.18	94.8	ug/mL	EPA 6010C
	Lead	0.500	0.510	102	ug/mL	EPA 6010C
	Nickel	2.50	2.45	97.8	ug/mL	EPA 6010C
	Selenium	0.500	0.506	101	ug/mL	EPA 6010C
	Silver	1.25	1.19	94.9	ug/mL	EPA 6010C
	Thallium	0.500	0.529	106	ug/mL	EPA 6010C
	Zinc	2.50	2.47	98.8	ug/mL	EPA 6010C
Y8C1403-CCVF	Antimony	0.250	0.256	102	ug/mL	EPA 6010C
	Arsenic	0.500	0.492	98.5	ug/mL	EPA 6010C
	Beryllium	0.250	0.262	105	ug/mL	EPA 6010C
	Cadmium	0.250	0.239	95.6	ug/mL	EPA 6010C
	Chromium	1.00	0.976	97.6	ug/mL	EPA 6010C
	Copper	1.25	1.21	96.7	ug/mL	EPA 6010C
	Lead	0.500	0.507	101	ug/mL	EPA 6010C
	Nickel	2.50	2.46	98.6	ug/mL	EPA 6010C
	Selenium	0.500	0.506	101	ug/mL	EPA 6010C
	Silver	1.25	1.20	96.3	ug/mL	EPA 6010C
	Thallium	0.500	0.533	107	ug/mL	EPA 6010C
	Zinc	2.50	2.46	98.5	ug/mL	EPA 6010C

\* Values outside of QC limits

**CRDL STANDARD**

**EPA 6010C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: WinLabICP

Calibration: 03/13/18

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limits
Y8C1403-CRL1	Antimony	0.0250	0.022	87.6	ug/mL	70 - 130
	Arsenic	0.0150	0.021	142 *	ug/mL	70 - 130
	Beryllium	0.000500	0.0004	84.9	ug/mL	70 - 130
	Cadmium	0.00300	0.003	101	ug/mL	70 - 130
	Chromium	0.00500	0.005	96.0	ug/mL	70 - 130
	Copper	0.0400	0.037	92.9	ug/mL	70 - 130
	Lead	0.00500	0.005	104	ug/mL	70 - 130
	Nickel	0.0100	0.009	88.4	ug/mL	70 - 130
	Selenium	0.0250	0.026	104	ug/mL	70 - 130
	Silver	0.0100	0.010	102	ug/mL	70 - 130
	Thallium	0.0250	0.030	118	ug/mL	70 - 130
	Zinc	0.0250	0.031	126	ug/mL	70 - 130

\* Values outside of QC limits

## FORM I

BLANKS  
EPA 6010CLaboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Instrument ID: WinLabICPProject: 41103.00 Task 0900 - Kingston CVS InvestigationSequence: Y8C1403Calibration: 03/13/18 1

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
Y8C1403-ICB1	Antimony	0.004	0.005	ug/mL		EPA 6010C
	Arsenic	0.002	0.004	ug/mL		EPA 6010C
	Beryllium	0.0003	0.001	ug/mL		EPA 6010C
	Cadmium	0.0004	0.003	ug/mL		EPA 6010C
	Chromium	0.001	0.005	ug/mL		EPA 6010C
	Copper	0.002	0.003	ug/mL		EPA 6010C
	Lead	-0.002	0.005	ug/mL		EPA 6010C
	Nickel	0.002	0.005	ug/mL		EPA 6010C
	Selenium	0.0007	0.010	ug/mL		EPA 6010C
	Silver	0.002	0.005	ug/mL		EPA 6010C
	Thallium	0.004	0.005	ug/mL		EPA 6010C
	Zinc	0.005	0.015	ug/mL		EPA 6010C
Y8C1403-CCB1	Antimony	0.003	0.005	ug/mL		EPA 6010C
	Arsenic	0.003	0.004	ug/mL		EPA 6010C
	Beryllium	0.00008	0.001	ug/mL		EPA 6010C
	Cadmium	0.0003	0.003	ug/mL		EPA 6010C
	Chromium	-0.0005	0.005	ug/mL		EPA 6010C
	Copper	-0.0001	0.003	ug/mL		EPA 6010C
	Lead	-0.002	0.005	ug/mL		EPA 6010C
	Nickel	-0.002	0.005	ug/mL		EPA 6010C
	Selenium	-0.001	0.010	ug/mL		EPA 6010C
	Silver	0.0002	0.005	ug/mL		EPA 6010C
	Thallium	0.006	0.005	ug/mL	*	EPA 6010C
	Zinc	-0.002	0.015	ug/mL		EPA 6010C
Y8C1403-CCBD	Antimony	0.0001	0.005	ug/mL		EPA 6010C
	Arsenic	0.005	0.004	ug/mL	*	EPA 6010C
	Beryllium	0.0005	0.001	ug/mL		EPA 6010C
	Cadmium	0.00009	0.003	ug/mL		EPA 6010C
	Chromium	-0.0001	0.005	ug/mL		EPA 6010C
	Copper	-0.002	0.003	ug/mL		EPA 6010C
	Lead	-0.003	0.005	ug/mL		EPA 6010C
	Nickel	0.002	0.005	ug/mL		EPA 6010C
	Selenium	0.003	0.010	ug/mL		EPA 6010C

**BLANKS**  
**EPA 6010C**

Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Instrument ID: WinLabICPProject: 41103.00 Task 0900 - Kingston CVS InvestigationSequence: Y8C1403Calibration: 03/13/18 1

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
Y8C1403-CCBD	Silver	-0.0004	0.005	ug/mL		EPA 6010C
	Thallium	0.007	0.005	ug/mL	*	EPA 6010C
	Zinc	-0.004	0.015	ug/mL		EPA 6010C
BC80552-BLK1	Antimony	0.002	0.006	mg/L		EPA 6010C
	Arsenic	-0.003	0.004	mg/L		EPA 6010C
	Beryllium	0.0003	0.001	mg/L		EPA 6010C
	Cadmium	-0.00002	0.003	mg/L		EPA 6010C
	Chromium	0.00001	0.006	mg/L		EPA 6010C
	Copper	-0.0004	0.003	mg/L		EPA 6010C
	Lead	-0.002	0.006	mg/L		EPA 6010C
	Nickel	-0.006	0.006	mg/L		EPA 6010C
	Selenium	0.010	0.011	mg/L		EPA 6010C
	Silver	0.0001	0.006	mg/L		EPA 6010C
	Thallium	0.00004	0.006	mg/L		EPA 6010C
	Zinc	-0.004	0.017	mg/L		EPA 6010C
Y8C1403-CCBE	Antimony	-0.003	0.005	ug/mL		EPA 6010C
	Arsenic	0.005	0.004	ug/mL	*	EPA 6010C
	Beryllium	0.0005	0.001	ug/mL		EPA 6010C
	Cadmium	0.0001	0.003	ug/mL		EPA 6010C
	Chromium	-0.0002	0.005	ug/mL		EPA 6010C
	Copper	-0.002	0.003	ug/mL		EPA 6010C
	Lead	-0.002	0.005	ug/mL		EPA 6010C
	Nickel	0.003	0.005	ug/mL		EPA 6010C
	Selenium	0.006	0.010	ug/mL		EPA 6010C
	Silver	0.0005	0.005	ug/mL		EPA 6010C
	Thallium	0.006	0.005	ug/mL	*	EPA 6010C
	Zinc	-0.003	0.015	ug/mL		EPA 6010C
Y8C1403-CCBF	Antimony	0.001	0.005	ug/mL		EPA 6010C
	Arsenic	0.005	0.004	ug/mL	*	EPA 6010C
	Beryllium	0.0004	0.001	ug/mL		EPA 6010C
	Cadmium	0.0002	0.003	ug/mL		EPA 6010C
	Chromium	-0.0001	0.005	ug/mL		EPA 6010C
	Copper	-0.001	0.003	ug/mL		EPA 6010C

**FORM I****BLANKS  
EPA 6010C**Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Instrument ID: WinLabICPProject: 41103.00 Task 0900 - Kingston CVS InvestigationSequence: Y8C1403Calibration: 03/13/18 1

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
Y8C1403-CCBF	Lead	-0.002 ✓	0.005	ug/mL		EPA 6010C
	Nickel	-0.001	0.005	ug/mL		EPA 6010C
	Selenium	0.0007	0.010	ug/mL		EPA 6010C
	Silver	0.0004	0.005	ug/mL		EPA 6010C
	Thallium	0.004	0.005	ug/mL		EPA 6010C
	Zinc	0.00008	0.015	ug/mL		EPA 6010C



# ICP INTERFERENCE CHECK SAMPLE

**EPA 6010C**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investiga

Instrument ID: WinLabICP

Calibration: 03/13/18

Sequence: Y8C1403

Lab Sample ID	Analyte	True	Found	%R	Units
Y8C1403-IFA1	Antimony		0.00		ug/mL
	Arsenic		0.00		ug/mL
	Beryllium		0.00		ug/mL
	Cadmium		0.00		ug/mL
	Chromium		0.00		ug/mL
	Copper		0.00		ug/mL
	Lead		0.00		ug/mL
	Nickel		0.00		ug/mL
	Selenium		0.00		ug/mL
	Silver		0.00		ug/mL
	Thallium		0.00		ug/mL
	Zinc		0.00		ug/mL
Y8C1403-IFB1	Antimony	0.500	0.52	103 ✓	ug/mL
	Arsenic	0.500	0.50	100	ug/mL
	Beryllium	0.500	0.53	105	ug/mL
	Cadmium	1.00	0.98	98.0	ug/mL
	Chromium	0.500	0.49	98.1	ug/mL
	Copper	0.500	0.53	107	ug/mL
	Lead	1.00	0.97	97.3	ug/mL
	Nickel	1.00	1.01	101	ug/mL
	Selenium	0.500	0.47	93.2	ug/mL
	Silver	1.00	1.06	106	ug/mL
	Thallium	0.500	0.52	104	ug/mL
	Zinc	1.00	0.97	96.8	ug/mL

\* Values outside of QC limits

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY**  
**EPA 6010C**

**KC-MW-01 (0318)**

Laboratory: York Analytical Laboratories, Inc.  
 Client: Chazen Environmental Services (Poughkeepsie)  
 Matrix: Water  
 Batch: BC80552  
 Preparation: EPA 3015A  
 Source Sample Name: KC-MW-01 (0318)

SDG: 18C0189  
 Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Laboratory ID: BC80552-MS1  
 Initial/Final: 45 mL / 50 mL

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC. #	QC LIMITS REC.
Antimony	0.278	ND	0.279	100 ✓	75 - 125
Arsenic	2.22	ND	2.20	99.0	75 - 125
Beryllium	0.0556	ND	0.056	101	75 - 125
Cadmium	0.0556	0.077	0.131	96.8	75 - 125
Chromium	0.222	0.011	0.222	95.0	75 - 125
Copper	0.278	0.009	0.283	98.4	75 - 125
Lead	0.556	ND	0.541	97.3	75 - 125
Nickel	0.556	0.190	0.754	101	75 - 125
Selenium	2.22	0.050	2.11	92.7	75 - 125
Silver	0.0556	ND	0.050	90.4	75 - 125
Thallium	2.22	ND	2.39	108	75 - 125
Zinc	0.556	0.154	0.666	92.2	75 - 125

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

# DUPLICATES

EPA 6010C

**KC-MW-01 (0318)**

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investi

Matrix: Water

Laboratory ID: BC80552-DUP1

Batch: BC80552

Lab Source ID: 18C0189-01

Preparation: EPA 3015A

Initial/Final: 45 mL / 50 mL

Source Sample Name: KC-MW-01 (0318)

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Antimony	20	ND		0.009				EPA 6010C
Arsenic	20	ND		ND				EPA 6010C
Beryllium	20	ND		ND				EPA 6010C
Cadmium	20	0.077		0.077		0.0408		EPA 6010C
Chromium	20	0.011		0.010		3.98		EPA 6010C
Copper	20	0.009		0.010		4.05		EPA 6010C
Lead	20	ND		ND				EPA 6010C
Nickel	20	0.190		0.188		1.10		EPA 6010C
Selenium	20	0.050		0.057		11.8		EPA 6010C
Silver	20	ND		ND				EPA 6010C
Thallium	20	ND		ND				EPA 6010C
Zinc	20	0.154		0.155		0.485		EPA 6010C

\* Values outside of QC limits

# STANDARD REFERENCE MATERIAL RECOVERY

EPA 6010C

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investi

Matrix: Water

Batch: BC80552

Laboratory ID: BC80552-SRM1

Preparation: EPA 3015A

Initial/Final: 45 mL / 50 mL

ANALYTE	TRUE (ug/mL)	FOUND (ug/mL)	SRM % REC. ✓	QC LIMITS REC.
Antimony	0.420	0.419	99.7	76.9 - 119.2
Arsenic	0.740	0.737	99.6	84.3 - 114.3
Beryllium	0.460	0.478	104	85 - 115
Cadmium	0.240	0.232	96.8	84.9 - 115
Chromium	0.860	0.854	99.3	85 - 115
Copper	0.320	0.316	98.9	85 - 115
Lead	0.640	0.651	102	85 - 115
Nickel	1.78	1.78	100	87 - 113.7
Selenium	0.680	0.716	105	85.1 - 115.1
Silver	0.600	0.574	95.7	85 - 115
Thallium	0.680	0.724	107	82.8 - 115.4
Zinc	1.62	1.54	95.0	84.9 - 115

\* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

EPA 7473

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investigation

Instrument ID: DMA 80-01

Calibration: 03/13/18

Control Limit: +/- %

Sequence: Y8C1335

Lab Sample ID	Analyte	True	Found	%R	Units	Method
Y8C1335-CCV1	Mercury	0.0100	0.00909	90.9 ✓	mg/L	EPA 7473
Y8C1335-CCV2	Mercury	0.0100	0.0103	103	mg/L	EPA 7473
Y8C1335-CCV3	Mercury	0.0100	0.00986	98.6	mg/L	EPA 7473
Y8C1335-CCV4	Mercury	0.0100	0.00987	98.7	mg/L	EPA 7473

\* Values outside of QC limits

**FORM I****BLANKS  
EPA 7473**Laboratory: York Analytical Laboratories, Inc.SDG: 18C0189Client: Chazen Environmental Services (Poughkeepsie)Instrument ID: DMA 80-01Project: 41103.00 Task 0900 - Kingston CVS InvestigationSequence: Y8C1335Calibration: 03/13/18 1

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
Y8C1335-CCB1	Mercury	0.00018 ✓	0.00020	mg/L		EPA 7473
BC80531-BLK1	Mercury	0.00004	0.00020	mg/L		EPA 7473
Y8C1335-CCB2	Mercury	0.00016	0.00020	mg/L		EPA 7473
Y8C1335-CCB3	Mercury	0.00017	0.00020	mg/L		EPA 7473
Y8C1335-CCB4	Mercury	0.00018	0.00020	mg/L		EPA 7473

**FORM I****METHOD BLANK DATA SHEET  
EPA 7473**

Laboratory: York Analytical Laboratories, Inc. SDG: 18C0189  
 Client: Chazen Environmental Services (Poughkeepsie) Project: 41103.00 Task 0900 - Kingston CVS Investigation  
 Matrix: Water Laboratory ID: BC80531-BLK1 File ID: QBHgDMA80-01\_031318a-013  
 Prepared: 03/13/18 09:12 Preparation: EPA 7473 water Initial/Final: 0.25 mL / 0.25 mL  
 Analyzed: 03/13/18 14:01 Instrument: DMA 80-01  
 Batch: BC80531 Sequence: Y8C1335 Calibration: UNASSIGNED

CAS NO.	COMPOUND	CONC. (mg/L)	Q
7439-97-6	Mercury	0.00020	U ✓

# STANDARD REFERENCE MATERIAL RECOVERY

EPA 7473

Laboratory: York Analytical Laboratories, Inc.

SDG: 18C0189

Client: Chazen Environmental Services (Poughkeepsie)

Project: 41103.00 Task 0900 - Kingston CVS Investi

Matrix: Water

Batch: BC80531

Laboratory ID: BC80531-SRM1

Preparation: EPA 7473 water

Initial/Final: 0.1 mL / 0.1 mL

ANALYTE	TRUE (mg/L)	FOUND (mg/L)	SRM % REC.	QC LIMITS REC.
Mercury	0.0100	0.0100	100	70 - 130

\* Values outside of QC limits