FINAL
2021 ANNUAL PERFORMANCE MONITORING REPORT
ON-BASE GROUNDWATER REMEDIATION
FORMER GRIFFISS AIR FORCE BASE
ROME, NEW YORK

December 2022

Prepared For:



Air Force Civil Engineer Center
Building 171
2261 Hughes Avenue, Suite 155
JBSA Lackland, TX 78236-9853

Contract/Task Order No.: FA8903-20-D-0001
Document Control No.: NEBECOS-0193-GRI

Prepared By:

bhate

1608 13th Avenue South, Suite 300
Birmingham, Alabama 35205
1-800-806-4001 • www.bhate.com

This page intentionally left blank.

TABLE OF CONTENTS

Acronyms and Abbreviations iii

1 Introduction 1-1

1.1 Objectives 1-1

2 SD052-01 Apron 2 Chlorinated Plume 2-1

2.1 Site Background 2-1
2.2 Remedial Action Summary 2-1
2.3 PM Sampling Plan 2-2
2.4 Field Activities 2-2
2.5 PM Results 2-2
2.6 Analysis and Discussion 2-4
2.6.1 Data Validation Summary 2-4
2.6.2 Trend Charts 2-5
2.7 Conclusions 2-5
2.7.1 Impacts of AP2HW-1 Shut Down 2-6
2.8 Recommendations 2-6

3 References 3-1

LIST OF FIGURES

Figure 1-1 CERCLA Groundwater AOCs Site Map
Figure 2-1 SD052-01 Apron 2 Chlorinated Plume Site Map
Figure 2-2 SD052-01 Apron 2 Chlorinated Plume Potentiometric Surface Map (November 2021)
Figure 2-3 SD052-01 Apron 2 Chlorinated Plume Map (November 2021)
Figure 2-4 SD052-01 Apron 2 Trend Chart for 782VMW-105B
Figure 2-5 SD052-01 Apron 2 Trend Chart for 782VMW-81
Figure 2-6 SD052-01 Apron 2 Trend Chart for 782VMW-121D
Figure 2-7 SD052-01 Apron 2 Trend Chart for 782VMW-101

LIST OF TABLES

Table 1-1 Remedial Action Objectives
Table 2-1 Site SD052-01 Apron 2 Detected Groundwater Sampling Results
Table 2-2 Site SD052-01 Apron 2 Detected Surface Water Sampling Results
Table 2-3 Site SD052-01 Apron 2 Water Level Measurements (November 2021)

LIST OF APPENDICES

Appendix A Field Forms
Appendix B Data Validation Report
Appendix C Laboratory Data Package

ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AFRPA	Air Force Real Property Agency
AOC	Area of Concern
Bhate	Bhate Environmental Associates, Inc.
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Chemicals of Concern
CVOC	Chlorinated volatile organic compound
D	Diluted
DCE	Dichloroethene
DO	Dissolved oxygen
ERD	Enhanced reductive dechlorination
FPM	FPM Remediations, Inc.
ft	Feet
J	Estimated
LTM	Long term monitoring
mg/L	Milligrams per liter
MNA	Monitored natural attenuation
MTBE	Methyl tert-butyl ether
mV	Millivolt
µg/L	Micrograms per liter
ND	Not detected
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
OBGW	On-Base Groundwater
ORP	Oxidation reduction potential
Parsons	Parsons Government Services or Parsons Infrastructure & Technology Group, Inc.
pH	Potential of hydrogen
PM	Performance Monitoring
QAPP	Quality Assurance Project Plan
QA	Quality assurance
QC	Quality control
RAO	Remedial Action Objective
ROD	Record of Decision

SMC	Six Mile Creek
TCE	Trichloroethene
UFP	Uniform Federal Policy
VC	Vinyl chloride
VOC	Volatile Organic Compound

1 INTRODUCTION

Environmental Chemical Corporation and team member Bhate Environmental Associates, Inc. (Bhate) were retained by the Air Force Civil Engineer Center, under Contract Number FA8903-20-D-0001, to conduct environmental remediation activities at the former Griffiss Air Force Base (AFB) located in Rome, New York. This Annual Performance Monitoring (PM) Report has been prepared as part of the ongoing PM being conducted at the following Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites at former Griffiss AFB:

- SD052-01: The Nosedocks/Apron 2 Chlorinated Plume
- SD052-02: Building 775/Pumphouse 3
- SD052-04: Landfill 6 Trichloroethene (TCE) Site
- SD052-05: Building 817/Weapon Storage Area Site
- Site SS062: Area of Concern (AOC) 9

The site locations are presented on **Figure 1-1.** This report presents and assesses site activities and groundwater monitoring data from the 2021 PM sampling at one of the CERCLA sites; SD052-01. The sampling schedules for Sites SD052-02, SD052-04, SD052-05, and SS062 are biennial and were not sampled in 2021. A summary of Remedial Action Objectives (RAOs) for SD052-01 is provided in **Table 1-1**. Bhate performed the sampling as detailed in previous annual reports and in accordance with the Final Basewide Uniform Federal Policy (UFP)-Quality Assurance Project Plan (QAPP) Long Term Monitoring (LTM) (Bhate, April 2022). The groundwater sampling forms are included in **Appendix A**, the data validation reports are presented in **Appendix B**, and the laboratory data packages are included in **Appendix C**. Select, representative monitoring well results are evaluated using trend charts. Discussion of the 2021 groundwater and surface water sampling results includes comparison to the last round of sampling results from 2019.

1.1 Objectives

The objective of PM is to maintain compliance with the Record of Decision (ROD) (Air Force Real Property Agency [AFRPA], December 2008) requirement to "evaluate effectiveness of the remedy" through "long term monitoring of the groundwater plume and treatment performance during implementation". Groundwater and surface water data is also used to support decision making and assessment of the implemented remedies. This report contains the following required information:

- Summary of field sampling activities
- Data assessment information including data validation reports and raw laboratory results
- Updated plume and water level contour maps
- Summary of analytical results
- Trend charts

The above requirements are addressed in the following sections:

- Site Background
- Remedial Action Summary
- PM Sampling Plan
- Field Activities
- PM Results
- Analysis and Discussion
- Conclusions
- Recommendations

2 SD052-01 APRON 2 CHLORINATED PLUME

2.1 Site Background

Site SD052-01 is a chlorinated volatile organic compound (CVOC) plume in the Apron 2 area that is approximately 2,800 feet (ft) long and 500 ft wide and appears to originate in the area of the nosedock wash waste water system near Building 786 (FPM Remediations, Inc. [FPM], April 2004) (**Figure 2-1**). Use of chlorinated solvents probably occurred in all nosedock facilities and multiple small sources could exist along floor drains, sewer lines, and oil water separators (FPM, February 2016). There are three primary contaminants exceeding New York State (NYS) Class GA Groundwater Standards (New York State Department of Environmental Conservation [NYSDEC], February 2008): TCE and its breakdown products cis-1,2-dichloroethene (DCE) and vinyl chloride (VC). The plume was commingled with several former but currently closed petroleum fuel plumes, including SS064, originating from the Apron 2 fueling system resulting in significant reductions of TCE and cis-1,2-DCE via anaerobic biodegradation (FPM, April 2004).

The contaminated aquifer, as described in the 2004 Remedial Investigation (FPM, April 2004) is located at 9 to 25 ft below ground surface with the shallow depth occurring in the vicinity of Six Mile Creek (SMC). The aquifer is composed of several well-defined layers including a silty-sand layer in the upper 5 ft; a 5 to 15-ft thick coarse sand and gravel layer in the middle of the aquifer; and a 15 to 20-ft thick layer of till composed of fine sand, silt, and gravel resting on the shale bedrock. The total aquifer thickness ranges from 45 ft in the source areas to less than 20 ft in the downgradient areas near SMC. Although the site has a relatively flat gradient, the high hydraulic conductivity of gravel layers has produced an estimated average groundwater velocity of 106 ft per year (FPM, August 2006). This velocity seems reasonable given the 2,800 ft CVOC plume has migrated. Monitored natural attenuation (MNA) with institutional controls and LTM is the selected remedy as detailed in the Final ROD for the On-Base Groundwater (OBGW) AOC (SD052) (AFRPA, December 2008). VC in the southern plume had migrated eastward to monitoring well 782VMW-101 near SMC (FPM, June 2015), however, aerobic degradation of VC is occurring near the leading edge of the plume. **Figure 2-1** presents the site and the monitoring well locations.

2.2 Remedial Action Summary

In accordance with the Final ROD, the Final Remedial Action Work Plan (Parsons Government Services [Parsons], July 2008) specifies MNA as the selected remedy using the ongoing physical, chemical, and natural biological process to reduce the contaminants within the aquifer. Based on previous investigations and studies, it has been determined that natural attenuation is occurring at Site SD052-01.

In June 2017, an enhanced reductive dechlorination (ERD) pilot study in accordance with the Remedial Optimization Work Plan (Bhate, March 2017) was completed to evaluate enhancing the MNA with additional substrate and bioaugmentation. Implementation of the ERD pilot study included injections of emulsified vegetable oil, an inoculum of dehalococcoides culture, and buffer into the groundwater via seven direct-push technology injection locations. Injection points 782IP-01 through 782IP-07 were advanced in the area of monitoring wells 782VMW-81

and 782VMW-105B. A summary of the pilot study ERD injections can be found in the 2017 Annual PM Report OBGW Remediation (Bhate, June 2018).

The Final 2018 OBGW report (Bhate, October 2019) recommended terminating the operation of horizontal sparge well AP2HW-1 (**Figure 2-1**) as it was not integral to site cleanup. AP2HW-1 was associated with the petroleum spill site SS064 which was closed in 2015 (NYSDEC, September 2015). The sparge continued to operate after the closure of SS064 as an optional contingency to prevent the SD052-01 VOC plume from reaching SMC. AP2HW-1 was part of a two well system that included horizontal sparge well 789HW-1, associated with petroleum spill site SS067. Approval was obtained during the July 2019 Base Realignment and Closure (BRAC) Cleanup Team meeting for shut down of both wells. Operation of the system fully ceased on 31 July 2019.

2.3 PM Sampling Plan

The 2021 PM was conducted in accordance with the 2016 Final UFP-QAPP (Bhate, November 2016), the sampling plan modifications made following regulatory approval of the annual OBGW reports recommendations, and the 2022 Final UFP-QAPP. The 2021 PM included sampling of 5 monitoring wells and one surface water location, shown on **Figure 2-1**. The locations are sampled to monitor the progress of the MNA remedy at the site.

2.4 Field Activities

The 2021 PM sampling round was performed on 16 November 2021. The 2021 samples were collected from five monitoring wells (782VMW-81, -101, -105B, -121D, and AP2MW-3) and one surface water sampling location (782SW-115). Monitoring well 782VMW-121D was inadvertently sampled due to field misidentification with 782VMW-121, located directly adjacent. Prior to and during purging, water levels were recorded at each monitoring well. The monitoring wells were sampled using a 12-volt monsoon pump (except for 782VMW-105B which was sampled using a 12-volt peristaltic pump) connected with disposable tubing to a flow-through cell containing a Horiba water quality meter that was used to obtain field parameter measurements. Field parameters collected include oxidation reduction potential (ORP), temperature, dissolved oxygen (DO), potential of hydrogen (pH), conductivity, turbidity, and water levels. The field parameters are discussed in Section 2.6, Analysis and Discussion. Field measurements collected for temperature, conductivity, and turbidity are primarily used for establishing groundwater stability before sample collection and are not reported in the table of results. These measurements were recorded on the groundwater sampling forms, presented in **Appendix A**. The surface water sample was collected using an amber glass sampling bottle and field parameters were not recorded. Groundwater and surface water samples were analyzed for volatile organic compounds (VOCs) by United States Environmental Protection Agency Method SW8260B.

2.5 PM Results

The Site SD052-01 Apron 2 Chlorinated Plume groundwater analytical results are provided in **Table 2-1**. Surface water analytical results are presented in **Table 2-2**. **Figure 2-2** presents the November 2021 potentiometric surface map. The groundwater elevation measurements used to develop the map are presented in **Table 2-3**. **Figure 2-3** presents the approximate CVOC plume

observed at SD052-01 in November 2021. The following bullets detail the analytical data from the 2021 sampling event and the field-measured water quality parameters. The exceedances of the NYS Class GA Groundwater Standards for TCE (5 micrograms per liter [µg/L]), and its breakdown compounds, cis-1,2-DCE (5 µg/L) and VC (2 µg/L), are presented from the source area in the vicinity of Building 786 towards SMC which is approximately 2,800 ft downgradient. Other VOC concentrations and exceedances can be found in **Table 2-1**. Data validation reports are attached in **Appendix B** and the laboratory data packages are provided in **Appendix C.**

- 782VMW-105B results reported not detected (ND) for all analytes, including TCE, cis-1,2-DCE, and VC. This is a decrease from the June 2019 detections of TCE (at 7.4 µg/L) and cis-1,2-DCE (at 1.8 µg/L). The ORP increased to -126 millivolts (mV) from -166 mV in June 2019, the DO decreased to 0.68 milligrams per liter (mg/L) from 1.34 mg/L, and the pH remained in the near-neutral range at 7.31.
- 782VMW-81 results reported ND for TCE. The reported cis-1,2-DCE concentration of 28.3 µg/L exceeded the 5 µg/L standard. This was a decrease from the June 2019 result of 33 µg/L. The VC concentration exceeded the 2 µg/L standard at 4.6 µg/L, which was unchanged from the June 2019 concentration. The ORP increased to -72 mV from -114 mV in June 2019, the DO decreased to 0.37 mg/L from 2.29 mg/L, and the pH remained in the near-neutral range at 7.18.
- 782VMW-121D results reported ND for TCE and cis-1,2-DCE. VC was reported in exceedance at a concentration of 14.9 µg/L. This was an increase from the June 2019 result of 9.9 µg/L. The ORP increased to -37 mV from -147 mV in June 2019, the DO decreased to 0.26 mg/L from 0.51 mg/L, and the pH remained in the near-neutral range at 6.90.
- AP2MW-3 (which is located south of the distal end of the VC plume and is cross-gradient from 782VMW-121D) results reported ND for TCE, cis-1,2-DCE, and VC. Analytical results also indicated that benzene and methyl tert-butyl ether (MTBE) were present at concentrations of 252 diluted (D) µg/L and 12 µg/L, respectively, which is in exceedance of their standards of 1 µg/L and 10 µg/L, respectively. These values are within the historical range of observed concentrations. The ORP increased to -79 mV from -160 mV in June 2019, the DO was stable at 0.58 mg/L compared to 0.54 mg/L, and the pH remained in the near-neutral range at 6.95.
- 782VMW-101 results reported ND for TCE and cis-1,2-DCE. Analytical results also indicated that VC was reported in exceedance at the same concentration, 2.6 µg/L, as was reported in June 2019. The ORP increased to -38 mV from -72 mV in June 2019, the DO decreased to 0.36 mg/L from 0.52 mg/L, and the pH remained in the near-neutral range at 7.04.
- Surface waters were sampled from one location at SMC, 782SW-115, situated just downgradient from 782VMW-101 (Figure 2-3). Chloroform was detected at 0.85 estimated (J) µg/L during the November 2021 sampling event. Chloroform has been detected at this location since sampling began in 2006 but has not exceeded the NYS Class GA Groundwater Standard of 7 µg/L.

2.6 Analysis and Discussion

Three VOCs have consistently exceeded the NYS Class GA Groundwater Standards: TCE and its daughter products cis-1,2-DCE and VC. The 2021 annual sampling event did not produce detections of TCE. Exceedances of cis-1,2-DCE were reported at one monitoring well, 782VMW-81, and exceedances of VC were reported at monitoring wells: 782VMW-81, -101, and -121D. Exceedances of benzene and MTBE were reported in the sample from AP2MW-3, however since 2008 samples at this monitoring well have been ND for chlorinated solvents.

The ND of TCE reported across the site, particularly at 782VMW-105B, and the presence of TCE daughter products cis-1,2-DCE and VC in the plume suggests that reductive dechlorination is still occurring.

Geochemical parameters used to monitor conditions for anaerobic bioremediation include DO, ORP, and pH. These parameters can be conducive to the bioremediation process or prohibitive (prevent biologic activity). Conducive values are, ORP less than -100 mV, DO less than 0.5 mg/L, and pH between 5 and 9 (Parsons, August 2004). Prohibitive values are ORP greater than 0 mV, DO greater than 1.0 mg/L, and pH less than 5.

ORP field measurements were negative within the plume with values ranging from -126 mV at 782VMW-105B to -37 mV at 782VMW-121D. Each of the sampled wells had a negative ORP. Monitoring well 782VMW-105B had an ORP considered to be 'conducive' to anaerobic bioremediation, however the other wells sampled in November 2021 did not have ORP values considered to be 'prohibitive' to anaerobic bioremediation.

The DO ranged from 0.26 mg/L at 782VMW-121D to 0.68 mg/L at 782VMW-105B, indicating that anaerobic conditions supportive of anaerobic bioremediation of cis-1,2-DCE and VC are present throughout the plume.

The pH field measurements in the near neutral range also indicate that conditions are conducive to anaerobic bioremediation throughout the plume.

The chloroform detection in surface water sample 782SW-115 is not related to the SD052-01 plume. This detection is attributed to storm water runoff, as SMC receives storm water from the southern and eastern sections of the former Griffiss AFB, which is considered an industrial watershed. Chloroform, when it has been found in the surface water samples, has been well below the NYS Class GA Groundwater Standard.

2.6.1 Data Validation Summary

All the laboratory data analyzed at SD052-01 was validated by the Bhate Project Chemist. Field quality assurance (QA)/quality control (QC) samples, including trip blank, ambient blank and field duplicate were collected to document field QA/QC. SGS North America Inc., Dayton, New Jersey performed the analysis of all samples collected.

There were no QC issues identified during the data validation of the laboratory results. All the data were determined to be usable without qualifications.

The following provides a description of data qualifiers used by the laboratory.

- U – The analyte was analyzed but ND
- J – The analyte was positively identified; the result was detected between the limit of detection and the limit of quantitation

2.6.2 Trend Charts

As shown in **Table 2-1**, three VOCs exceeded the NYS Class GA Groundwater Standards on a regular basis at the SD052-01 Apron 2 Chlorinated Plume Site: TCE; cis-1,2-DCE; and VC. Trend charts for select wells were prepared which include each of these three CVOCs versus time and are included as **Figure 2-4** through **Figure 2-7**. These trend charts include the CVOC analytical results from previous investigations for the monitoring wells, dating back to 2006. Petroleum VOCs exceeding the NYS Class GA Groundwater Standards were excluded from the trend analysis.

The trend chart for the source area (782VMW-105B, **Figure 2-4**) demonstrates that the TCE, cis-1,2-DCE, and VC concentrations have decreased to ND. Approximately 250 ft downgradient of the source area, at monitoring well 782VMW-81 (**Figure 2-5**), TCE was also observed to have decreased to ND. An increase in the cis-1,2-DCE concentration in well 782VMW-81 was observed following the 2017 injections, from 23.0 J µg/L in 2016 to 53 J µg/L in 2018, but has decreased in 2021 to 28.3 µg/L. At monitoring well 782VMW-121D, located 3,000 ft downgradient of the source area, near the toe of the plume, TCE and cis-1,2-DCE remained ND and the VC concentration indicates a slightly increasing trend in the deep aquifer (**Figure 2-6**). At the most downgradient monitoring well, 782VMW-101 (**Figure 2-7**), VC has historically been detected at concentrations ranging from 0.47 µg/L to 5.77 µg/L. The concentration in 2021 was 2.6 µg/L which, while an exceedance, is well within the historical range and unchanged from the June 2019 detection.

2.7 Conclusions

The selected remedy at the SD052-01 Apron 2 Chlorinated Plume Site is MNA, which results in slow changes at the site, typically over an extended period of time. The TCE plume has degraded below the NYS Class GA Groundwater Standard and is no longer detected at the site. The TCE daughter product, cis-1,2-DCE, is found in the upper/middle portion of the plume and the daughter product, VC, is found in exceedance throughout the plume. The cis-1,2-DCE concentrations have decreased throughout the portion of the plume where it is found while the VC concentrations in those areas have generally increased or remained stable. This indicates that cis-1,2-DCE, where present, continues to degrade to VC. Degradation of VC is likely occurring anaerobically throughout the plume. The observed buildup of VC in some wells is likely due to the inability of the microbes to keep pace with the production of the new VC being created from the breakdown of cis-1,2-DCE.

The MNA remedy is supported by the lack of detections of TCE in 2021. Additionally, the observed decreasing concentration trends for the daughter product cis-1,2-DCE paired with the concurrent increasing trends for VC, demonstrates that CVOC degradation continues across the site.

The surface water from SMC is not impacted, based upon the results of the surface water monitoring, where no detections were reported above NYS Class GA Groundwater Standards.

The lack of detections in the SMC sample confirms the site is compliant with the specific RAO which states VC concentration in SMC samples must remain below 2 µg/L.

2.7.1 Impacts of AP2HW-1 Shut Down

Horizontal sparge line, AP2HW-1, fully ceased operation on 31 July 2019. The main purpose of the biosparge well was to prevent petroleum compounds associated with former spill site SS064, now closed (NYSDEC, September 2015), from reaching SMC. The well location is cross-gradient to the distal end of the VC plume at SD052-01 (**Figure 2-3**). Although the ROD for site SD052-01 specifies that air sparging may be used as a possible contingency measure in the event that VC concentrations in SMC exhibit an increasing trend (AFRPA, December 2008), the operation was not necessary for VC migration control. Recommendations for shut down of AP2HW-1 in the 2018 OBGW included continued surface water monitoring for any increase in VC concentrations in SMC. PM sampling in 2021 indicates that shut down of AP2HW-1 has not negatively impacted SMC, as VC has not been observed in samples collected from SMC.

2.8 Recommendations

In accordance with the UFP-QAPP (Bhate, November 2016) and the Final Remedial Optimization Work Plan (Bhate, March 2017), and following evaluation of the 2019 and 2021 data, the sampling plan at SD052-01 should proceed on a biennial basis. However, the sampling schedule should be aligned with the biennial sampling at the other OBGW sites and thus the next PM sampling round is planned for the Fall of 2022. Sampling should be conducted at the following locations:

- Upgradient/source area monitoring well 782VMW-105B
- Head of plume area monitoring well 782VMW-81
- Toe of plume area monitoring well 782VMW-121
- Cross gradient monitoring well AP2MW-3
- Downgradient area monitoring well 782VMW-101
- SMC surface water sampling location 782SW-115

3 REFERENCES

AFRPA. December 2008. *Final Record of Decision for the On-base Groundwater AOC (SD-052) at the Former Griffiss Air Force Base, Rome, New York.*

Bhate. November 2016. *Final 2016 Update Uniform Federal Policy – Quality Assurance Project Plan for Performance Monitoring at On-Base Groundwater Areas of Concern Former Griffiss Air Force Base Rome, New York.*

Bhate. March 2017. *Remedial Optimization Work Plan On-Base Groundwater Areas of Concern Former Griffiss Air Force Base, Rome, New York.*

Bhate. June 2018. *2017 Annual Performance Monitoring Report On-Base Groundwater Remediation Former Griffiss Air Force Base Rome, New York.*

Bhate. October 2019. *2018 Annual Performance Monitoring Report On-Base Groundwater Remediation Former Griffiss Air Force Base Rome, New York.*

Bhate. April 2022. *Final Basewide Uniform Federal Policy-Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base Rome, New York.*

FPM. April 2004. *Final Remedial Investigation Report, Nosedocks/Apron 2 Chlorinated Plume, Former Griffiss Air Force Base, Rome, New York*.

FPM. August 2006. *Final Groundwater Feasibility Study, Nosedocks/Apron 2 Chlorinated Plume, Former Griffiss Air Force Base, Rome, New York*.

FPM. June 2015. *Final Spring 2014 Annual Report, On-Base Groundwater Remediation, Performance Monitoring, Former Griffiss Air Force Base, Rome, New York.*

FPM. February 2016. Draft *Spring 2015 Annual Report, Performance Monitoring, On-Base Groundwater Remediation, Performance Monitoring, Former Griffiss Air Force Base, Rome, New York.*

NYSDEC. February 16, 2008. Amendments to Water Quality Standards Regulations (6 New York Codes, Rules, and Regulations Parts 700 -704).

NYSDEC. September 2015. *Site Closeout Letter for Site SS064, September 2015, Former Griffiss Air Force Base, Rome, New York.*

Parsons. August 2004. *Principles and Practices of Enhanced Anaerobic Bioremediation of Chlorinated Solvents.*

Parsons. July 2008. *Final Remedial Action Work Plan, On-Base Groundwater Remediation Work Plan, Former Griffiss Air Force Base, Rome, New York*.

This page intentionally left blank.

FIGURES

This page intentionally left blank.

Figures

CERCLA Groundwater AOCs
Site Map

Figure 1-1

2021 Annual Performance Monitoring Report
On-Base Groundwater Remediation
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM

DATE: 8/10/2022

SCALE: As Shown

PROJECT NO: MSC2021.0012.1008.0002

bhate

www.bhate.com

This page intentionally left blank.

Figures

SD052-01 Apron 2 Chlorinated Plume Site Map

Figure 2-1

2021 Annual Performance Monitoring Report
On-Base Groundwater Remediation
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM

DATE: 10/19/2022

SCALE: As Shown

PROJECT NO: MSC2021.0012.1008.0002

bhate

www.bhate.com

782MW-3
782MW-3R
782MW-12
782VMW-86
782MW-11
782MW-1R
782MW-1
782VMW-89
782MW-9
782VMW-90
782VMW-85
782MW-5
782VMW-95
782MW-6R2
782MW-6D
782VMW-88
782VMW-100
782VMW-84
782-MW184
782VMW-84D
782VMW-121
782VMW-121D
782VMW-94
782MW-10
782VMW-87
SD052-01
782VMW-101
782SW-115
782VMW-78
782VMW-96
782VMW-93
AP2MW-3
AP2HW-1
782VMW-82
782VMW-92
782VMW-76
782SW-118
782VMW-102
782VMW-81
782SW-119
782VMW-105B
782VMW-104
782VMW-83
782VMW-97
782VMW-98
782VMW-99
Six Mile Creek
Approximate Direction of Groundwater Flow

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

0 125 250 500 Feet

Legend:
- 2021 Performance Monitoring Sample Location
- Monitoring Well Location
- Surface Water Sample Location
- Installation Restoration Program (IRP) Area
- Horizontal Well Screen (Below Ground)
- Horizontal Well Piping (Aboveground)
- Horizontal Well Piping (Below Ground)
- 5657 Building Number
- 0781 Demolished Building Location

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

This page intentionally left blank.

Figures

SD052-01 Apron 2 Chlorinated Plume
Potentiometric Surface Map
(November 2021)

Figure 2-2

2021 Annual Performance Monitoring Report
On-Base Groundwater Remediation
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM

DATE: 8/10/2022

SCALE: As Shown

PROJECT NO: MSC2021.0012.1008.0002

bhate

www.bhate.com

SD052-01

782VMW-121D (448.36)

782VMW-101 (445.93)

AP2MW-3 (447.73)

AP2HW-1

782VMW-81 (459.27)

782VMW-105B (461.45)

460.00

455.00

450.00

6389C

5730

5340

0782

0783

0784

0785

0786

8004

N0763

N0758

0789

0787

0793

0799

N0727

0775

0774

0795

0797

0745

Six Mile Creek

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

0 125 250 500
Feet

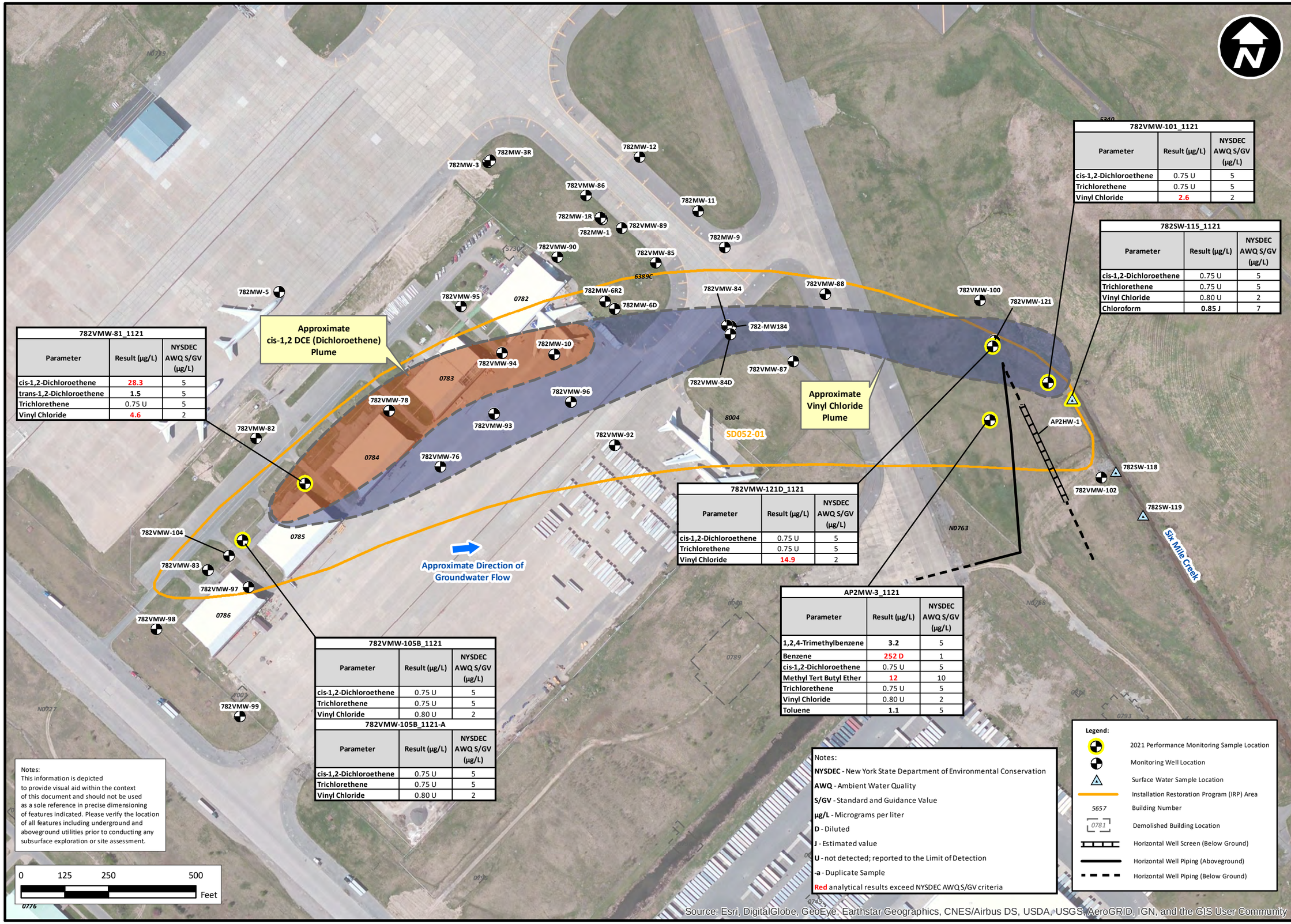
Legend:

- Monitoring Well Location
- Installation Restoration Program (IRP) Area
- (447.73) Potentiometric Surface Elevation in Feet Above Mean Sea Level
- Potentiometric Surface Contour
- Direction of Groundwater Flow
- Horizontal Well Screen (Below Ground)
- Horizontal Well Piping (Aboveground)
- Horizontal Well Piping (Below Ground)
- 5657 Building Number
- 0781 Demolished Building Location

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

This page intentionally left blank.

Figures



782VMW-81_1121		
Parameter	Result (µg/L)	NYSDEC AWQ S/GV (µg/L)
cis-1,2-Dichloroethene	28.3	5
trans-1,2-Dichloroethene	1.5	5
Trichlorethene	0.75 U	5
Vinyl Chloride	4.6	2

782VMW-101_1121		
Parameter	Result (µg/L)	NYSDEC AWQ S/GV (µg/L)
cis-1,2-Dichloroethene	0.75 U	5
Trichlorethene	0.75 U	5
Vinyl Chloride	2.6	2

782SW-115_1121		
Parameter	Result (µg/L)	NYSDEC AWQ S/GV (µg/L)
cis-1,2-Dichloroethene	0.75 U	5
Trichlorethene	0.75 U	5
Vinyl Chloride	0.80 U	2
Chloroform	0.85 J	7

782VMW-121D_1121		
Parameter	Result (µg/L)	NYSDEC AWQ S/GV (µg/L)
cis-1,2-Dichloroethene	0.75 U	5
Trichlorethene	0.75 U	5
Vinyl Chloride	14.9	2

AP2MW-3_1121		
Parameter	Result (µg/L)	NYSDEC AWQ S/GV (µg/L)
1,2,4-Trimethylbenzene	3.2	5
Benzene	252 D	1
cis-1,2-Dichloroethene	0.75 U	5
Methyl Tert Butyl Ether	12	10
Trichlorethene	0.75 U	5
Vinyl Chloride	0.80 U	2
Toluene	1.1	5

782VMW-105B_1121		
Parameter	Result (µg/L)	NYSDEC AWQ S/GV (µg/L)
cis-1,2-Dichloroethene	0.75 U	5
Trichlorethene	0.75 U	5
Vinyl Chloride	0.80 U	2

782VMW-105B_1121-A		
Parameter	Result (µg/L)	NYSDEC AWQ S/GV (µg/L)
cis-1,2-Dichloroethene	0.75 U	5
Trichlorethene	0.75 U	5
Vinyl Chloride	0.80 U	2

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

0 125 250 500 Feet

Notes:
NYSDEC - New York State Department of Environmental Conservation
AWQ - Ambient Water Quality
S/GV - Standard and Guidance Value
µg/L - Micrograms per liter
D - Diluted
J - Estimated value
U - not detected; reported to the Limit of Detection
-a - Duplicate Sample
Red analytical results exceed NYSDEC AWQ S/GV criteria

Legend:
- 2021 Performance Monitoring Sample Location
- Monitoring Well Location
- Surface Water Sample Location
- Installation Restoration Program (IRP) Area
- 5657 Building Number
- 0781 Demolished Building Location
- Horizontal Well Screen (Below Ground)
- Horizontal Well Piping (Aboveground)
- Horizontal Well Piping (Below Ground)

Source: Esri, DigitalBodle, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

SD052-01 Apron 2
Chlorinated Plume Map
(November 2021)

Figure 2-3

2021 Annual Performance Monitoring Report
On-Base Groundwater Remediation
Former Griffiss Air Force Base, Rome, New York

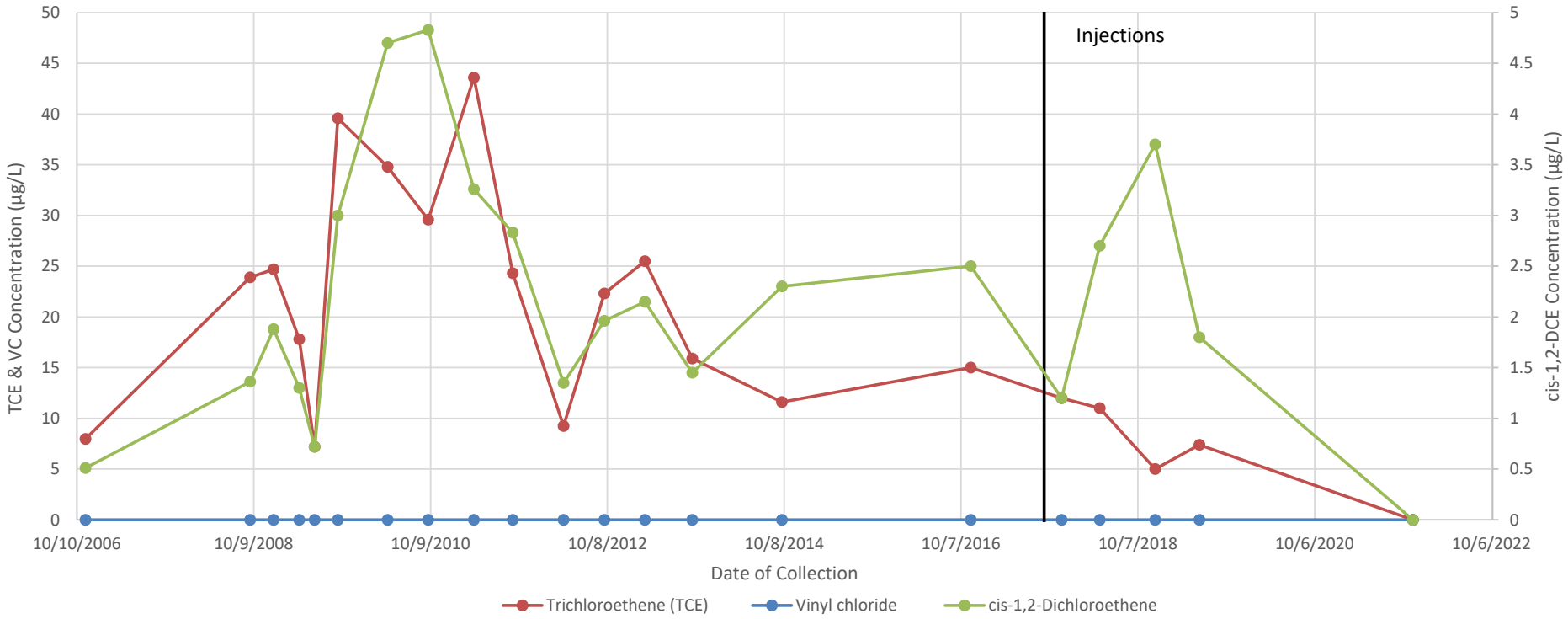
DRAWN BY: MRM
DATE: 9/12/2022
SCALE: As Shown
PROJECT NO: MSC2021.0012.1008.0002

bhate
www.bhate.com

This page intentionally left blank.

Figures

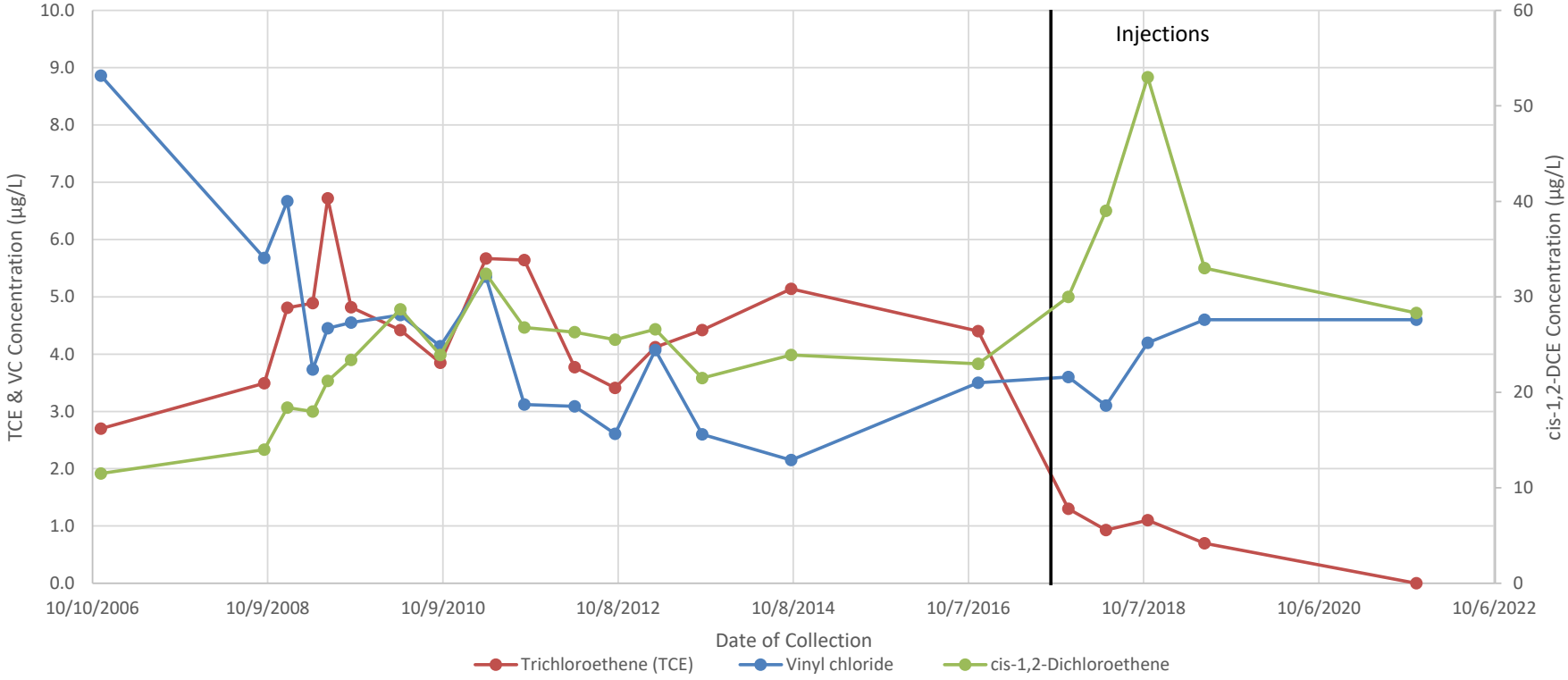
Figure 2-4 SD052-01 Apron 2 Trend Chart for 782VMW-105B



This page intentionally left blank.

Figures

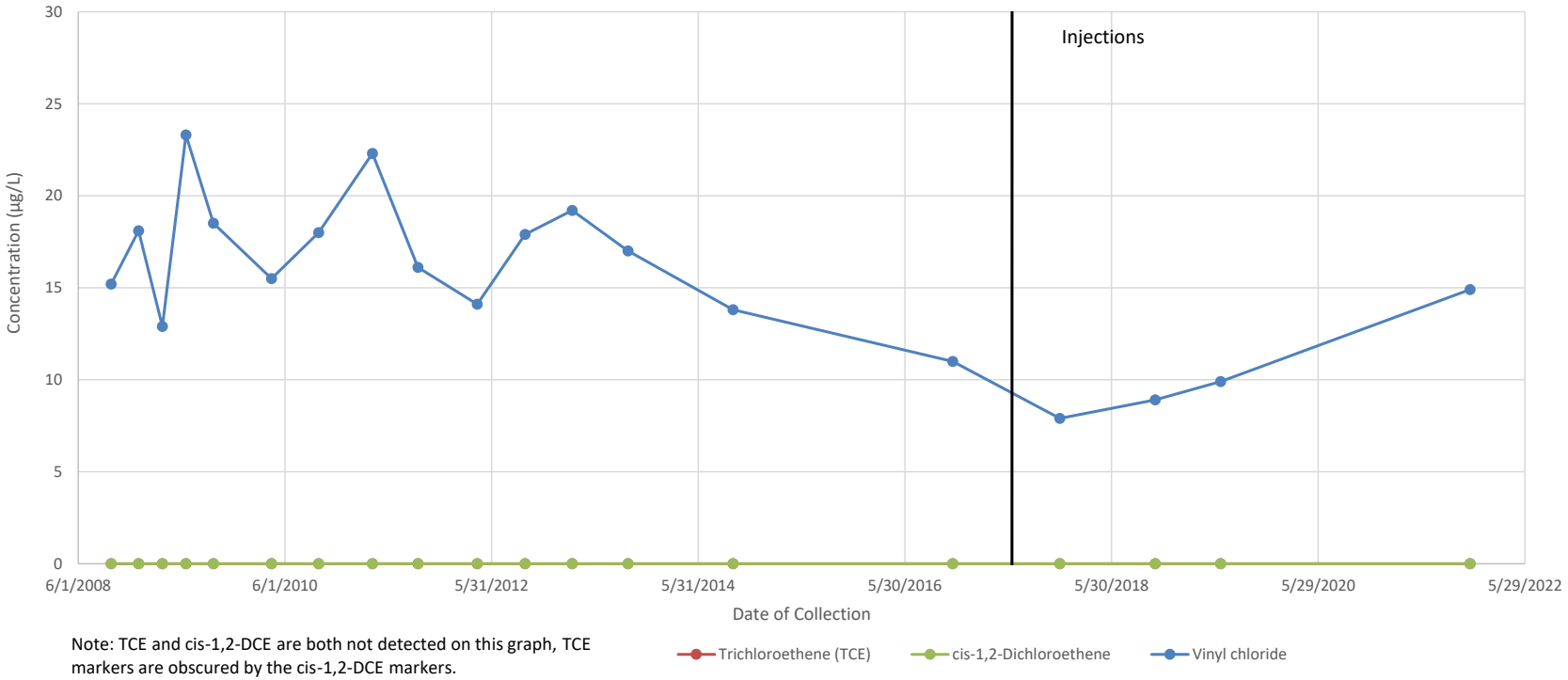
Figure 2-5 SD052-01 Apron 2 Trend Chart for 782VMW-81



This page intentionally left blank.

Figures

Figure 2-6 SD052-01 Apron 2 Trend Chart for 782VMW-121D

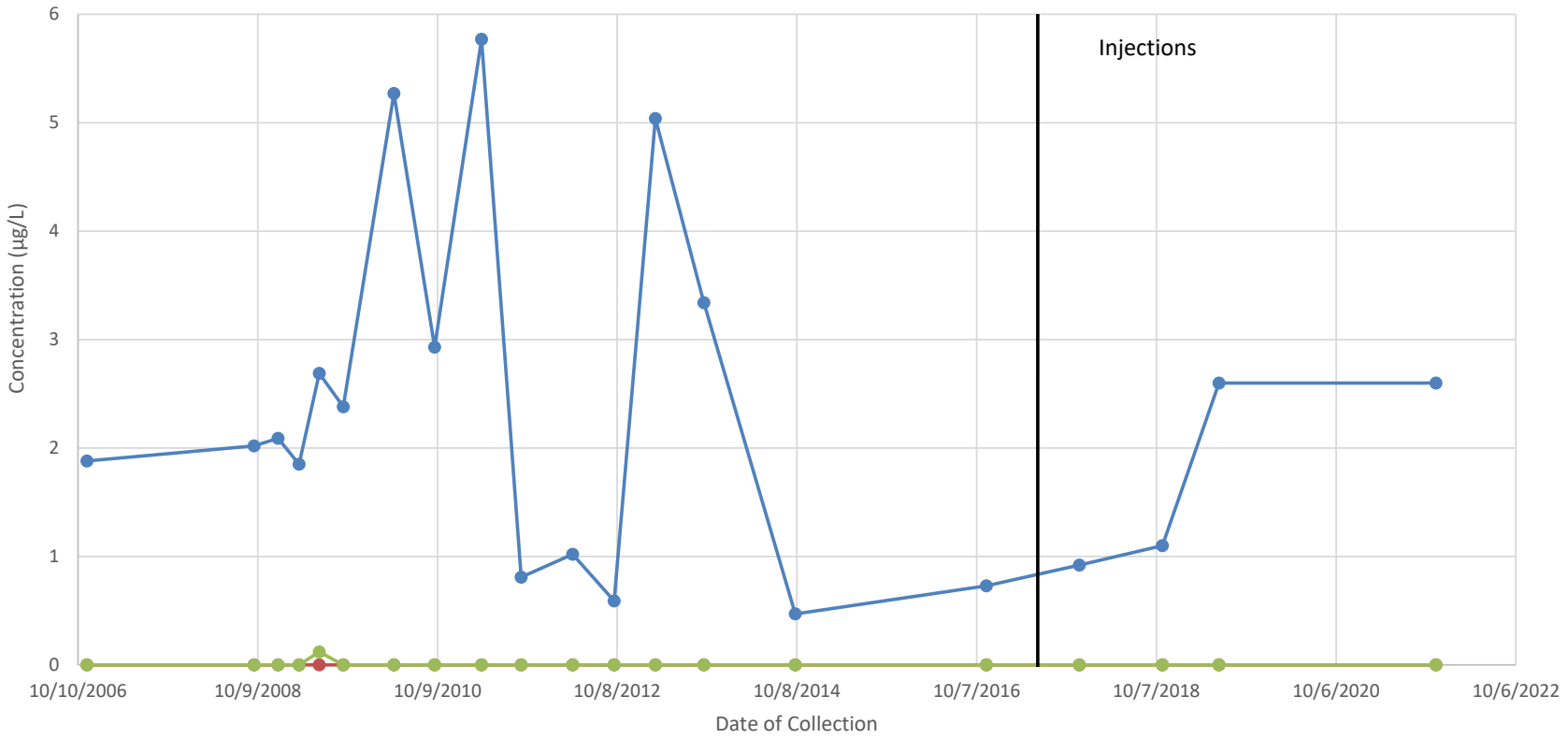


Note: TCE and cis-1,2-DCE are both not detected on this graph, TCE markers are obscured by the cis-1,2-DCE markers.

This page intentionally left blank.

Figures

Figure 2-7 SD052-01 Apron 2 Trend Chart for 782VMW-101



Note: TCE and cis-1,2-DCE are both not detected on this graph, TCE markers are obscured by the cis-1,2-DCE markers.

This page intentionally left blank.

Figures

TABLES

This page intentionally left blank.

Tables

Table 1-1

Remedial Action Objectives

Site	Remedial Action Objectives
Site SD052-01: Apron 2 Chlorinated Plume	1. Achieve the cleanup goals for chemicals of concern (COCs) based on New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Quality Standards. 2. Prevent human exposure to groundwater through groundwater use restrictions until cleanup goals are achieved. 3. Prevent contaminated groundwater from the site from adversely impacting surface water (in Six Mile Creek), which is defined as surface water concentrations above performance indicators (NYSDEC Class GA Groundwater Quality Standard of 2 micrograms per liter [µg/L] for vinyl chloride [VC]). 4. Prevent development and use of the property for residential housing, elementary and secondary schools, childcare facilities, and playgrounds.
Site SD052-02: Building 775	1. Achieve the cleanup goals for COCs based on NYSDEC Class GA Groundwater Quality Standards. 2. Prevent human exposure to groundwater through groundwater use restrictions until cleanup goals are achieved. 3. Prevent contaminated groundwater from the site from adversely impacting surface water (in Three Mile Creek), which is defined as surface water concentrations above performance indicators (NYSDEC Class GA Groundwater Quality Standards of 5 µg/L for dichloroethene [DCE] and 2 µg/L for VC). 4. Prevent development and use of the property for residential housing, elementary and secondary schools, childcare facilities, and playgrounds.
Site SS062: Area of Concern (AOC) 9	1. Achieve the cleanup goals for AOC 9 COCs. 2. Prevent potential unacceptable human risk associated with exposure to groundwater through groundwater use restrictions until AOC 9 cleanup goals are achieved. 3. Prevent contaminated groundwater from the AOC 9 Site from adversely impacting surface water (in Six Mile Creek), which is defined as surface water concentrations above performance indicators for COCs. 4. Prevent the potential for unacceptable human risk under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) associated with exposure to soil vapor until the AOC 9 groundwater cleanup goals are achieved.

This page intentionally left blank.

Tables

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-76									
Sample Identification			782VM7638AA	782VM7638AB	782VM7638BB	782VM7638CA	782VM7638DA	782VM7638EB	782VM7638FB	782VM7638GA	782VM7638HA	782VM7638IA
Date of Collection			11/15/2006	9/24/2008	12/31/2008	4/15/2009	6/16/2009	9/21/2009	4/19/2010	9/28/2010	4/5/2011	9/14/2011
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	1.74 F	2.07 F	U	1.91 F	U	1.58 F	1.93 FB	U
Benzene	1	0.4	0.110 F	U	U	U	0.160 F	0.160 F	0.160 F	0.150 F	0.130 F	0.730
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	2.29 F
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	0.990 F	0.630 F	U	0.670 F	1.02	0.910 F	0.990 F	0.960 F	0.970 F	0.990 F
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	4.56 F	3.42 F	U	4.75 F	5.14	5.67	4.66 F	3.88 F	4.12 F	4.75 F
Methylene chloride	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	0.420 F	0.340 F	U	0.250 F	0.630 F	0.550 F	0.500 F	0.540 F	0.440 F	0.550 F
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	10.3	7.54	U	7.73	15.1	13.0	10.0	10.6	8.05	9.56
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	11.71	11.89	U	15.47	22.05	22.2	16.31	17.71	15.64	18.87
Wet Chemistry												
DOC (mg/L)	--	1	1.6	4.6	7.4	5.5	2.3	2.7	3.0	2.2	4.2	2.5
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	290	250	130	340	330	330	310	300	270	310
Chloride (mg/L)	250	1	44	43	5.7	53	47	47	37	35	31	30
Nitrate (mg/L)	10	1	0.044 F	U	4	U	U	0.037 F	0.044 F	U	U	U
Sulfate (mg/L)	250	1	1.1	7.0	63.0	2.0	U	U	U	U	U	8.0
Field Parameters												
ORP (mV)	--	--	-76	-118	256	-110	-100	-72	-101	-58	-56	-263
Dissolved Oxygen (mg/L)	--	--	8.04	1.54	3.96	2.80	7.17	7.24	6.75	0.00	0.00	0.00
pH	--	--	6.52	7.00	6.95	6.61	7.06	6.69	7.18	6.00	7.42	8.26
Ferrous iron (mg/L)	--	--	0.0	2.0	NS	2.2	4.0	2.0	1.6	4.0	1.6	1.6

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-76								
Sample Identification			782VM7638JA	782VM7638KA	782VM7638LA	782VM7638MA	782VM7638NA	782VMW-76_1116	782VMW-76_1117	782VMW-76_1018	782VMW-76_0619
Date of Collection			4/11/2012	9/25/2012	3/13/2013	9/25/2013	9/29/2014	11/15/2016	11/27/2017	10/24/2018	6/18/2019
VOCs (µg/L)											
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	UJ	U	UJ	UJ
4-Chlorotoluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Acetone	50	10	U	U	7.29 FB	9.29 FB	U	2.7 J	U	5.4 J	3.3 UB
Benzene	1	0.4	0.230 F	2.23	0.290 F	0.240 F	0.280 F	0.17 J	U	0.21 J	0.31 J
Bromomethane	5*	3.0	U	U	U	UJ	U	UJ	U	UJ	UJ
2-Butanone	50	10	U	U	U	U	U	UJ	U	UJ	UJ
Chlorobenzene	5*	0.5	U	U	U	U	U	UJ	U	UJ	UJ
Chloroform	7	0.3	U	U	U	U	U	UJ	U	UJ	UJ
Chloromethane	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
cis-1,2-Dichloroethene	5*	1.0	0.870 F	0.740 F	0.830 F	0.670 F	0.900 F	0.15 J	U	0.30 J	0.5 J
Ethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Isopropylbenzene	5*	1.0	U	U	U	UJ	U	UJ	U	UJ	UJ
Methyl tert-butyl ether	10	5.0	4.45 F	3.91 F	4.39 F	2.73 F	2.55 F	2.3 J	3.1 J	1.8 J	3.2 J
Methylene chloride	5*	1.0	U	U	U	U	U	UJ	U	0.33 J	UJ
n-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
n-Propylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
m,p-Xylene	5*	2.0	U	U	U	U	U	UJ	U	UJ	UJ
Naphthalene	10	1.0	U	U	U	U	U	UJ	U	UJ	UJ
o-Xylene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
sec-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
tert-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Toluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
trans-1,2-Dichloroethene	5*	1.0	0.560 F	0.510 F	0.590 F	0.490 F	0.430 F	UJ	U	0.25 J	0.42 J
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Vinyl chloride	2	1.0	9.56	9.54	12.8	9.58	7.22	5.2 J	6.2	4.3 J	8.7 J
Xylenes, total	5*	2	U	U	U	U	U	UJ	U	UJ	UJ
Total VOCs	--	--	15.67	16.93	26.19	23	11.38	10.52	9.3	12.59	16.43
Wet Chemistry											
DOC (mg/L)	--	1	2.9	1.8	1.8	1.9	1.8	14	2.6	1.3 UB	1.7
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	350	320	330	290	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	32	35	27	24	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	0.16 F	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	U	1.3	U	0.86 F	NS	NS	NS	NS	NS
Field Parameters											
ORP (mV)	--	--	-184	-100	-229	-128	-105	-221	-110	-153	-147
Dissolved Oxygen (mg/L)	--	--	0.00	0.67	0.00	7.40	1.20	0.91	0.00	3.90	0.48
pH	--	--	7.19	7.63	7.59	7.17	7.22	7.28	7.10	7.53	7.14
Ferrous iron (mg/L)	--	--	3.0	3.6	6.5	1.4	1.2	NS	NS	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-78									
Sample Identification			782VM7840AA	782VM7840AB	782VM7840BB	782VM7840CA	782VM7840DA	782VM7840EB	782VM7840FB	782VM7840GA	782VM7840HA	782VMW7840IA
Date of Collection			11/14/2006	9/25/2008	12/31/2008	3/26/2009	6/16/2009	9/21/2009	4/19/2010	9/28/2010	4/6/2011	9/13/2011
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	0.190 F♦	0.200 F	U	U	U	U	0.150 F	0.190 F	0.220 F	0.140 F
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	U	U	U	U	U	1.06 F	1.69 FB	U
Benzene	1	0.4	0.230 F	0.260 F	U	U	U	0.240 F	0.270 F	0.290 F	0.340 F	0.290 F
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	38.1 ♦	42.0	42.8	39.6	45.9	46.3	43.4 J	46.0	56.9	44.8
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	U	U	U	U	U	U	U	U	0.210 F	U
Methylene chloride	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	4.04	4.37	3.66	3.48	3.84	4.04	4.31	4.22	5.25	4.57
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	14.0	16.0	10.6	6.50	6.78	10.5	9.42	7.60	8.78	7.57
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	56.14	62.83	57.06	49.58	56.52	61.08	57.55	59.36	73.39	57.37
Wet Chemistry												
DOC (mg/L)	--	1	1.6	1.7	1.9	2.0 B	2.5	1.8	2.2	1.9	2.5	1.9
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	270	260	250	250	240	240	230	230	220	230
Chloride (mg/L)	250	1	170	24	28	27	25	19	22	20	17	12
Nitrate (mg/L)	10	1	0.027 F ♦	U	U	0.024 F	U	0.015 F	U	U	U	U
Sulfate (mg/L)	250	1	12	8.2	7.9	7.7	7.4	6.5	7	6.7	6.5	5.5
Field Parameters												
ORP (mV)	--	--	-125	-144	-56	-47	-80	-77	-104	-138	-102	-161
Dissolved Oxygen (mg/L)	--	--	0.00	1.63	1.39	0.00	2.05	6.35	7.49	5.00	7.43	0.00
pH	--	--	6.93	7.02	5.91	6.40	7.45	6.86	7.52	7.75	7.8	7.43
Ferrous iron (mg/L)	--	--	2.4	1.8	NS	1.0	1.2	1.8	1.2	1.0	1.8	1.1

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-78								
Sample Identification			782VMW7840JA	782VMW7840KA	782VM7840LA	782VM7840MA	782VM7840NA	782VMW-78_1116	782VMW-78_1117	782VMW-78_1018	782VMW-78_0619
Date of Collection			4/10/2012	9/25/2012	3/13/2013	9/24/2013	9/29/2014	11/16/2016	11/27/2017	10/24/2018	6/18/2019
VOCs (µg/L)											
1,1-Dichloroethane	5*	1.0	0.160 F	U	U	0.150 F	U	UJ	U	UJ	UJ
1,1-Dichloroethene	5*	1.0	U	U	U	U	0.130 F	UJ	U	UJ	UJ
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	UJ	U	UJ	UJ
4-Chlorotoluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Acetone	50	10	1.14 F	U	11.2 FB	1.36 FB	U	3.7 J	U	3.8 J ♦	6.7 UB
Benzene	1	0.4	0.280 F	U	0.340 F	0.270 F	0.260 F	0.29 J	U	0.31 J	0.36 J ♦
Bromomethane	5*	3.0	U	U	U	U	U	UJ	U	UJ	UJ
2-Butanone	50	10	U	U	U	U	U	UJ	U	UJ	UJ
Chlorobenzene	5*	0.5	U	U	U	U	U	UJ	U	UJ	UJ
Chloroform	7	0.3	U	U	U	U	U	UJ	U	UJ	UJ
Chloromethane	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
cis-1,2-Dichloroethene	5*	1.0	40.9	46.7	45.7	42.3	51.0	53 J	50.0	61 J D ♦	61 J ♦
Ethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Isopropylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Methyl tert-butyl ether	10	5.0	U	U	U	U	U	UJ	U	UJ	UJ
Methylene chloride	5*	1.0	U	U	0.540 F	U	U	UJ	U	0.32 J ♦	UJ
n-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
n-Propylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
m,p-Xylene	5*	2.0	U	U	U	U	U	UJ	U	UJ	UJ
Naphthalene	10	1.0	U	U	U	U	U	UJ	U	UJ	UJ
o-Xylene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
sec-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
tert-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Toluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
trans-1,2-Dichloroethene	5*	1.0	4.29	3.94	4.12	3.89	4.23	4.1 J♦	4	3.8 J D ♦	4.7 J ♦
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	UJ	U	UJ	UJ
Vinyl chloride	2	1.0	5.57	6.38	8.00	7.2	4.58	6.5 J♦	7.5♦	14 J	26 J
Xylenes, total	5*	2	U	U	U	U	U	U	U	UJ	UJ
Total VOCs	--	--	52.34	57.02	69.9	55.17	60.2	67.59	61.5	81.22 ♦	98.76
Wet Chemistry											
DOC (mg/L)	--	1	1.4	1.4	1.5	1.4	1.3	1.5♦	1.9	1.5 ♦	1.4
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	230	230	230	230	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	11	10	11	12	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	U	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	5.7	5.6	8.4	5	NS	NS	NS	NS	NS
Field Parameters											
ORP (mV)	--	--	-136	-97	-145	-120	-129	-213	-101	-191	-184
Dissolved Oxygen (mg/L)	--	--	2.48	10.47	0.43	10.39	3.21	1.01	0.00	1.60	0.42
pH	--	--	7.13	7.65	7.65	7	7.36	6.72	7.14	7.73	8.28
Ferrous iron (mg/L)	--	--	1.2	1.6	1.6	2.8	2.1	2.0	2.0	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-81									
Sample Identification			782VM8146AA	782VM8146AB	782VM8146BB	782VM8146CA	782VM8146DA	782VM8146EB	782VM8146FB	782VM8146GA	782VM8146HA	782VM8146IA
Date of Collection			11/14/2006	9/24/2008	12/30/2008	4/15/2009	6/16/2009	9/21/2009	4/15/2010	9/28/2010	4/6/2011	9/13/2011
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	U	U	U	U	0.110 F	U	U	U	0.130 F	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	0.190 F	U	U	U	0.190 F	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	U	U	U	U	U	2.30 F	1.63 FB	U
Benzene	1	0.4	U	U	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	11.5	14.0	18.4	18.0	21.2	23.4	28.7	23.9	32.4	26.8
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	U	U	U	U	U	U	U	U	U	U
Methylene chloride	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	1.09	0.940 F	1.01	1.02	1.13	0.970 F	1.35	1.00	1.29	1.06
Trichloroethene (TCE)	5*	1.0	2.7	3.49	4.81	4.89	6.72	4.82	4.42	3.85	5.67	5.64
Vinyl chloride	2	1.0	8.86	5.68	6.67	3.73	4.45	4.55	4.68	4.14	5.35	3.12
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	24.15	24.11	30.89	27.64	33.8	33.74	39.15	35.19	46.66	36.62
Wet Chemistry												
DOC (mg/L)	--	1	0.58 F	1.7	0.84	0.88 F	0.65 F	1.7	1.4	1.3	1.4	1.1
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	220	220	230	200	210	210	210	220	220	230
Chloride (mg/L)	250	1	48	29	26	24	21	18	20	17	16	16
Nitrate (mg/L)	10	1	U	U	U	0.036 F	0.022 F	0.024 F	0.035 F	U	U	U
Sulfate (mg/L)	250	1	4.7	5.0	6.3	6.7	7.2	7.3	8.5	8.5	7.7	7.1
Field Parameters												
ORP (mV)	--	--	144	-182	-101	-50	-50	-61	-83	-131	-95	-141
Dissolved Oxygen (mg/L)	--	--	1.40	1.69	0.67	2.71	2.84	6.44	0.00	4.92	8.32	0.00
pH	--	--	6.94	7.61	7.81	6.38	7.56	7.22	8.00	7.81	7.8	7.55
Ferrous iron (mg/L)	--	--	1.0	1.0	NS	1.0	0.1	0.8	0.4	0.8	0.8	0.5

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-81										
Sample Identification			782VM8146JA	782VM8146KA	782VM8146LA	782VM8146MA	782VM8146NA	782VMW-81_1116	782VMW-81_1117	782VMW-81_0518	782VMW-81_1018	782VMW-81_0619	782VMW-81_1121
Date of Collection			4/10/2012	9/25/2012	3/12/2013	9/24/2013	9/29/2014	11/16/2016	11/27/2017	5/3/2018	10/24/2018	6/18/2019	11/16/2021
VOCs (µg/L)													
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
1,1-Dichloroethene	5*	1.0	U	U	0.170 F	U	U	UJ	U	U	UJ	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	UJ	U	U	UJ	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
Acetone	50	10	U	U	4.54 FB	8.02 FB	U	UJ	U	U	7.3 J	U	U
Benzene	1	0.4	U	U	U	U	U	UJ	U	U	UJ	U	U
Bromomethane	5*	3.0	U	U	U	U	U	UJ	U	U	UJ	U	U
2-Butanone	50	10	U	U	U	U	U	UJ	U	U	UJ	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	UJ	U	U	UJ	U	U
Chloroform	7	0.3	U	U	U	U	U	UJ	U	U	UJ	U	U
Chloromethane	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
cis-1,2-Dichloroethene	5*	1.0	26.3	25.5	26.6	21.5	23.9	23.0 J	30.0	39.0 ♦	53 J	33	28.3
Ethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
Methyl tert-butyl ether	10	5.0	U	U	U	U	U	UJ	U	0.29 J ♦	UJ	U	U
Methylene chloride	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	UJ	U	U	UJ	U	U
Naphthalene	10	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
o-Xylene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
Toluene	5*	1.0	U	U	U	U	U	UJ	U	U	UJ	U	U
trans-1,2-Dichloroethene	5*	1.0	1.14	1.00	1.16	0.900 F	0.920 F	1.1 J	0.92 J	1.1	1.1 J	1.3	1.5
Trichloroethene (TCE)	5*	1.0	3.77	3.41	4.12	4.42	5.14	4.4 J	1.30	0.93 J ♦	1.1 J	0.7 J	U
Vinyl chloride	2	1.0	3.09	2.61	4.07	2.6	2.15	3.5 J	3.6	3.1 ♦	4.2 J	4.6	4.6
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	UJ	U	U
Total VOCs	--	--	34.3	32.52	40.66	37.44	32.11	32	35.9	44.42	66.7	39.6	34.4
Wet Chemistry													
DOC (mg/L)	--	1	0.68 F	0.72 F	0.83 F	0.72 F	0.57 F	0.91 J	1.3	NS	0.96 UB	0.81 J	NS
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	230	220	210	220	NS	NS	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	16	16	13	16	NS	NS	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	U	NS	NS	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	5.9	6.0	8.3	6.7	NS	NS	NS	NS	NS	NS	NS
Field Parameters													
ORP (mV)	--	--	-144	-50	-77	-110	-93	-122	-44	-76	-158	-114	-72
Dissolved Oxygen (mg/L)	--	--	1.52	2.01	0.00	0.00	2.69	1.49	4.81	4.44	1.50	2.29	0.37
pH	--	--	7.13	7.94	7.36	7.22	7.43	7.03	7.18	7.54	7.57	7.37	7.18
Ferrous iron (mg/L)	--	--	0.6	0.6	0.5	0.2	0.5	0.5	0.5	NS	NS	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-84									
Sample Identification			782VM8440AA	782VM8440AB	782VM8440BB	782VM8440CA	782VM8440DA	782VM8440EB	782VM8440FB	782VM8440GA	782VM8440HA	782VM8440IA
Date of Collection			11/15/2006	9/26/2008	12/31/2008	3/26/2009	6/17/2009	9/23/2009	4/19/2010	9/29/2010	4/5/2011	9/13/2011
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	U	U	U	U	0.130 F	U	U	U	0.130 F	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	U	U	U	U	U	U	2.03 FB	U
Benzene	1	0.4	U	U	U	0.130 F	0.140 F	U	0.130 F	0.120 F	0.150 F	0.180 F
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	0.460 F	0.420 F	U	0.460 F	0.560 F	0.500 F	0.560 F	0.410 F	0.730 F	0.580 F
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	3.00 F	3.20 F	U	3.06 F	3.24 F	2.54 F	2.70 F	1.30 F	2.58 F	1.90 F
Methylene chloride	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	0.180 F	0.210 F	U	0.170 F	0.160 F	0.200 F	0.160 F
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	31.7	32.3	U	39.8	42.2	39.4	39.5	37.3	44.6	32.9
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	31.7	35.92	0	43.63	46.48	42.44	43.06	39.29	50.42	35.72
Wet Chemistry												
DOC (mg/L)	--	1	5.0	5.8	0.64 F	5.6	5.3	4.9	5.2	4.4	4.8	4.6
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	340	340	20	330	330	320	310	290	290	290
Chloride (mg/L)	250	1	48	68	0.48 F	45	39	38	35	27	35	27
Nitrate (mg/L)	10	1	0.046 F	U	0.19	U	0.014 F	0.020 F	0.039 F	U	U	U
Sulfate (mg/L)	250	1	2.7	45	0.76 F	3.2	4.1	2.9	1.6	U	0.73 F	U
Field Parameters												
ORP (mV)	--	--	-99	-113	136	-97	-126	-103	-114	-71	-127	-154
Dissolved Oxygen (mg/L)	--	--	1.12	0.62	9.84	0.00	0.00	4.11	0.00	0.00	0.00	7.58
pH	--	--	6.87	6.34	6.36	6.00	6.49	6.51	6.91	6.21	6.86	6.91
Ferrous iron (mg/L)	--	--	3.0	3.4	NS	2.0	4.8	5.5	4.2	4.6	4.2	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-84								
Sample Identification			782VM8440JA	782VM8440KA	782VM8440LA	782VM8440MA	782VM8440NA	782VMW-84	782VMW-84	782VMW-84_1018	782VMW-84_0619
Date of Collection			4/11/2012	9/25/2012	3/13/2013	9/25/2013	9/30/2014	11/15/2016	11/28/2017	10/24/2018	6/19/2019
VOCs (µg/L)											
1,1-Dichloroethane	5*	1.0	0.110 F	0.110 F	0.150 F	U	U	UJ	U	UJ	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	UJ	U	UJ	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	UJ	U	UJ	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
Acetone	50	10	U	U	9.87 FB	1.85 FB	U	UJ	U	UJ	29 UB
Benzene	1	0.4	0.240 F	0.260 F	0.420 F	0.420 F	0.320 F	2.1 J	U	0.21 J	0.38 J
Bromomethane	5*	3.0	U	U	U	UJ	U	UJ	U	UJ	U
2-Butanone	50	10	U	U	U	U	U	UJ	U	UJ	U
Chlorobenzene	5*	0.5	U	U	U	U	U	UJ	U	UJ	U
Chloroform	7	0.3	U	U	U	U	0.110 F	UJ	U	UJ	U
Chloromethane	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
cis-1,2-Dichloroethene	5*	1.0	0.610 F	0.820 F	0.750 F	0.610 F	0.970 F	0.59 J	U	0.64 J	0.62 J
Ethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
Isopropylbenzene	5*	1.0	U	U	U	UJ	U	UJ	U	UJ	U
Methyl tert-butyl ether	10	5.0	1.72 F	1.03 F	1.88 F	2.60 F	2.63 F	1.9 J	1.7 J	0.72 J	1.2 J
Methylene chloride	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
m,p-Xylene	5*	2.0	U	U	U	U	U	UJ	U	UJ	U
Naphthalene	10	1.0	U	U	U	U	U	UJ	U	UJ	U
o-Xylene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
Toluene	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
trans-1,2-Dichloroethene	5*	1.0	0.160 F	0.190 F	0.220 F	0.210 F	0.170 F	0.16 J	U	0.15 J	0.23 J
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	UJ	U	UJ	U
Vinyl chloride	2	1.0	33.0	35.8	46.5	32.1	25.0	25.0 J	23	32 J	25
Xylenes, total	5*	2	U	U	U	U	U	U	U	UJ	U
Total VOCs	--	--	35.84	38.21	59.79	37.79	29.2	29.75	24.7	33.72	56.43
Wet Chemistry											
DOC (mg/L)	--	1	4.7	3.8	4.1	4.0	3.8	4.8	5.2	2.9	5.1
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	300	280	300	330	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	25	23	24	30	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	U	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	U	U	0.71 F	1.8	NS	NS	NS	NS	NS
Field Parameters											
ORP (mV)	--	--	-158	-129	-138	-120	-132	-148	-50	-200	-164
Dissolved Oxygen (mg/L)	--	--	0.00	0.00	0.00	0.00	4.70	0.99	0.44	1.20	0.09
pH	--	--	6.78	6.95	6.90	6.88	6.74	6.79	6.97	7.46	6.9
Ferrous iron (mg/L)	--	--	3.0	3.0	3.4	3.0	6.0	2.5	NS	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-84D								
Sample Identification			782VM84D50AB	782VM8440BB	782VM84D50CA	782VM84D50DA	782VM84D50EB	782VM84D50FB	782VM84D50GA		782VM84D50IA
Date of Collection			9/26/2008	12/31/2008	3/25/2009	6/17/2009	9/23/2009	4/19/2010	9/28/2010		9/14/2011
VOCs (µg/L)											
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	Monitoring well not sampled, annual sampling frequency.	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U		U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U		U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U		U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U		U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U		U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U		U
Acetone	50	10	U	2.34 F	2.74 F	1.25 F	2.85 F	2.41 F	1.33 F		U
Benzene	1	0.4	U	U	U	U	U	U	0.180 F		0.280 F
Bromomethane	5*	3.0	U	U	U	U	U	U	U		U
2-Butanone	50	10	U	U	U	U	U	U	U		U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U		U
Chloroform	7	0.3	U	U	U	U	U	U	U		U
Chloromethane	5*	1.0	U	U	U	U	U	U	U		U
cis-1,2-Dichloroethene	5*	1.0	0.340 F	U	U	U	0.110 F	0.140 F	0.350 F		0.330 F
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U		U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U		U
Methyl tert-butyl ether	10	5.0	4.36 F	U	1.94 F	U	1.43 F	1.51 F	2.60 F		2.29 F
Methylene chloride	5*	1.0	U	U	U	U	U	U	U		U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U		U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U		U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U		U
Naphthalene	10	1.0	U	U	U	U	U	U	U		U
o-Xylene	5*	1.0	U	U	U	U	U	U	U		U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U		U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U		U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U		U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U		U
Toluene	5*	1.0	U	U	U	U	U	U	U		U
trans-1,2-Dichloroethene	5*	1.0	0.180 F	U	U	U	U	U	0.210 F		0.170 F
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U		U
Vinyl chloride	2	1.0	29.7	U	8.83	1.18	12.8	10.9	28.7		22.9
Xylenes, total	5*	2	U	U	U	U	U	U	U		U
Total VOCs	--	--	34.58	2.34	13.51	2.43	17.19	14.96	33.37		25.97
Wet Chemistry											
DOC (mg/L)	--	1	6.0	1.4	4.4	2.8	4.2	3.9	4.8		4.8
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS		NS
Alkalinity (mg/L)	--	10	350	260	72	48	170	180	310		290
Chloride (mg/L)	250	1	50	1.5	20	1.4	18	19	96		150
Nitrate (mg/L)	10	1	U	0.14	0.14	0.016 F	0.063 F	0.18	U		U
Sulfate (mg/L)	250	1	7.4	5.4	6.5	14	7.8	4.2	2.0		U
Field Parameters											
ORP (mV)	--	--	-114	-33	40	-3	-61	-74	-48		-146
Dissolved Oxygen (mg/L)	--	--	0.51	8.22	0.20	0.66	5.43	0.84	0.00		0.00
pH	--	--	6.50	9.30	10.79	11.14	7.21	7.26	6.77		7.03
Ferrous iron (mg/L)	--	--	3.6	NS	0.0	0.0	1.2	0.0	3.6		3.6

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-84D							
Sample Identification			782VM84D50KA	782VM84D50MA	782VM84D50NA	782VMW-84D_1116	782VMW-84D_0217	782VMW-84D_1117		782VMW-84D_0619
Date of Collection			9/25/2012	9/26/2013	9/30/2014	11/15/2016	2/9/2017	11/28/2017		6/20/2019
VOCs (µg/L)										
1,1-Dichloroethane	5*	1.0	0.120 F	U	U		U	U		U
1,1-Dichloroethene	5*	1.0	U	U	U		U	U		U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U		U	U		U
1,2-Dichlorobenzene	3	1.0	U	U	U		U	U		U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U		U	U		U
1,4-Dichlorobenzene	3	0.5	U	U	U		U	U		U
4-Chlorotoluene	5*	1.0	U	U	U		U	U		U
Acetone	50	10	U	5.93 FB	U		U	U		8.3 UB
Benzene	1	0.4	0.310 F	0.71	0.190 F		0.22 J	U		U
Bromomethane	5*	3.0	U	U	U		U	U		U
2-Butanone	50	10	U	U	U		U	U		2.2 J
Chlorobenzene	5*	0.5	U	U	U		U	U		U
Chloroform	7	0.3	U	U	U		U	U		U
Chloromethane	5*	1.0	U	U	U		U	U		U
cis-1,2-Dichloroethene	5*	1.0	0.420 F	0.440 F	0.800 F		0.42 J	U		0.18 J
Ethylbenzene	5*	1.0	U	U	U		U	U		0.51 J
Isopropylbenzene	5*	1.0	U	U	U		U	U		U
Methyl tert-butyl ether	10	5.0	1.88 F	1.13 F	1.39 F		1.6 J	1.3 J		0.7 J
Methylene chloride	5*	1.0	U	U	U		U	U		U
n-Butylbenzene	5*	1.0	U	U	U		U	U		U
n-Propylbenzene	5*	1.0	U	U	U		U	U		U
m,p-Xylene	5*	2.0	U	U	U		U	U		0.31 UB
Naphthalene	10	1.0	U	U	U		U	U		U
o-Xylene	5*	1.0	U	U	U		U	U		0.26 J
p-Isopropyltoluene	5*	1.0	U	U	U		U	U		U
sec-Butylbenzene	5*	1.0	U	U	U		U	U		U
tert-Butylbenzene	5*	1.0	U	U	U		U	U		U
Tetrachloroethene (PCE)	5*	1.0	U	U	U		U	U		U
Toluene	5*	1.0	U	U	U		U	U		U
trans-1,2-Dichloroethene	5*	1.0	0.200 F	0.160 F	0.150 F		U	U		U
Trichloroethene (TCE)	5*	1.0	U	U	U		U	U		U
Vinyl chloride	2	1.0	24.6	38.3	24.6		22	16		8.6
Xylenes, total	5*	2	U	U	U		U	U		0.57 UB
Total VOCs	--	--	27.53	46.67	27.13		24.24	17.3		21.06
Wet Chemistry										
DOC (mg/L)	--	1	4.2	2.8	3.4		NS	4.0		4.6
TOC (mg/L)	--	1	NS	NS	NS		NS	NS		NS
Alkalinity (mg/L)	--	10	310	260	NS		NS	NS		NS
Chloride (mg/L)	250	1	27	230	NS		NS	NS		NS
Nitrate (mg/L)	10	1	U	U	NS		NS	NS		NS
Sulfate (mg/L)	250	1	1.2	U	NS		NS	NS		NS
Field Parameters										
ORP (mV)	--	--	-99	-133	-144		-122	-85		-65
Dissolved Oxygen (mg/L)	--	--	0.00	0.00	2.91		1.64	0.00		3.72
pH	--	--	6.94	7.08	6.96		7.12	6.96		6.89
Ferrous iron (mg/L)	--	--	3.0	4.2	5.0		NS	NS		NS

Incorrect well sampled

This monitoring well was not sampled in 2018 due to misidentification of the well.

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-93									
Sample Identification			782VM9335AA	782VM9335AB		782VM9335CA	782VM9335DA	782VM9335EB	782VM9335FB	782VM9335GA	782VM9335HA	
Date of Collection			11/15/2006	9/26/2008		4/15/2009	6/16/2009	9/23/2009	4/19/2010	9/28/2010	4/5/2011	
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	U	U	This monitoring well could not be sampled due to the large amount of run-off from the landfarm containing petroleum contaminated soils on Apron 2. This is contaminating the well with silt and petroleum constituents.	U	U	U	U	U	U	This monitoring well could not be not sampled. This well has been undermined during clean-up activities from the landfarm.
1,1-Dichloroethene	5*	1.0	U	U		U	U	U	U	U	U	
1,2,4-Trimethylbenzene	5*	1.0	U	U		U	U	U	U	U	U	
1,2-Dichlorobenzene	3	1.0	U	U		U	U	U	U	U	U	
1,3,5-Trimethylbenzene	5*	1.0	U	U		U	U	U	U	U	U	
1,4-Dichlorobenzene	3	0.5	U	U		U	U	U	U	U	U	
4-Chlorotoluene	5*	1.0	U	U		U	U	U	U	U	U	
Acetone	50	10	U	176		1.94 F	U	U	U	U	2.03 FB	
Benzene	1	0.4	U	U		U	U	U	U	U	U	
Bromomethane	5*	3.0	U	U		U	U	U	U	U	U	
2-Butanone	50	10	U	90.0 J		U	U	U	U	U	U	
Chlorobenzene	5*	0.5	U	U		U	U	U	U	U	U	
Chloroform	7	0.3	U	U		0.280 F	U	U	U	U	U	
Chloromethane	5*	1.0	U	U		U	U	U	U	U	U	
cis-1,2-Dichloroethene	5*	1.0	U	U		U	U	U	0.590 F	U	U	
Ethylbenzene	5*	1.0	U	4.49		U	U	U	U	U	U	
Isopropylbenzene	5*	1.0	U	U		U	U	U	U	U	U	
Methyl tert-butyl ether	10	5.0	8.04 F	4.47 F		7.40	10.9	9.40 F	U	7.51	7.26	
Methylene chloride	5*	1.0	U	U		U	U	U	U	U	U	
n-Butylbenzene	5*	1.0	U	U		U	U	U	U	U	U	
n-Propylbenzene	5*	1.0	U	U		U	U	U	U	U	U	
m,p-Xylene	5*	2.0	U	U		U	U	U	U	U	U	
Naphthalene	10	1.0	U	U		U	U	U	U	U	U	
o-Xylene	5*	1.0	U	U		U	U	U	U	U	U	
p-Isopropyltoluene	5*	1.0	U	U		U	U	U	U	U	U	
sec-Butylbenzene	5*	1.0	U	U		U	U	U	U	U	U	
tert-Butylbenzene	5*	1.0	U	U		U	U	U	U	U	U	
Tetrachloroethene (PCE)	5*	1.0	U	U		U	U	U	U	U	U	
Toluene	5*	1.0	U	1150		1.78	1.70	0.800 F	U	0.390 F	0.330 F	
trans-1,2-Dichloroethene	5*	1.0	U	U		U	U	U	U	U	U	
Trichloroethene (TCE)	5*	1.0	U	U		U	U	U	U	U	U	
Vinyl chloride	2	1.0	54.6	17.2		35.1	62.6	54.6	2.31	48.6	45.9	
Xylenes, total	5*	2	U	U		U	U	U	U	U	U	
Total VOCs	--	--	54.6	1442.16		46.5	75.2	64.8	2.9	56.5	55.52	
Wet Chemistry												
DOC (mg/L)	--	1	2.7	120		11	2.9	3.5	1.7	3.5	6.0	
TOC (mg/L)	--	1	NS	NS		NS	NS	NS	NS	NS	NS	
Alkalinity (mg/L)	--	10	320	520		320	330	360	250	300	240	
Chloride (mg/L)	250	1	32	37		49	56	53	140	36	22	
Nitrate (mg/L)	10	1	0.089 F	47		0.098 F	0.046 F	0.018 F	U	U	0.15 F	
Sulfate (mg/L)	250	1	0.36 F	0.99 F		13	0.61 F	U	U	U	0.80 F	
Field Parameters												
ORP (mV)	--	--	-20	-208		-76	-101	-104	-130	-57	-94	
Dissolved Oxygen (mg/L)	--	--	1.11	1.07		1.54	4.02	1.76	0.00	0.00	0.00	
pH	--	--	6.83	6.54		6.36	7.08	7.56	7.82	6.93	7.45	
Ferrous iron (mg/L)	--	--	0.2	1.6		1.0	NS	3.2	0.0	ns	3.0	

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-96														
Sample Identification			782VM9637AA	782VM9637AB	782VM9637BB	782VM9637CA	782VM9637DA		782VM9637JA	782VM9637KA	782VM9637LA	782VM9637MA	782VM9637NA	782VMW-96_1116	782VMW-96_1117		782VMW-96_0619
Date of Collection			11/14/2006	9/25/2008	12/31/2008	3/26/2009	6/17/2009		4/10/2012	9/25/2012	3/13/2013	9/25/2013	9/30/2014	11/15/2016	11/28/2017		6/18/2019
VOCs (µg/L)																	
1,1-Dichloroethane	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U		U	U	U	U	U	UJ	U		U
4-Chlorotoluene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Acetone	50	10	U	U	U	U	U		U	U	8.76 FB	2.02 FB	U	2.3 J	U		U
Benzene	1	0.4	U	U	U	U	U		U	U	U	U	U	0.30 J	U		U
Bromomethane	5*	3.0	U	U	U	U	U		U	U	U	UJ	U	UJ	U		U
2-Butanone	50	10	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Chlorobenzene	5*	0.5	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Chloroform	7	0.3	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Chloromethane	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
cis-1,2-Dichloroethene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Ethylbenzene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Isopropylbenzene	5*	1.0	U	U	U	U	U		U	U	U	UJ	U	UJ	U		U
Methyl tert-butyl ether	10	5.0	7.72 F	12.7	10.5	12.3	7.28 F		10.7	8.78 F	11.2	8.36 F	10.2	9.5 J	9		8.2
Methylene chloride	5*	1.0	U	U	U	U	U		U	U	0.700 F	U	U	UJ	UJ		U
n-Butylbenzene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
n-Propylbenzene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
m,p-Xylene	5*	2.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Naphthalene	10	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
o-Xylene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
sec-Butylbenzene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
tert-Butylbenzene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Toluene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Vinyl chloride	2	1.0	68.2	49.6	50.9	46.6	28.3		45.8	44.9	63.7	47	35.6	40.0 J	43		39
Xylenes, total	5*	2	U	U	U	U	U		U	U	U	U	U	UJ	U		U
Total VOCs	--	--	68.2	62.3	61.4	58.9	35.58		56.5	53.68	84.36	57.38	45.8	52.1	52		47.2
Wet Chemistry																	
DOC (mg/L)	--	1	2.5	2.3	2.6	3.4	2.6		2.7	2.4	2.7	2.2	2.0	2.7	2.9		2.4
TOC (mg/L)	--	1	NS	NS	NS	NS	NS		NS	NS	NS	NS	NS	NS	NS		NS
Alkalinity (mg/L)	--	10	320	320	310	330	320		330	310	300	290	NS	NS	NS		NS
Chloride (mg/L)	250	1	54	42	44	46	44		56	54	63	55 J	NS	NS	NS		NS
Nitrate (mg/L)	10	1	0.035 F	0.041 F	0.068	U	0.023 F		U	U	U	U	NS	NS	NS		NS
Sulfate (mg/L)	250	1	0.17 F	U	0.2	U	0.11 F		U	U	U	U	NS	NS	NS		NS
Field Parameters																	
ORP (mV)	--	--	124	-129	-69	-68	-127		-158	-78	-101	-125	-132	-149	-100		-120
Dissolved Oxygen (mg/L)	--	--	3.39	4.23	0.90	0.00	0.00		3.29	0.00	0.00	0.00	7.87	0.98	0.00		0.27
pH	--	--	7.28	6.98	6.60	6.12	6.06		6.89	7.51	6.99	7.06	6.64	7.03	7.07		7.19
Ferrous iron (mg/L)	--	--	1.5	1.8	NS	1.2	3.2		1.0	2.6	3.2	3.5	3.2	NS	0.0		NS

Monitoring well not sampled. This well was designated for sampling in the first year only of performance monitoring.

This monitoring well was not sampled in 2018 due to misidentification of the well.

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-98				782VMW-100							
Sample Identification			782VM9829AA	782VM9832AB		782VMW-98_1118	782VM10025AB	782VM10025BB	782VM10025CA	782VM10025DA	782VM10025EB	782VM10025FB	782VM10025GA	782VM10025HA
Date of Collection			11/14/2006	9/24/2008	11/15/2016	11/1/2018	9/26/2008	12/31/2008	3/25/2009	6/17/2009	9/21/2009	4/15/2010	9/28/2010	4/7/2011
VOCs (µg/L)														
1,1-Dichloroethane	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U		U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U		U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U		10 J ♦	U	U	1.20 F	U	3.68 F	1.19 F	3.36 F	2.95 FB
Benzene	1	0.4	U	U		U	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U		U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U		U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U		U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U		U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	U	U		U	U	U	U	U	U	U	U	U
Methylene chloride	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U		U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U		U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U		U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	U	U		U	U	U	U	U	U	U	U	U
Xylenes, total	5*	2	U	U		U	U	U	U	U	U	U	U	U
Total VOCs	--	--	0	0		10	0	0	1.2	0	3.68	1.19	3.36	2.95
Wet Chemistry														
DOC (mg/L)	--	1	0.26 F	0.56 F		6.0 J	4.2	4	2.5 B	3.7	4.6	4.2	3.5	3.0
TOC (mg/L)	--	1	NS	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	200	190		NS	280	180	150	230	300	190	300	150
Chloride (mg/L)	250	1	4.0	11		NS	5.2	3.4	2.2	1.5	1.8	3.5	3.5	2.3
Nitrate (mg/L)	10	1	0.33 F	0.44		NS	1.8	U	U	U	0.015 F	U	U	U
Sulfate (mg/L)	250	1	5.1	6.6		NS	11	16	15	6.1	16	7.4	10	21
Field Parameters														
ORP (mV)	--	--	161	65		47	38	-16	0	-51	-102	-78	-57	-32
Dissolved Oxygen (mg/L)	--	--	5.32	5.48		6.42	1.43	2.19	0.00	0.00	1.61	0.00	5.01	0.00
pH	--	--	6.55	7.21		7.45	6.35	8.15	6.92	7.18	7.62	7.52	7.51	7.53
Ferrous iron (mg/L)	--	--	0.0	0.0		NS	0.2	NS	0.6	0.8	1.6	0.8	1.8	0.6

This monitoring well not sampled due to upgradient status.

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-100							
Sample Identification			782VM10025IA	782VM10025JA	782VM10025KA	782VM10025LA	782VM10025MA	782VM10025NA	782VMW-100_1116	782VMW-100_1018
Date of Collection			9/14/2011	4/10/2012	9/25/2012	3/12/2013	9/26/2013	10/1/2014	11/15/2016	10/31/2018
VOCs (µg/L)										
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	1.57 F	5.9 FB	4.50 FB	1.52 F	U	U
Benzene	1	0.4	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	U	U	U	U	U	U	U	U
Methylene chloride	5*	1.0	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	U	U	U	U	U	U	U	U
Xylenes, total	5*	2	U	U	U	U	U	U	U	U
Total VOCs	--	--	0	0	1.57 F	5.9	4.5	1.52	0	0
Wet Chemistry										
DOC (mg/L)	--	1	4.1	3.1	3.4	2.4	3.2	3.6	3.7	3.5
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	300	190	330	180	240	NS	NS	NS
Chloride (mg/L)	250	1	4.5	4.0	3.9	2.0	13.0	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	U	U	NS	NS	NS
Sulfate (mg/L)	250	1	15	11	140	33	12	NS	NS	NS
Field Parameters										
ORP (mV)	--	--	-52	-62	101	-62	-100	29	-172	-143
Dissolved Oxygen (mg/L)	--	--	0.00	0.00	0.00	0.00	0.00	0.76	1.24	1.24
pH	--	--	7.00	7.39	6.94	7.61	7.16	6.97	7.05	6.76
Ferrous iron (mg/L)	--	--	1.6	0.0	0.4	0.5	0.6	0.4	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-101										
Sample Identification			782VM10118AA	782VM10118AB	782VM10118BB	782VM10118CA	782VM10118DA	782VM10118EB	782VM10118FB	782VM10118GA	782VM10118HB	782VM10118IA	782VM10118JA
Date of Collection			11/15/2006	9/24/2008	12/30/2008	3/26/2009	6/16/2009	9/21/2009	4/15/2010	9/28/2010	4/6/2011	9/14/2011	4/10/2012
VOCs (µg/L)													
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	U	U	U	1.96 F	U	U	2.68 FB	3.23 FB♦	U
Benzene	1	0.4	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	U	U	U	0.120 F	U	U	U	U	U	U
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	1.87 F	7.09	6.78	6.37	5.70	6.64 ♦	9.15 ♦	5.45	8.63 ♦	3.03 F	4.11 F♦
Methylene chloride	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	1.88	2.02	2.09 ♦	1.85 ♦	2.69	2.38	5.27 ♦	2.93	5.77	0.810 F	1.02
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	3.75	9.11	8.81	8.22	8.51	10.92	14.42	8.38	17.08	7.07	5.13
Wet Chemistry													
DOC (mg/L)	--	1	2.2	4.1	3.8 ♦	3.9	3.3	3.6 ♦	4.9 ♦	2.9	4.2 J	2.2	2.9
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	260	310	340	320	320	320	320	270	320 ♦	290	280
Chloride (mg/L)	250	1	4.3	21	31	25 ♦	17 ♦	28	38 ♦	27 ♦	41 ♦	21 B	21 ♦
Nitrate (mg/L)	10	1	0.021 F	0.037 F	U	0.021 F ♦	U	U	U	U	U	U	U
Sulfate (mg/L)	250	1	3.9	150	140	130	140	120	210	170	230	110	130
Field Parameters													
ORP (mV)	--	--	-131	-89	-49	-46	-76	-89	-99	22	-59	-100	-128
Dissolved Oxygen (mg/L)	--	--	5.99	1.36	1.41	0.00	0.48	2.19	0.00	0.00	0.00	0.00	0.00
pH	--	--	6.95	5.76	6.65	5.36	7.09	7.86	6.9	6.52	7.2	7.16	6.88
Ferrous iron (mg/L)	--	--	4.2	3.8	NS	1.6	1.8	2.9	4.1	2.6	0.4	1.8	3.0

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-101								
Sample Identification			782VM10118KA	782VM10118LA	782VM10118MA	782VM10118NA	782VMW-101_1116	782VMW-101_1117	782VMW-101_1018	782VMW-101_0619	782VMW-101_1121
Date of Collection			9/26/2012	3/12/2013	9/25/2013	10/1/2014	11/15/2016	11/28/2017	10/31/2018	6/18/2019	11/16/2021
VOCs (µg/L)											
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	6.76 FB♦	4.94 FB	U	U	U	3.2 J	U	U
Benzene	1	0.4	U	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	UJ	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	UJ	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	3.16 F♦	7.57 ♦	2.90 F	2.16 F♦	3.5 J	4.2 J	4.4 J	2.8 J	0.97 J
Methylene chloride	5*	1.0	0.190 F	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	0.590 F♦	5.04 ♦	3.34 ♦	0.470 F♦	0.73 J	0.92 J	1.1 J	2.6	2.6
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	3.77	19.37	11.18	2.63	4.23	5.12	8.7	5.4	3.57
Wet Chemistry											
DOC (mg/L)	--	1	2.0	3.5	2.1	1.6	2.6	2.9	2.8	1.9	NS
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	330 ♦	330	320	NS	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	26	34	19	NS	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	NS	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	100 ♦	220 ♦	58	NS	NS	NS	NS	NS	NS
Field Parameters											
ORP (mV)	--	--	-70	-112	-92	-100	-47	-24	-155	-72	-38
Dissolved Oxygen (mg/L)	--	--	0.00	0.00	0.99	1.70	2.28	0.00	1.08	0.52	0.36
pH	--	--	6.98	7.15	6.95	6.99	7.36	7.26	6.8	6.92	7.04
Ferrous iron (mg/L)	--	--	2.6	2.9	2.8	2.0	NS	NS	NS	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-105B									
Sample Identification			782VM105B33AA	782VM105B33AB	782VM105B36BB	782VM105B36CA	782VM105B36DA	782VM105B36EB	782VM105B36FB	782VM105B36GA	782VM105B36HB	782VM105B36IB
Date of Collection			11/14/2006	9/24/2008	12/30/2008	4/15/2009	6/17/2009	9/21/2009	4/15/2010	9/29/2010	4/6/2011	9/13/2011
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	28.7	64.1 M♦	157 J♦	123	35.5 ♦	1.06 F	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	0.220 F	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	44.4	44.5 M♦	66.5	32.7	17.0 ♦	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	0.110 F	U	U
Acetone	50	10	U	U	U	U	U	U	U	7.56 F	3.61 FB	U
Benzene	1	0.4	U	0.180 F	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	0.160 F	0.150 F♦	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	0.510 F	1.36	1.88 F	1.30 F♦	0.720 F ♦	3.00 ♦	4.70 ♦	4.83 ♦	3.26 J♦	2.83
Ethylbenzene	5*	1.0	U	31.8	22.6	65.4 M♦	29.1 ♦	21.0 ♦	U	U	U	U
Isopropylbenzene	5*	1.0	U	37.4	25.5 M♦	30.9 ♦	18.3 ♦	24.4	1.22 F	0.570 F	0.15 F♦	0.130 F
Methyl tert-butyl ether	10	5.0	U	U	U	U	U	U	U	U	U	U
Methylene chloride	5*	1.0	U	U	0.38 F♦	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	1.08	1.12 F	1.80 F♦	1.24 F	1.10 F ♦	U	U	U	U
n-Propylbenzene	5*	1.0	U	36.4	26.0 M♦	31.1 ♦	18.1 ♦	22.6 ♦	0.640 F	0.110 F	U	U
m,p-Xylene	5*	2.0	U	21.2	38.6 ♦	148 M♦	99.6 ♦	18.4 ♦	U	U	U	U
Naphthalene	10	1.0	U	29.3	15.8 ♦	36.7	20.9	17.1♦	0.880 F	U	U	U
o-Xylene	5*	1.0	U	U	0.560 F♦	1.10 F♦	0.220 F♦	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	0.630 F	2.00 ♦	4.20	2.20	1.46 F ♦	U	U	U	U
sec-Butylbenzene	5*	1.0	U	6.43	4.74 ♦	5.96	3.10	4.98 ♦	1.10 F	0.770 F	0.330 F♦	0.300 F
tert-Butylbenzene	5*	1.0	U	0.790 F	U	U	0.400	0.540 F	U	0.120 F	U	U
Tetrachloroethene (PCE)	5*	1.0	0.130 F	0.360 F	0.380 F♦	0.680 F	U	0.400 F	0.500 F	0.450 F	0.600 F♦	0.360 F
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	7.97	23.9	24.7	17.8	7.20 ♦	39.6 ♦	34.8	29.6	43.6 M ♦	24.3 ♦
Vinyl chloride	2	1.0	U	U	U	U	U	U	U	U	U	U
Xylenes, total	5*	2	U	21.2	39.2 ♦	150 M♦	U	U	U	U	U	U
Total VOCs	--	--	8.61	263.93	272.86	568.66	356.78	207.08	44.9	44.28	51.7	27.92
Wet Chemistry												
DOC (mg/L)	--	1	1.6	2.4	2.6 ♦	2.7 ♦	3.3 ♦	2.2	2.6 J♦	2.0 J	1.8 ♦	11.8
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	250	260	240	190	210 ♦	250	190	210	230	240
Chloride (mg/L)	250	1	12	11	9.3	6.7 ♦	7.5 ♦	7.5	4.9 ♦	7.5	11	7
Nitrate (mg/L)	10	1	0.32 F	0.68	0.39 ♦	0.17 ♦	0.21 ♦	0.33	0.083 F ♦	U	U	U
Sulfate (mg/L)	250	1	9.0	7.0	6.8	5.2 ♦	6.4 ♦	9.5	8.6 ♦	8.6 ♦	8.5	7.3
Field Parameters												
ORP (mV)	--	--	-22	-199	-145	-138	-147	-152	-133	-170	-120	-173
Dissolved Oxygen (mg/L)	--	--	0.00	1.53	0.78	0.34	0.00	5.56	0.93	4.98	8.11	1.32
pH	--	--	7.01	7.36	7.49	6.50	7.40	7.18	7.68	7.37	7.43	7.25
Ferrous iron (mg/L)	--	--	0.5	2.0	NS	2.0	3.6	2.5	2.0	1.4	3.0	1.7

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-105B										
Sample Identification			782VM105B36JB	782VM105B36KB	782VM105B36LA	782VM105B36MA	782VM105B36NA	782VMW-105B_1116	782VMW-105B_1117	782VMW-105B_0518	782VMW-105B_1118	782VMW-105B_0619	782VMW-105B_1121 & 782VMW-105B_1121-a
Date of Collection			4/10/2012	9/26/2012	3/12/2013	9/24/2013	9/29/2014	11/16/2016	11/27/2017	5/3/2018	11/28/2018	6/18/2019	11/16/2021
VOCs (µg/L)													
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	13	3.5	1.4 ♦	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	UJ	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	4.4	1.1	0.37 J ♦	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	UJ	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
Acetone	50	10	1.20 FM	1.66 F	9.60 FB♦	7.97 FB♦	U	UJ	4.3 J	U	5.8 UB	U	U
Benzene	1	0.4	U	U	U	U	U	UJ	U	U	U	U	U
Bromomethane	5*	3.0	U	U	U	U	U	UJ	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	UJ	U	22	5.6 J	4.7 J ♦	U
Chlorobenzene	5*	0.5	U	U	U	U	U	UJ	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	UJ	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	1.35	1.96	2.15 ♦	1.45	2.30	2.5 J	1.2♦	2.7	3.7	1.8 ♦	U
Ethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	UJ	U	0.96 J	0.38 J	U	U
Methyl tert-butyl ether	10	5.0	U	U	U	U	U	UJ	U	U	U	U	U
Methylene chloride	5*	1.0	U	0.180 F	U	U	U	UJ	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	UJ	U	0.42 J	0.29 J	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	UJ	U	0.87 J	U	0.4 J ♦	U
Naphthalene	10	1.0	U	U	U	U	U	UJ	U	0.73 J	0.54 J	U	U
o-Xylene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	UJ	U	0.17 J	U	U	U
sec-Butylbenzene	5*	1.0	0.250 F	U	U	U	U	UJ	U	0.60 J	0.32 J	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	0.320 F	0.390 F	0.200 F	0.170 F	0.24 J♦	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	UJ	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	9.24 M♦	22.3	25.5 ♦	15.9 ♦	11.6	15.0 J	12	11	5	7.4	U
Vinyl chloride	2	1.0	U	U	U	U	U	UJ	U	U	U	U	U
Xylenes, total	5*	2	U	U	U	U	U	UJ	U	0.87 J	U	0.4 J ♦	U
Total VOCs	--	--	12.04	26.42	37.64	25.52	11.77	17.5	17.5	57.72	20.43	16.07	0
Wet Chemistry													
DOC (mg/L)	--	1	2.2	1.9 J♦	1.8 ♦	1.8	1.3 ♦	2	4.7	NS	12	5.9	NS
TOC (mg/L)	--	1	2.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	250	250	250	250	NS	NS	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	4.4	3.8	3.9	3.8	NS	NS	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	0.12 F	0.15 F	0.15 F	0.34 F	NS	NS	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	7.3	6.6	12	7.1	NS	NS	NS	NS	NS	NS	NS
Field Parameters													
ORP (mV)	--	--	-181	-119	-143	-123	-130	-153	-128	-109	NS	-166	-126
Dissolved Oxygen (mg/L)	--	--	6.60	4.70	0.00	0.00	4.39	1.46	2.39	10.93	NS	1.34	0.68
pH	--	--	7.00	7.24	7.59	7.68	6.95	6.99	7.17	7.23	NS	7.78	7.31
Ferrous iron (mg/L)	--	--	3.0	4.4	2.6	3.6	1.8	2.0	2.0	NS	NS	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782MW-10									
Sample Identification			782M1027AA	782M1027AB	782M1027BB	782VM1027CA	782M1027DA	782M1027EB	782M1027FB	782M1027GA	782M1027HA	782M1027IA
Date of Collection			11/14/2006	9/24/2008	12/31/2008	3/26/2009	6/16/2009	9/23/2009	4/19/2010	9/28/2010	4/5/2011	9/13/2011
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	0.420 F	0.240 F	0.240 F	0.190 F	0.340 F	0.200 F	0.120 F	0.400 F	0.390 F	0.220 F
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U			U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	1.14 F	U	U	1.47 F	1.19 F	U	2.03 FB	U
Benzene	1	0.4	0.420 F	0.250 F	0.250 F	0.200 F	0.310 F	0.190 F	0.170 F	0.510	0.480 F	0.390 F
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	43.9	23.0	23.9	16.6	32.2	20.1	12.7	40.2	40.0	28.5
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U		U
Methyl tert-butyl ether	10	5.0	0.220 F	U	0.170 F	U	0.280 F	U	U	0.280 F	0.270 F	U
Methylene chloride	5*	1.0	0.200 F	U	U	U	U	U	U	U	0.330 F	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	2.92	1.69	1.71	1.27	2.22	1.41	0.970 F	3.19	3.17	2.39
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	17.4	10.8	13.0	10.2	18.1	12.1	7.22	20.2	20.1	13.8
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	64.64	35.98	40.41	28.46	53.45	35.47	22.35	64.78	66.77	45.3
Wet Chemistry												
DOC (mg/L)	--	1	3.1	5.1	5.3	5.5	6.8	5.5	10	4.3	19	5.2
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	270	270	260	270	260	280	250	240	230	240
Chloride (mg/L)	250	1	110	16	13	13	15	9.2	6.9	16	13	11
Nitrate (mg/L)	10	1	U	0.018 F	0.46	0.41	0.35	0.12 B	U	U	U	U
Sulfate (mg/L)	250	1	4.9	2.1	1.2	9.7	1.8	1.3	0.67 F	2.1	2.3	1.2
Field Parameters												
ORP (mV)	--	--	-109	-92	159	-8	17	-18	-105	-97	-114	-166
Dissolved Oxygen (mg/L)	--	--	0.93	1.05	1.99	0.00	3.45	1.48	0.00	0.00	0.00	8.32
pH	--	--	6.97	6.86	6.25	5.90	7.06	7.26	6.74	7.01	7.07	6.9
Ferrous iron (mg/L)	--	--	5.0	NS	NS	0.0	0.9	0.8	2.4	1.6	1.4	3.2

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782MW-10								
Sample Identification			782M1027JA	782M1027KA	782M1027LA	782M1027MA	782M1027NA	782MW-10_1116	782MW-10_1117	782MW-10_1018	782MW-10_0619
Date of Collection			4/10/2012	9/25/2012	3/13/2013	9/25/2013	9/29/2014	11/15/2016	11/27/2017	10/24/2018	6/18/2019
VOCs (µg/L)											
1,1-Dichloroethane	5*	1.0	0.330 F	0.360 F	0.450 F	0.350 F	0.310 F	0.29 J	U	782MW-10 was not sampled in 2018. The well was mis-identified in the field and the wrong well was sampled.	0.31 J
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U		U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U		U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U		U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U		U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U		U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U		U
Acetone	50	10	26.2	2.85 F	10.4 B	4.39 FB	U	U	U		8.2 UB
Benzene	1	0.4	0.470 F	0.440 F	0.550	0.420 F	0.410 F	0.43 J	U		0.52 J
Bromomethane	5*	3.0	U	U	U	UJ	U	U	U		U
2-Butanone	50	10	U	U	U	U	U	U	U		U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U		U
Chloroform	7	0.3	U	U	U	U	U	U	U		U
Chloromethane	5*	1.0	U	U	U	U	U	U	U		U
cis-1,2-Dichloroethene	5*	1.0	35.4	37.9	37.4	42.3	38.2	29.0	29.0		21
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U		U
Isopropylbenzene	5*	1.0	U	U	U	UJ	U	U	U		U
Methyl tert-butyl ether	10	5.0	0.300 F	0.250 F	0.360 F	0.430 F	0.230 F	U	U		U
Methylene chloride	5*	1.0	U	U	U	U	U	U	U		U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U		U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U		U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U		U
Naphthalene	10	1.0	U	U	U	U	U	U	U		U
o-Xylene	5*	1.0	U	U	U	U	U	U	U		U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U		U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U		U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U		U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U		U
Toluene	5*	1.0	U	U	U	U	U	U	U		U
trans-1,2-Dichloroethene	5*	1.0	3.05	3.31	3.41	3.14	3.50	2.9	3.2		3.6
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U		U
Vinyl chloride	2	1.0	18.4	20.6	30.6	22.1	16.9	16.0	19.0		49.0
Xylenes, total	5*	2	U	U	U	U	U	U	U		U
Total VOCs	--	--	84.15	65.71	83.17	54.17	59.55	48.62	51.2		82.63
Wet Chemistry											
DOC (mg/L)	--	1	5.5	3.0	2.9	2.9	2.6	4.5	3.9	Not Sampled	2.4
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS		NS
Alkalinity (mg/L)	--	10	260	250	260	230	NS	NS	NS		NS
Chloride (mg/L)	250	1	11	12	10	13	NS	NS	NS		NS
Nitrate (mg/L)	10	1	0.1	U	U	U	NS	NS	NS		NS
Sulfate (mg/L)	250	1	0.73 F	0.62 F	0.68 F	1.9	NS	NS	NS		NS
Field Parameters											
ORP (mV)	--	--	-166	-101	-114	-134	-144	-230	-77	Not Sampled	-150
Dissolved Oxygen (mg/L)	--	--	0.00	0.00	0.00	0.00	2.57	0.74	0.00		0.23
pH	--	--	6.95	7.47	6.99	7.05	7.07	7.03	7.11		7.11
Ferrous iron (mg/L)	--	--	2.0	3.5	2.6	2.2	6.0	NS	NS		NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-121									
Sample Identification			782M12116AB	782VM12116BB	782MW12116CA	782VM12116DA	782VM12116EB	782VM12116FB	782VM12116GA	782VM12116HA	782VM12116IA	782VM12116JA
Date of Collection			9/25/2008	12/31/2008	3/25/2009	6/17/2009	9/21/2009	4/15/2010	9/28/2010	4/6/2011	9/13/2011	4/10/2012
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	1.19 F	U	2.57 F	U	U	1.49 FB	U	U
Benzene	1	0.4	U	U	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	3.95 F	3.29 F	2.34 F	2.18 F	4.16 F	2.68 F	2.68 F	2.92 F	3.09 F	1.38 F
Methylene chloride	5*	1.0	U	U	0.170 F	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	22.5	24.4	12.7	11.8	21.8	17.5	19.2	19.1	15.7	11.8
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	26.45	27.69	16.4	13.98	28.53	20.18	21.88	23.51	18.79	13.18
Wet Chemistry												
DOC (mg/L)	--	1	4.5	4.0	3.8	4.2	4.7	4.1	4.1	3.2	3.0	3.5
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	320	320	330	340	320	290	290	270	320	310
Chloride (mg/L)	250	1	57	57	39	47	51	34	40	35	37	31
Nitrate (mg/L)	10	1	U	U	0.17 F	U	0.059 F	U	U	U	U	U
Sulfate (mg/L)	250	1	270	190	110	180	120	260	290	330	210	95
Field Parameters												
ORP (mV)	--	--	-105	-59	-33	-54	-88	-81	-100	-13	-118	-104
Dissolved Oxygen (mg/L)	--	--	0.55	0.91	1.59	0.00	1.97	0.00	4.68	0.00	0.00	0.99
pH	--	--	6.17	8.79	6.89	6.67	7.53	6.98	7.65	7.05	6.98	7.01
Ferrous iron (mg/L)	--	--	3.0	NS	1.8	1.4	3.2	1.8	1.8	2.3	2.5	4.0

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-121							
Sample Identification			782VM12116KA	782VM12116LA	782VM12116MA	782VM12116NA	782VMW-121_1116	782VMW-121_1117	782VMW-121_1018	782VMW-121_0619
Date of Collection			9/26/2012	3/12/2013	9/25/2013	10/1/2014	11/15/2016	11/28/2017	10/31/2018	6/18/2019
VOCs (µg/L)										
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U
Acetone	50	10	2.30 F	8.29 FB	6.31 FB	U	U	U	4.5 J	U
Benzene	1	0.4	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	UJ	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	UJ	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	1.66 F	2.15 F	1.35 F	2.38 F	1.9 J	1.0 J	0.72 J	0.48 J
Methylene chloride	5*	1.0	0.200 F	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	15.5	17.0	9.12	18.5	11	7.5	4.3	4.2
Xylenes, total	5*	2	U	U	U	U	U	U	U	U
Total VOCs	--	--	19.66	27.44	16.78	20.88	12.9	8.5	9.52	4.68
Wet Chemistry										
DOC (mg/L)	--	1	2.1	2.9	2.5	3.0	2.5	2.2	2.2	1.6
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	320	310	340	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	39	35	34	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	82	130	87	NS	NS	NS	NS	NS
Field Parameters										
ORP (mV)	--	--	-77	-87	-84	-103	-185	-43	-153	-101
Dissolved Oxygen (mg/L)	--	--	0.00	0.00	6.81	1.88	1.05	0.00	2.59	1.90
pH	--	--	6.91	6.86	6.88	6.64	6.75	6.88	6.83	8.09
Ferrous iron (mg/L)	--	--	5.0	3.2	5.4	6.0	3.0	NS	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-121D									
Sample Identification			782M121D26AB	782VM121D26BB	782VM121D26CA	782VM121D26DA	782VM121D26EB	782VM121D26FB	782VM121D26GA	782VM121D26HA	782VM121D26IA	782VM121D26JA
Date of Collection			9/25/2008	12/31/2008	3/25/2009	6/16/2009	9/21/2009	4/15/2010	9/28/2010	4/6/2011	9/14/2011	4/10/2012
VOCs (µg/L)												
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U	U	1.13 F	U	1.22 F	1.52 F	1.38 F	1.36 FB	U	U
Benzene	1	0.4	U	U	U	U	U	U	U	U	U	U
Bromomethane	5*	3.0	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U	U	U	U	U	U	U	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	0.120 F	U
Ethylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	5.0	5.35	5.71	5.66	6.60	6.76	6.5	5.12	6.48	6.68	4.92 F
Methylene chloride	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	U	U	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	U	U	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	U	U	U	U	U	U	U	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	15.2	18.1	12.9	23.3	18.5	15.5	18.0	22.3	16.1	14.1
Xylenes, total	5*	2	U	U	U	U	U	U	U	U	U	U
Total VOCs	--	--	20.55	23.81	19.69	29.9	26.48	23.52	24.5	30.14	22.9	18.39
Wet Chemistry												
DOC (mg/L)	--	1	4.9	5.0	4.6	7.9	5.4	19	4.9	3.9	3.9	5.8
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	360	350	350	360	340	350	340	330	340	330
Chloride (mg/L)	250	1	61	56	56	53	55	48	48	45	40	45
Nitrate (mg/L)	10	1	U	U	U	U	0.048 F	U	U	U	U	U
Sulfate (mg/L)	250	1	32	27	27	25	17	79	59	170	110	47
Field Parameters												
ORP (mV)	--	--	-95	-38	-61	-95	-103	-96	-130	-76	-126	-139
Dissolved Oxygen (mg/L)	--	--	0.87	1.25	0.32	0.64	2.17	0.00	4.74	0.00	0.00	0.00
pH	--	--	6.01	8.6	6.93	7.24	7.73	6.92	7.68	7.13	6.89	6.91
Ferrous iron (mg/L)	--	--	2.8	NS	1.2	2.0	3.0	4.0	2.4	1.2	5.6	6.0

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	782VMW-121D								
Sample Identification			782VM121D26KA	782VM121D26LA	782VM121D26MA	782VM121D26NA	782VMW-121D_1116	782VMW-121D_1117	782VMW-121D-1018	782VMW-121D-0619	782VMW-121_1121
Date of Collection			9/26/2012	3/12/2013	9/25/2013	10/1/2014	11/15/2016	11/28/2017	10/31/2018	6/19/2019	11/16/2021
VOCs (µg/L)											
1,1-Dichloroethane	5*	1.0	U	U	U	U	U	UJ	U	U	U
1,1-Dichloroethene	5*	1.0	U	U	U	U	U	UJ	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U
1,2-Dichlorobenzene	3	1.0	U	U	U	U	U	UJ	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U
1,4-Dichlorobenzene	3	0.5	U	U	U	U	U	UJ	U	U	U
4-Chlorotoluene	5*	1.0	U	U	U	U	U	UJ	U	U	U
Acetone	50	10	U	10.1 B	5.62 FB	U	U	UJ	3.9 J	2.8 UB	U
Benzene	1	0.4	U	U	U	U	U	UJ	U	U	U
Bromomethane	5*	3.0	U	U	UJ	U	U	UJ	U	U	U
2-Butanone	50	10	U	U	U	U	U	UJ	U	U	U
Chlorobenzene	5*	0.5	U	U	U	U	U	UJ	U	U	U
Chloroform	7	0.3	U	U	U	U	U	UJ	U	U	U
Chloromethane	5*	1.0	U	U	U	U	U	UJ	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U	0.110 F	U	U	U	UJ	U	U	U
Ethylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U
Isopropylbenzene	5*	1.0	U	U	UJ	U	U	UJ	U	U	U
Methyl tert-butyl ether	10	5.0	4.05 F	3.79 F	3.25 F	4.01 F	3.4 J	3.3 J	2.3 J	2.3 J	U
Methylene chloride	5*	1.0	U	U	U	U	U	UJ	U	U	U
n-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U
n-Propylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U
m,p-Xylene	5*	2.0	U	U	U	U	U	UJ	U	U	U
Naphthalene	10	1.0	U	U	U	U	U	UJ	U	U	U
o-Xylene	5*	1.0	U	U	U	U	U	UJ	U	U	U
p-Isopropyltoluene	5*	1.0	U	U	U	U	U	UJ	U	U	U
sec-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U
tert-Butylbenzene	5*	1.0	U	U	U	U	U	UJ	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U	U	U	U	U	UJ	U	U	U
Toluene	5*	1.0	U	U	U	U	U	UJ	U	U	U
trans-1,2-Dichloroethene	5*	1.0	U	U	U	U	U	UJ	U	U	U
Trichloroethene (TCE)	5*	1.0	U	U	U	U	U	UJ	U	U	U
Vinyl chloride	2	1.0	17.9	19.2	17.0	13.8	11	7.9 J	8.9	9.9	14.9
Xylenes, total	5*	2	U	U	U	U	U	UJ	U	U	U
Total VOCs	--	--	21.95	33.2	25.87	17.81	14.4	11.2	15.1	15	14.9
Wet Chemistry											
DOC (mg/L)	--	1	2.8	3.0	3.2	3.4	3.2	3.1	2.4	2.4	NS
TOC (mg/L)	--	1	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	310	310	330	NS	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	44	38	38	NS	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U	U	U	NS	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	37	130	75	NS	NS	NS	NS	NS	NS
Field Parameters											
ORP (mV)	--	--	-93	-95	-95	-120	-137	-57	-167	-147	-37
Dissolved Oxygen (mg/L)	--	--	0.00	0.00	0.27	2.32	1.34	0.00	1.09	0.51	0.26
pH	--	--	6.91	6.85	6.88	6.74	6.71	7.14	6.65	6.89	6.9
Ferrous iron (mg/L)	--	--	6.0	1.4	5.4	5.8	NS	NS	NS	NS	NS

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	AP2MW-3													
Sample Identification			AP2M0327AB		AP2M0327EB	AP2M0327FB	AP2M0327GA	AP2M0327IA	AP2M0327KA	AP2M0340MA	AP2M0340NA	AP2MW-3_1116	AP2-MW3_1117	AP2MW-3_1018	AP2MW-3_0619	AP2MW-3_1121
Date of Collection			9/26/2008		9/21/2009	4/15/2010	9/28/2010	9/14/2011	9/25/2012	9/26/2013	10/1/2014	11/15/2016	11/28/2017	10/31/2018	6/18/2019	11/16/2021
VOCs (µg/L)																
1,1-Dichloroethane	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	5*	1.0	32.4		17.0 F	29.2	14.5 F	10.6	8.03	8.8	0.830 F	2.3	2.1	2.6	2.3 D	3.2
1,2-Dichlorobenzene	3	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	5*	1.0	6.73		4.00 F	7.25 F	3.50 F	2.27	1.58	1.01	U	U	U	U	U	U
1,4-Dichlorobenzene	3	0.5	U		U	U	U	U	U	U	U	U	U	U	U	U
4-Chlorotoluene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
Acetone	50	10	U		U	U	253	U	U	U	U	U	U	U	U	U
Benzene	1	0.4	658		668	708	614	U	211 J	U	112 J	370	300	240 D	210 D	252 D
Bromomethane	5*	3.0	U		U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	50	10	U		U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.5	U		U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	7	0.3	U		3.00 F	U	U	U	U	U	0.59	U	U	U	U	U
Chloromethane	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	1.0	2.57		U	5.00 F	U	0.480 F	0.330 F	0.390 F	U	U	U	U	U	U
Isopropylbenzene	5*	1.0	2.54		U	U	U	1.25	0.730 F	0.950 F	0.130 F	0.26 J	U	0.37 J	U	U
Methyl tert-butyl ether	10	5.0	U		51.5 F	55.8 F	37.2 F	53.9	30.1	49.6	33.4	35	28	13	21 D	12
Methylene chloride	5*	1.0	U		U	U	U	U	U	U	U	U	UJ	U	U	U
n-Butylbenzene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
n-Propylbenzene	5*	1.0	2.52		U	4.00 F	U	0.960 F	0.630 F	0.850 F	0.110 F	0.32 J	U	0.36 J	0.36 J D	U
m,p-Xylene	5*	2.0	61.0		35.2 F	32.2 F	11.8 F	3.57	1.3 F	0.810 F	U	U	U	U	0.33 J D	U
Naphthalene	10	1.0	11.9		5.50 F	6.75 F	6.25 F	4.11	2.46	3.66	0.870 F	0.90 J	0.61 J	0.80 J	0.48 J D	U
o-Xylene	5*	1.0	0.610 F		U	4.50 F	U	0.170 F	0.120 F	0.150 F	U	U	U	U	U	U
p-Isopropyltoluene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
sec-Butylbenzene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
tert-Butylbenzene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene (PCE)	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
Toluene	5*	1.0	0.690 F		U	U	U	0.420 F	0.260 F	0.670 F	0.120 F	0.46 J	0.61 J	0.91 J	0.72 J D	1.1
trans-1,2-Dichloroethene	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	2	1.0	U		U	U	U	U	U	U	U	U	U	U	U	U
Xylenes, total	5*	2	61.6		35.2 F	36.8 F	11.8 F	3.7	U	U	U	U	U	U	U	U
Total VOCs	--	--	778.96		784.2	852.7	940.25	77.73	256.54	66.89	148.05	409.24	331.32	258.04	235.19	268.3
Wet Chemistry																
DOC (mg/L)	--	1	6.1		6.4	6.7	5.8	6.2	5.0	5.2	4.7	5.6	6	4.8	4.4	NS
TOC (mg/L)	--	1	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Alkalinity (mg/L)	--	10	350		360	370	370	360	370	350	NS	NS	NS	NS	NS	NS
Chloride (mg/L)	250	1	72		75	62	68	58	58	43	NS	NS	NS	NS	NS	NS
Nitrate (mg/L)	10	1	U		U	U	U	U	U	U	NS	NS	NS	NS	NS	NS
Sulfate (mg/L)	250	1	U		U	U	U	U	U	8	NS	NS	NS	NS	NS	NS
Field Parameters																
ORP (mV)	--	--	-116		-101	-105	-9	-136	-87	-110	-90	-157	-106	-194	-160	-79
Dissolved Oxygen (mg/L)	--	--	1.60		1.79	0.00	0.00	0.00	0.00	3.11	3.39	1.12	0.00	0.96	0.54	0.58
pH	--	--	6.74		7.60	6.98	6.57	7.01	6.83	6.85	7.05	6.83	6.93	6.74	7.94	6.95
Ferrous iron (mg/L)	--	--	1.6		3.8	6.0	3.0	3.8	4.2	4.2	2.0	NS	NS	NS	NS	NS

Monitoring well not sampled, annual sampling frequency.

Table 2-1
Site SD052-01 Apron 2 Detected Groundwater Sampling Results

Sample Location	NYS Class GA Groundwater Standards	Reporting Limit	786MW-15		786MW-16	
Sample Identification			786M1515JA		786M1617JA	
Date of Collection			4/11/2012		4/11/2012	
VOCs (µg/L)						
1,1-Dichloroethane	5*	1.0	U	Monitoring well 786MW-15 was sampled once to determine the level of petroleum contamination as this well is located in the source zone of the Apron 2 Chlorinated Plume.	U	Monitoring well 786MW-16 was sampled once to determine the level of petroleum contamination as this well is located in the source zone of the Apron 2 Chlorinated Plume.
1,1-Dichloroethene	5*	1.0	U		U	
1,2,4-Trimethylbenzene	5*	1.0	U		U	
1,2-Dichlorobenzene	3	1.0	U		U	
1,3,5-Trimethylbenzene	5*	1.0	U		U	
1,4-Dichlorobenzene	3	0.5	0.300 F		U	
4-Chlorotoluene	5*	1.0	U		U	
Acetone	50	10	2.32 F		2.38 F	
Benzene	1	0.4	U		U	
Bromomethane	5*	3.0	2.08 F		U	
2-Butanone	50	10	U		U	
Chlorobenzene	5*	0.5	U		U	
Chloroform	7	0.3	U		U	
Chloromethane	5*	1.0	0.530 F		U	
cis-1,2-Dichloroethene	5*	1.0	U		U	
Ethylbenzene	5*	1.0	U		U	
Isopropylbenzene	5*	1.0	U		U	
Methyl tert-butyl ether	10	5.0	U		U	
Methylene chloride	5*	1.0	U		U	
n-Butylbenzene	5*	1.0	U		U	
n-Propylbenzene	5*	1.0	U		U	
m,p-Xylene	5*	2.0	U		U	
Naphthalene	10	1.0	U		U	
o-Xylene	5*	1.0	U		U	
p-Isopropyltoluene	5*	1.0	U		U	
sec-Butylbenzene	5*	1.0	U		U	
tert-Butylbenzene	5*	1.0	U		U	
Tetrachloroethene (PCE)	5*	1.0	U		U	
Toluene	5*	1.0	0.430 F		0.400 F	
trans-1,2-Dichloroethene	5*	1.0	U		U	
Trichloroethene (TCE)	5*	1.0	U		U	
Vinyl chloride	2	1.0	U		U	
Xylenes, total	5*	2	U		U	
Total VOCs	--	--	5.66		2.78	
Wet Chemistry						
DOC (mg/L)	--	1	5.1		NS	
TOC (mg/L)	--	1	NS		6.1	
Alkalinity (mg/L)	--	10	NS		NS	
Chloride (mg/L)	250	1	NS		NS	
Nitrate (mg/L)	10	1	NS		NS	
Sulfate (mg/L)	250	1	NS		NS	
Field Parameters						
ORP (mV)	--	--	-120		116	
Dissolved Oxygen (mg/L)	--	--	1.97		0.00	
pH	--	--	6.64		6.33	
Ferrous iron (mg/L)	--	--	0.0		0.0	

Notes:
D - Dilution
B - The result for the analyte was detected in a blank sample.
F - Analyte was positively identified above the Method Detection Limit (MDL), but the concentration is below the Reporting Limit (RL).
J - Analyte was positively identified above the MDL, but the concentration is below the RL.
This replaces the F flag.
M - Matrix effect is present.
U - The analyte was analyzed for, but not detected. The value is at or below the MDL.
UJ - estimated non detect flag due to a QC discrepancy
VOCs - Volatile Organic Compounds
NS - Not Sampled
DOC - Dissolved Organic Carbon
TOC - Total Organic Carbon
ORP - Oxidation Reduction Potential
µg/L - Micrograms per liter, mg/L - milligrams per liter, mV - milliVolts
NYS - New York State
- Exceedance of the NYS Groundwater Standards or Guidance Values.
♦ - Denotes higher nominal value of duplicate sample result.
* - The principal organic contaminant standard for groundwater of 5 µg/L applies to this COC.
- - No NYS Groundwater Standard available.

Table 2-2
Site SD052-01 Apron 2 Detected Surface Water Sampling Results

Sample Location	NYS	782SW-115											
Sample Identification	Groundwater	782SW11501AA	782SW11501AB	782SW11501BB	782SW11501CA	782SW11501DA	782SW11501EB	782SW11501FB	782SW11501GA	782SW11501HA	782SW11501IA	782SW11501KA	782SW11501LA
Date of Collection	Standards	11/15/2006	9/24/2008	1/2/2009	4/16/2009	6/16/2009	9/24/2009	4/21/2010	10/4/2010	4/5/2011	9/14/2011	9/26/2012	3/12/2013
VOCs (µg/L)													
Acetone	50	U	U	U	1.12 F	U	1.11 F	U	U	3.52 FB	3.25 FB	1.86 F	7.68 FB
Benzene	1	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	5*	0.160 F	U	0.230 F	0.220 F	0.120 F	U	0.190 F	0.250 F	0.210 F	U	U	U
Chloroform	7	U	U	U	U	U	U	0.150 F	0.240 F	0.160 F	0.500	0.240 F	U
cis-1,2-Dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	U	U	U	U	U	U	U	U	U	U	U	U
Methylene chloride	5*	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	0.140 F	U	0.110 F	U	U	0.130 F	U	0.110 F	U	0.180 F	0.130 F	U
Vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	-	0.3	0	0.34	1.34	0.24	1.83	0.34	0.6	3.89	3.93	2.23	7.68

Table 2-2
Site SD052-01 Apron 2 Detected Surface Water Sampling Results

Sample Location	NYS	782SW-115							782SW-118					
Sample Identification	Groundwater	782SW11501MA	782SW11501NA	782SW-115_1116	782SW-115_1117	782SW-115_1018	782SW-115_0619	782SW-115_1121	782SW11801AA	782SW11801AB	782SW11801BB	782SW11801CA	782SW11801DA	782SW11801EB
Date of Collection	Standards	9/25/2013	9/26/2014	11/15/2016	11/27/2017	10/31/2018	6/19/2019	11/16/2021	11/15/2006	9/24/2008	1/2/2009	4/16/2009	6/16/2009	9/24/2009
VOCs (µg/L)														
Acetone	50	9.20 FB	U	U	U	3.2 J	6.4 UB	U	U	U	U	1.10 F	U	U
Benzene	1	U	U	U	U	U	U	U	1.85	1.42	1.11	0.620	0.620	0.740
Chlorobenzene	5*	U	U	U	U	U	U	U	0.150 F	U	0.200 F	0.170 F	0.130 F	U
Chloroform	7	0.290 FB	0.570	0.66 J	0.33 J	U	1.00	0.85 J	U	U	U	U	U	U
cis-1,2-Dichloroethene	5*	U	0.550 F	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	U	U	U	U	U	U	U	0.110 F	U	U	U	U	U
Methyl tert-butyl ether	10	U	U	U	U	U	U	U	0.190 F	U	0.220 F	U	0.220 F	0.300 F
Methylene chloride	5*	U	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	0.120 F	0.150 F	U	U	U	0.16 J	U	0.130 F	U	U	0.120 F	U	0.110 F
Vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	-	9.61	1.27	0.66	0.33	3.2	1.16	0.85	0.28	1.42	1.53	2.01	0.970	1.54

Table 2-2
Site SD052-01 Apron 2 Detected Surface Water Sampling Results

Sample Location	NYS	782SW-118											
Sample Identification	Groundwater	782SW11801FB	782SW11801GA	782SW11801HA	782SW11801IA	782SW11801KA	782SW11801LA	782SW11801MA	782SW11801NA	782SW-118_1116	782SW-118_1117	782SW-118_1018	782SW-118_0619
Date of Collection	Standards	4/21/2010	10/4/2010	4/5/2011	9/14/2011	9/26/2012	3/12/2013	9/25/2013	9/26/2014	11/15/2016	11/27/2017	10/31/2018	6/19/2019
VOCs (µg/L)													
Acetone	50	1.27 F	U	3.72 FB	U	1.77 F	11.3 B	7.71 FB	1.18 F	U	U	5.1 J	6.5 UB
Benzene	1	0.350 F	U	U	0.180 F	0.210 F	U	0.190 F	U	U	U	U	U
Chlorobenzene	5*	0.230 F	0.240 F	0.180 F	U	U	U	U	U	U	U	U	U
Chloroform	7	0.150 F	0.230 F	0.140 F	0.490 F	0.260 F	U	0.270 FB	0.600	0.62 J	0.34 J	U	0.86 J
cis-1,2-Dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	U	U	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	0.171 FJ	U	U	0.210 F	0.230 F	U	0.460 F	0.180 F	U	U	U	U
Methylene chloride	5*	U	U	U	U	0.180 F	U	U	U	U	U	U	U
Trichloroethene (TCE)	5*	0.110 F	U	U	0.180 F	U	U	U	0.150 F	U	U	U	U
Vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	-	2.281	0.47	4.04	1.06	2.65	11.3	8.63	2.11	0.62	0.34	5.1	0.86

Table 2-2
Site SD052-01 Apron 2 Detected Surface Water Sampling Results

Sample Location	NYS	782SW-119											
Sample Identification	Groundwater	782SW11901AA	782SW11901AB	782SW11901BB	782SW11901CA	782SW11901DA	782SW11901EB	782SW11901FB	782SW11901GA	782SW11901HA	782SW11901IA	782SW11901KA	782SW11901LA
Date of Collection	Standards	11/15/2006	9/24/2008	1/2/2009	4/16/2009	6/16/2009	9/24/2009	4/21/2010	10/4/2010	4/5/2011	9/14/2011	9/26/2012	3/12/2013
VOCs (µg/L)													
Acetone	50	U	U	U	U	U	U	U	U	4.20 FB	4.25 FB	1.88 F	13.0 B
Benzene	1	4.49	2.74	1.25	0.570	0.590	0.710	0.340 F	0.120 F	U	0.170 F	0.200 F	U
Chlorobenzene	5*	0.150 F	U	0.190 F	0.170 F	0.120 F	U	0.170 F	0.230 F	0.180 F	U	U	U
Chloroform	7	U	U	U	U	U	U	0.120 F	0.230 F	0.130 F	0.440 F	0.250 F	U
cis-1,2-Dichloroethene	5*	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5*	0.150 F	U	U	U	U	U	U	U	U	U	U	U
Methyl tert-butyl ether	10	0.510 F	0.930 F	0.260 F	U	0.190 F	0.370 F	0.200 F	U	U	0.180 F	0.250 F	U
Methylene chloride	5*	0.120 F	U	U	U	U	U	U	U	U	U	0.190 F	U
Trichloroethene (TCE)	5*	U	U	U	U	0.110 F	U	0.170 F	U	U	0.150 F	U	U
Vinyl chloride	2	U	U	U	U	U	U	U	U	U	U	U	U
Total VOCs	-	0.15	3.67	1.7	0.74	1.01	1.08	1	0.58	4.51	5.19	2.77	13

Table 2-2
Site SD052-01 Apron 2 Detected Surface Water Sampling Results

Sample Location	NYS Groundwater Standards	782SW-119					
Sample Identification		782SW11901MA	782SW11901NA	782SW-119_1116	782SW-119_1117	782SW-119_1018	782SW-119_0619
Date of Collection		9/25/2013	9/26/2014	11/15/2016	11/27/2017	10/31/2018	6/19/2019
VOCs (µg/L)							
Acetone	50	3.50 FB	U	U	U	11	7.2 UB
Benzene	1	0.140 F	U	U	U	U	U
Chlorobenzene	5*	U	U	U	U	U	U
Chloroform	7	0.250 FB	0.530	0.54 J	0.27 J	0.41 J	0.87 J
cis-1,2-Dichloroethene	5*	U	U	U	U	U	U
Ethylbenzene	5*	U	U	U	U	U	U
Methyl tert-butyl ether	10	0.470 F	0.210 F	U	U	U	U
Methylene chloride	5*	U	U	U	U	U	U
Trichloroethene (TCE)	5*	U	0.170 F	U	U	U	U
Vinyl chloride	2	U	U	U	U	U	U
Total VOCs	-	4.36	0.91	0.54	0.27	11.41	0.87

Notes:
Qualifiers:
B - The result for the analyte was detected in a blank sample.
F - Analyte was positively identified above the Method Detection Limit (MDL), but the concentration is below the Reporting Limit (RL).
J - Analyte was positively identified above the MDL, but the concentration is below the RL. Replaces the "F" flag.
U - The analyte was analyzed for, but not detected. The numerical value is at or below the MDL.
VOCs - Volatile Organic Compounds
µg/L - Micrograms per liter
NYS - New York State
- Exceedance of the NYS Groundwater Standards or Guidance Values.
* - The principal organic contaminant standard for groundwater of 5 µg/L applies to this COC.
- - No NYS Groundwater Standard available.

This page intentionally left blank.

Tables

Table 2-3
Site SD052-01 Apron 2
Water Level Measurements (November 2021)

Well Identification	Depth to Water (ft btoc)	Top of Casing Elevation (ft amsl)	Groundwater Elevation (ft amsl)
AP2MW-3	17.90	465.63	447.73
782VMW-81	20.30	479.57	459.27
782VMW-101	8.02	453.95	445.93
782VMW-105B	18.8	480.25	461.45
782VMW-121D	12.35	460.71	448.36

Notes:
ft - Feet
btoc - Below top of casing
amsl - Above mean sea level

This page intentionally left blank.

APPENDICES

This page intentionally left blank.

APPENDIX A
FIELD FORMS

This page intentionally left blank.

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: SD052 - 01	Location ID: 782VMW - 81	Date: 11/16/2021
	Project Name: Griffiss FAFB	Project No./Phase: -	Recorded By: A. Petrilli
EQUIPMENT	Pump Type/ID#: Grundfos (2876443)	Water Quality Meter/ID#: Horiba U-52 (PVMJKYW4)	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst (483746)	Other Equipment/ID#: Handset (WDVFRGLE)	Decon Method: Alconox / Distilled H2O
	Tubing Type/Diameter (in): 3/8" ID x 1/2" OD	Other Equipment/ID#: Flow thru cell (P9M00BTX)	PPE: Level D+ modified w/ nitrile gloves
WELL INFO	Casing Type / ID (in): 2" PVC Stickup	Unit Casing Volume (gal/lin ft) (A): 0.16	Initial Depth to Water (ft) (B): 20.30
	Total Well Depth (ft) (C): 50.8	Water Column Thickness (ft) (C-B): 30.5	Well Volume (gal) (A*(C-B)): 4.88
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: Overcast 33°F	Well Condition: Fair	Comments: Removed bladder pump prior to purge @ 0930

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
11/16/2021	0935	21.2	2	400	12.50	7.30	1.59	1.61	38	-86	cloudy
	0940	21.2	4		13.31	7.25	1.72	0.86	26 ↓	-70	cloudy
	0945	21.2	6		13.42	7.23	1.75	0.66	12.9 ↓	-69	clear
	0950	21.2	8		13.55	7.22	1.77	0.54	7	-70	
	0955	21.2	10		13.69	7.19	1.80	0.41	1.4	-71	
	1000	21.2	12		13.75	7.18	1.82	0.38	0	-72	
	1005	21.2	14	↓	13.83	7.18	1.82	0.37	0	-72	

Colorimeter Results					**No. Containers/Volume/Type**			**Preserv.**	**Filter (Y/N)**	**Method**	**Parameter(s)**
Time	**Analyte**	**Dilution**	**Result**	**Units**	3	40mL	VOA	HCL	N	8260	VOCs

Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%							
	Cond	+/- 10%	ORP	+/- 10	Sample ID: 782VMW-81_1121				Sample Time: 1010		

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: SD052-01	Location ID: AP2MW-3	Date: 11/16/2021
	Project Name: Griffiss FAFB	Project No./Phase: -	Recorded By: A. Petrilli
EQUIPMENT	Pump Type/ID#: Grundfos (2876443)	Water Quality Meter/ID#: Horiba U-52 (PKMJKYW4)	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst (483740)	Other Equipment/ID#: Handset (WDVFRCLE)	Decon Method: Alconox / Distilled H20
	Tubing Type/Diameter (in): 3/8" ID x 1/2" OD	Other Equipment/ID#: Flow thru cell (P9MOOBTX)	PPE: Level D+ modified w/ nitrile gloves
WELL INFO	Casing Type / ID (in): 2" PVC FM	Unit Casing Volume (gal/lin ft) (A): 0.160	Initial Depth to Water (ft) (B): 17.90
	Total Well Depth (ft) (C): 33.83	Water Column Thickness (ft) (C-B): 15.93	Well Volume (gal) (A*(C-B)): 2.55
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 31°F, snow	Well Condition: Fair	Comments: Removed bladder pump prior to purge; Pump started @ 1045

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
11/16/2021	1050	18.05	2	~400	12.93	6.88	0.852	0.58	190	-69	cloudy
	1055	18	4	↓	12.68	6.89	0.844	0.57	177	-70	cloudy
	1100	18.06	6		13.10	6.91	0.837	0.56	115	-73	clear
	1105	18	8		13.24	6.92	0.835	0.56	90	-74	↓
	1110	18.10	10		13.41	6.94	0.830	0.56	47.9	-79	
	1115	18	12		13.58	6.95	0.830	0.57	20	-79	
	1120	18	14	↓	13.64	6.95	0.829	0.58	7	-79	↓

Colorimeter Results					**No. Containers/Volume/Type**			**Preserv.**	**Filter (Y/N)**	**Method**	**Parameter(s)**
Time	**Analyte**	**Dilution**	**Result**	**Units**	3	40 mL	VOA	HCL	N	8260	VOCs

Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%							
	Cond	+/- 10%	ORP	+/- 10	Sample ID: AP2MW-3_1121				Sample Time: 1125		

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: SD052-01	Location ID: 782SW-115 (Surface water)	Date: 11/16/2021
	Project Name: Griffiss FAFB	Project No./Phase: -	Recorded By: A. Petrill
EQUIPMENT	Pump Type/ID#: -	Water Quality Meter/ID#: Horiba U-52 (PVM3K764)	PID Type/ID#: -
	Water Level Indicator Type/ID#: -	Other Equipment/ID#: -	Decon Method: -
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D modified w/ nitrile gloves
WELL INFO	Casing Type / ID (in): -	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): -
	Total Well Depth (ft) (C): -	Water Column Thickness (ft) (C-B): -	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 34°F; overcast & raining	Well Condition: -	Comments: -

CASING INFO											
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
11/16/2021	1145	-	-	-	9.46	7.35	0.410	12.06	0	88	clear

Colorimeter Results					**No. Containers/Volume/Type**			**Preserv.**	**Filter (Y/N)**	**Method**	**Parameter(s)**
Time	**Analyte**	**Dilution**	**Result**	**Units**	3	40 mL	glass vial	HCL	N	-	VOCs

Conversions	**Stabilization Criteria**										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%							
	Cond	+/- 10%	ORP	+/- 10	Sample ID: 782SW-115-1116				Sample Time: 1145		

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: SD052-01	Location ID: 782VMW-101	Date: 11/16/2021
	Project Name: Griffiss FAFB	Project No./Phase: -	Recorded By: A. Petrilli
EQUIPMENT	Pump Type/ID#: Grundfos (2876443)	Water Quality Meter/ID#: Horiba U-52 (PVMJKYW4)	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst (483746)	Other Equipment/ID#: Handset (WDVFRCLE)	Decon Method: Alconox/Distilled H2O
	Tubing Type/Diameter (in): 3/8" ID x 1/2" OD	Other Equipment/ID#: Flow thru cell (P9M00BTK)	PPE: Level D+ modified w/ nitrile gloves
WELL INFO	Casing Type / ID (in): 2" PVC Stickup	Unit Casing Volume (gal/lin ft) (A): 0.160	Initial Depth to Water (ft) (B): 8.02
	Total Well Depth (ft) (C): 25.50	Water Column Thickness (ft) (C-B): 17.48	Well Volume (gal) (A*(C-B)): 2.8
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 31° F; freezing rain	Well Condition: Fair	Comments: Began purge @ 1245

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
11/16/2021	1250	8.1	2	~400	11.95	7.09	0.570	0.98	101	-10	orange tint
	1255	8.1	4	↓	12.10	7.06	0.602	0.71	95.4	-21	orange tint
	1300	8	6		12.86	7.06	0.626	0.51	65	-29	clear
	1305	8	8		12.99	7.05	0.643	0.44	48.9	-32	↓
	1310	8	10		13.12	7.04	0.656	0.40	37.1	-34	
	1315	8	12		13.06	7.04	0.661	0.38	21.7	-36	
	1320	8	14	↓	13.09	7.04	0.659	0.36	7.1	-38	↓

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	3	40 mL	VOA	HCL	N	8260	VOCs

Conversions	Stabilization Criteria										
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%							
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%							
	Cond	+/- 10%	ORP	+/- 10	Sample ID: 782VMW-101-1121				Sample Time: 1325		

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: SD052-01	Location ID: 782VMW-121	Date: 11/16/2021
	Project Name: Griffiss FAFB	Project No./Phase: -	Recorded By: A. Petrilli
EQUIPMENT	Pump Type/ID#: Grundfos (2876443)	Water Quality Meter/ID#: Horiba U-52 (PVMJKYG4)	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst (483746)	Other Equipment/ID#: Manifold (WDVFRGLE)	Decon Method: Alconox / Distilled H2O
	Tubing Type/Diameter (in): 3/8" ID x 1/2" OD	Other Equipment/ID#: Flow thru cell (P9MCOBTX)	PPE: Level D+ modified w/ nitrile gloves
WELL INFO	Casing Type / ID (in): 2" PVC Stickup	Unit Casing Volume (gal/lin ft) (A): 0.16	Initial Depth to Water (ft) (B): 12.35
	Total Well Depth (ft) (C): 30.45	Water Column Thickness (ft) (C-B): 18.1	Well Volume (gal) (A*(C-B)): 3
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 35°F; intermittent hail	Well Condition: Fair	Comments: Pulled bladder pump prior to purge @ 1345

CASING INFO											
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
11/16/2021	1350	12.40	2	400	12.96	6.9	1.26	0.74	244	-32	orange tint (slight)
	1355	12.36	4		13.9	6.91	1.22	0.71	106	-35	clear
	1400	12.4	6		14.14	6.91	1.19	0.37	19.8	-35	
	1405	12.4	8		14.31	6.9	1.19	0.31	10.1	-36	
	1410	12.4	10		14.31	6.9	1.2	0.32	7.9	-37	
	1415	12.4	12		14.32	6.9	1.2	0.27	4.3	-37	
	1420	12.4	14	↓	14.37	6.9	1.2	0.26	1	-37	↓

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	3	40mL	VOA	HCl	N	8260	VOC

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

Sample ID: 782VMW-121-1121 Sample Time: 1425

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: SD052-01	Location ID: 782VMW-105B	Date: 11/16/2021
	Project Name: GRIGGS FAFB	Project No./Phase: -	Recorded By: A. Petrilli
EQUIPMENT	Pump Type/ID#: Geopump (51860)	Water Quality Meter/ID#: Horiba U-52 (PVMJCYW4)	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst (483746)	Other Equipment/ID#: Handset (WDVFRCLE)	Decon Method: Alconox/Distilled H20
	Tubing Type/Diameter (in): 1/4" ID x 3/8" OD	Other Equipment/ID#: Flow thru cell (P9MCOBTX)	PPE: Level D+ modified w/ nitrile gloves
WELL INFO	Casing Type / ID (in): 2" PVC stickup	Unit Casing Volume (gal/lin ft) (A): 0.16	Initial Depth to Water (ft) (B): 18.8
	Total Well Depth (ft) (C): 40	Water Column Thickness (ft) (C-B): 25.2	Well Volume (gal) (A*(C-B)): 4
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 30°F	Well Condition: Fair - casing pinched - unable to use sub. pump	Comments: Departed site to pick up pers pump & returned to sample well. Sub pump could not descend past ~ 3' into well.

CASING INFO											
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
11/16/21	1710	18.8	1	200	12.1	7.2	0.626	2.23	28	-65	clear
	1715		2		12.53	7.26	0.618	1.01	18.3	-99	
	1720		3		12.6	7.29	0.621	0.71	7	-108	
	1723		4		12.62	7.3	0.622	0.64	4	-115	
	1730		5		12.5	7.31	0.625	0.66	0.8	-119	
	1735		6		12.51	7.31	0.627	0.68	0	-126	

Dup collected @ this location & ambient samples during collection

Began purge @ 1705

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	6	40mL	VOA	HCL	N	8260*	VOC

Conversions	Stabilization Criteria									
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%						
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%						
	Cond	+/- 10%	ORP	+/- 10	Sample ID: 782VMW-105B-1121			Sample Time: 1745		

782VMW-105B-1121a

APPENDIX B
DATA VALIDATION REPORT

This page intentionally left blank.

Data Validation Report

This report contains the results of the review and validation of the specified data package performed by Marcia Olive, Bhate Environmental Associates, Denver, Colorado.

Introduction

This data validation report covers samples taken from Griffiss Air Force Base, New York, on November 16, 2021. Six aqueous samples, one field duplicate sample and associated quality control blanks were collected from site SD052-01 Apron 2 for performance monitoring. All analyses were performed by SGS North America, Inc., Dayton, NJ. The specific samples included in this validation were:

Sample Identification	Matrix	Collection Date	Lab Package	Analyses (USEPA Method)
AP2MW-3_1121	Water	11/16/21	JD35517	VOCs (SW8260D)
782VMW-81_1121				
782VMW-101_1121				
782VMW-105B_1121				
782VMW-105B_1121-a				
782VMW-121_1121				
782SW-115_1121				
782-AB_1121				
782-TB_1121				
Notes- TB – Trip Blank; AB = Ambient Blank; VOCs = Volatile Organic Compounds; SW = Solid Waste; USEPA = United States Environmental Protection Agency				

This data was validated against the laboratory's quality assurance (QA)/quality control (QC) limits using the guidelines and practices published in the *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA, November 2020) and per requirements of the Department of Defense (DOD) Quality Systems Manual (QSM), Version 5.3, as specified in the project-specific Quality Assurance Project Plan (QAPP).

Sample Handling and Holding times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required hold time.

Method Blank

No compounds were detected in the method blanks.

Laboratory Spike Sample (LCS)/Surrogates

The LCS and surrogate recoveries were all within control limits.

Matrix Spike/Matrix Spike Duplicates (MS/MSD)

The MS/MSD recoveries, when reported, were within control limits.

Project Specific Quality Assurance/Quality Control

The ambient blank and trip blank reported no detections.

One field duplicate sample was collected with this package and no analytes exceeded relative percent difference (RPD) limits between the parent and duplicate.

Calibration Verification Data

The continuing calibration verification (CCV) was within control limits for all analytes.

Overall Assessment of Data

All analyses were performed, and the data met the required QC criteria. The data is 100% complete.

APPENDIX C
LABORATORY DATA PACKAGE

This page intentionally left blank.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Bhate Environmental Associates, Inc.

BECOS Former Griffiss AFB, Rome, NY

MSC2021.0012.1008.0002

SGS Job Number: JD35517

Sampling Date: 11/16/21



Report to:

Bhate Environmental Associates, Inc.
445 Union Blvd Suite 129
Lakewood, CO 80228
molive@bhate.com

ATTN: Marcia Olive

Total number of pages in report: **199**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Mike Earp
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

SGS is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

Please share your ideas about how we can serve you better at:
EHS.US.CustomerCare@sgs.com

Table of Contents

Section 1: Sample Summary 3
Section 2: Case Narrative/Conformance Summary 4
Section 3: Summary of Hits 5
Section 4: Sample Results 6
4.1: JD35517-1: AP2MW-3_1121 7
4.2: JD35517-2: 782VMW-81_1121 10
4.3: JD35517-3: 782VMW-101_1121 13
4.4: JD35517-4: 782VMW-105B_1121 16
4.5: JD35517-5: 782VMW-105B_1121-A 19
4.6: JD35517-6: 782VMW-121_1121 22
4.7: JD35517-7: 782SW-115_1121 25
4.8: JD35517-8: 782-AB_1121 28
4.9: JD35517-9: 782-TB_1121 31
Section 5: Misc. Forms 34
5.1: Chain of Custody 35
5.2: Sample Tracking Chronicle 37
5.3: Internal Chain of Custody 39
5.4: QC Evaluation: DOD QSM5.x Limits 41
Section 6: MS Volatiles - QC Data Summaries 49
6.1: Method Blank Summary 50
6.2: Blank Spike Summary 53
6.3: Matrix Spike/Matrix Spike Duplicate Summary 56
6.4: Instrument Performance Checks (BFB) 59
6.5: Internal Standard Area Summaries 62
6.6: Surrogate Recovery Summaries 63
6.7: Initial and Continuing Calibration Summaries 64
6.8: Run Sequence Reports 84
Section 7: MS Volatiles - Raw Data 86
7.1: Samples 87
7.2: Method Blanks 121
7.3: Blank Spikes 123
7.4: Matrix Spike/Matrix Spike Duplicates 127
7.5: Instrument Performance Checks (BFB) 135
7.6: Initial and Continuing Calibrations 141
7.7: Instrument Run Logs 196

SGS North America Inc.

Sample Summary

Bhate Environmental Associates, Inc.

Job No: JD35517

BECOS Former Griffiss AFB, Rome, NY
Project No: MSC2021.0012.1008.0002

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD35517-1	11/16/21	11:25	AP	11/18/21	AQ	Ground Water	AP2MW-3_1121
JD35517-2	11/16/21	10:10	AP	11/18/21	AQ	Ground Water	782VMW-81_1121
JD35517-3	11/16/21	13:25	AP	11/18/21	AQ	Ground Water	782VMW-101_1121
JD35517-4	11/16/21	17:45	AP	11/18/21	AQ	Ground Water	782VMW-105B_1121
JD35517-5	11/16/21	17:45	AP	11/18/21	AQ	Ground Water	782VMW-105B_1121-A
JD35517-6	11/16/21	14:25	AP	11/18/21	AQ	Ground Water	782VMW-121_1121
JD35517-7	11/16/21	11:45	AP	11/18/21	AQ	Ground Water	782SW-115_1121
JD35517-8	11/16/21	17:50	AP	11/18/21	AQ	Field Blank Water	782-AB_1121
JD35517-9	11/16/21	17:50	AP	11/18/21	AQ	Trip Blank Water	782-TB_1121

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Bhate Environmental Associates, Inc.	**Job No:**	JD35517
Site:	BECOS Former Griffiss AFB, Rome, NY	**Report Date**	12/3/2021 10:09:34 A

On 11/18/2021, 7 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.5 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD35517 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1X8346

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD35406-1MS, JD35406-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
JD35517-1	**AP2MW-3_1121**					
Benzene		252	5.0	4.5	ug/l	SW846 8260D
Methyl Tert Butyl Ether		12.0	1.0	0.75	ug/l	SW846 8260D
Toluene		1.1	1.0	0.75	ug/l	SW846 8260D
1,2,4-Trimethylbenzene		3.2	2.0	1.5	ug/l	SW846 8260D
JD35517-2	**782VMW-81_1121**					
cis-1,2-Dichloroethene		28.3	1.0	0.75	ug/l	SW846 8260D
trans-1,2-Dichloroethene		1.5	1.0	0.75	ug/l	SW846 8260D
1,2-Dichloroethene (total)		29.8	1.0	0.75	ug/l	SW846 8260D
Vinyl chloride		4.6	1.0	0.80	ug/l	SW846 8260D
JD35517-3	**782VMW-101_1121**					
Methyl Tert Butyl Ether		0.97 J	1.0	0.75	ug/l	SW846 8260D
Vinyl chloride		2.6	1.0	0.80	ug/l	SW846 8260D
JD35517-4	**782VMW-105B_1121**					
No hits reported in this sample.						
JD35517-5	**782VMW-105B_1121-A**					
No hits reported in this sample.						
JD35517-6	**782VMW-121_1121**					
Vinyl chloride		14.9	1.0	0.80	ug/l	SW846 8260D
JD35517-7	**782SW-115_1121**					
Chloroform		0.85 J	1.0	0.75	ug/l	SW846 8260D
JD35517-8	**782-AB_1121**					
No hits reported in this sample.						
JD35517-9	**782-TB_1121**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	AP2MW-3_1121		
Lab Sample ID:	JD35517-1	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192701.D	1	11/30/21 15:21	BK	n/a	n/a	V1X8346
Run #2	1X192704.D	10	11/30/21 16:39	BK	n/a	n/a	V1X8346

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	252 [a]	5.0	4.5	4.3	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AP2MW-3_1121		
Lab Sample ID:	JD35517-1	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	12.0	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	1.1	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	3.2	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	96%	85-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	AP2MW-3_1121		
Lab Sample ID:	JD35517-1	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%	98%	80-121%
2037-26-5	Toluene-D8	101%	100%	80-120%
460-00-4	4-Bromofluorobenzene	102%	100%	80-120%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	782VMW-81_1121		
Lab Sample ID:	JD35517-2	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192711.D	1	11/30/21 19:41	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	28.3	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.5	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	29.8	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782VMW-81_1121		
Lab Sample ID:	JD35517-2	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	4.6	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		85-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782VMW-81_1121		
Lab Sample ID:	JD35517-2	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	782VMW-101_1121		
Lab Sample ID:	JD35517-3	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192712.D	1	11/30/21 20:07	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 782VMW-101_1121
Lab Sample ID: JD35517-3
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: BECOS Former Griffiss AFB, Rome, NY

Date Sampled: 11/16/21
Date Received: 11/18/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.97	1.0	0.75	0.51	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	2.6	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782VMW-101_1121		
Lab Sample ID:	JD35517-3	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	782VMW-105B_1121		
Lab Sample ID:	JD35517-4	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192697.D	1	11/30/21 13:38	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 782VMW-105B_1121
Lab Sample ID: JD35517-4
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: BECOS Former Griffiss AFB, Rome, NY

Date Sampled: 11/16/21
Date Received: 11/18/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782VMW-105B_1121		
Lab Sample ID:	JD35517-4	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	782VMW-105B_1121-A		
Lab Sample ID:	JD35517-5	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192698.D	1	11/30/21 14:04	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 782VMW-105B_1121-A
Lab Sample ID: JD35517-5
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: BECOS Former Griffiss AFB, Rome, NY

Date Sampled: 11/16/21
Date Received: 11/18/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		85-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782VMW-105B_1121-A		
Lab Sample ID:	JD35517-5	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	782VMW-121_1121		
Lab Sample ID:	JD35517-6	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192699.D	1	11/30/21 14:30	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 782VMW-121_1121
Lab Sample ID: JD35517-6
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: BECOS Former Griffiss AFB, Rome, NY

Date Sampled: 11/16/21
Date Received: 11/18/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	14.9	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		85-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782VMW-121_1121		
Lab Sample ID:	JD35517-6	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%		80-121%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: 782SW-115_1121
Lab Sample ID: JD35517-7
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: BECOS Former Griffiss AFB, Rome, NY

Date Sampled: 11/16/21
Date Received: 11/18/21
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192713.D	1	11/30/21 20:33	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.85	1.0	0.75	0.50	ug/l	J
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782SW-115_1121		
Lab Sample ID:	JD35517-7	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782SW-115_1121		
Lab Sample ID:	JD35517-7	**Date Sampled:**	11/16/21
Matrix:	AQ - Ground Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	100%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	782-AB_1121		
Lab Sample ID:	JD35517-8	**Date Sampled:**	11/16/21
Matrix:	AQ - Field Blank Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192706.D	1	11/30/21 17:31	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: 782-AB_1121
Lab Sample ID: JD35517-8
Matrix: AQ - Field Blank Water
Method: SW846 8260D
Project: BECOS Former Griffiss AFB, Rome, NY

Date Sampled: 11/16/21
Date Received: 11/18/21
Percent Solids: n/a

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		85-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782-AB_1121		
Lab Sample ID:	JD35517-8	**Date Sampled:**	11/16/21
Matrix:	AQ - Field Blank Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	782-TB_1121		
Lab Sample ID:	JD35517-9	**Date Sampled:**	11/16/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1X192707.D	1	11/30/21 17:57	BK	n/a	n/a	V1X8346
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	7.5 U	10	7.5	3.1	ug/l	
71-43-2	Benzene	0.45 U	0.50	0.45	0.43	ug/l	
108-86-1	Bromobenzene	0.75 U	1.0	0.75	0.55	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.48	ug/l	
75-27-4	Bromodichloromethane	0.75 U	1.0	0.75	0.45	ug/l	
75-25-2	Bromoform	0.75 U	1.0	0.75	0.63	ug/l	
74-83-9	Bromomethane	1.8 U	2.0	1.8	1.6	ug/l	
78-93-3	2-Butanone (MEK)	7.5 U	10	7.5	6.9	ug/l	
104-51-8	n-Butylbenzene	1.0 U	2.0	1.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	1.5 U	2.0	1.5	0.62	ug/l	
98-06-6	tert-Butylbenzene	1.0 U	2.0	1.0	0.69	ug/l	
75-15-0	Carbon disulfide	1.0 U	2.0	1.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	0.75 U	1.0	0.75	0.55	ug/l	
108-90-7	Chlorobenzene	0.75 U	1.0	0.75	0.56	ug/l	
75-00-3	Chloroethane	0.75 U	1.0	0.75	0.73	ug/l	
67-66-3	Chloroform	0.75 U	1.0	0.75	0.50	ug/l	
74-87-3	Chloromethane	0.85 U	1.0	0.85	0.76	ug/l	
95-49-8	o-Chlorotoluene	1.0 U	2.0	1.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	1.0 U	2.0	1.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	1.5 U	2.0	1.5	0.53	ug/l	
124-48-1	Dibromochloromethane	0.75 U	1.0	0.75	0.56	ug/l	
106-93-4	1,2-Dibromoethane	0.50 U	1.0	0.50	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	0.75 U	1.0	0.75	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	0.75 U	1.0	0.75	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	0.75 U	1.0	0.75	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	1.5 U	2.0	1.5	0.56	ug/l	
75-34-3	1,1-Dichloroethane	0.75 U	1.0	0.75	0.57	ug/l	
107-06-2	1,2-Dichloroethane	0.75 U	1.0	0.75	0.60	ug/l	
75-35-4	1,1-Dichloroethene	0.75 U	1.0	0.75	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.75 U	1.0	0.75	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.75 U	1.0	0.75	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	0.75 U	1.0	0.75	0.51	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782-TB_1121		
Lab Sample ID:	JD35517-9	**Date Sampled:**	11/16/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
78-87-5	1,2-Dichloropropane	0.75 U	1.0	0.75	0.51	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
594-20-7	2,2-Dichloropropane	0.75 U	1.0	0.75	0.52	ug/l	
563-58-6	1,1-Dichloropropene	0.90 U	1.0	0.90	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.43	ug/l	
100-41-4	Ethylbenzene	0.75 U	1.0	0.75	0.60	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.54	ug/l	
591-78-6	2-Hexanone	2.5 U	5.0	2.5	2.0	ug/l	
98-82-8	Isopropylbenzene	0.75 U	1.0	0.75	0.65	ug/l	
99-87-6	p-Isopropyltoluene	1.5 U	2.0	1.5	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.75 U	1.0	0.75	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	3.5 U	5.0	3.5	1.9	ug/l	
74-95-3	Methylene bromide	0.75 U	1.0	0.75	0.48	ug/l	
75-09-2	Methylene chloride	1.5 U	2.0	1.5	1.0	ug/l	
91-20-3	Naphthalene	3.0 U	5.0	3.0	2.5	ug/l	
103-65-1	n-Propylbenzene	1.0 U	2.0	1.0	0.60	ug/l	
100-42-5	Styrene	0.75 U	1.0	0.75	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.75 U	1.0	0.75	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.75 U	1.0	0.75	0.65	ug/l	
127-18-4	Tetrachloroethene	0.90 U	1.0	0.90	0.90	ug/l	
108-88-3	Toluene	0.75 U	1.0	0.75	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	0.75 U	1.0	0.75	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.75 U	1.0	0.75	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	0.75 U	1.0	0.75	0.53	ug/l	
79-01-6	Trichloroethene	0.75 U	1.0	0.75	0.53	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	1.5 U	2.0	1.5	1.0	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.1	ug/l	
75-01-4	Vinyl chloride	0.80 U	1.0	0.80	0.79	ug/l	
	m,p-Xylene	0.80 U	1.0	0.80	0.78	ug/l	
95-47-6	o-Xylene	0.75 U	1.0	0.75	0.59	ug/l	
1330-20-7	Xylene (total)	0.75 U	1.0	0.75	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		85-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	782-TB_1121		
Lab Sample ID:	JD35517-9	**Date Sampled:**	11/16/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	11/18/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	BECOS Former Griffiss AFB, Rome, NY		

VOA Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%		80-121%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	101%		80-120%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

CM-092121-183

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : JD35517 PAGE 1 OF 1
CM-092121-185
SGS - ORLANDO Quote # SKIFF #

Client / Reporting Information

Company Name: Bhate
Address: 445 Union Blvd Ste 129
City: Lakewood State: CO Zip: 80228
Project Contact: Marcia Olive Email: molive@bhate.com
Phone #: 303-725-7631
Sampler(s) Name(s) (Printed)
Sampler 1: A. Petrilli Sampler 2:

Project Information

Project Name: SD052-01
Street
City State
Project # MSC2021.0012.1008.0002
Fax #
Client Purchase Order #

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	8260C - VOCs	LAB USE ONLY
1	AP2MW-3_1121	11/16/21	11:25	AP	WG	3			X							X	V880
2	782VMW-81_1121	11/16/21	10:10	AP	WG	3			X							X	
3	782VMW-101_1121	11/16/21	13:25	AP	WG	3			X							X	
4	782VMW-105B_1121	11/16/21	17:45	AP	WG	3			X							X	
5	782VMW-105B_1121-a	11/16/21	17:45	AP	WG	3			X							X	
6	782VMW-121_1121	11/16/21	14:25	AP	WG	3			X							X	
7	782SW-115_1121	11/16/21	11:45	AP	WG	3			X							X	
8	782-AB_1121	11/16/21	17:50	AP	WQ	3			X							X	
9	782-TB_1121	11/16/21	9:00	-	WQ	2			X							X	

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other

Approved By: / Date:
Initial Assessment SS 2A
Label Verification CC

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [X] FULLT1 (EPA LEVEL 4)
- [X] EDD'S ChemLab

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
	11/17/2021 1000	2	3	11/17/21	
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 4.9°

http://www.sgs.com/en/terms-and-conditions

Copy of SGS COC SD05201 Rev 031318

SGS Sample Receipt Summary

Job Number: JD35517 **Client:** BHATE **Project:** SD052-01

Date / Time Received: 11/18/2021 11:15:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (4.9);

Cooler Temps (Corrected) °C: Cooler 1: (3.5);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD35517: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Bhate Environmental Associates, Inc.

Job No: JD35517

BECOS Former Griffiss AFB, Rome, NY
Project No: MSC2021.0012.1008.0002

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD35517-1	Collected: 16-NOV-21 11:25 By: AP			Received: 18-NOV-21	By: DDH	
AP2MW-3_1121						
JD35517-1	SW846 8260D	30-NOV-21 15:21	BK			V8260SL
JD35517-1	SW846 8260D	30-NOV-21 16:39	BK			V8260SL
JD35517-2	Collected: 16-NOV-21 10:10 By: AP			Received: 18-NOV-21	By: DDH	
782VMW-81_1121						
JD35517-2	SW846 8260D	30-NOV-21 19:41	BK			V8260SL
JD35517-3	Collected: 16-NOV-21 13:25 By: AP			Received: 18-NOV-21	By: DDH	
782VMW-101_1121						
JD35517-3	SW846 8260D	30-NOV-21 20:07	BK			V8260SL
JD35517-4	Collected: 16-NOV-21 17:45 By: AP			Received: 18-NOV-21	By: DDH	
782VMW-105B_1121						
JD35517-4	SW846 8260D	30-NOV-21 13:38	BK			V8260SL
JD35517-5	Collected: 16-NOV-21 17:45 By: AP			Received: 18-NOV-21	By: DDH	
782VMW-105B_1121-A						
JD35517-5	SW846 8260D	30-NOV-21 14:04	BK			V8260SL
JD35517-6	Collected: 16-NOV-21 14:25 By: AP			Received: 18-NOV-21	By: DDH	
782VMW-121_1121						
JD35517-6	SW846 8260D	30-NOV-21 14:30	BK			V8260SL
JD35517-7	Collected: 16-NOV-21 11:45 By: AP			Received: 18-NOV-21	By: DDH	
782SW-115_1121						
JD35517-7	SW846 8260D	30-NOV-21 20:33	BK			V8260SL
JD35517-8	Collected: 16-NOV-21 17:50 By: AP			Received: 18-NOV-21	By: DDH	
782-AB_1121						
JD35517-8	SW846 8260D	30-NOV-21 17:31	BK			V8260SL

Internal Sample Tracking Chronicle

Bhate Environmental Associates, Inc.

Job No: JD35517

BECOS Former Griffiss AFB, Rome, NY
Project No: MSC2021.0012.1008.0002

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD35517-9	Collected: 16-NOV-21 17:50 By: AP		Received: 18-NOV-21 By: DDH			
782-TB_1121						
JD35517-9	SW846 8260D	30-NOV-21 17:57	BK			V8260SL

SGS Internal Chain of Custody

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Received: 11/18/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35517-1.2	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-1.2	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-1.2	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-1.2	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-1.2	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-1.2	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-1.2	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-1.2	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage
JD35517-2.2	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-2.2	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-2.2	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-2.2	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-2.2	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-2.2	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-2.2	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-2.2	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage
JD35517-3.2	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-3.2	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-3.2	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-3.2	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-3.2	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-3.2	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-3.2	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-3.2	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage
JD35517-4.2	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-4.2	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-4.2	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-4.2	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-4.2	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-4.2	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-4.2	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-4.2	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage
JD35517-5.2	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-5.2	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-5.2	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-5.2	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-5.2	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-5.2	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-5.2	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-5.2	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage

SGS Internal Chain of Custody

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Received: 11/18/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD35517-6.1	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-6.1	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-6.1	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-6.1	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-6.1	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-6.1	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-6.1	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-6.1	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage
JD35517-7.2	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-7.2	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-7.2	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-7.2	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-7.2	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-7.2	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-7.2	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-7.2	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage
JD35517-8.2	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-8.2	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-8.2	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-8.2	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-8.2	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-8.2	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-8.2	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-8.2	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage
JD35517-9.1	Secured Storage	Thien Nguyen	11/30/21 10:02	Retrieve from Storage
JD35517-9.1	Thien Nguyen	GCMS2C	11/30/21 10:02	Load on Instrument
JD35517-9.1	GCMS2C	Thien Nguyen	11/30/21 10:28	Unload from Instrument
JD35517-9.1	Thien Nguyen	Secured Storage	11/30/21 10:28	Return to Storage
JD35517-9.1	Secured Storage	Brittany Klimek	11/30/21 16:00	Retrieve from Storage
JD35517-9.1	Brittany Klimek	GCMS1X	11/30/21 16:00	Load on Instrument
JD35517-9.1	GCMS1X	Brittany Klimek	12/01/21 10:20	Unload from Instrument
JD35517-9.1	Brittany Klimek	Secured Storage	12/01/21 10:20	Return to Storage

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V1X8346	SW846 8260D						
V1X8346-BS	67-64-1	Acetone	BSP	REC	107	%	39-160
V1X8346-BS	71-43-2	Benzene	BSP	REC	100	%	79-120
V1X8346-BS	108-86-1	Bromobenzene	BSP	REC	107	%	80-120
V1X8346-BS	74-97-5	Bromochloromethane	BSP	REC	101	%	78-123
V1X8346-BS	75-27-4	Bromodichloromethane	BSP	REC	100	%	79-125
V1X8346-BS	75-25-2	Bromoform	BSP	REC	108	%	66-130
V1X8346-BS	74-83-9	Bromomethane	BSP	REC	96	%	53-141
V1X8346-BS	78-93-3	2-Butanone (MEK)	BSP	REC	100	%	56-143
V1X8346-BS	104-51-8	n-Butylbenzene	BSP	REC	100	%	75-128
V1X8346-BS	135-98-8	sec-Butylbenzene	BSP	REC	99	%	77-126
V1X8346-BS	98-06-6	tert-Butylbenzene	BSP	REC	98	%	78-124
V1X8346-BS	75-15-0	Carbon disulfide	BSP	REC	85	%	64-133
V1X8346-BS	56-23-5	Carbon tetrachloride	BSP	REC	99	%	72-136
V1X8346-BS	108-90-7	Chlorobenzene	BSP	REC	102	%	82-118
V1X8346-BS	75-00-3	Chloroethane	BSP	REC	101	%	60-138
V1X8346-BS	67-66-3	Chloroform	BSP	REC	96	%	79-124
V1X8346-BS	74-87-3	Chloromethane	BSP	REC	100	%	50-139
V1X8346-BS	95-49-8	o-Chlorotoluene	BSP	REC	101	%	79-122
V1X8346-BS	106-43-4	p-Chlorotoluene	BSP	REC	99	%	78-122
V1X8346-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	97	%	62-128
V1X8346-BS	124-48-1	Dibromochloromethane	BSP	REC	108	%	74-126
V1X8346-BS	106-93-4	1,2-Dibromoethane	BSP	REC	102	%	77-121
V1X8346-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	100	%	80-119
V1X8346-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	100	%	80-119
V1X8346-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	99	%	79-118
V1X8346-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	106	%	32-152
V1X8346-BS	75-34-3	1,1-Dichloroethane	BSP	REC	93	%	77-125
V1X8346-BS	107-06-2	1,2-Dichloroethane	BSP	REC	93	%	73-128
V1X8346-BS	75-35-4	1,1-Dichloroethene	BSP	REC	92	%	71-131
V1X8346-BS	156-59-2	cis-1,2-Dichloroethene	BSP	REC	95	%	78-123
V1X8346-BS	156-60-5	trans-1,2-Dichloroethene	BSP	REC	93	%	75-124
V1X8346-BS	540-59-0	1,2-Dichloroethene (total)	BSP	REC	94	%	79-121
V1X8346-BS	78-87-5	1,2-Dichloropropane	BSP	REC	101	%	78-122
V1X8346-BS	142-28-9	1,3-Dichloropropane	BSP	REC	101	%	80-119
V1X8346-BS	594-20-7	2,2-Dichloropropane	BSP	REC	99	%	60-139
V1X8346-BS	563-58-6	1,1-Dichloropropene	BSP	REC	97	%	79-125
V1X8346-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	102	%	75-124
V1X8346-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	106	%	73-127
V1X8346-BS	100-41-4	Ethylbenzene	BSP	REC	98	%	79-121
V1X8346-BS	87-68-3	Hexachlorobutadiene	BSP	REC	94	%	66-134
V1X8346-BS	591-78-6	2-Hexanone	BSP	REC	104	%	57-139
V1X8346-BS	98-82-8	Isopropylbenzene	BSP	REC	100	%	72-131

* Sample used for QC is not from job JD35517

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V1X8346-BS	99-87-6	p-Isopropyltoluene	BSP	REC	100	%	77-127
V1X8346-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	96	%	71-124
V1X8346-BS	108-10-1	4-Methyl-2-pentanone(MIBK)	BSP	REC	100	%	67-130
V1X8346-BS	74-95-3	Methylene bromide	BSP	REC	99	%	79-123
V1X8346-BS	75-09-2	Methylene chloride	BSP	REC	90	%	74-124
V1X8346-BS	91-20-3	Naphthalene	BSP	REC	94	%	61-128
V1X8346-BS	103-65-1	n-Propylbenzene	BSP	REC	101	%	76-126
V1X8346-BS	100-42-5	Styrene	BSP	REC	102	%	78-123
V1X8346-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	104	%	78-124
V1X8346-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	104	%	71-121
V1X8346-BS	127-18-4	Tetrachloroethene	BSP	REC	103	%	74-129
V1X8346-BS	108-88-3	Toluene	BSP	REC	104	%	80-121
V1X8346-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	96	%	69-129
V1X8346-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	98	%	69-130
V1X8346-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	97	%	74-131
V1X8346-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	102	%	80-119
V1X8346-BS	79-01-6	Trichloroethene	BSP	REC	97	%	79-123
V1X8346-BS	75-69-4	Trichlorofluoromethane	BSP	REC	105	%	65-141
V1X8346-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	101	%	73-122
V1X8346-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	100	%	76-124
V1X8346-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	99	%	75-124
V1X8346-BS	108-05-4	Vinyl Acetate	BSP	REC	102	%	54-146
V1X8346-BS	75-01-4	Vinyl chloride	BSP	REC	92	%	58-137
V1X8346-BS		m,p-Xylene	BSP	REC	102	%	80-121
V1X8346-BS	95-47-6	o-Xylene	BSP	REC	98	%	78-122
V1X8346-BS	1330-20-7	Xylene (total)	BSP	REC	101	%	79-121
V1X8346-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	95	%	80-119
V1X8346-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	97	%	81-118
V1X8346-BS	2037-26-5	Toluene-D8	BSP	SURR	101	%	89-112
V1X8346-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	100	%	85-114
JD35406-1MS*	67-64-1	Acetone	MS	REC	77	%	39-160
JD35406-1MS*	71-43-2	Benzene	MS	REC	99	%	79-120
JD35406-1MS*	108-86-1	Bromobenzene	MS	REC	102	%	80-120
JD35406-1MS*	74-97-5	Bromochloromethane	MS	REC	99	%	78-123
JD35406-1MS*	75-27-4	Bromodichloromethane	MS	REC	96	%	79-125
JD35406-1MS*	75-25-2	Bromoform	MS	REC	102	%	66-130
JD35406-1MS*	74-83-9	Bromomethane	MS	REC	100	%	53-141
JD35406-1MS*	78-93-3	2-Butanone (MEK)	MS	REC	91	%	56-143
JD35406-1MS*	104-51-8	n-Butylbenzene	MS	REC	101	%	75-128
JD35406-1MS*	135-98-8	sec-Butylbenzene	MS	REC	102	%	77-126
JD35406-1MS*	98-06-6	tert-Butylbenzene	MS	REC	100	%	78-124
JD35406-1MS*	75-15-0	Carbon disulfide	MS	REC	85	%	64-133
JD35406-1MS*	56-23-5	Carbon tetrachloride	MS	REC	100	%	72-136
JD35406-1MS*	108-90-7	Chlorobenzene	MS	REC	101	%	82-118
JD35406-1MS*	75-00-3	Chloroethane	MS	REC	108	%	60-138

* Sample used for QC is not from job JD35517

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JD35406-1MS*	67-66-3	Chloroform	MS	REC	92	%	79-124
JD35406-1MS*	74-87-3	Chloromethane	MS	REC	98	%	50-139
JD35406-1MS*	95-49-8	o-Chlorotoluene	MS	REC	99	%	79-122
JD35406-1MS*	106-43-4	p-Chlorotoluene	MS	REC	98	%	78-122
JD35406-1MS*	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	94	%	62-128
JD35406-1MS*	124-48-1	Dibromochloromethane	MS	REC	104	%	74-126
JD35406-1MS*	106-93-4	1,2-Dibromoethane	MS	REC	97	%	77-121
JD35406-1MS*	95-50-1	1,2-Dichlorobenzene	MS	REC	97	%	80-119
JD35406-1MS*	541-73-1	1,3-Dichlorobenzene	MS	REC	99	%	80-119
JD35406-1MS*	106-46-7	1,4-Dichlorobenzene	MS	REC	96	%	79-118
JD35406-1MS*	75-71-8	Dichlorodifluoromethane	MS	REC	98	%	32-152
JD35406-1MS*	75-34-3	1,1-Dichloroethane	MS	REC	93	%	77-125
JD35406-1MS*	107-06-2	1,2-Dichloroethane	MS	REC	91	%	73-128
JD35406-1MS*	75-35-4	1,1-Dichloroethene	MS	REC	94	%	71-131
JD35406-1MS*	156-59-2	cis-1,2-Dichloroethene	MS	REC	94	%	78-123
JD35406-1MS*	156-60-5	trans-1,2-Dichloroethene	MS	REC	93	%	75-124
JD35406-1MS*	540-59-0	1,2-Dichloroethene (total)	MS	REC	94	%	79-121
JD35406-1MS*	78-87-5	1,2-Dichloropropane	MS	REC	100	%	78-122
JD35406-1MS*	142-28-9	1,3-Dichloropropane	MS	REC	97	%	80-119
JD35406-1MS*	594-20-7	2,2-Dichloropropane	MS	REC	99	%	60-139
JD35406-1MS*	563-58-6	1,1-Dichloropropene	MS	REC	98	%	79-125
JD35406-1MS*	10061-01-5	cis-1,3-Dichloropropene	MS	REC	99	%	75-124
JD35406-1MS*	10061-02-6	trans-1,3-Dichloropropene	MS	REC	101	%	73-127
JD35406-1MS*	100-41-4	Ethylbenzene	MS	REC	98	%	79-121
JD35406-1MS*	87-68-3	Hexachlorobutadiene	MS	REC	97	%	66-134
JD35406-1MS*	591-78-6	2-Hexanone	MS	REC	88	%	57-139
JD35406-1MS*	98-82-8	Isopropylbenzene	MS	REC	100	%	72-131
JD35406-1MS*	99-87-6	p-Isopropyltoluene	MS	REC	102	%	77-127
JD35406-1MS*	1634-04-4	Methyl Tert Butyl Ether	MS	REC	92	%	71-124
JD35406-1MS*	108-10-1	4-Methyl-2-pentanone(MIBK)	MS	REC	93	%	67-130
JD35406-1MS*	74-95-3	Methylene bromide	MS	REC	95	%	79-123
JD35406-1MS*	75-09-2	Methylene chloride	MS	REC	87	%	74-124
JD35406-1MS*	91-20-3	Naphthalene	MS	REC	89	%	61-128
JD35406-1MS*	103-65-1	n-Propylbenzene	MS	REC	101	%	76-126
JD35406-1MS*	100-42-5	Styrene	MS	REC	100	%	78-123
JD35406-1MS*	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	102	%	78-124
JD35406-1MS*	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	100	%	71-121
JD35406-1MS*	127-18-4	Tetrachloroethene	MS	REC	107	%	74-129
JD35406-1MS*	108-88-3	Toluene	MS	REC	102	%	80-121
JD35406-1MS*	87-61-6	1,2,3-Trichlorobenzene	MS	REC	92	%	69-129
JD35406-1MS*	120-82-1	1,2,4-Trichlorobenzene	MS	REC	95	%	69-130
JD35406-1MS*	71-55-6	1,1,1-Trichloroethane	MS	REC	99	%	74-131
JD35406-1MS*	79-00-5	1,1,2-Trichloroethane	MS	REC	97	%	80-119
JD35406-1MS*	79-01-6	Trichloroethene	MS	REC	114	%	79-123
JD35406-1MS*	75-69-4	Trichlorofluoromethane	MS	REC	113	%	65-141

* Sample used for QC is not from job JD35517

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JD35406-1MS*	96-18-4	1,2,3-Trichloropropane	MS	REC	98	%	73-122
JD35406-1MS*	95-63-6	1,2,4-Trimethylbenzene	MS	REC	98	%	76-124
JD35406-1MS*	108-67-8	1,3,5-Trimethylbenzene	MS	REC	98	%	75-124
JD35406-1MS*	108-05-4	Vinyl Acetate	MS	REC	98	%	54-146
JD35406-1MS*	75-01-4	Vinyl chloride	MS	REC	95	%	58-137
JD35406-1MS*		m,p-Xylene	MS	REC	100	%	80-121
JD35406-1MS*	95-47-6	o-Xylene	MS	REC	97	%	78-122
JD35406-1MS*	1330-20-7	Xylene (total)	MS	REC	99	%	79-121
JD35406-1MS*	1868-53-7	Dibromofluoromethane	MS	SURR	97	%	80-119
JD35406-1MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	97	%	81-118
JD35406-1MS*	2037-26-5	Toluene-D8	MS	SURR	100	%	89-112
JD35406-1MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	100	%	85-114
JD35406-1MSD*	67-64-1	Acetone	MSD	REC	82	%	39-160
JD35406-1MSD*	67-64-1	Acetone	MSD	RPD	6	%	20
JD35406-1MSD*	71-43-2	Benzene	MSD	REC	104	%	79-120
JD35406-1MSD*	71-43-2	Benzene	MSD	RPD	5	%	20
JD35406-1MSD*	108-86-1	Bromobenzene	MSD	REC	108	%	80-120
JD35406-1MSD*	108-86-1	Bromobenzene	MSD	RPD	6	%	20
JD35406-1MSD*	74-97-5	Bromochloromethane	MSD	REC	101	%	78-123
JD35406-1MSD*	74-97-5	Bromochloromethane	MSD	RPD	3	%	20
JD35406-1MSD*	75-27-4	Bromodichloromethane	MSD	REC	101	%	79-125
JD35406-1MSD*	75-27-4	Bromodichloromethane	MSD	RPD	5	%	20
JD35406-1MSD*	75-25-2	Bromoform	MSD	REC	107	%	66-130
JD35406-1MSD*	75-25-2	Bromoform	MSD	RPD	5	%	20
JD35406-1MSD*	74-83-9	Bromomethane	MSD	REC	95	%	53-141
JD35406-1MSD*	74-83-9	Bromomethane	MSD	RPD	4	%	20
JD35406-1MSD*	78-93-3	2-Butanone (MEK)	MSD	REC	94	%	56-143
JD35406-1MSD*	78-93-3	2-Butanone (MEK)	MSD	RPD	3	%	20
JD35406-1MSD*	104-51-8	n-Butylbenzene	MSD	REC	105	%	75-128
JD35406-1MSD*	104-51-8	n-Butylbenzene	MSD	RPD	4	%	20
JD35406-1MSD*	135-98-8	sec-Butylbenzene	MSD	REC	105	%	77-126
JD35406-1MSD*	135-98-8	sec-Butylbenzene	MSD	RPD	3	%	20
JD35406-1MSD*	98-06-6	tert-Butylbenzene	MSD	REC	104	%	78-124
JD35406-1MSD*	98-06-6	tert-Butylbenzene	MSD	RPD	4	%	20
JD35406-1MSD*	75-15-0	Carbon disulfide	MSD	REC	91	%	64-133
JD35406-1MSD*	75-15-0	Carbon disulfide	MSD	RPD	6	%	20
JD35406-1MSD*	56-23-5	Carbon tetrachloride	MSD	REC	106	%	72-136
JD35406-1MSD*	56-23-5	Carbon tetrachloride	MSD	RPD	6	%	20
JD35406-1MSD*	108-90-7	Chlorobenzene	MSD	REC	105	%	82-118
JD35406-1MSD*	108-90-7	Chlorobenzene	MSD	RPD	3	%	20
JD35406-1MSD*	75-00-3	Chloroethane	MSD	REC	102	%	60-138
JD35406-1MSD*	75-00-3	Chloroethane	MSD	RPD	6	%	20
JD35406-1MSD*	67-66-3	Chloroform	MSD	REC	96	%	79-124
JD35406-1MSD*	67-66-3	Chloroform	MSD	RPD	4	%	20
JD35406-1MSD*	74-87-3	Chloromethane	MSD	REC	92	%	50-139

* Sample used for QC is not from job JD35517

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JD35406-1MSD*	74-87-3	Chloromethane	MSD	RPD	7	%	20
JD35406-1MSD*	95-49-8	o-Chlorotoluene	MSD	REC	104	%	79-122
JD35406-1MSD*	95-49-8	o-Chlorotoluene	MSD	RPD	5	%	20
JD35406-1MSD*	106-43-4	p-Chlorotoluene	MSD	REC	103	%	78-122
JD35406-1MSD*	106-43-4	p-Chlorotoluene	MSD	RPD	5	%	20
JD35406-1MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	100	%	62-128
JD35406-1MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	6	%	20
JD35406-1MSD*	124-48-1	Dibromochloromethane	MSD	REC	108	%	74-126
JD35406-1MSD*	124-48-1	Dibromochloromethane	MSD	RPD	4	%	20
JD35406-1MSD*	106-93-4	1,2-Dibromoethane	MSD	REC	101	%	77-121
JD35406-1MSD*	106-93-4	1,2-Dibromoethane	MSD	RPD	4	%	20
JD35406-1MSD*	95-50-1	1,2-Dichlorobenzene	MSD	REC	101	%	80-119
JD35406-1MSD*	95-50-1	1,2-Dichlorobenzene	MSD	RPD	4	%	20
JD35406-1MSD*	541-73-1	1,3-Dichlorobenzene	MSD	REC	103	%	80-119
JD35406-1MSD*	541-73-1	1,3-Dichlorobenzene	MSD	RPD	4	%	20
JD35406-1MSD*	106-46-7	1,4-Dichlorobenzene	MSD	REC	100	%	79-118
JD35406-1MSD*	106-46-7	1,4-Dichlorobenzene	MSD	RPD	4	%	20
JD35406-1MSD*	75-71-8	Dichlorodifluoromethane	MSD	REC	94	%	32-152
JD35406-1MSD*	75-71-8	Dichlorodifluoromethane	MSD	RPD	4	%	20
JD35406-1MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	97	%	77-125
JD35406-1MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	4	%	20
JD35406-1MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	95	%	73-128
JD35406-1MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	4	%	20
JD35406-1MSD*	75-35-4	1,1-Dichloroethene	MSD	REC	99	%	71-131
JD35406-1MSD*	75-35-4	1,1-Dichloroethene	MSD	RPD	6	%	20
JD35406-1MSD*	156-59-2	cis-1,2-Dichloroethene	MSD	REC	97	%	78-123
JD35406-1MSD*	156-59-2	cis-1,2-Dichloroethene	MSD	RPD	3	%	20
JD35406-1MSD*	156-60-5	trans-1,2-Dichloroethene	MSD	REC	99	%	75-124
JD35406-1MSD*	156-60-5	trans-1,2-Dichloroethene	MSD	RPD	5	%	20
JD35406-1MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	REC	98	%	79-121
JD35406-1MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	RPD	4	%	20
JD35406-1MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	104	%	78-122
JD35406-1MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	4	%	20
JD35406-1MSD*	142-28-9	1,3-Dichloropropane	MSD	REC	100	%	80-119
JD35406-1MSD*	142-28-9	1,3-Dichloropropane	MSD	RPD	4	%	20
JD35406-1MSD*	594-20-7	2,2-Dichloropropane	MSD	REC	103	%	60-139
JD35406-1MSD*	594-20-7	2,2-Dichloropropane	MSD	RPD	4	%	20
JD35406-1MSD*	563-58-6	1,1-Dichloropropene	MSD	REC	104	%	79-125
JD35406-1MSD*	563-58-6	1,1-Dichloropropene	MSD	RPD	6	%	20
JD35406-1MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	103	%	75-124
JD35406-1MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	4	%	20
JD35406-1MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	106	%	73-127
JD35406-1MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	4	%	20
JD35406-1MSD*	100-41-4	Ethylbenzene	MSD	REC	102	%	79-121
JD35406-1MSD*	100-41-4	Ethylbenzene	MSD	RPD	5	%	20

* Sample used for QC is not from job JD35517

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JD35406-1MSD*	87-68-3	Hexachlorobutadiene	MSD	REC	100	%	66-134
JD35406-1MSD*	87-68-3	Hexachlorobutadiene	MSD	RPD	3	%	20
JD35406-1MSD*	591-78-6	2-Hexanone	MSD	REC	92	%	57-139
JD35406-1MSD*	591-78-6	2-Hexanone	MSD	RPD	4	%	20
JD35406-1MSD*	98-82-8	Isopropylbenzene	MSD	REC	104	%	72-131
JD35406-1MSD*	98-82-8	Isopropylbenzene	MSD	RPD	4	%	20
JD35406-1MSD*	99-87-6	p-Isopropyltoluene	MSD	REC	107	%	77-127
JD35406-1MSD*	99-87-6	p-Isopropyltoluene	MSD	RPD	5	%	20
JD35406-1MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	96	%	71-124
JD35406-1MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	4	%	20
JD35406-1MSD*	108-10-1	4-Methyl-2-pentanone(MIBK)	MSD	REC	97	%	67-130
JD35406-1MSD*	108-10-1	4-Methyl-2-pentanone(MIBK)	MSD	RPD	5	%	20
JD35406-1MSD*	74-95-3	Methylene bromide	MSD	REC	101	%	79-123
JD35406-1MSD*	74-95-3	Methylene bromide	MSD	RPD	6	%	20
JD35406-1MSD*	75-09-2	Methylene chloride	MSD	REC	91	%	74-124
JD35406-1MSD*	75-09-2	Methylene chloride	MSD	RPD	4	%	20
JD35406-1MSD*	91-20-3	Naphthalene	MSD	REC	94	%	61-128
JD35406-1MSD*	91-20-3	Naphthalene	MSD	RPD	5	%	20
JD35406-1MSD*	103-65-1	n-Propylbenzene	MSD	REC	106	%	76-126
JD35406-1MSD*	103-65-1	n-Propylbenzene	MSD	RPD	5	%	20
JD35406-1MSD*	100-42-5	Styrene	MSD	REC	103	%	78-123
JD35406-1MSD*	100-42-5	Styrene	MSD	RPD	4	%	20
JD35406-1MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	105	%	78-124
JD35406-1MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	3	%	20
JD35406-1MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	103	%	71-121
JD35406-1MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	4	%	20
JD35406-1MSD*	127-18-4	Tetrachloroethene	MSD	REC	112	%	74-129
JD35406-1MSD*	127-18-4	Tetrachloroethene	MSD	RPD	4	%	20
JD35406-1MSD*	108-88-3	Toluene	MSD	REC	107	%	80-121
JD35406-1MSD*	108-88-3	Toluene	MSD	RPD	5	%	20
JD35406-1MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	97	%	69-129
JD35406-1MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	5	%	20
JD35406-1MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	99	%	69-130
JD35406-1MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	4	%	20
JD35406-1MSD*	71-55-6	1,1,1-Trichloroethane	MSD	REC	104	%	74-131
JD35406-1MSD*	71-55-6	1,1,1-Trichloroethane	MSD	RPD	6	%	20
JD35406-1MSD*	79-00-5	1,1,2-Trichloroethane	MSD	REC	101	%	80-119
JD35406-1MSD*	79-00-5	1,1,2-Trichloroethane	MSD	RPD	4	%	20
JD35406-1MSD*	79-01-6	Trichloroethene	MSD	REC	116	%	79-123
JD35406-1MSD*	79-01-6	Trichloroethene	MSD	RPD	1	%	20
JD35406-1MSD*	75-69-4	Trichlorofluoromethane	MSD	REC	109	%	65-141
JD35406-1MSD*	75-69-4	Trichlorofluoromethane	MSD	RPD	4	%	20
JD35406-1MSD*	96-18-4	1,2,3-Trichloropropane	MSD	REC	99	%	73-122
JD35406-1MSD*	96-18-4	1,2,3-Trichloropropane	MSD	RPD	1	%	20
JD35406-1MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	103	%	76-124

* Sample used for QC is not from job JD35517

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JD35406-1MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	5	%	20
JD35406-1MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	104	%	75-124
JD35406-1MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	5	%	20
JD35406-1MSD*	108-05-4	Vinyl Acetate	MSD	REC	101	%	54-146
JD35406-1MSD*	108-05-4	Vinyl Acetate	MSD	RPD	2	%	20
JD35406-1MSD*	75-01-4	Vinyl chloride	MSD	REC	90	%	58-137
JD35406-1MSD*	75-01-4	Vinyl chloride	MSD	RPD	5	%	20
JD35406-1MSD*		m,p-Xylene	MSD	REC	105	%	80-121
JD35406-1MSD*		m,p-Xylene	MSD	RPD	5	%	20
JD35406-1MSD*	95-47-6	o-Xylene	MSD	REC	101	%	78-122
JD35406-1MSD*	95-47-6	o-Xylene	MSD	RPD	3	%	20
JD35406-1MSD*	1330-20-7	Xylene (total)	MSD	REC	103	%	79-121
JD35406-1MSD*	1330-20-7	Xylene (total)	MSD	RPD	4	%	20
JD35406-1MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	96	%	80-119
JD35406-1MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	97	%	81-118
JD35406-1MSD*	2037-26-5	Toluene-D8	MSD	SURR	100	%	89-112
JD35406-1MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	100	%	85-114
V1X8346-MB	1868-53-7	Dibromofluoromethane	MB	SURR	98	%	80-119
V1X8346-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	98	%	81-118
V1X8346-MB	2037-26-5	Toluene-D8	MB	SURR	100	%	89-112
V1X8346-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	102	%	85-114
JD35517-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	96	%	80-119
JD35517-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%	80-119
JD35517-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-1	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
JD35517-1	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
JD35517-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	85-114
JD35517-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	102	%	85-114
JD35517-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	97	%	80-119
JD35517-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	99	%	81-118
JD35517-2	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
JD35517-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	85-114
JD35517-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	98	%	80-119
JD35517-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-3	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
JD35517-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	85-114
JD35517-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%	80-119
JD35517-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-4	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
JD35517-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	85-114
JD35517-5	1868-53-7	Dibromofluoromethane	SAMP	SURR	99	%	80-119
JD35517-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-5	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
JD35517-5	460-00-4	4-Bromofluorobenzene	SAMP	SURR	102	%	85-114

* Sample used for QC is not from job JD35517

QC Evaluation: DOD QSM5.x Limits

Job Number: JD35517
Account: Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY
Collected: 11/16/21

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
JD35517-6	1868-53-7	Dibromofluoromethane	SAMP	SURR	100	%	80-119
JD35517-6	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	99	%	81-118
JD35517-6	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
JD35517-6	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	85-114
JD35517-7	1868-53-7	Dibromofluoromethane	SAMP	SURR	98	%	80-119
JD35517-7	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-7	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
JD35517-7	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	85-114
JD35517-8	1868-53-7	Dibromofluoromethane	SAMP	SURR	98	%	80-119
JD35517-8	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-8	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
JD35517-8	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	85-114
JD35517-9	1868-53-7	Dibromofluoromethane	SAMP	SURR	97	%	80-119
JD35517-9	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
JD35517-9	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
JD35517-9	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	85-114

* Sample used for QC is not from job JD35517

MS Volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8346-MB	1X192694.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.55	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
104-51-8	n-Butylbenzene	ND	2.0	0.52	ug/l	
135-98-8	sec-Butylbenzene	ND	2.0	0.62	ug/l	
98-06-6	tert-Butylbenzene	ND	2.0	0.69	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
95-49-8	o-Chlorotoluene	ND	2.0	0.63	ug/l	
106-43-4	p-Chlorotoluene	ND	2.0	0.60	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.51	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.43	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.52	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.42	ug/l	

Method Blank Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8346-MB	1X192694.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Compound	Result	RL	MDL	Units	Q
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.54	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
99-87-6	p-Isopropyltoluene	ND	2.0	0.66	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
74-95-3	Methylene bromide	ND	1.0	0.48	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
91-20-3	Naphthalene	ND	5.0	2.5	ug/l	
103-65-1	n-Propylbenzene	ND	2.0	0.60	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.60	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.70	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	1.0	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.1	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

Method Blank Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8346-MB	1X192694.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	85-118%
17060-07-0	1,2-Dichloroethane-D4	98%	80-121%
2037-26-5	Toluene-D8	100%	80-120%
460-00-4	4-Bromofluorobenzene	102%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8346-BS	1X192692.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	213	107	63-137
71-43-2	Benzene	50	50.0	100	78-117
108-86-1	Bromobenzene	50	53.5	107	82-121
74-97-5	Bromochloromethane	50	50.3	101	83-124
75-27-4	Bromodichloromethane	50	49.8	100	83-123
75-25-2	Bromoform	50	53.9	108	80-140
74-83-9	Bromomethane	50	48.1	96	26-167
78-93-3	2-Butanone (MEK)	200	200	100	73-135
104-51-8	n-Butylbenzene	50	50.0	100	78-126
135-98-8	sec-Butylbenzene	50	49.5	99	78-122
98-06-6	tert-Butylbenzene	50	49.0	98	77-122
75-15-0	Carbon disulfide	50	42.3	85	60-131
56-23-5	Carbon tetrachloride	50	49.5	99	75-127
108-90-7	Chlorobenzene	50	51.2	102	83-115
75-00-3	Chloroethane	50	50.6	101	61-135
67-66-3	Chloroform	50	48.0	96	76-118
74-87-3	Chloromethane	50	50.0	100	46-144
95-49-8	o-Chlorotoluene	50	50.4	101	80-120
106-43-4	p-Chlorotoluene	50	49.4	99	80-117
96-12-8	1,2-Dibromo-3-chloropropane	50	48.3	97	75-135
124-48-1	Dibromochloromethane	50	54.0	108	84-128
106-93-4	1,2-Dibromoethane	50	51.0	102	82-129
95-50-1	1,2-Dichlorobenzene	50	50.0	100	85-117
541-73-1	1,3-Dichlorobenzene	50	49.8	100	83-116
106-46-7	1,4-Dichlorobenzene	50	49.5	99	82-115
75-71-8	Dichlorodifluoromethane	50	53.1	106	49-153
75-34-3	1,1-Dichloroethane	50	46.6	93	75-122
107-06-2	1,2-Dichloroethane	50	46.6	93	74-116
75-35-4	1,1-Dichloroethene	50	46.0	92	68-129
156-59-2	cis-1,2-Dichloroethene	50	47.3	95	78-120
156-60-5	trans-1,2-Dichloroethene	50	46.5	93	74-125
540-59-0	1,2-Dichloroethene (total)	100	93.8	94	77-122
78-87-5	1,2-Dichloropropane	50	50.5	101	80-120
142-28-9	1,3-Dichloropropane	50	50.7	101	82-116
594-20-7	2,2-Dichloropropane	50	49.6	99	70-128
563-58-6	1,1-Dichloropropene	50	48.5	97	75-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8346-BS	1X192692.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
10061-01-5	cis-1,3-Dichloropropene	50	51.1	102	84-123
10061-02-6	trans-1,3-Dichloropropene	50	53.1	106	84-124
100-41-4	Ethylbenzene	50	49.2	98	80-115
87-68-3	Hexachlorobutadiene	50	47.2	94	68-137
591-78-6	2-Hexanone	200	207	104	74-132
98-82-8	Isopropylbenzene	50	49.9	100	79-120
99-87-6	p-Isopropyltoluene	50	50.2	100	80-122
1634-04-4	Methyl Tert Butyl Ether	50	48.0	96	77-124
108-10-1	4-Methyl-2-pentanone(MIBK)	200	199	100	77-129
74-95-3	Methylene bromide	50	49.5	99	83-121
75-09-2	Methylene chloride	50	45.0	90	74-125
91-20-3	Naphthalene	50	47.2	94	73-138
103-65-1	n-Propylbenzene	50	50.4	101	78-117
100-42-5	Styrene	50	50.8	102	83-122
630-20-6	1,1,1,2-Tetrachloroethane	50	52.0	104	82-125
79-34-5	1,1,2,2-Tetrachloroethane	50	52.2	104	78-122
127-18-4	Tetrachloroethene	50	51.7	103	75-125
108-88-3	Toluene	50	52.1	104	80-115
87-61-6	1,2,3-Trichlorobenzene	50	47.8	96	73-140
120-82-1	1,2,4-Trichlorobenzene	50	49.1	98	77-137
71-55-6	1,1,1-Trichloroethane	50	48.7	97	77-124
79-00-5	1,1,2-Trichloroethane	50	50.9	102	83-118
79-01-6	Trichloroethene	50	48.6	97	80-123
75-69-4	Trichlorofluoromethane	50	52.3	105	71-134
96-18-4	1,2,3-Trichloropropane	50	50.7	101	80-121
95-63-6	1,2,4-Trimethylbenzene	50	50.0	100	81-119
108-67-8	1,3,5-Trimethylbenzene	50	49.7	99	79-120
108-05-4	Vinyl Acetate	50	51.2	102	77-131
75-01-4	Vinyl chloride	50	45.8	92	56-138
	m,p-Xylene	100	102	102	81-118
95-47-6	o-Xylene	50	48.8	98	81-119
1330-20-7	Xylene (total)	150	151	101	81-118

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1X8346-BS	1X192692.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	85-118%
17060-07-0	1,2-Dichloroethane-D4	97%	80-121%
2037-26-5	Toluene-D8	101%	80-120%
460-00-4	4-Bromofluorobenzene	100%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35406-1MS	1X192702.D	1	11/30/21	BK	n/a	n/a	V1X8346
JD35406-1MSD	1X192703.D	1	11/30/21	BK	n/a	n/a	V1X8346
JD35406-1	1X192695.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Compound	JD35406-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	10 U		200	154	77	200	164	82	6	52-133/18
71-43-2	Benzene	0.50 U		50	49.3	99	50	52.0	104	5	55-129/11
108-86-1	Bromobenzene	1.0 U		50	50.8	102	50	53.9	108	6	73-120/11
74-97-5	Bromochloromethane	1.0 U		50	49.3	99	50	50.6	101	3	75-122/10
75-27-4	Bromodichloromethane	1.0 U		50	48.1	96	50	50.5	101	5	74-123/11
75-25-2	Bromoform	1.0 U		50	50.8	102	50	53.3	107	5	69-135/12
74-83-9	Bromomethane	2.0 U		50	49.8	100	50	47.7	95	4	11-167/43
78-93-3	2-Butanone (MEK)	10 U		200	181	91	200	187	94	3	64-131/15
104-51-8	n-Butylbenzene	2.0 U		50	50.6	101	50	52.7	105	4	69-130/11
135-98-8	sec-Butylbenzene	2.0 U		50	51.0	102	50	52.7	105	3	70-125/12
98-06-6	tert-Butylbenzene	2.0 U		50	50.0	100	50	51.9	104	4	68-125/12
75-15-0	Carbon disulfide	2.0 U		50	42.7	85	50	45.3	91	6	54-137/15
56-23-5	Carbon tetrachloride	1.0 U		50	49.8	100	50	53.0	106	6	68-132/11
108-90-7	Chlorobenzene	1.0 U		50	50.6	101	50	52.3	105	3	71-119/10
75-00-3	Chloroethane	1.0 U		50	53.8	108	50	50.9	102	6	50-146/18
67-66-3	Chloroform	1.0 U		50	45.9	92	50	47.8	96	4	67-120/11
74-87-3	Chloromethane	1.0 U		50	49.1	98	50	45.9	92	7	42-146/17
95-49-8	o-Chlorotoluene	2.0 U		50	49.6	99	50	52.1	104	5	71-120/12
106-43-4	p-Chlorotoluene	2.0 U		50	49.1	98	50	51.5	103	5	71-117/11
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U		50	46.8	94	50	49.8	100	6	65-130/15
124-48-1	Dibromochloromethane	1.0 U		50	52.0	104	50	53.9	108	4	74-125/10
106-93-4	1,2-Dibromoethane	1.0 U		50	48.7	97	50	50.6	101	4	74-125/9
95-50-1	1,2-Dichlorobenzene	1.0 U		50	48.5	97	50	50.5	101	4	73-117/10
541-73-1	1,3-Dichlorobenzene	1.0 U		50	49.3	99	50	51.3	103	4	73-117/10
106-46-7	1,4-Dichlorobenzene	1.0 U		50	48.0	96	50	50.2	100	4	70-117/10
75-71-8	Dichlorodifluoromethane	2.0 U		50	49.1	98	50	47.2	94	4	46-169/17
75-34-3	1,1-Dichloroethane	0.81	J	50	47.1	93	50	49.1	97	4	66-124/13
107-06-2	1,2-Dichloroethane	1.0 U		50	45.7	91	50	47.6	95	4	66-115/10
75-35-4	1,1-Dichloroethene	1.0 U		50	46.8	94	50	49.7	99	6	60-136/15
156-59-2	cis-1,2-Dichloroethene	2.9		50	49.9	94	50	51.5	97	3	55-133/12
156-60-5	trans-1,2-Dichloroethene	1.0 U		50	46.7	93	50	49.3	99	5	67-127/13
540-59-0	1,2-Dichloroethene (total)	2.9		100	96.6	94	100	101	98	4	55-134/12
78-87-5	1,2-Dichloropropane	1.0 U		50	50.2	100	50	52.1	104	4	72-120/11
142-28-9	1,3-Dichloropropane	1.0 U		50	48.4	97	50	50.2	100	4	72-115/10
594-20-7	2,2-Dichloropropane	1.0 U		50	49.7	99	50	51.7	103	4	61-133/12
563-58-6	1,1-Dichloropropene	1.0 U		50	48.9	98	50	51.9	104	6	68-127/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35406-1MS	1X192702.D	1	11/30/21	BK	n/a	n/a	V1X8346
JD35406-1MSD	1X192703.D	1	11/30/21	BK	n/a	n/a	V1X8346
JD35406-1	1X192695.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Compound	JD35406-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
10061-01-5	cis-1,3-Dichloropropene	1.0 U		50	49.5	99	50	51.6	103	4	75-123/12
10061-02-6	trans-1,3-Dichloropropene	1.0 U		50	50.7	101	50	52.8	106	4	73-122/11
100-41-4	Ethylbenzene	1.0 U		50	48.8	98	50	51.2	102	5	44-136/10
87-68-3	Hexachlorobutadiene	2.0 U		50	48.7	97	50	50.0	100	3	55-143/15
591-78-6	2-Hexanone	5.0 U		200	175	88	200	183	92	4	64-129/13
98-82-8	Isopropylbenzene	1.0 U		50	50.1	100	50	51.9	104	4	71-122/11
99-87-6	p-Isopropyltoluene	2.0 U		50	51.0	102	50	53.4	107	5	72-124/11
1634-04-4	Methyl Tert Butyl Ether	1.4		50	47.6	92	50	49.4	96	4	64-122/11
108-10-1	4-Methyl-2-pentanone(MIBK)	5.0 U		200	185	93	200	194	97	5	68-128/13
74-95-3	Methylene bromide	1.0 U		50	47.5	95	50	50.3	101	6	74-118/10
75-09-2	Methylene chloride	2.0 U		50	43.6	87	50	45.6	91	4	65-126/13
91-20-3	Naphthalene	5.0 U		50	44.3	89	50	46.8	94	5	58-140/16
103-65-1	n-Propylbenzene	2.0 U		50	50.4	101	50	52.9	106	5	64-123/11
100-42-5	Styrene	1.0 U		50	49.9	100	50	51.7	103	4	73-124/11
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		50	51.0	102	50	52.6	105	3	74-123/11
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		50	49.8	100	50	51.7	103	4	68-120/15
127-18-4	Tetrachloroethene	12.4		50	65.9	107	50	68.4	112	4	61-134/11
108-88-3	Toluene	1.0 U		50	51.1	102	50	53.5	107	5	54-130/11
87-61-6	1,2,3-Trichlorobenzene	1.0 U		50	46.1	92	50	48.5	97	5	64-135/15
120-82-1	1,2,4-Trichlorobenzene	1.0 U		50	47.6	95	50	49.4	99	4	67-134/14
71-55-6	1,1,1-Trichloroethane	1.0 U		50	49.4	99	50	52.2	104	6	66-130/12
79-00-5	1,1,2-Trichloroethane	1.0 U		50	48.7	97	50	50.5	101	4	73-117/11
79-01-6	Trichloroethene	132		50	189	114	50	190	116	1	56-139/11
75-69-4	Trichlorofluoromethane	2.0 U		50	56.5	113	50	54.3	109	4	63-150/16
96-18-4	1,2,3-Trichloropropane	2.0 U		50	49.1	98	50	49.7	99	1	71-118/12
95-63-6	1,2,4-Trimethylbenzene	2.0 U		50	49.2	98	50	51.6	103	5	45-139/11
108-67-8	1,3,5-Trimethylbenzene	2.0 U		50	49.2	98	50	51.8	104	5	60-128/12
108-05-4	Vinyl Acetate	10 U		50	49.1	98	50	50.3	101	2	66-128/15
75-01-4	Vinyl chloride	1.0 U		50	47.4	95	50	44.9	90	5	48-148/17
	m,p-Xylene	1.0 U		100	100	100	100	105	105	5	42-140/10
95-47-6	o-Xylene	1.0 U		50	48.6	97	50	50.3	101	3	54-133/11
1330-20-7	Xylene (total)	1.0 U		150	149	99	150	155	103	4	46-138/10

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD35406-1MS	1X192702.D	1	11/30/21	BK	n/a	n/a	V1X8346
JD35406-1MSD	1X192703.D	1	11/30/21	BK	n/a	n/a	V1X8346
JD35406-1	1X192695.D	1	11/30/21	BK	n/a	n/a	V1X8346

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD35517-1, JD35517-2, JD35517-3, JD35517-4, JD35517-5, JD35517-6, JD35517-7, JD35517-8, JD35517-9

CAS No.	Surrogate Recoveries	MS	MSD	JD35406-1	Limits
1868-53-7	Dibromofluoromethane	97%	96%	98%	85-118%
17060-07-0	1,2-Dichloroethane-D4	97%	97%	98%	80-121%
2037-26-5	Toluene-D8	100%	100%	99%	80-120%
460-00-4	4-Bromofluorobenzene	100%	100%	102%	80-120%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample: V1X8342-BFB
Lab File ID: 1X192528.D
Instrument ID: GCMS1X
Injection Date: 11/17/21
Injection Time: 19:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	20418	22.0		Pass
75	30.0 - 60.0% of mass 95	45120	48.7		Pass
95	Base peak, 100% relative abundance	92688	100.0		Pass
96	5.0 - 9.0% of mass 95	6083	6.56		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	86586	93.4		Pass
175	5.0 - 9.0% of mass 174	6662	7.19	(7.69) [a]	Pass
176	95.0 - 101.0% of mass 174	85501	92.2	(98.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5877	6.34	(6.87) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8342-IC8342	1X192530.D	11/17/21	19:41	00:34	Initial cal 0.2
V1X8342-IC8342	1X192532.D	11/17/21	20:15	01:08	Initial cal 0.5
V1X8342-IC8342	1X192534.D	11/17/21	20:49	01:42	Initial cal 1
V1X8342-IC8342	1X192536.D	11/17/21	21:22	02:15	Initial cal 2
V1X8342-IC8342	1X192538.D	11/17/21	21:56	02:49	Initial cal 4
V1X8342-IC8342	1X192540.D	11/17/21	22:30	03:23	Initial cal 8
V1X8342-IC8342	1X192542.D	11/17/21	23:04	03:57	Initial cal 20
V1X8342-ICC8342	1X192544.D	11/17/21	23:38	04:31	Initial cal 50
V1X8342-IC8342	1X192546.D	11/18/21	00:12	05:05	Initial cal 100
V1X8342-IC8342	1X192548.D	11/18/21	00:45	05:38	Initial cal 200
V1X8342-ICV8342	1X192554.D	11/18/21	02:25	07:18	Initial cal verification 50
V1X8342-ICV8342	1X192556.D	11/18/21	02:59	07:52	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample: V1X8342-BFB2
Lab File ID: 1X192566.D
Instrument ID: GCMS1X
Injection Date: 11/23/21
Injection Time: 10:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15983	22.4		Pass
75	30.0 - 60.0% of mass 95	35298	49.6		Pass
95	Base peak, 100% relative abundance	71226	100.0		Pass
96	5.0 - 9.0% of mass 95	4783	6.72		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	65664	92.2		Pass
175	5.0 - 9.0% of mass 174	4944	6.94	(7.53) [a]	Pass
176	95.0 - 101.0% of mass 174	64024	89.9	(97.5) [a]	Pass
177	5.0 - 9.0% of mass 176	4107	5.77	(6.41) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8342-ICV8342	1X192568.D	11/23/21	10:46	00:43	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample: V1X8346-BFB
Lab File ID: 1X192690.D
Instrument ID: GCMS1X
Injection Date: 11/30/21
Injection Time: 10:36

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	15161	22.1		Pass
75	30.0 - 60.0% of mass 95	34109	49.6		Pass
95	Base peak, 100% relative abundance	68707	100.0		Pass
96	5.0 - 9.0% of mass 95	4750	6.91		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	63029	91.7		Pass
175	5.0 - 9.0% of mass 174	4748	6.91	(7.53) [a]	Pass
176	95.0 - 101.0% of mass 174	61392	89.4	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	4124	6.00	(6.72) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1X8346-CC8342	1X192690.D	11/30/21	10:36	00:00	Continuing cal 20
V1X8346-BS	1X192692.D	11/30/21	11:28	00:52	Blank Spike
V1X8346-MB	1X192694.D	11/30/21	12:19	01:43	Method Blank
JD35406-1	1X192695.D	11/30/21	12:45	02:09	(used for QC only; not part of job JD35517)
ZZZZZZ	1X192696.D	11/30/21	13:12	02:36	(unrelated sample)
JD35517-4	1X192697.D	11/30/21	13:38	03:02	782VMW-105B_1121
JD35517-5	1X192698.D	11/30/21	14:04	03:28	782VMW-105B_1121-A
JD35517-6	1X192699.D	11/30/21	14:30	03:54	782VMW-121_1121
ZZZZZZ	1X192700.D	11/30/21	14:55	04:19	(unrelated sample)
JD35517-1	1X192701.D	11/30/21	15:21	04:45	AP2MW-3_1121
JD35406-1MS	1X192702.D	11/30/21	15:47	05:11	Matrix Spike
JD35406-1MSD	1X192703.D	11/30/21	16:13	05:37	Matrix Spike Duplicate
JD35517-1	1X192704.D	11/30/21	16:39	06:03	AP2MW-3_1121
ZZZZZZ	1X192705.D	11/30/21	17:05	06:29	(unrelated sample)
JD35517-8	1X192706.D	11/30/21	17:31	06:55	782-AB_1121
JD35517-9	1X192707.D	11/30/21	17:57	07:21	782-TB_1121
ZZZZZZ	1X192708.D	11/30/21	18:23	07:47	(unrelated sample)
ZZZZZZ	1X192709.D	11/30/21	18:49	08:13	(unrelated sample)
ZZZZZZ	1X192710.D	11/30/21	19:15	08:39	(unrelated sample)
JD35517-2	1X192711.D	11/30/21	19:41	09:05	782VMW-81_1121
JD35517-3	1X192712.D	11/30/21	20:07	09:31	782VMW-101_1121
JD35517-7	1X192713.D	11/30/21	20:33	09:57	782SW-115_1121
V1X8346-ECC8342	1X192714.D	11/30/21	20:59	10:23	Ending cal 50

Internal Standard Area Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Check Std: V1X8346-CC8342 **Injection Date:** 11/30/21
Lab File ID: 1X192690.D **Injection Time:** 10:36
Instrument ID: GCMS1X **Method:** SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	88206	2.54	169149	3.62	236689	4.12	222008	6.20	99166	8.00
Upper Limit [a]	176412	3.04	338298	4.12	473378	4.62	444016	6.70	198332	8.50
Lower Limit [b]	44103	2.04	84575	3.12	118345	3.62	111004	5.70	49583	7.50

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V1X8346-BS	89925	2.54	172344	3.62	242549	4.12	227055	6.20	101723	8.00
V1X8346-MB	81009	2.54	162646	3.62	232430	4.12	215467	6.20	93426	8.00
JD35406-1	79883	2.54	161700	3.62	228662	4.12	213981	6.20	90748	8.00
ZZZZZZ	77703	2.54	160635	3.62	227671	4.12	211240	6.20	90890	8.00
JD35517-4	75652	2.54	159726	3.62	227679	4.12	212279	6.20	92129	8.00
JD35517-5	74855	2.54	160285	3.62	229781	4.12	212534	6.20	91543	8.00
JD35517-6	78281	2.54	159965	3.62	229404	4.12	213243	6.20	92351	8.00
ZZZZZZ	77634	2.54	156514	3.62	223598	4.12	208202	6.20	89837	8.00
JD35517-1	78876	2.54	158681	3.62	227846	4.12	209878	6.20	91164	8.00
JD35406-1MS	85116	2.54	167775	3.62	236997	4.12	223324	6.20	100441	8.00
JD35406-1MSD	89764	2.54	172453	3.62	241197	4.12	229019	6.20	102511	8.00
JD35517-1	82957	2.54	167314	3.62	234783	4.12	218479	6.20	95627	8.00
ZZZZZZ	77931	2.54	159335	3.62	227234	4.12	210715	6.20	91794	8.00
JD35517-8	79093	2.54	158813	3.62	226812	4.12	210649	6.20	91807	8.00
JD35517-9	77636	2.54	161750	3.62	228018	4.12	212431	6.20	92047	8.00
ZZZZZZ	77259	2.54	156437	3.62	225295	4.12	208186	6.20	90199	8.00
ZZZZZZ	74168	2.54	156342	3.62	222282	4.12	205271	6.20	89457	8.00
ZZZZZZ	74889	2.54	159847	3.62	225736	4.12	208940	6.20	90725	8.00
JD35517-2	76080	2.54	161244	3.62	226567	4.12	210945	6.20	91281	8.00
JD35517-3	71703	2.54	155252	3.62	219699	4.12	202837	6.20	88989	8.00
JD35517-7	75107	2.54	156922	3.62	220654	4.12	204279	6.20	88716	8.00
V1X8346-ECC8342	82485	2.54	166043	3.62	229557	4.12	217001	6.20	97817	8.00

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD35517-1	1X192704.D	96	98	100	100
JD35517-1	1X192701.D	99	98	101	102
JD35517-2	1X192711.D	97	99	100	100
JD35517-3	1X192712.D	98	98	101	100
JD35517-4	1X192697.D	99	98	101	101
JD35517-5	1X192698.D	99	98	101	102
JD35517-6	1X192699.D	100	99	100	101
JD35517-7	1X192713.D	98	98	101	100
JD35517-8	1X192706.D	98	98	101	101
JD35517-9	1X192707.D	97	98	101	101
JD35406-1MS	1X192702.D	97	97	100	100
JD35406-1MSD	1X192703.D	96	97	100	100
V1X8346-BS	1X192692.D	95	97	101	100
V1X8346-MB	1X192694.D	98	98	100	102

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	85-118%
S2 = 1,2-Dichloroethane-D4	80-121%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number: JD35517 **Sample:** V1X8342-ICC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192544.D
Project: BECOS Former Griffiss AFB, Rome, NY

Response Factor Report ACC-VOA-M

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Calibration Files
1 =1X192534.D 2 =1X192536.D 100 =1X192546.D 50 =1X192544.D
20 =1X192542.D 200 =1X192548.D 4 =1X192538.D 8 =1X192540.D
0.5 =1X192532.D 0.2 =1X192530.D = =

Compound	1	2	100	50	20	200	4	8	0.5	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	ISTD											
2) ethanol	0.065	0.068	0.051	0.054	0.054	0.045	0.060	0.060			0.057	13.30
3) tertiary butyl alcohol	0.679	0.790	0.723	0.704	0.722	0.704	0.701	0.711			0.717	4.54
4) 1,4-dioxane	0.046	0.063	0.063	0.062	0.064	0.057	0.064				0.060	10.87
5) I pentafluorobenzene	ISTD											
6) chlorodifluoromethane	0.359	0.438	0.395	0.396	0.390	0.389	0.377	0.419			0.395	6.18
7) dichlorodifluoromethane	0.338	0.416	0.362	0.375	0.373	0.407	0.320	0.372			0.370	8.60
8) chloromethane	0.470	0.482	0.388	0.409	0.424	0.419	0.412	0.432	0.424	0.398	0.426	6.97
9) vinyl chloride	0.363	0.422	0.355	0.370	0.372	0.384	0.363	0.396			0.378	5.82
10) bromomethane	0.211	0.233	0.149	0.171	0.192		0.212	0.213	0.173		0.194	14.34
11) chloroethane	0.173	0.203	0.157	0.173	0.182	0.137	0.176	0.189			0.174	11.39
12) trichlorofluoromethane	0.498	0.580	0.506	0.518	0.515	0.520	0.452	0.516			0.513	6.80
13) 1,3-butadiene	0.279	0.378	0.324	0.336	0.333	0.320	0.306	0.352			0.328	9.04
14) ethyl ether	0.106	0.131	0.139	0.135	0.135	0.138	0.124	0.136			0.131	8.54
15) acrolein	0.046	0.051	0.061	0.061	0.057	0.058	0.047	0.056			0.055	10.64
16) 1,1-dichloroethene	0.211	0.272	0.270	0.267	0.259	0.276	0.244	0.269			0.258	8.35
17) freon 113	0.321	0.319	0.311	0.298	0.319	0.269	0.309				0.307	5.95
18) acetone	0.029	0.035	0.031	0.031	0.035	0.039	0.033	0.035			0.034	9.46
19) acetonitrile	0.043	0.051	0.048	0.049	0.048	0.047	0.053	0.052	0.037		0.047	10.04
20) iodomethane	0.297	0.355	0.359	0.349	0.329	0.369	0.301	0.332	0.266		0.328	10.37
21) carbon disulfide	0.652	0.797	0.743	0.731	0.691	0.753	0.658	0.726			0.719	6.86
22) methylene chloride	0.266	0.273	0.256	0.252	0.251	0.255	0.241	0.258	0.231	0.284	0.257	5.92
23) methyl acetate												

```
      0.294 0.325 0.323 0.318 0.333 0.297 0.321 0.323 0.243        0.309    8.99
24)  methyl tert butyl ether
      0.732 0.824 0.789 0.754 0.775 0.779 0.724 0.767 0.615        0.751    7.89
25)  acrylonitrile
      0.121 0.142 0.143 0.143 0.144 0.142 0.129 0.139              0.138    6.06
26)  trans-1,2-dichloroethene
      0.223 0.298 0.284 0.280 0.275 0.290 0.259 0.282              0.274    8.59
27)  hexane
            0.558 0.615 0.588 0.553 0.617 0.472 0.562              0.566    8.68
28)  di-isopropyl ether
      0.901 0.998 1.025 0.980 0.980 1.018 0.952 0.976 0.708        0.949   10.26
29)  2-butanone
            0.037 0.037 0.036 0.036 0.037 0.034 0.036              0.036    3.22
30)  1,1-dichloroethane
      0.473 0.551 0.544 0.539 0.534 0.548 0.514 0.545              0.531    4.93
31)  chloroprene
            0.498 0.522 0.519 0.508 0.529 0.464 0.521              0.509    4.35
32)  vinyl acetate
                  0.064 0.061 0.057 0.056 0.043 0.054              0.056   12.97
33)  ethyl tert-butyl ether
      0.830 0.921 0.962 0.916 0.932 0.957 0.875 0.900 0.701        0.888    9.15
34)  ethyl acetate
            0.058 0.064 0.062 0.063 0.062 0.059 0.055              0.060    5.01
35)  2,2-dichloropropane
      0.392 0.443 0.458 0.450 0.436 0.463 0.411 0.456              0.439    5.70
36)  cis-1,2-dichloroethene
      0.288 0.304 0.302 0.293 0.295 0.306 0.269 0.297              0.294    4.09
37)  methyl acrylate
      0.357 0.396 0.416 0.412 0.404 0.409 0.388 0.403              0.398    4.76
38)  propionitrile
      0.054 0.058 0.056 0.056 0.056 0.054 0.055 0.056 0.041        0.054    9.37
39)  tert-butyl formate
            0.182 0.266 0.246 0.228 0.253 0.191 0.209              0.225   14.24
40)  bromochloromethane
      0.135 0.157 0.146 0.144 0.147 0.145 0.146 0.151              0.146    4.22
41)  tetrahydrofuran
      0.131 0.128 0.116 0.113 0.112 0.110 0.125 0.121 0.123 0.124  0.120    6.07
42)  chloroform
      0.485 0.562 0.506 0.497 0.504 0.509 0.490 0.506 0.463 0.604  0.513    7.96
43)  dibromofluoromethane (s)
      0.508 0.515 0.492 0.498 0.503 0.488 0.513 0.506 0.511 0.509  0.504    1.78
44)  methacrylonitrile
      0.094 0.119 0.133 0.128 0.129 0.133 0.113 0.129              0.122   10.95
45)  1,1,1-trichloroethane
      0.454 0.532 0.510 0.506 0.495 0.519 0.473 0.514 0.346        0.483   11.74
46)  cyclohexane
      0.349 0.398 0.389 0.388 0.378 0.438 0.335 0.373              0.381    8.22
47)  tert amyl alcohol
            0.011 0.013 0.012 0.013 0.012 0.013 0.012              0.012    5.82
48)  1,1-dichloropropene
      0.332 0.409 0.421 0.411 0.400 0.426 0.365 0.410              0.397    8.04
49)  isobutyl alcohol
            0.007 0.007 0.007 0.007 0.007 0.007 0.007              0.007    3.93
50)  carbon tetrachloride
      0.366 0.473 0.490 0.476 0.453 0.498 0.407 0.465              0.453    9.93
51)  isopropyl acetate
      0.056 0.054 0.069 0.065 0.066 0.070 0.061 0.065              0.063    8.91

52) I   1,4-difluorobenzene   ----------------ISTD---------------------
53)  1,2-dichloroethane-d4 (s)
```

```
      0.435 0.435 0.414 0.421 0.433 0.404 0.435 0.438 0.432 0.431  0.428    2.62
54)  iso-octane
            0.767 0.812 0.779 0.759 0.798 0.655 0.784              0.765    6.75
55)  epichlorohydrin
      0.024 0.026 0.029 0.028 0.028 0.028 0.026 0.027              0.027    5.77
56)  n-butyl alcohol
                  0.006 0.006 0.005 0.006 0.004 0.005              0.005   17.17
57)  benzene
      0.625 0.759 0.746 0.731 0.723 0.751 0.680 0.738 0.501        0.695   12.12
58)  tert-amyl methyl ether
      0.541 0.551 0.610 0.574 0.577 0.604 0.541 0.565 0.406        0.552   10.90
59)  heptane
            0.142 0.152 0.146 0.142 0.152 0.115 0.148              0.142    9.04
60)  1,2-dichloroethane
      0.333 0.348 0.311 0.303 0.315 0.300 0.306 0.315 0.330        0.318    4.94
61)  trichloroethene
      0.206 0.242 0.244 0.238 0.232 0.252 0.215 0.240              0.234    6.73
62)  ethyl acrylate
      0.264 0.297 0.315 0.301 0.306 0.314 0.280 0.306              0.298    5.94
63)  2-nitropropane
            0.079 0.086 0.085 0.084 0.079 0.080 0.078              0.082    4.28
64)  2-chloroethyl vinyl ether
      0.118 0.133 0.143 0.136 0.137 0.138 0.125 0.135              0.133    5.99
65)  methyl methacrylate
            0.056 0.060 0.056 0.057 0.061 0.050 0.052              0.056    7.00
66)  1,2-dichloropropane
      0.056 0.078 0.086 0.083 0.084 0.085 0.075 0.086              0.079   12.88
67)  dibromomethane
      0.130 0.138 0.134 0.127 0.129 0.130 0.126 0.129 0.095        0.127    9.75
68)  methylcyclohexane
            0.321 0.364 0.344 0.327 0.375 0.277 0.327              0.334    9.56
69)  bromodichloromethane
      0.234 0.259 0.269 0.258 0.262 0.269 0.247 0.254              0.256    4.60
70)  cis-1,3-dichloropropene
      0.248 0.276 0.318 0.302 0.302 0.319 0.269 0.291              0.291    8.56
71)  4-methyl-2-pentanone
      0.079 0.087 0.094 0.089 0.091 0.093 0.085 0.091 0.066        0.086   10.08
72)  3-methyl-1-butanol  *This compound fails Initial Calibration criteria*
                  0.005 0.004 0.003 0.005 0.001 0.002              0.003   39.62

73) I   chlorobenzene-d5      ----------------ISTD---------------------
74)  toluene-d8 (s)
      1.217 1.221 1.205 1.209 1.221 1.209 1.222 1.210 1.223 1.218  1.216    0.54
75)  toluene
      0.429 0.499 0.498 0.481 0.477 0.506 0.454 0.483 0.338 0.388  0.455   12.07
76)  trans-1,3-dichloropropene
      0.235 0.275 0.318 0.299 0.297 0.322 0.262 0.276              0.286   10.27
77)  ethyl methacrylate
      0.229 0.247 0.273 0.255 0.261 0.272 0.236 0.251 0.190        0.246   10.45
78)  1,1,2-trichloroethane
      0.140 0.139 0.158 0.150 0.152 0.157 0.151 0.150              0.150    4.53
79)  tetrachloroethene
      0.174 0.199 0.207 0.199 0.194 0.216 0.176 0.193              0.195    7.28
80)  1,3-dichloropropane
      0.254 0.301 0.305 0.290 0.291 0.302 0.279 0.283              0.288    5.74
81)  2-hexanone
      0.088 0.095 0.096 0.092 0.096 0.099 0.092 0.097 0.069        0.092    9.99
82)  butyl acetate
      0.137 0.154 0.168 0.160 0.160 0.172 0.152 0.159              0.158    6.70
83)  dibromochloromethane
```

```
      0.212 0.222 0.254 0.237 0.240 0.252 0.215 0.224 0.160        0.224   12.70
 84)  1,2-dibromoethane
      0.189 0.202 0.218 0.208 0.206 0.215 0.194 0.205              0.205    4.81
 85)  n-butyl ether
      0.745 0.852 0.927 0.899 0.877 0.923 0.790 0.862              0.859    7.43
 86)  chlorobenzene
      0.498 0.565 0.576 0.555 0.551 0.580 0.520 0.547 0.406        0.533   10.18
 87)  1,1,1,2-tetrachloroethane
      0.179 0.201 0.234 0.219 0.214 0.236 0.190 0.205              0.210    9.65
 88)  ethylbenzene
      0.840 0.940 0.972 0.948 0.926 0.970 0.852 0.924              0.921    5.44
 89)  m,p-xylene
      0.333 0.369 0.389 0.375 0.366 0.391 0.335 0.365 0.248        0.352   12.50
 90)  o-xylene
      0.628 0.707 0.767 0.743 0.719 0.771 0.670 0.716              0.715    6.77
 91)  styrene
      0.477 0.547 0.635 0.598 0.586 0.632 0.501 0.558              0.567   10.15
 92)  butyl acrylate
            0.393 0.490 0.458 0.454 0.489 0.387 0.424              0.442    9.49
 93)  n-amyl acetate
            0.133 0.165 0.152 0.153 0.167 0.136 0.145              0.150    8.82
 94)  bromoform
      0.143 0.153 0.189 0.175 0.168 0.189 0.141 0.154              0.164   11.67
 95)  isopropylbenzene
      0.767 0.925 0.984 0.950 0.919 0.986 0.827 0.918              0.910    8.38
 96)  cis-1,4-dichloro-2-butene
                  0.115 0.106 0.103 0.111 0.082 0.094              0.102   11.64

 97) I   1,4-dichlorobenzene-d ----------------ISTD---------------------
 98)  4-bromofluorobenzene (s)
      1.013 1.000 0.963 0.976 0.982 0.994 1.001 0.995 1.007 1.007  0.994    1.58
 99)  bromobenzene
      0.498 0.538 0.569 0.545 0.536 0.585 0.509 0.539 0.392        0.523   10.70
100)  1,1,2,2-tetrachloroethane
      0.503 0.558 0.549 0.536 0.538 0.539 0.530 0.538 0.407        0.522    8.74
101)  trans-1,4-dichloro-2-butene
      0.171 0.185 0.216 0.208 0.207 0.211 0.188 0.205              0.199    7.80
102)  1,2,3-trichloropropane
      0.141 0.171 0.168 0.165 0.164 0.170 0.163 0.174              0.165    6.16
103)  n-propylbenzene
      1.982 2.319 2.402 2.375 2.303 2.455 2.114 2.356              2.288    6.96
104)  2-chlorotoluene
      0.438 0.509 0.519 0.511 0.501 0.543 0.468 0.503              0.499    6.45
105)  4-chlorotoluene
      1.188 1.354 1.411 1.365 1.352 1.429 1.237 1.341              1.335    6.16
106)  1,3,5-trimethylbenzene
      1.345 1.569 1.653 1.601 1.564 1.687 1.422 1.581              1.553    7.38
107)  tert-butylbenzene
      1.280 1.504 1.545 1.501 1.447 1.597 1.330 1.504              1.463    7.34
108)  1,2,4-trimethylbenzene
      1.284 1.558 1.668 1.613 1.564 1.712 1.445 1.569              1.551    8.67
109)  sec-butylbenzene
      1.712 1.994 2.186 2.141 2.044 2.231 1.823 2.095              2.028    8.87
110)  1,3-dichlorobenzene
      0.847 0.986 1.036 0.996 0.976 1.059 0.923 0.967              0.974    6.79
111)  p-isopropyltoluene
      1.469 1.734 1.957 1.916 1.792 2.002 1.584 1.810              1.783   10.33
112)  1,4-dichlorobenzene
      0.968 1.027 1.051 1.018 1.003 1.070 0.924 0.999              1.007    4.58
113)  1,2-dichlorobenzene
```

Initial Calibration Summary

Job Number: JD35517 **Sample:** V1X8342-ICC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192544.D
Project: BECOS Former Griffiss AFB, Rome, NY

```
       0.856 0.922 0.987 0.944 0.933 1.000 0.853 0.911              0.926    5.77
114)  benzyl chloride
                  1.175 1.111 1.049 1.185 0.833 0.960              1.052   12.96
115)  n-butylbenzene
       0.647 0.769 0.875 0.852 0.814 0.904 0.708 0.815             0.798   10.84
116)  1,2-dibromo-3-chloropropane
             0.113 0.155 0.149 0.145 0.160 0.119 0.141             0.140   12.71
117)  1,3,5-trichlorobenzene
       0.502 0.617 0.688 0.661 0.630 0.745 0.581 0.621             0.630   11.45
118)  hexachlorobutadiene
             0.217 0.258 0.247 0.225 0.285 0.187 0.226             0.235   13.37
119)  naphthalene
       1.558 1.681 1.883 1.764 1.757 1.961 1.584 1.713             1.738    7.90
120)  1,2,4-trichlorobenzene
       0.474 0.518 0.631 0.582 0.548 0.677 0.485 0.525             0.555   12.74
121)  1,2,3-trichlorobenzene
       0.483 0.522 0.609 0.550 0.531 0.639 0.470 0.503             0.538   11.00
122)  hexachloroethane
             0.232 0.296 0.276 0.250 0.316 0.209 0.234             0.259   14.78
123)  2-methylnaphthalene
                  0.907 0.835 0.794 0.975 0.679 0.754             0.824   12.94
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M1X8342.M         Wed Dec 01 10:50:35 2021   GCMSX
```

Initial Calibration Verification

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample: V1X8342-ICV8342
Lab FileID: 1X192554.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192554.D Vial: 31
Acq On : 18 Nov 2021 2:25 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	97	0.00	2.55
2		ethanol	0.057	0.057	0.0	101	0.00	2.04
3		tertiary butyl alcohol	0.717	0.702	2.1	96	0.00	2.59
4		1,4-dioxane	0.060	0.066	-10.0	101	0.00	4.49
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	3.62
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane	0.370	0.319	13.8	89	0.00	1.32
8		chloromethane	0.426	0.385	9.6	98	0.00	1.45
9		vinyl chloride	0.378	0.352	6.9	99	0.00	1.52
10		bromomethane	0.194	0.182	6.2	111	0.00	1.74
11		chloroethane	0.174	0.162	6.9	98	0.00	1.80
12		trichlorofluoromethane	0.513	0.472	8.0	96	0.00	1.96
13		1,3-butadiene	0.328	0.308	6.1	96	0.00	1.55
14		ethyl ether	0.131	0.129	1.5	100	0.00	2.12
15		acrolein	0.055	0.055	0.0	95	0.00	2.21
16		1,1-dichloroethene	0.258	0.228	11.6	89	0.00	2.28
17		freon 113	0.307	0.268	12.7	90	0.00	2.27
18		acetone	0.034	0.037	-8.8	125	0.00	2.29
19		acetonitrile		----------NA----------				
20		iodomethane	0.328	0.338	-3.0	102	0.00	2.38
21		carbon disulfide	0.719	0.632	12.1	91	0.00	2.43
22		methylene chloride	0.257	0.237	7.8	98	0.00	2.57
23		methyl acetate	0.309	0.272	12.0	90	0.00	2.47
24		methyl tert butyl ether	0.751	0.720	4.1	100	0.00	2.72
25		acrylonitrile		----------NA----------				
26		trans-1,2-dichloroethene	0.274	0.255	6.9	95	0.00	2.73
27		hexane	0.566	0.446	21.2	80	0.00	2.89
28		di-isopropyl ether	0.949	0.870	8.3	93	0.00	2.98
29		2-butanone	0.036	0.037	-2.8	109	0.00	3.30
30		1,1-dichloroethane	0.531	0.496	6.6	96	0.00	2.99
31		chloroprene	0.509	0.492	3.3	99	0.00	3.04
32		vinyl acetate	0.056	0.047	16.1	80	0.00	2.97
33		ethyl tert-butyl ether	0.888	0.822	7.4	94	0.00	3.20
34		ethyl acetate	0.060	0.060	0.0	102	0.00	3.32
35		2,2-dichloropropane	0.439	0.406	7.5	95	0.00	3.34
36		cis-1,2-dichloroethene	0.294	0.279	5.1	100	0.00	3.33
37		methyl acrylate	0.398	0.378	5.0	96	0.00	3.35
38		propionitrile	0.054	0.047	13.0	89	0.00	3.35
39		tert-butyl formate	0.225	0.221	1.8	94	0.00	3.54
40		bromochloromethane	0.146	0.145	0.7	105	0.00	3.48
41		tetrahydrofuran	0.120	0.107	10.8	99	0.00	3.49

Initial Calibration Verification

Job Number: JD35517 **Sample:** V1X8342-ICV8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192554.D
Project: BECOS Former Griffiss AFB, Rome, NY

42		chloroform	0.513	0.474	7.6	100	0.00	3.53
43	S	dibromofluoromethane (s)	0.504	0.491	2.6	103	0.00	3.62
44		methacrylonitrile	0.122	0.127	-4.1	104	0.00	3.44
45		1,1,1-trichloroethane	0.483	0.467	3.3	97	0.00	3.65
46		cyclohexane	0.381	0.412	-8.1	111	0.00	3.70
47	m	tert amyl alcohol	0.012	0.012	0.0	99	0.00	3.83
48		1,1-dichloropropene	0.397	0.383	3.5	98	0.00	3.74
49		isobutyl alcohol	0.007	0.006	14.3	92	0.00	3.92
50		carbon tetrachloride	0.453	0.439	3.1	96	0.00	3.75
51		isopropyl acetate	0.063	0.060	4.8	96	0.00	3.85
52	I	1,4-difluorobenzene	1.000	1.000	0.0	103	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.422	1.4	103	0.00	3.84
54		iso-octane	0.765	0.651	14.9	86	0.00	3.93
55		epichlorohydrin	0.027	0.028	-3.7	102	0.00	4.84
56		n-butyl alcohol	0.005	0.006	-20.0	104	0.00	4.17
57		benzene	0.695	0.692	0.4	97	0.00	3.87
58		tert-amyl methyl ether	0.552	0.502	9.1	90	0.00	3.93
59		heptane	0.142	0.135	4.9	95	0.00	4.02
60		1,2-dichloroethane	0.318	0.295	7.2	100	0.00	3.90
61		trichloroethene	0.234	0.231	1.3	100	0.00	4.29
62	m	ethyl acrylate	0.298	0.224	24.8	77	0.00	4.30
63		2-nitropropane	0.082	0.083	-1.2	100	0.00	4.77
64		2-chloroethyl vinyl ether	0.133	0.148	-11.3	112	0.00	4.79
65		methyl methacrylate	0.056	0.056	0.0	104	0.00	4.46
66		1,2-dichloropropane	0.079	0.082	-3.8	101	0.00	4.46
67		dibromomethane	0.127	0.127	0.0	104	0.00	4.52
68		methylcyclohexane	0.334	0.335	-0.3	100	0.00	4.45
69		bromodichloromethane	0.256	0.257	-0.4	103	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.302	-3.8	103	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.087	-1.2	100	0.00	5.01
72		3-methyl-1-butanol	0.003	0.004	-33.3#	111	0.00	5.03
73	I	chlorobenzene-d5	1.000	1.000	0.0	104	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.200	1.3	103	0.00	5.11
75		toluene	0.455	0.457	-0.4	99	0.00	5.16
76		trans-1,3-dichloropropene	0.286	0.296	-3.5	103	0.00	5.31
77		ethyl methacrylate	0.246	0.247	-0.4	100	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.149	0.7	103	0.00	5.46
79		tetrachloroethene		----------NA----------				
80		1,3-dichloropropane	0.288	0.285	1.0	102	0.00	5.59
81		2-hexanone	0.092	0.093	-1.1	105	0.00	5.60
82		butyl acetate	0.158	0.151	4.4	98	0.00	5.68
83		dibromochloromethane	0.224	0.236	-5.4	104	0.00	5.75
84		1,2-dibromoethane	0.205	0.206	-0.5	103	0.00	5.85
85	m	n-butyl ether	0.859	0.672	21.8	78	0.00	6.26
86		chlorobenzene	0.533	0.538	-0.9	101	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.216	-2.9	102	0.00	6.28
88		ethylbenzene	0.921	0.897	2.6	98	0.00	6.29
89		m,p-xylene	0.352	0.357	-1.4	99	0.00	6.38
90		o-xylene	0.715	0.693	3.1	97	0.00	6.69
91		styrene	0.567	0.584	-3.0	101	0.00	6.70
92		butyl acrylate	0.442	0.409	7.5	93	0.00	6.62
93		n-amyl acetate	0.150	0.139	7.3	95	0.00	6.80
94		bromoform	0.164	0.177	-7.9	105	0.00	6.86
95		isopropylbenzene	0.910	0.916	-0.7	100	0.00	6.98
96		cis-1,4-dichloro-2-butene	0.102	0.100	2.0	98	0.00	7.02
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.973	2.1	105	0.00	7.12

Initial Calibration Verification

Job Number: JD35517 **Sample:** V1X8342-ICV8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192554.D
Project: BECOS Former Griffiss AFB, Rome, NY

99	bromobenzene	0.523	0.530	-1.3	103	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.511	2.1	101	0.00	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.200	-0.5	101	0.00	7.24
102	1,2,3-trichloropropane	0.165	0.162	1.8	103	0.00	7.26
103	n-propylbenzene	2.288	2.222	2.9	99	0.00	7.30
104	2-chlorotoluene	0.499	0.485	2.8	100	0.00	7.38
105	4-chlorotoluene	1.335	1.284	3.8	99	0.00	7.47
106	1,3,5-trimethylbenzene	1.553	1.524	1.9	100	0.00	7.44
107	tert-butylbenzene	1.463	1.739	-18.9	122	0.00	7.68
108	1,2,4-trimethylbenzene	1.551	1.540	0.7	101	0.00	7.72
109	sec-butylbenzene	2.028	2.000	1.4	99	0.00	7.84
110	1,3-dichlorobenzene	0.974	0.963	1.1	102	0.00	7.93
111	p-isopropyltoluene	1.783	1.788	-0.3	98	0.00	7.95
112	1,4-dichlorobenzene	1.007	0.978	2.9	101	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.930	-0.4	104	0.00	8.26
114	benzyl chloride	1.052	0.950	9.7	90	0.00	8.08
115	n-butylbenzene	0.798	0.794	0.5	98	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.148	-5.7	105	0.00	8.79
117	1,3,5-trichlorobenzene	0.630	0.656	-4.1	105	0.00	8.91
118	hexachlorobutadiene	0.235	0.242	-3.0	103	0.00	9.40
119	naphthalene	1.738	1.764	-1.5	105	0.00	9.48
120	1,2,4-trichlorobenzene	0.555	0.585	-5.4	106	0.00	9.31
121 m	1,2,3-trichlorobenzene	0.538	0.564	-4.8	108	0.00	9.62
122	hexachloroethane	0.259	0.274	-5.8	105	0.00	8.45
123	2-methylnaphthalene	0.824	0.817	0.8	103	0.00	10.22

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Wed Dec 01 10:50:09 2021 GCMSX

Initial Calibration Verification

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample: V1X8342-ICV8342
Lab FileID: 1X192556.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192556.D Vial: 33
Acq On : 18 Nov 2021 2:59 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Tue Nov 23 09:12:27 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	90	0.00	2.54
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	105	0.00	3.62
6		chlorodifluoromethane	0.395	0.485	-22.8	129	0.00	1.33
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		freon 113		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile	0.047	0.049	-4.3	107	0.00	2.46
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		acrylonitrile	0.138	0.163	-18.1	120	0.00	2.70
26		trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28		di-isopropyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				
38		propionitrile		----------NA----------				
39		tert-butyl formate		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD35517 **Sample:** V1X8342-ICV8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192556.D
Project: BECOS Former Griffiss AFB, Rome, NY

42		chloroform		----------NA----------					
43	S	dibromofluoromethane (s)	0.504	0.487	3.4	103	0.00	3.62	
44		methacrylonitrile		----------NA----------					
45		1,1,1-trichloroethane		----------NA----------					
46		cyclohexane		----------NA----------					
47	m	tert amyl alcohol		----------NA----------					
48		1,1-dichloropropene		----------NA----------					
49		isobutyl alcohol		----------NA----------					
50		carbon tetrachloride		----------NA----------					
51		isopropyl acetate		----------NA----------					
52	I	1,4-difluorobenzene	1.000	1.000	0.0	104	0.00	4.12	
53	S	1,2-dichloroethane-d4 (s)	0.428	0.424	0.9	104	0.00	3.84	
54		iso-octane		----------NA----------					
55		epichlorohydrin		----------NA----------					
56		n-butyl alcohol		----------NA----------					
57		benzene		----------NA----------					
58		tert-amyl methyl ether		----------NA----------					
59		heptane		----------NA----------					
60		1,2-dichloroethane		----------NA----------					
61		trichloroethene		----------NA----------					
62	m	ethyl acrylate		----------NA----------					
63		2-nitropropane		----------NA----------					
64		2-chloroethyl vinyl ether		----------NA----------					
65		methyl methacrylate		----------NA----------					
66		1,2-dichloropropane		----------NA----------					
67		dibromomethane		----------NA----------					
68		methylcyclohexane		----------NA----------					
69		bromodichloromethane		----------NA----------					
70		cis-1,3-dichloropropene		----------NA----------					
71		4-methyl-2-pentanone		----------NA----------					
72		3-methyl-1-butanol		----------NA----------					
73	I	chlorobenzene-d5	1.000	1.000	0.0	103	0.00	6.20	
74	S	toluene-d8 (s)	1.216	1.211	0.4	104	0.00	5.11	
75		toluene		----------NA----------					
76		trans-1,3-dichloropropene		----------NA----------					
77		ethyl methacrylate		----------NA----------					
78		1,1,2-trichloroethane		----------NA----------					
79		tetrachloroethene	0.195	0.292	-49.7#	152	0.00	5.54	
80		1,3-dichloropropane		----------NA----------					
81		2-hexanone		----------NA----------					
82		butyl acetate		----------NA----------					
83		dibromochloromethane		----------NA----------					
84		1,2-dibromoethane		----------NA----------					
85	m	n-butyl ether		----------NA----------					
86		chlorobenzene		----------NA----------					
87		1,1,1,2-tetrachloroethane		----------NA----------					
88		ethylbenzene		----------NA----------					
89		m,p-xylene		----------NA----------					
90		o-xylene		----------NA----------					
91		styrene		----------NA----------					
92		butyl acrylate		----------NA----------					
93		n-amyl acetate		----------NA----------					
94		bromoform		----------NA----------					
95		isopropylbenzene		----------NA----------					
96		cis-1,4-dichloro-2-butene		----------NA----------					
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	7.99	
98	S	4-bromofluorobenzene (s)	0.994	0.993	0.1	103	0.00	7.12	

Initial Calibration Verification

Job Number: JD35517 **Sample:** V1X8342-ICV8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192556.D
Project: BECOS Former Griffiss AFB, Rome, NY

99		bromobenzene	----------NA----------
100		1,1,2,2-tetrachloroethane	----------NA----------
101		trans-1,4-dichloro-2-bute	----------NA----------
102		1,2,3-trichloropropane	----------NA----------
103		n-propylbenzene	----------NA----------
104		2-chlorotoluene	----------NA----------
105		4-chlorotoluene	----------NA----------
106		1,3,5-trimethylbenzene	----------NA----------
107		tert-butylbenzene	----------NA----------
108		1,2,4-trimethylbenzene	----------NA----------
109		sec-butylbenzene	----------NA----------
110		1,3-dichlorobenzene	----------NA----------
111		p-isopropyltoluene	----------NA----------
112		1,4-dichlorobenzene	----------NA----------
113		1,2-dichlorobenzene	----------NA----------
114		benzyl chloride	----------NA----------
115		n-butylbenzene	----------NA----------
116		1,2-dibromo-3-chloropropa	----------NA----------
117		1,3,5-trichlorobenzene	----------NA----------
118		hexachlorobutadiene	----------NA----------
119		naphthalene	----------NA----------
120		1,2,4-trichlorobenzene	----------NA----------
121	m	1,2,3-trichlorobenzene	----------NA----------
122		hexachloroethane	----------NA----------
123		2-methylnaphthalene	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Sat Nov 27 09:41:15 2021 GCMSX

Initial Calibration Verification

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Sample: V1X8342-ICV8342
Lab FileID: 1X192568.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\VX8342\1X192568.D Vial: 45
Acq On : 23 Nov 2021 10:46 am Operator: benk
Sample : icv8342-50 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Tue Nov 23 09:12:27 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	52	0.00	2.54
2		ethanol		----------NA----------				
3		tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	62	0.00	3.62
6		chlorodifluoromethane		----------NA----------				
7		dichlorodifluoromethane		----------NA----------				
8		chloromethane		----------NA----------				
9		vinyl chloride		----------NA----------				
10		bromomethane		----------NA----------				
11		chloroethane		----------NA----------				
12		trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		ethyl ether		----------NA----------				
15		acrolein		----------NA----------				
16		1,1-dichloroethene		----------NA----------				
17		freon 113		----------NA----------				
18		acetone		----------NA----------				
19		acetonitrile		----------NA----------				
20		iodomethane		----------NA----------				
21		carbon disulfide		----------NA----------				
22		methylene chloride		----------NA----------				
23		methyl acetate		----------NA----------				
24		methyl tert butyl ether		----------NA----------				
25		acrylonitrile		----------NA----------				
26		trans-1,2-dichloroethene		----------NA----------				
27		hexane		----------NA----------				
28		di-isopropyl ether		----------NA----------				
29		2-butanone		----------NA----------				
30		1,1-dichloroethane		----------NA----------				
31		chloroprene		----------NA----------				
32		vinyl acetate		----------NA----------				
33		ethyl tert-butyl ether		----------NA----------				
34		ethyl acetate		----------NA----------				
35		2,2-dichloropropane		----------NA----------				
36		cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				
38		propionitrile		----------NA----------				
39		tert-butyl formate		----------NA----------				
40		bromochloromethane		----------NA----------				
41		tetrahydrofuran		----------NA----------				

Initial Calibration Verification

Job Number: JD35517 **Sample:** V1X8342-ICV8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192568.D
Project: BECOS Former Griffiss AFB, Rome, NY

42		chloroform		----------NA----------				
43	S	dibromofluoromethane (s)	0.504	0.538	-6.7	67	0.00	3.62
44		methacrylonitrile		----------NA----------				
45		1,1,1-trichloroethane		----------NA----------				
46		cyclohexane		----------NA----------				
47	m	tert amyl alcohol		----------NA----------				
48		1,1-dichloropropene		----------NA----------				
49		isobutyl alcohol		----------NA----------				
50		carbon tetrachloride		----------NA----------				
51		isopropyl acetate		----------NA----------				
52	I	1,4-difluorobenzene	1.000	1.000	0.0	67	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.423	1.2	67	0.00	3.85
54		iso-octane		----------NA----------				
55		epichlorohydrin		----------NA----------				
56		n-butyl alcohol		----------NA----------				
57		benzene		----------NA----------				
58		tert-amyl methyl ether		----------NA----------				
59		heptane		----------NA----------				
60		1,2-dichloroethane		----------NA----------				
61		trichloroethene		----------NA----------				
62	m	ethyl acrylate		----------NA----------				
63		2-nitropropane		----------NA----------				
64		2-chloroethyl vinyl ether		----------NA----------				
65		methyl methacrylate		----------NA----------				
66		1,2-dichloropropane		----------NA----------				
67		dibromomethane		----------NA----------				
68		methylcyclohexane		----------NA----------				
69		bromodichloromethane		----------NA----------				
70		cis-1,3-dichloropropene		----------NA----------				
71		4-methyl-2-pentanone		----------NA----------				
72		3-methyl-1-butanol		----------NA----------				
73	I	chlorobenzene-d5	1.000	1.000	0.0	64	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.235	-1.6	65	0.00	5.12
75		toluene		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		ethyl methacrylate		----------NA----------				
78		1,1,2-trichloroethane		----------NA----------				
79		tetrachloroethene	0.195	0.187	4.1	60	0.00	5.55
80		1,3-dichloropropane		----------NA----------				
81		2-hexanone		----------NA----------				
82		butyl acetate		----------NA----------				
83		dibromochloromethane		----------NA----------				
84		1,2-dibromoethane		----------NA----------				
85	m	n-butyl ether		----------NA----------				
86		chlorobenzene		----------NA----------				
87		1,1,1,2-tetrachloroethane		----------NA----------				
88		ethylbenzene		----------NA----------				
89		m,p-xylene		----------NA----------				
90		o-xylene		----------NA----------				
91		styrene		----------NA----------				
92		butyl acrylate		----------NA----------				
93		n-amyl acetate		----------NA----------				
94		bromoform		----------NA----------				
95		isopropylbenzene		----------NA----------				
96		cis-1,4-dichloro-2-butene		----------NA----------				
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	62	0.00	7.99
98	S	4-bromofluorobenzene (s)	0.994	0.989	0.5	63	0.00	7.13

Initial Calibration Verification

Job Number: JD35517 **Sample:** V1X8342-ICV8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192568.D
Project: BECOS Former Griffiss AFB, Rome, NY

99		bromobenzene	----------NA----------
100		1,1,2,2-tetrachloroethane	----------NA----------
101		trans-1,4-dichloro-2-bute	----------NA----------
102		1,2,3-trichloropropane	----------NA----------
103		n-propylbenzene	----------NA----------
104		2-chlorotoluene	----------NA----------
105		4-chlorotoluene	----------NA----------
106		1,3,5-trimethylbenzene	----------NA----------
107		tert-butylbenzene	----------NA----------
108		1,2,4-trimethylbenzene	----------NA----------
109		sec-butylbenzene	----------NA----------
110		1,3-dichlorobenzene	----------NA----------
111		p-isopropyltoluene	----------NA----------
112		1,4-dichlorobenzene	----------NA----------
113		1,2-dichlorobenzene	----------NA----------
114		benzyl chloride	----------NA----------
115		n-butylbenzene	----------NA----------
116		1,2-dibromo-3-chloropropa	----------NA----------
117		1,3,5-trichlorobenzene	----------NA----------
118		hexachlorobutadiene	----------NA----------
119		naphthalene	----------NA----------
120		1,2,4-trichlorobenzene	----------NA----------
121	m	1,2,3-trichlorobenzene	----------NA----------
122		hexachloroethane	----------NA----------
123		2-methylnaphthalene	----------NA----------

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Sat Nov 27 09:41:16 2021 GCMSX

Continuing Calibration Summary

Job Number: JD35517 **Sample:** V1X8346-CC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192690.D
Project: BECOS Former Griffiss AFB, Rome, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...46\v1x8346\1x192690.d Vial: 2
Acq On : 30 Nov 2021 10:36 am Operator: brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	65	-0.01	2.54
2		ethanol	0.057	0.063	-10.5	75	-0.01	2.03
3		tertiary butyl alcohol	0.717	0.742	-3.5	67	-0.01	2.58
4		1,4-dioxane	0.060	0.064	-6.7	67	0.00	4.49
5	I	pentafluorobenzene	1.000	1.000	0.0	71	0.00	3.62
6		chlorodifluoromethane	0.395	0.314	20.5#	57	-0.01	1.32
7		dichlorodifluoromethane	0.370	0.437	-18.1	83	-0.02	1.30
8		chloromethane	0.426	0.494	-16.0	83	-0.02	1.43
9		vinyl chloride	0.378	0.379	-0.3	73	0.00	1.51
10		bromomethane	0.194	0.220	-13.4	82	-0.01	1.72
11		chloroethane	0.174	0.197	-13.2	77	0.00	1.79
12		trichlorofluoromethane	0.513	0.578	-12.7	80	-0.01	1.95
13		1,3-butadiene	0.328	0.271	17.4	58	-0.01	1.53
14		ethyl ether	0.131	0.130	0.8	69	0.00	2.11
15		acrolein	0.055	0.058	-5.5	72	0.00	2.20
16		1,1-dichloroethene	0.258	0.252	2.3	70	0.00	2.27
17		freon 113	0.307	0.303	1.3	72	0.00	2.26
18		acetone	0.034	0.033	2.9	68	0.00	2.28
19		acetonitrile	0.047	0.046	2.1	68	0.00	2.45
20		iodomethane	0.328	0.191	41.8#	41#	0.00	2.37
21		carbon disulfide	0.719	0.670	6.8	69	0.00	2.42
22		methylene chloride	0.257	0.246	4.3	70	0.00	2.56
23		methyl acetate	0.309	0.297	3.9	63	0.00	2.46
24		methyl tert butyl ether	0.751	0.750	0.1	69	0.00	2.71
25		acrylonitrile	0.138	0.135	2.2	67	0.00	2.69
26		trans-1,2-dichloroethene	0.274	0.281	-2.6	73	0.00	2.72
27		hexane	0.566	0.569	-0.5	73	0.00	2.88
28		di-isopropyl ether	0.949	0.974	-2.6	71	0.00	2.98
29		2-butanone	0.036	0.037	-2.8	72	0.00	3.30
30		1,1-dichloroethane	0.531	0.532	-0.2	71	0.00	2.98
31		chloroprene	0.509	0.500	1.8	70	0.00	3.03
32		vinyl acetate	0.056	0.059	-5.4	74	0.00	2.96
33		ethyl tert-butyl ether	0.888	0.918	-3.4	70	0.00	3.20
34		ethyl acetate	0.060	0.059	1.7	66	0.00	3.31
35		2,2-dichloropropane	0.439	0.457	-4.1	75	0.00	3.34
36		cis-1,2-dichloroethene	0.294	0.291	1.0	70	0.00	3.33
37		methyl acrylate	0.398	0.391	1.8	69	0.00	3.35
38		propionitrile	0.054	0.053	1.9	68	0.00	3.35
39		tert-butyl formate	0.225	0.203	9.8	64	0.00	3.54
40		bromochloromethane	0.146	0.153	-4.8	74	0.00	3.47
41		tetrahydrofuran	0.120	0.112	6.7	71	0.00	3.48

Continuing Calibration Summary

Job Number: JD35517 **Sample:** V1X8346-CC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192690.D
Project: BECOS Former Griffiss AFB, Rome, NY

42		chloroform	0.513	0.531	-3.5	75	0.00	3.52
43	S	dibromofluoromethane (s)	0.504	0.484	4.0	69	0.00	3.62
44		methacrylonitrile	0.122	0.127	-4.1	70	0.00	3.44
45		1,1,1-trichloroethane	0.483	0.507	-5.0	73	0.00	3.65
46		cyclohexane	0.381	0.458	-20.2#	86	0.00	3.69
47	m	tert amyl alcohol	0.012	0.012	0.0	68	0.00	3.83
48		1,1-dichloropropene	0.397	0.402	-1.3	72	0.00	3.74
49		isobutyl alcohol	0.007	0.007	0.0	71	0.00	3.93
50		carbon tetrachloride	0.453	0.461	-1.8	73	0.00	3.74
51		isopropyl acetate	0.063	0.067	-6.3	72	0.00	3.85
52	I	1,4-difluorobenzene	1.000	1.000	0.0	70	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.427	0.2	69	0.00	3.84
54		iso-octane	0.765	0.808	-5.6	74	0.00	3.92
55		epichlorohydrin	0.027	0.026	3.7	65	0.00	4.84
56		n-butyl alcohol	0.005	0.005	0.0	71	0.00	4.17
57		benzene	0.695	0.737	-6.0	71	0.00	3.87
58		tert-amyl methyl ether	0.552	0.595	-7.8	72	0.00	3.92
59		heptane	0.142	0.157	-10.6	77	0.00	4.02
60		1,2-dichloroethane	0.318	0.312	1.9	69	0.00	3.89
61		trichloroethene	0.234	0.243	-3.8	73	0.00	4.28
62	m	ethyl acrylate	0.298	0.304	-2.0	69	0.00	4.30
63		2-nitropropane	0.082	0.076	7.3	63	0.00	4.77
64		2-chloroethyl vinyl ether	0.133	0.136	-2.3	69	0.00	4.79
65		methyl methacrylate	0.056	0.058	-3.6	71	0.00	4.46
66		1,2-dichloropropane	0.079	0.083	-5.1	69	0.00	4.46
67		dibromomethane	0.127	0.130	-2.4	70	0.00	4.52
68		methylcyclohexane	0.334	0.348	-4.2	74	0.00	4.45
69		bromodichloromethane	0.256	0.263	-2.7	70	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.305	-4.8	71	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.087	-1.2	67	0.00	5.01
72		3-methyl-1-butanol	0.003	0.004	-33.3#	75	0.00	5.03
73	I	chlorobenzene-d5	1.000	1.000	0.0	68	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.224	-0.7	69	0.00	5.12
75		toluene	0.455	0.498	-9.5	71	0.00	5.17
76		trans-1,3-dichloropropene	0.286	0.305	-6.6	70	0.00	5.32
77		ethyl methacrylate	0.246	0.258	-4.9	68	0.00	5.33
78		1,1,2-trichloroethane	0.150	0.159	-6.0	71	0.00	5.47
79		tetrachloroethene	0.195	0.211	-8.2	74	0.00	5.55
80		1,3-dichloropropane	0.288	0.302	-4.9	71	0.00	5.59
81		2-hexanone	0.092	0.095	-3.3	68	0.00	5.60
82		butyl acetate	0.158	0.158	0.0	68	0.00	5.68
83		dibromochloromethane	0.224	0.243	-8.5	69	0.00	5.75
84		1,2-dibromoethane	0.205	0.216	-5.4	72	0.00	5.86
85	m	n-butyl ether	0.859	0.862	-0.3	67	0.00	6.27
86		chlorobenzene	0.533	0.574	-7.7	71	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.222	-5.7	71	0.01	6.29
88		ethylbenzene	0.921	0.953	-3.5	70	0.00	6.29
89		m,p-xylene	0.352	0.373	-6.0	70	0.00	6.39
90		o-xylene	0.715	0.736	-2.9	70	0.01	6.70
91		styrene	0.567	0.588	-3.7	69	0.00	6.71
92		butyl acrylate	0.442	0.435	1.6	66	0.00	6.63
93		n-amyl acetate	0.150	0.147	2.0	66	0.00	6.81
94		bromoform	0.164	0.174	-6.1	71	0.00	6.86
95		isopropylbenzene	0.910	0.945	-3.8	70	0.01	6.99
96		cis-1,4-dichloro-2-butene	0.102	0.105	-2.9	70	0.01	7.03
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	66	0.01	8.00
98	S	4-bromofluorobenzene (s)	0.994	0.998	-0.4	67	0.00	7.13

Continuing Calibration Summary

Job Number: JD35517 **Sample:** V1X8346-CC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192690.D
Project: BECOS Former Griffiss AFB, Rome, NY

99	bromobenzene	0.523	0.584	-11.7	72	0.00	7.24
100	1,1,2,2-tetrachloroethane	0.522	0.579	-10.9	71	0.01	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.212	-6.5	68	0.00	7.25
102	1,2,3-trichloropropane	0.165	0.176	-6.7	71	0.00	7.27
103	n-propylbenzene	2.288	2.460	-7.5	71	0.00	7.31
104	2-chlorotoluene	0.499	0.527	-5.6	69	0.00	7.38
105	4-chlorotoluene	1.335	1.408	-5.5	69	0.01	7.48
106	1,3,5-trimethylbenzene	1.553	1.623	-4.5	69	0.00	7.44
107	tert-butylbenzene	1.463	1.524	-4.2	70	0.00	7.68
108	1,2,4-trimethylbenzene	1.551	1.634	-5.4	69	0.00	7.72
109	sec-butylbenzene	2.028	2.144	-5.7	69	0.01	7.85
110	1,3-dichlorobenzene	0.974	1.004	-3.1	68	0.00	7.94
111	p-isopropyltoluene	1.783	1.881	-5.5	69	0.00	7.95
112	1,4-dichlorobenzene	1.007	1.040	-3.3	68	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.961	-3.8	68	0.00	8.26
114	benzyl chloride	1.052	1.107	-5.2	70	0.00	8.09
115	n-butylbenzene	0.798	0.838	-5.0	68	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.141	-0.7	64	0.01	8.80
117	1,3,5-trichlorobenzene	0.630	0.627	0.5	66	0.01	8.92
118	hexachlorobutadiene	0.235	0.234	0.4	69	0.00	9.40
119	naphthalene	1.738	1.674	3.7	63	0.00	9.49
120	1,2,4-trichlorobenzene	0.555	0.557	-0.4	67	0.00	9.32
121 m	1,2,3-trichlorobenzene	0.538	0.528	1.9	66	0.00	9.62
122	hexachloroethane	0.259	0.255	1.5	67	0.00	8.45
123	2-methylnaphthalene	0.824	0.772	6.3	64	0.01	10.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192542.D M1X8342.M Thu Dec 02 06:23:36 2021

Continuing Calibration Summary

Job Number: JD35517 **Sample:** V1X8346-ECC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192714.D
Project: BECOS Former Griffiss AFB, Rome, NY

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ke...46\v1x8346\1x192714.d Vial: 26
Acq On : 30 Nov 2021 8:59 pm Operator: brittank
Sample : ecc8342-50 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Wed Dec 01 10:49:30 2021
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	57	0.00	2.54
2		ethanol	0.057	0.057	0.0	60	-0.01	2.03
3		tertiary butyl alcohol	0.717	0.710	1.0	58	0.00	2.59
4		1,4-dioxane	0.060	0.064	-6.7	58	0.00	4.50
5	I	pentafluorobenzene	1.000	1.000	0.0	67	0.00	3.62
6		chlorodifluoromethane	0.395	0.273	30.9	46#	-0.01	1.32
7		dichlorodifluoromethane	0.370	0.369	0.3	66	-0.01	1.31
8		chloromethane	0.426	0.407	4.5	67	-0.01	1.44
9		vinyl chloride	0.378	0.341	9.8	62	0.00	1.51
10		bromomethane	0.194	0.188	3.1	73	-0.01	1.72
11		chloroethane	0.174	0.178	-2.3	69	0.00	1.79
12		trichlorofluoromethane	0.513	0.537	-4.7	70	0.00	1.95
13		1,3-butadiene	0.328	0.242	26.2	48#	0.00	1.54
14		ethyl ether	0.131	0.121	7.6	60	0.00	2.11
15		acrolein	0.055	0.048	12.7	53	0.00	2.20
16		1,1-dichloroethene	0.258	0.234	9.3	59	0.00	2.27
17		freon 113	0.307	0.272	11.4	59	0.00	2.26
18		acetone	0.034	0.027	20.6	57	0.00	2.28
19		acetonitrile	0.047	0.039	17.0	54	0.00	2.45
20		iodomethane	0.328	0.270	17.7	52	0.00	2.37
21		carbon disulfide	0.719	0.594	17.4	55	0.00	2.42
22		methylene chloride	0.257	0.226	12.1	60	0.00	2.56
23		methyl acetate	0.309	0.272	12.0	58	0.00	2.46
24		methyl tert butyl ether	0.751	0.708	5.7	63	0.00	2.71
25		acrylonitrile	0.138	0.119	13.8	56	0.00	2.69
26		trans-1,2-dichloroethene	0.274	0.252	8.0	60	0.00	2.72
27		hexane	0.566	0.468	17.3	53	0.00	2.88
28		di-isopropyl ether	0.949	0.888	6.4	61	0.00	2.98
29		2-butanone	0.036	0.032	11.1	61	0.00	3.30
30		1,1-dichloroethane	0.531	0.485	8.7	60	0.00	2.98
31		chloroprene	0.509	0.466	8.4	60	0.00	3.03
32		vinyl acetate	0.056	0.053	5.4	58	0.00	2.97
33		ethyl tert-butyl ether	0.888	0.854	3.8	63	0.00	3.20
34		ethyl acetate	0.060	0.054	10.0	59	0.00	3.31
35		2,2-dichloropropane	0.439	0.367	16.4	55	0.00	3.34
36		cis-1,2-dichloroethene	0.294	0.270	8.2	62	0.00	3.33
37		methyl acrylate	0.398	0.367	7.8	60	0.00	3.35
38		propionitrile	0.054	0.048	11.1	58	0.00	3.35
39		tert-butyl formate	0.225	0.190	15.6	52	0.00	3.54
40		bromochloromethane	0.146	0.146	0.0	68	0.00	3.47
41		tetrahydrofuran	0.120	0.098	18.3	58	0.00	3.48

Continuing Calibration Summary

Job Number: JD35517 **Sample:** V1X8346-ECC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192714.D
Project: BECOS Former Griffiss AFB, Rome, NY

42		chloroform	0.513	0.486	5.3	66	0.00	3.52
43	S	dibromofluoromethane (s)	0.504	0.486	3.6	66	0.00	3.62
44		methacrylonitrile	0.122	0.118	3.3	62	0.00	3.44
45		1,1,1-trichloroethane	0.483	0.472	2.3	63	0.00	3.65
46		cyclohexane	0.381	0.410	-7.6	71	0.00	3.70
47	m	tert amyl alcohol	0.012	0.012	0.0	64	0.00	3.83
48		1,1-dichloropropene	0.397	0.377	5.0	61	0.00	3.74
49		isobutyl alcohol	0.007	0.006	14.3	64	0.00	3.93
50		carbon tetrachloride	0.453	0.449	0.9	63	0.00	3.75
51		isopropyl acetate	0.063	0.062	1.6	63	0.00	3.85
52	I	1,4-difluorobenzene	1.000	1.000	0.0	65	0.00	4.12
53	S	1,2-dichloroethane-d4 (s)	0.428	0.416	2.8	64	0.00	3.84
54		iso-octane	0.765	0.694	9.3	58	0.00	3.93
55		epichlorohydrin	0.027	0.024	11.1	56	0.00	4.84
56		n-butyl alcohol	0.005	0.005	0.0	62	0.00	4.17
57		benzene	0.695	0.696	-0.1	62	0.00	3.87
58		tert-amyl methyl ether	0.552	0.562	-1.8	64	0.00	3.93
59		heptane	0.142	0.128	9.9	57	0.00	4.02
60		1,2-dichloroethane	0.318	0.297	6.6	64	0.00	3.90
61		trichloroethene	0.234	0.232	0.9	63	0.00	4.29
62	m	ethyl acrylate	0.298	0.286	4.0	62	0.00	4.30
63		2-nitropropane	0.082	0.078	4.9	59	0.00	4.77
64		2-chloroethyl vinyl ether	0.133	0.128	3.8	61	0.00	4.80
65		methyl methacrylate	0.056	0.054	3.6	63	0.00	4.46
66		1,2-dichloropropane	0.079	0.081	-2.5	63	0.00	4.46
67		dibromomethane	0.127	0.125	1.6	64	0.00	4.52
68		methylcyclohexane	0.334	0.323	3.3	61	0.00	4.45
69		bromodichloromethane	0.256	0.253	1.2	64	0.00	4.62
70		cis-1,3-dichloropropene	0.291	0.285	2.1	61	0.00	4.92
71		4-methyl-2-pentanone	0.086	0.081	5.8	59	0.00	5.01
72		3-methyl-1-butanol	0.003	0.004	-33.3	69	0.00	5.03
73	I	chlorobenzene-d5	1.000	1.000	0.0	64	0.00	6.20
74	S	toluene-d8 (s)	1.216	1.213	0.2	64	0.00	5.12
75		toluene	0.455	0.467	-2.6	62	0.00	5.17
76		trans-1,3-dichloropropene	0.286	0.286	0.0	61	0.00	5.32
77		ethyl methacrylate	0.246	0.243	1.2	61	0.01	5.34
78		1,1,2-trichloroethane	0.150	0.148	1.3	63	0.00	5.47
79		tetrachloroethene	0.195	0.200	-2.6	64	0.00	5.55
80		1,3-dichloropropane	0.288	0.284	1.4	63	0.01	5.59
81		2-hexanone	0.092	0.081	12.0	56	0.01	5.61
82		butyl acetate	0.158	0.142	10.1	57	0.01	5.68
83		dibromochloromethane	0.224	0.237	-5.8	64	0.00	5.75
84		1,2-dibromoethane	0.205	0.207	-1.0	64	0.00	5.86
85	m	n-butyl ether	0.859	0.809	5.8	58	0.00	6.27
86		chlorobenzene	0.533	0.538	-0.9	62	0.00	6.22
87		1,1,1,2-tetrachloroethane	0.210	0.217	-3.3	63	0.01	6.29
88		ethylbenzene	0.921	0.899	2.4	61	0.01	6.29
89		m,p-xylene	0.352	0.356	-1.1	61	0.00	6.39
90		o-xylene	0.715	0.696	2.7	60	0.01	6.70
91		styrene	0.567	0.563	0.7	60	0.00	6.71
92		butyl acrylate	0.442	0.406	8.1	57	0.00	6.63
93		n-amyl acetate	0.150	0.138	8.0	58	0.00	6.81
94		bromoform	0.164	0.171	-4.3	63	0.00	6.86
95		isopropylbenzene	0.910	0.903	0.8	61	0.01	6.99
96		cis-1,4-dichloro-2-butene	0.102	0.096	5.9	58	0.01	7.03
97	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	62	0.01	8.00
98	S	4-bromofluorobenzene (s)	0.994	0.979	1.5	62	0.01	7.13

Continuing Calibration Summary

Job Number: JD35517 **Sample:** V1X8346-ECC8342
Account: BHATCOL Bhate Environmental Associates, Inc. **Lab FileID:** 1X192714.D
Project: BECOS Former Griffiss AFB, Rome, NY

99	bromobenzene	0.523	0.540	-3.3	62	0.01	7.25
100	1,1,2,2-tetrachloroethane	0.522	0.524	-0.4	61	0.01	7.22
101	trans-1,4-dichloro-2-bute	0.199	0.185	7.0	55	0.00	7.25
102	1,2,3-trichloropropane	0.165	0.165	0.0	62	0.00	7.27
103	n-propylbenzene	2.288	2.258	1.3	59	0.00	7.31
104	2-chlorotoluene	0.499	0.495	0.8	60	0.01	7.39
105	4-chlorotoluene	1.335	1.297	2.8	59	0.01	7.48
106	1,3,5-trimethylbenzene	1.553	1.525	1.8	59	0.01	7.45
107	tert-butylbenzene	1.463	1.442	1.4	60	0.00	7.68
108	1,2,4-trimethylbenzene	1.551	1.523	1.8	59	0.00	7.72
109	sec-butylbenzene	2.028	2.000	1.4	58	0.01	7.85
110	1,3-dichlorobenzene	0.974	0.957	1.7	60	0.01	7.94
111	p-isopropyltoluene	1.783	1.781	0.1	58	0.00	7.95
112	1,4-dichlorobenzene	1.007	0.976	3.1	60	0.00	8.01
113	1,2-dichlorobenzene	0.926	0.910	1.7	60	0.01	8.27
114	benzyl chloride	1.052	0.809	23.1	45#	0.01	8.09
115	n-butylbenzene	0.798	0.776	2.8	57	0.00	8.24
116	1,2-dibromo-3-chloropropa	0.140	0.135	3.6	56	0.01	8.80
117	1,3,5-trichlorobenzene	0.630	0.587	6.8	55	0.01	8.92
118	hexachlorobutadiene	0.235	0.215	8.5	54	0.00	9.40
119	naphthalene	1.738	1.570	9.7	55	0.00	9.49
120	1,2,4-trichlorobenzene	0.555	0.520	6.3	55	0.00	9.32
121 m	1,2,3-trichlorobenzene	0.538	0.500	7.1	56	0.00	9.62
122	hexachloroethane	0.259	0.256	1.2	58	0.01	8.46
123	2-methylnaphthalene	0.824	0.768	6.8	57	0.01	10.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1X192544.D M1X8342.M Thu Dec 02 06:28:14 2021

Run Sequence Report

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Run ID: V1X8342	**Method:** SW846 8260D	**Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8342-BFB	1X192528.D	11/17/21 19:07	n/a	BFB Tune
V1X8342-IC8342	1X192530.D	11/17/21 19:41	n/a	Initial cal 0.2
V1X8342-IC8342	1X192532.D	11/17/21 20:15	n/a	Initial cal 0.5
V1X8342-IC8342	1X192534.D	11/17/21 20:49	n/a	Initial cal 1
V1X8342-IC8342	1X192536.D	11/17/21 21:22	n/a	Initial cal 2
V1X8342-IC8342	1X192538.D	11/17/21 21:56	n/a	Initial cal 4
V1X8342-IC8342	1X192540.D	11/17/21 22:30	n/a	Initial cal 8
V1X8342-IC8342	1X192542.D	11/17/21 23:04	n/a	Initial cal 20
V1X8342-ICC8342	1X192544.D	11/17/21 23:38	n/a	Initial cal 50
V1X8342-IC8342	1X192546.D	11/18/21 00:12	n/a	Initial cal 100
V1X8342-IC8342	1X192548.D	11/18/21 00:45	n/a	Initial cal 200
V1X8342-ICV8342	1X192554.D	11/18/21 02:25	n/a	Initial cal verification 50
V1X8342-ICV8342	1X192556.D	11/18/21 02:59	n/a	Initial cal verification 50
V1X8342-BFB2	1X192566.D	11/23/21 10:03	n/a	BFB Tune
V1X8342-ICV8342	1X192568.D	11/23/21 10:46	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD35517
Account: BHATCOL Bhate Environmental Associates, Inc.
Project: BECOS Former Griffiss AFB, Rome, NY

Run ID: V1X8346 **Method:** SW846 8260D **Instrument ID:** GCMS1X

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1X8346-BFB	1X192690.D	11/30/21 10:36	n/a	BFB Tune
V1X8346-CC8342	1X192690.D	11/30/21 10:36	n/a	Continuing cal 20
V1X8346-BS	1X192692.D	11/30/21 11:28	n/a	Blank Spike
V1X8346-MB	1X192694.D	11/30/21 12:19	n/a	Method Blank
JD35406-1	1X192695.D	11/30/21 12:45	n/a	(used for QC only; not part of job JD35517)
ZZZZZZ	1X192696.D	11/30/21 13:12	n/a	(unrelated sample)
JD35517-4	1X192697.D	11/30/21 13:38	n/a	782VMW-105B_1121
JD35517-5	1X192698.D	11/30/21 14:04	n/a	782VMW-105B_1121-A
JD35517-6	1X192699.D	11/30/21 14:30	n/a	782VMW-121_1121
ZZZZZZ	1X192700.D	11/30/21 14:55	n/a	(unrelated sample)
JD35517-1	1X192701.D	11/30/21 15:21	n/a	AP2MW-3_1121
JD35406-1MS	1X192702.D	11/30/21 15:47	n/a	Matrix Spike
JD35406-1MSD	1X192703.D	11/30/21 16:13	n/a	Matrix Spike Duplicate
JD35517-1	1X192704.D	11/30/21 16:39	n/a	AP2MW-3_1121
ZZZZZZ	1X192705.D	11/30/21 17:05	n/a	(unrelated sample)
JD35517-8	1X192706.D	11/30/21 17:31	n/a	782-AB_1121
JD35517-9	1X192707.D	11/30/21 17:57	n/a	782-TB_1121
ZZZZZZ	1X192708.D	11/30/21 18:23	n/a	(unrelated sample)
ZZZZZZ	1X192709.D	11/30/21 18:49	n/a	(unrelated sample)
ZZZZZZ	1X192710.D	11/30/21 19:15	n/a	(unrelated sample)
JD35517-2	1X192711.D	11/30/21 19:41	n/a	782VMW-81_1121
JD35517-3	1X192712.D	11/30/21 20:07	n/a	782VMW-101_1121
JD35517-7	1X192713.D	11/30/21 20:33	n/a	782SW-115_1121
V1X8346-ECC8342	1X192714.D	11/30/21 20:59	n/a	Ending cal 50

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192701.d
Acq On : 30 Nov 2021 3:21 pm
Operator : brittank
Sample : JD35517-1 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:16:02 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

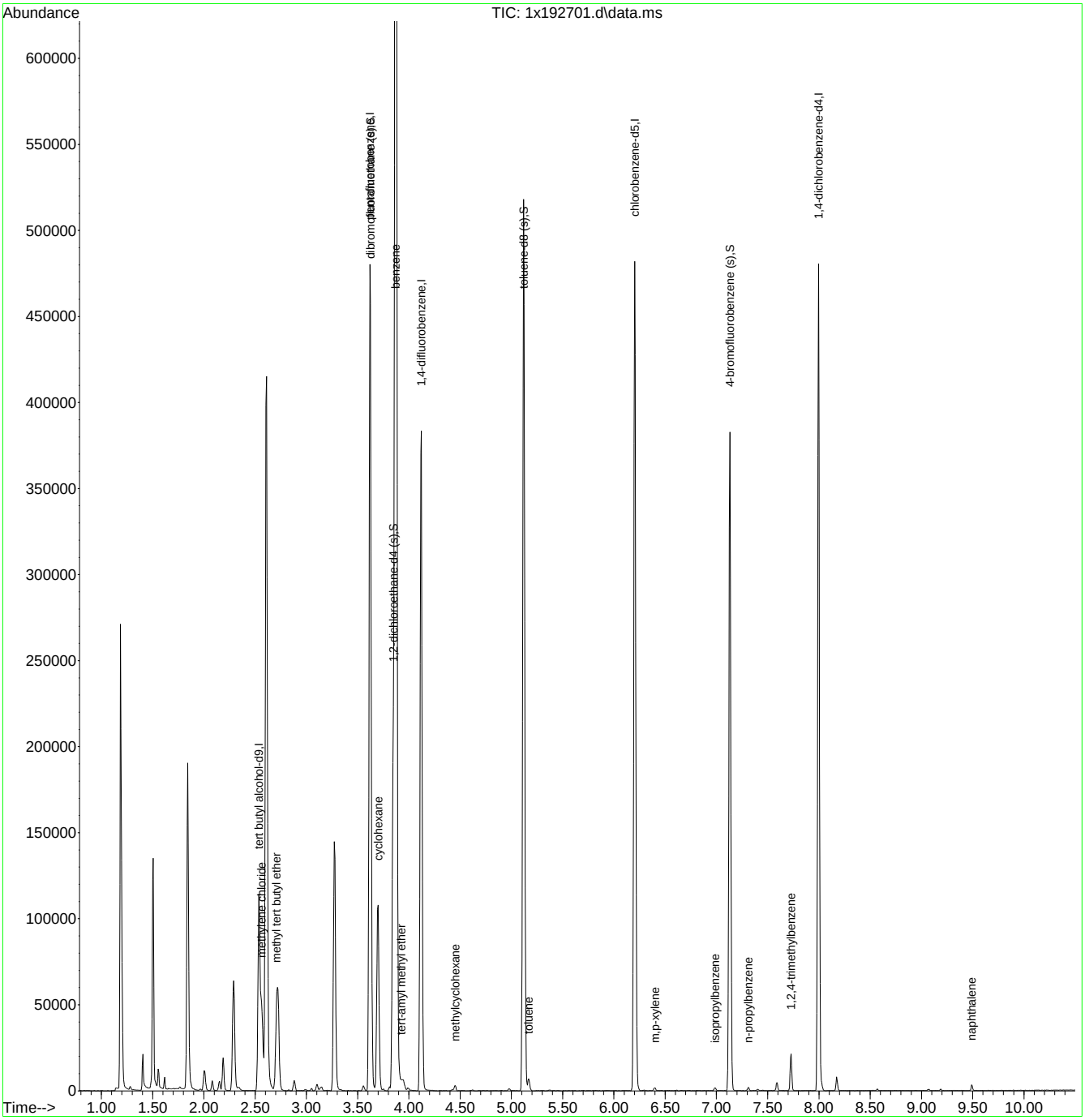
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.536	65	78876	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	158681	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.121	114	227846	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	209878	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	91164	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	78808	49.25	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.50%			
53) 1,2-dichloroethane-d4 (s)	3.849	65	95954	49.22	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.44%			
74) toluene-d8 (s)	5.119	98	257060	50.37	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.74%			
98) 4-bromofluorobenzene (s)	7.131	95	91966	50.75	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.50%			
Target Compounds						Qvalue
22) methylene chloride	2.562	84	108	0.13	ug/L #	82
24) methyl tert butyl ether	2.707	73	28590	12.00	ug/L	83
46) cyclohexane	3.699	84	29518	24.42	ug/L #	54
57) benzene	3.870	78	769304	242.93	ug/L	99
58) tert-amyl methyl ether	3.923	73	1104	0.44	ug/L	68
68) methylcyclohexane	4.452	83	1029	0.68	ug/L	98
75) toluene	5.167	92	2077	1.09	ug/L	99
89) m,p-xylene	6.400	106	610	0.41	ug/L	91
95) isopropylbenzene	6.987	105	1428	0.37	ug/L	95
103) n-propylbenzene	7.312	91	1685	0.40	ug/L	94
108) 1,2,4-trimethylbenzene	7.729	105	9102	3.22	ug/L	97
119) naphthalene	9.490	128	2373	0.75	ug/L	98

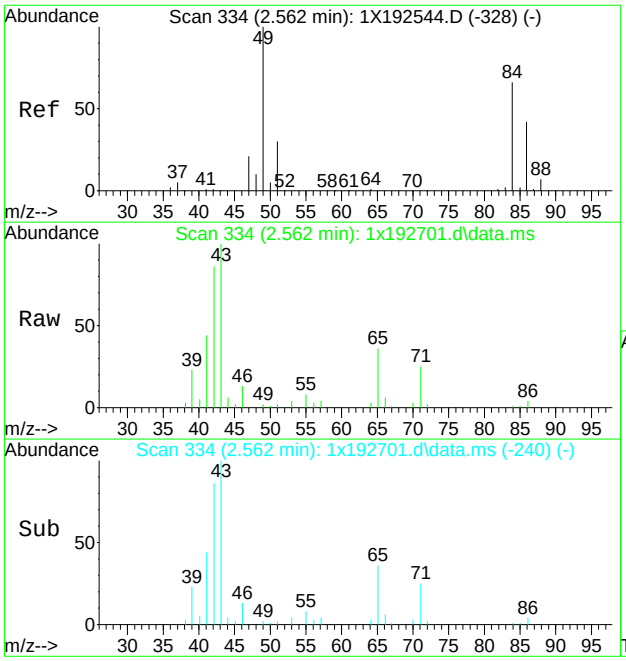
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192701.d
Acq On : 30 Nov 2021 3:21 pm
Operator : brittank
Sample : JD35517-1 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:16:02 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

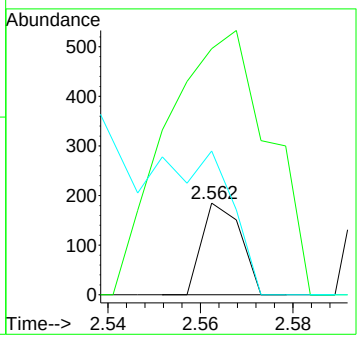


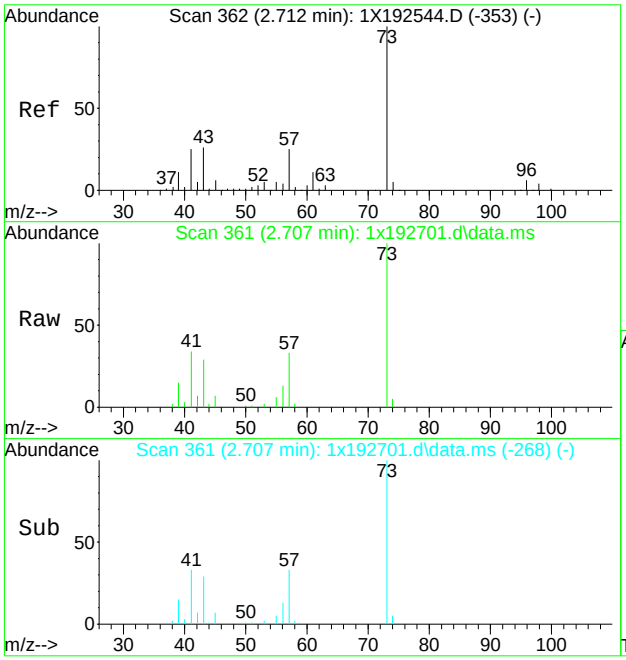


#22
methylene chloride
Concen: 0.13 ug/L
RT: 2.562 min Scan# 334
Delta R.T. 0.000 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 84 Resp: 108

Ion	Ratio	Lower	Upper
84	100		
86	105.9	34.3	94.3#
49	156.8	122.9	182.9

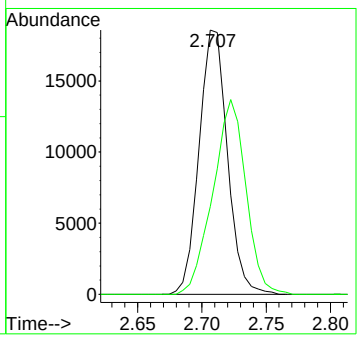


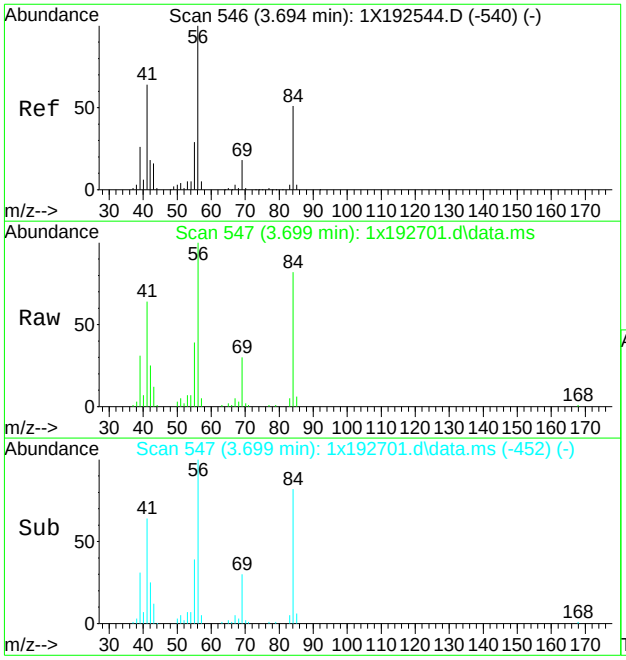


#24
methyl tert butyl ether
Concen: 12.00 ug/L
RT: 2.707 min Scan# 361
Delta R.T. -0.005 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 73 Resp: 28590

Ion	Ratio	Lower	Upper
73	100		
57	33.2	0.0	54.6

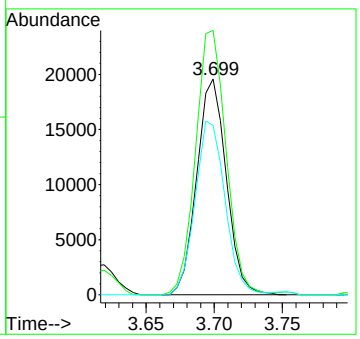


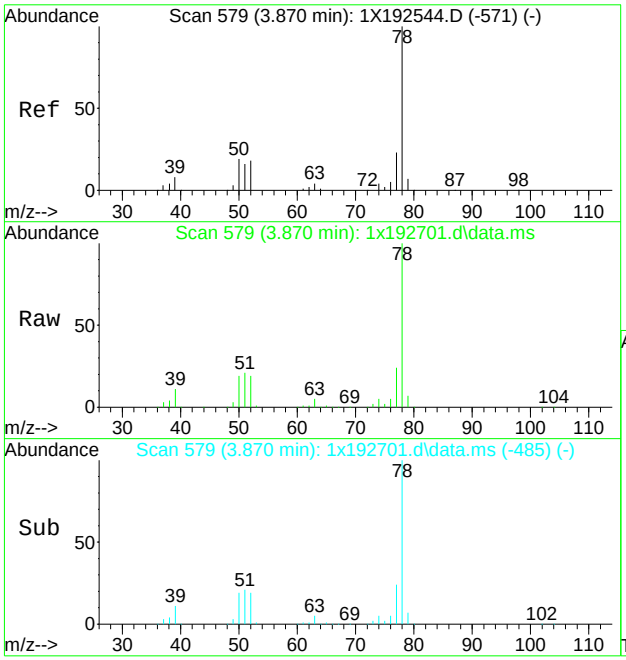


#46
cyclohexane
Concen: 24.42 ug/L
RT: 3.699 min Scan# 547
Delta R.T. 0.006 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 84 Resp: 29518

Ion	Ratio	Lower	Upper
84	100		
56	122.5	166.4	226.4#
41	78.4	95.1	155.1#

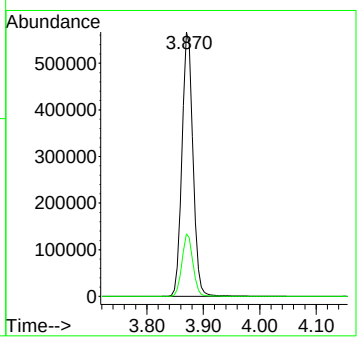


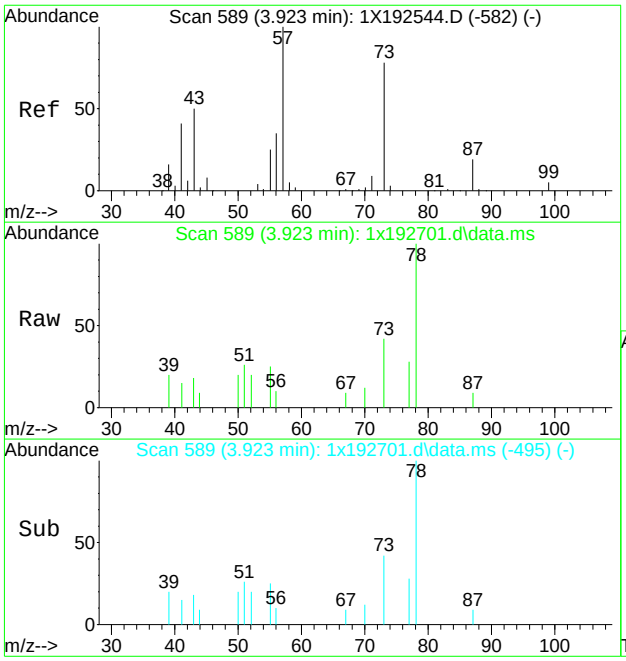


#57
benzene
Concen: 242.93 ug/L
RT: 3.870 min Scan# 579
Delta R.T. 0.000 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 78 Resp: 769304

Ion	Ratio	Lower	Upper
78	100		
77	23.6	0.0	53.3

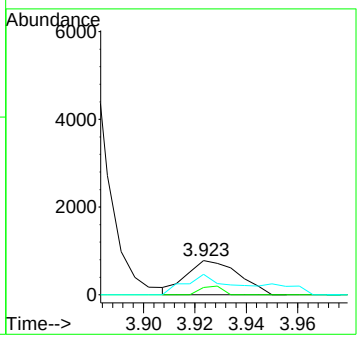


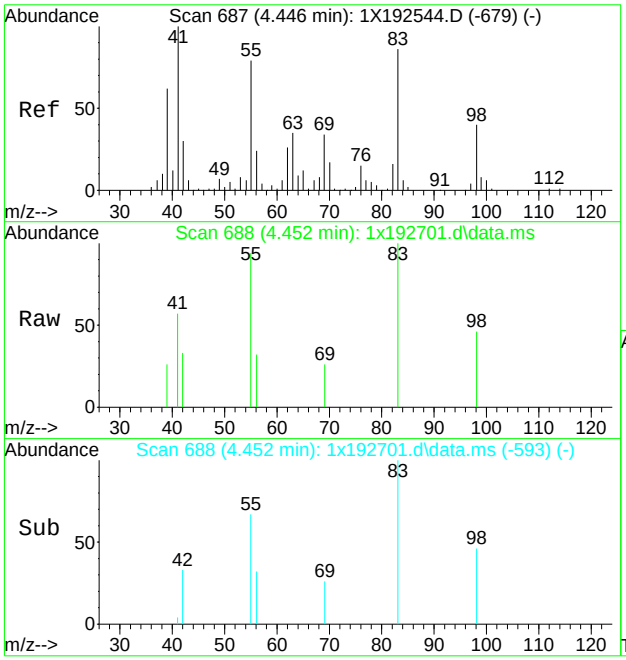


#58
tert-amyl methyl ether
Concen: 0.44 ug/L
RT: 3.923 min Scan# 589
Delta R.T. 0.000 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 73 Resp: 1104

Ion	Ratio	Lower	Upper
73	100		
87	21.3	0.0	54.7
55	59.8	1.4	61.4

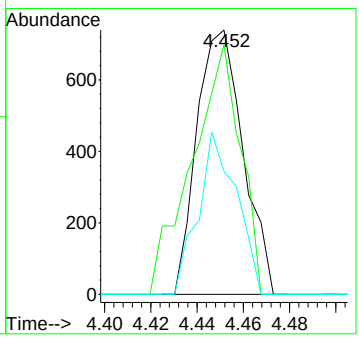


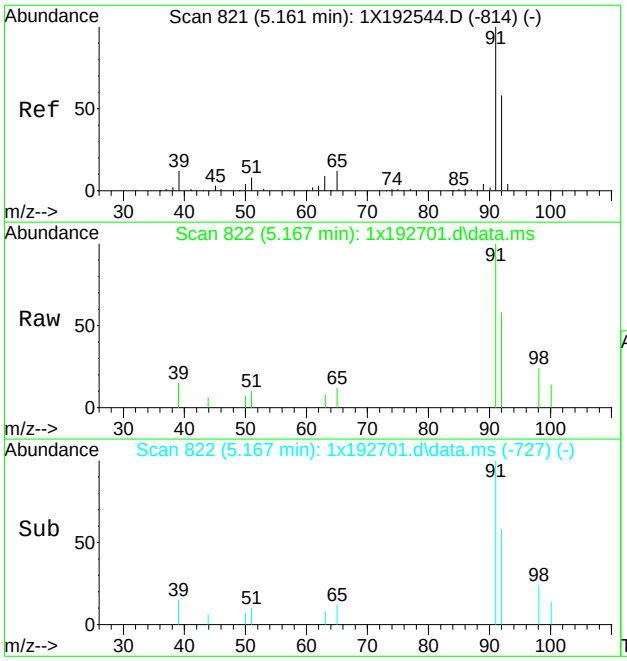


#68
methylcyclohexane
Concen: 0.68 ug/L
RT: 4.452 min Scan# 688
Delta R.T. 0.006 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 83 Resp: 1029

Ion	Ratio	Lower	Upper
83	100		
55	94.5	61.4	121.4
98	46.5	16.6	76.6

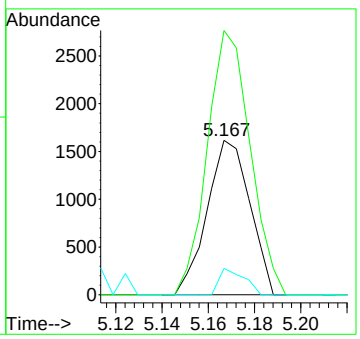


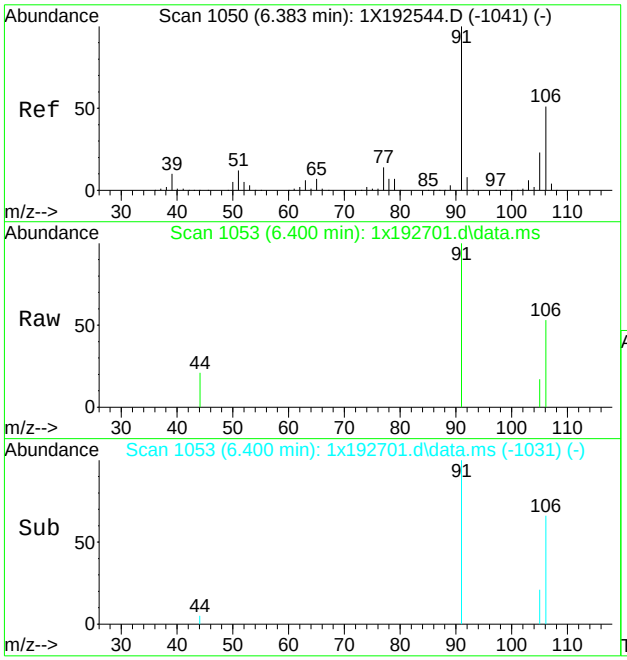


#75
toluene
Concen: 1.09 ug/L
RT: 5.167 min Scan# 822
Delta R.T. 0.005 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 92 Resp: 2077

Ion	Ratio	Lower	Upper
92	100		
91	171.2	152.4	192.4
51	17.0	0.0	34.1

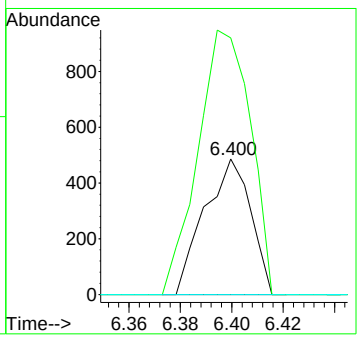


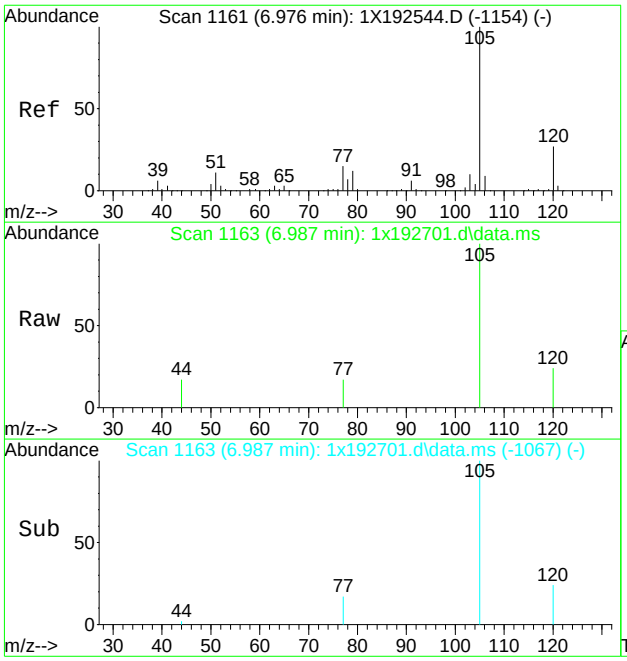


#89
m,p-xylene
Concen: 0.41 ug/L
RT: 6.400 min Scan# 1053
Delta R.T. 0.016 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion:106 Resp: 610

Ion	Ratio	Lower	Upper
106	100		
91	189.3	164.7	224.7
77	0.0	0.0	56.6

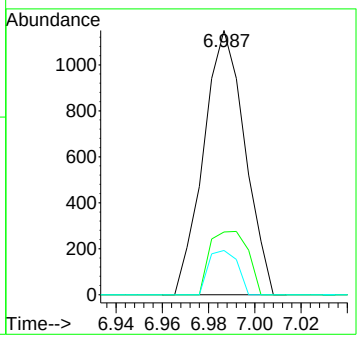


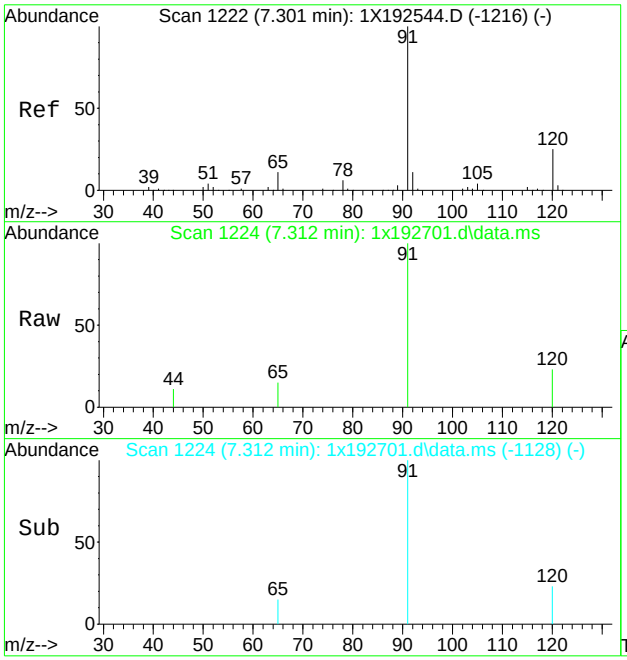


#95
isopropylbenzene
Concen: 0.37 ug/L
RT: 6.987 min Scan# 1163
Delta R.T. 0.011 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion:105 Resp: 1428

Ion	Ratio	Lower	Upper
105	100		
120	23.7	7.2	47.2
77	16.7	0.0	35.4

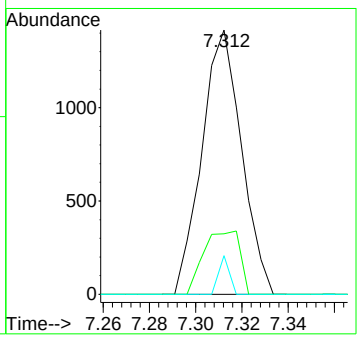


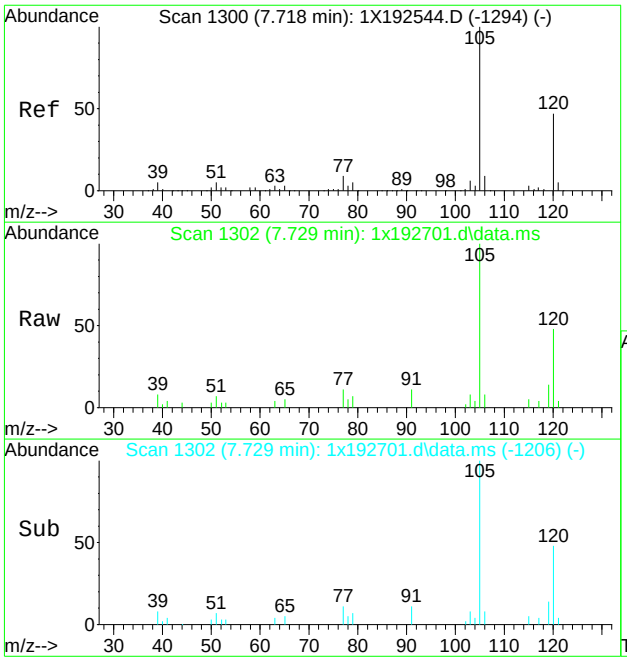


#103
n-propylbenzene
Concen: 0.40 ug/L
RT: 7.312 min Scan# 1224
Delta R.T. 0.011 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion: 91 Resp: 1685

Ion	Ratio	Lower	Upper
91	100		
120	22.9	0.0	55.0
65	14.6	0.0	41.3

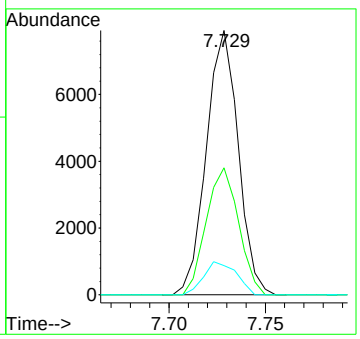


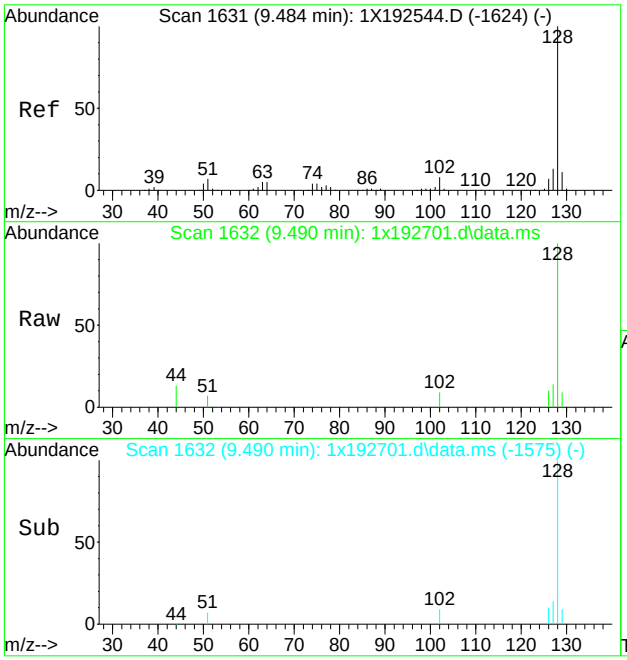


#108
1,2,4-trimethylbenzene
Concen: 3.22 ug/L
RT: 7.729 min Scan# 1302
Delta R.T. 0.011 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion:105 Resp: 9102

Ion	Ratio	Lower	Upper
105	100		
120	48.0	19.6	79.6
77	11.0	0.0	42.4

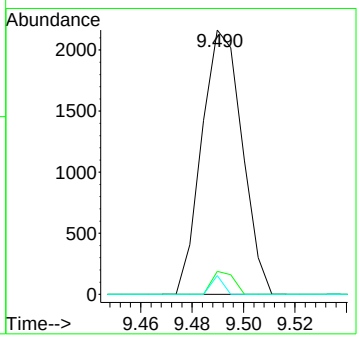




#119
naphthalene
Concen: 0.75 ug/L
RT: 9.490 min Scan# 1632
Delta R.T. 0.005 min
Lab File: 1x192701.d
Acq: 30 Nov 2021 3:21 pm

Tgt Ion:128 Resp: 2373

Ion	Ratio	Lower	Upper
128	100		
102	8.7	0.0	37.7
51	7.2	0.0	36.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192704.d
Acq On : 30 Nov 2021 4:39 pm
Operator : brittank
Sample : JD35517-1 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:29:11 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

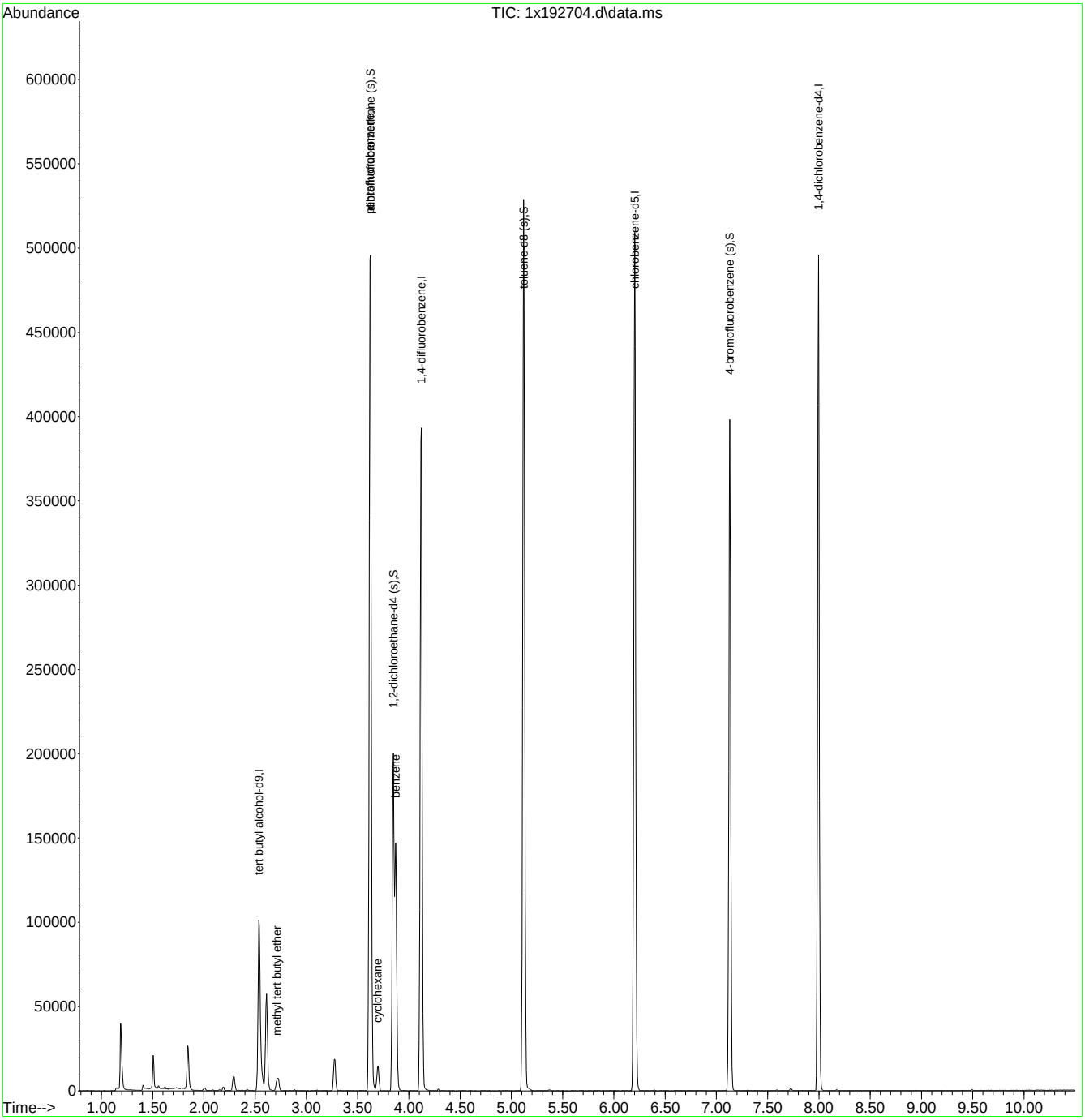
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.536	65	82957	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	167314	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.121	114	234783	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	218479	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	95627	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	80833	47.91	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.82%			
53) 1,2-dichloroethane-d4 (s)	3.848	65	98601	49.09	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.18%			
74) toluene-d8 (s)	5.119	98	264452	49.78	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.56%			
98) 4-bromofluorobenzene (s)	7.131	95	95193	50.08	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.16%			
Target Compounds						Qvalue
24) methyl tert butyl ether	2.712	73	3269	1.30	ug/L	74
46) cyclohexane	3.694	84	4114	3.23	ug/L #	52
57) benzene	3.870	78	82110	25.16	ug/L	100

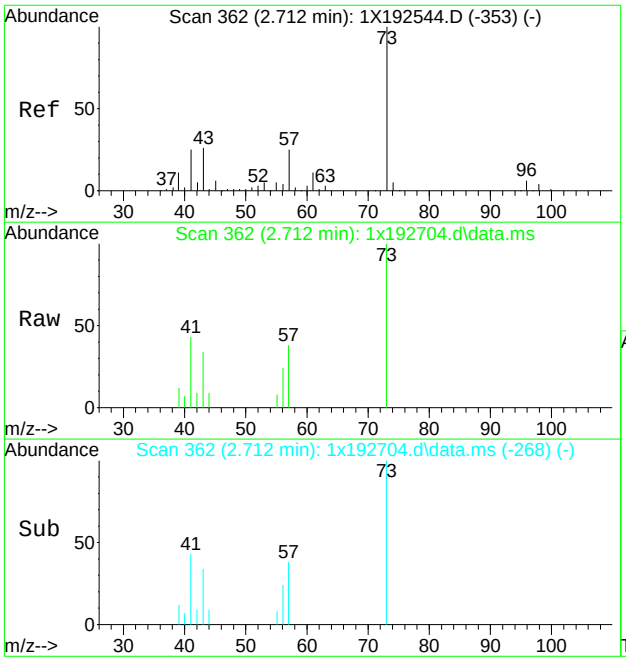
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192704.d
Acq On : 30 Nov 2021 4:39 pm
Operator : brittank
Sample : JD35517-1 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,10
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:29:11 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

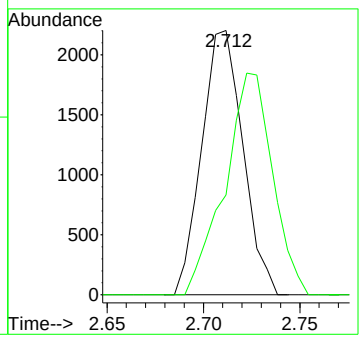


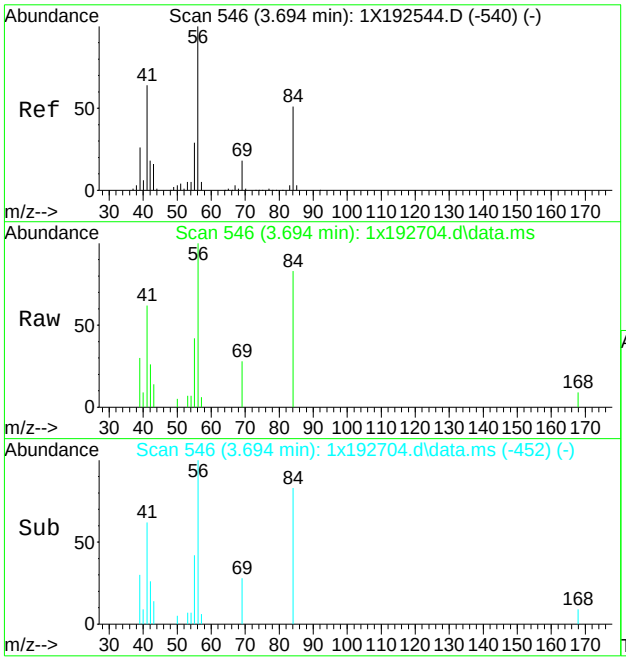


#24
methyl tert butyl ether
Concen: 1.30 ug/L
RT: 2.712 min Scan# 362
Delta R.T. 0.000 min
Lab File: 1x192704.d
Acq: 30 Nov 2021 4:39 pm

Tgt Ion: 73 Resp: 3269

Ion	Ratio	Lower	Upper
73	100		
57	37.8	0.0	54.6

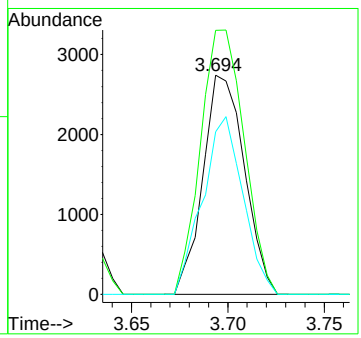


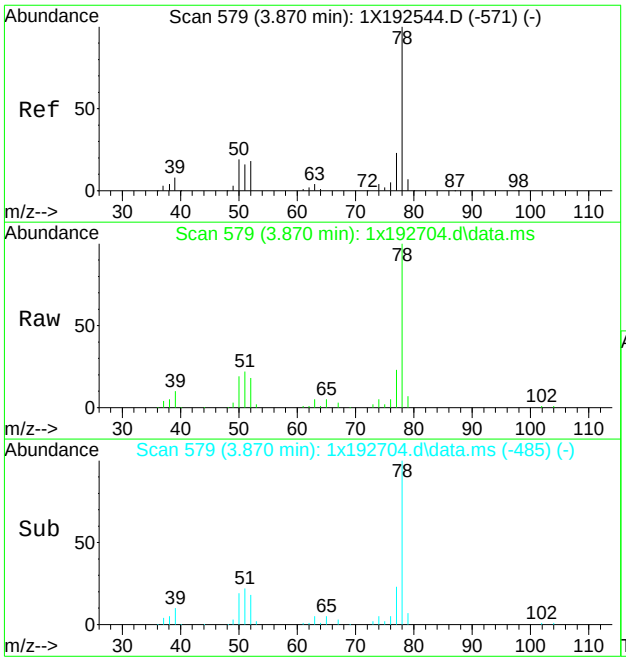


#46
cyclohexane
Concen: 3.23 ug/L
RT: 3.694 min Scan# 546
Delta R.T. 0.000 min
Lab File: 1x192704.d
Acq: 30 Nov 2021 4:39 pm

Tgt Ion: 84 Resp: 4114

Ion	Ratio	Lower	Upper
84	100		
56	120.5	166.4	226.4#
41	74.2	95.1	155.1#

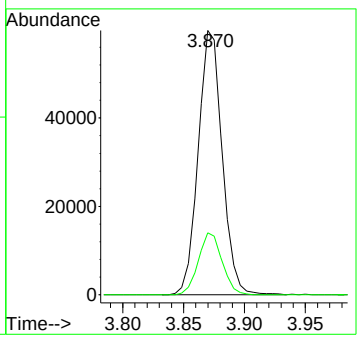




#57
benzene
Concen: 25.16 ug/L
RT: 3.870 min Scan# 579
Delta R.T. 0.000 min
Lab File: 1x192704.d
Acq: 30 Nov 2021 4:39 pm

Tgt Ion: 78 Resp: 82110

Ion	Ratio	Lower	Upper
78	100		
77	23.4	0.0	53.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192711.d
Acq On : 30 Nov 2021 7:41 pm
Operator : brittank
Sample : JD35517-2 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:11:39 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

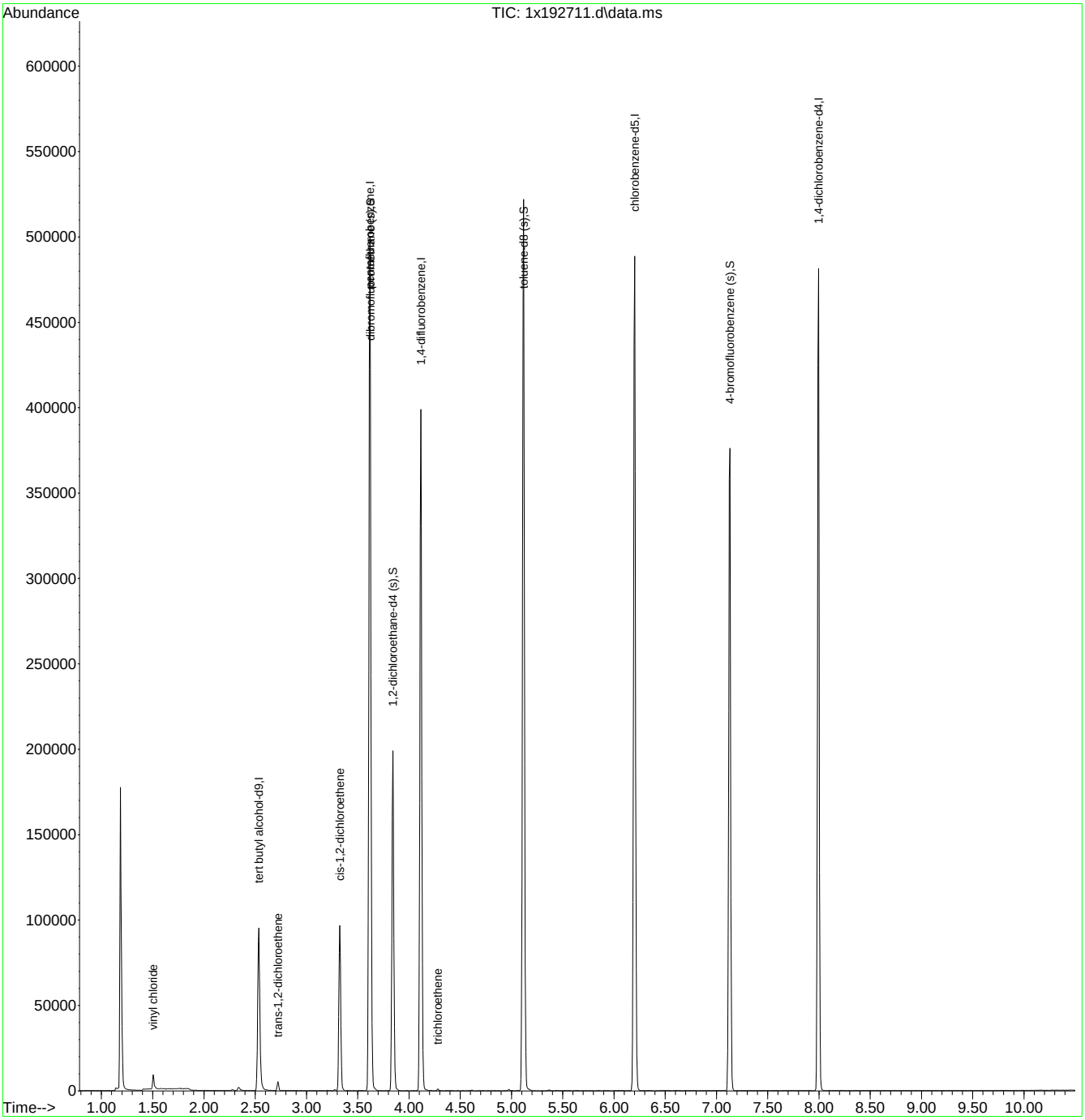
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.536	65	76080	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	161244	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	226567	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	210945	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	91281	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	79261	48.75	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.50%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	95874	49.46	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.92%			
74) toluene-d8 (s)	5.119	98	256942	50.10	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.20%			
98) 4-bromofluorobenzene (s)	7.131	95	90815	50.05	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.10%			
Target Compounds						Qvalue
9) vinyl chloride	1.506	62	5551	4.55	ug/L	99
26) trans-1,2-dichloroethene	2.722	96	1348	1.53	ug/L	89
36) cis-1,2-dichloroethene	3.325	96	26828	28.26	ug/L	86
61) trichloroethene	4.281	130	305	0.29	ug/L #	71

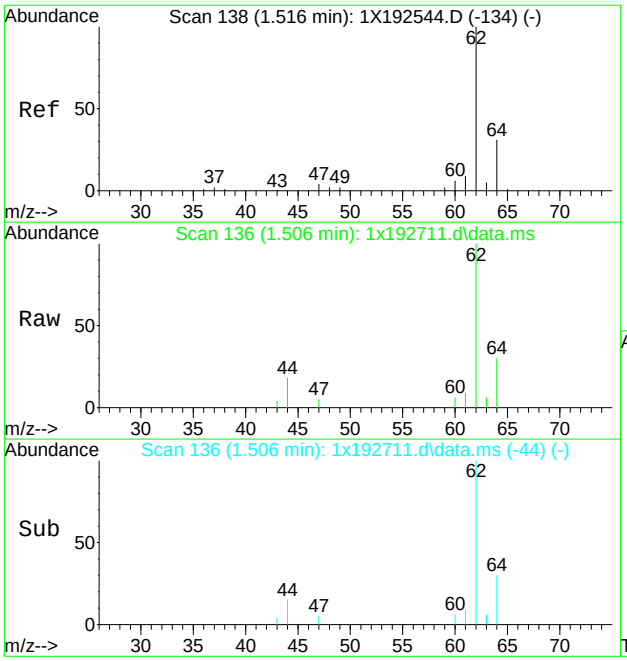
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192711.d
Acq On : 30 Nov 2021 7:41 pm
Operator : brittank
Sample : JD35517-2 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:11:39 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

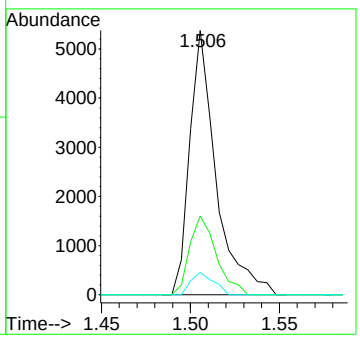


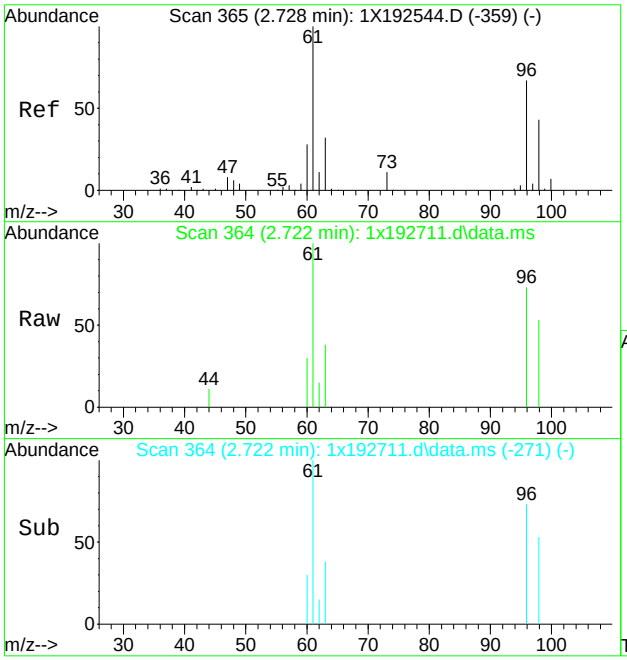


#9
vinyl chloride
Concen: 4.55 ug/L
RT: 1.506 min Scan# 136
Delta R.T. -0.011 min
Lab File: 1x192711.d
Acq: 30 Nov 2021 7:41 pm

Tgt Ion: 62 Resp: 5551

Ion	Ratio	Lower	Upper
62	100		
64	29.8	0.5	60.5
61	8.5	0.0	38.7

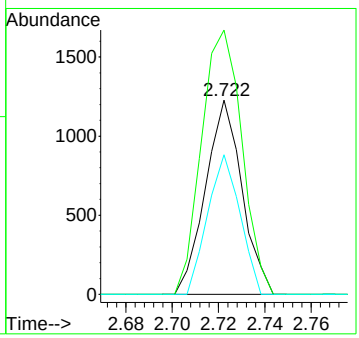


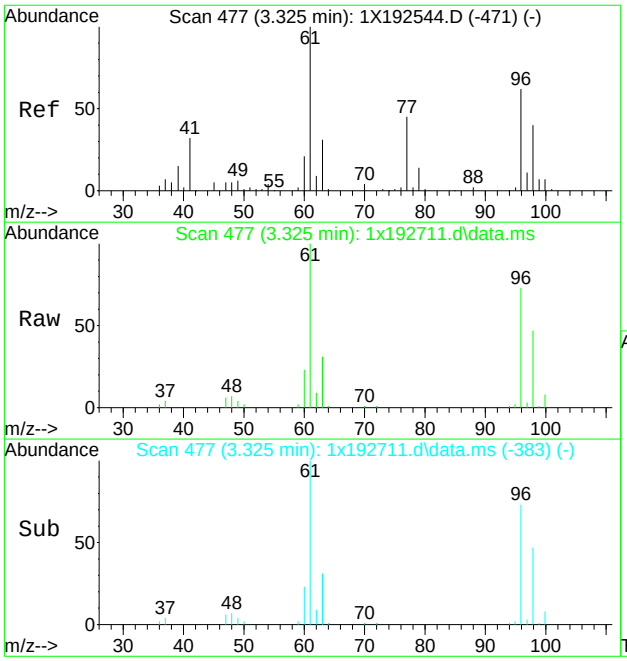


#26
trans-1,2-dichloroethene
Concen: 1.53 ug/L
RT: 2.722 min Scan# 364
Delta R.T. -0.005 min
Lab File: 1x192711.d
Acq: 30 Nov 2021 7:41 pm

Tgt Ion: 96 Resp: 1348

Ion	Ratio	Lower	Upper
96	100		
61	136.1	120.2	180.2
98	71.9	34.0	94.0

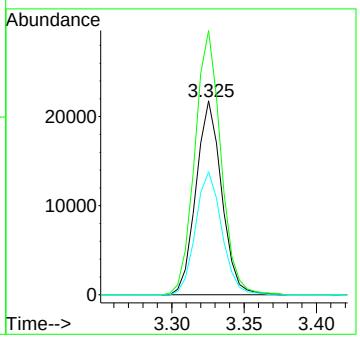


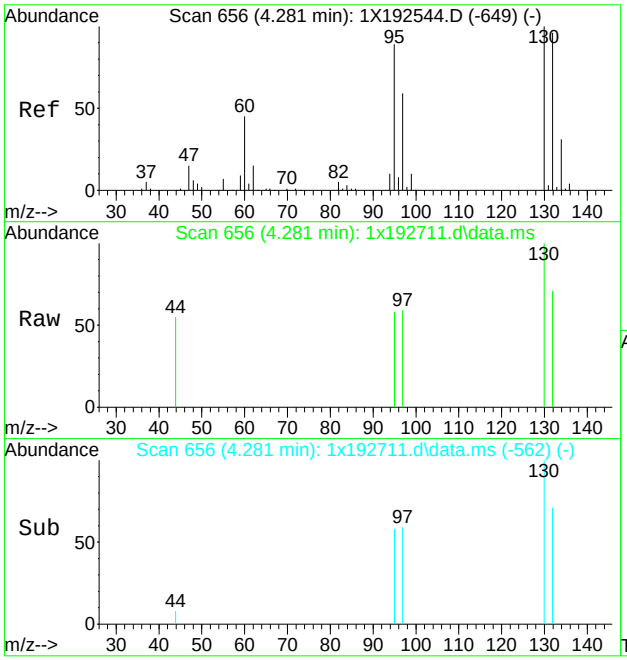


#36
cis-1,2-dichloroethene
Concen: 28.26 ug/L
RT: 3.325 min Scan# 477
Delta R.T. 0.000 min
Lab File: 1x192711.d
Acq: 30 Nov 2021 7:41 pm

Tgt Ion: 96 Resp: 26828

Ion	Ratio	Lower	Upper
96	100		
61	136.3	131.2	191.2
98	63.5	34.7	94.7

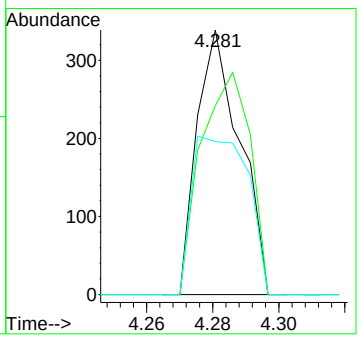




#61
trichloroethene
Concen: 0.29 ug/L
RT: 4.281 min Scan# 656
Delta R.T. 0.000 min
Lab File: 1x192711.d
Acq: 30 Nov 2021 7:41 pm

Tgt Ion:130 Resp: 305

Ion	Ratio	Lower	Upper
130	100		
132	71.4	65.5	125.5
95	57.8	58.7	118.7#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192712.d
Acq On : 30 Nov 2021 8:07 pm
Operator : brittank
Sample : JD35517-3 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:15:48 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

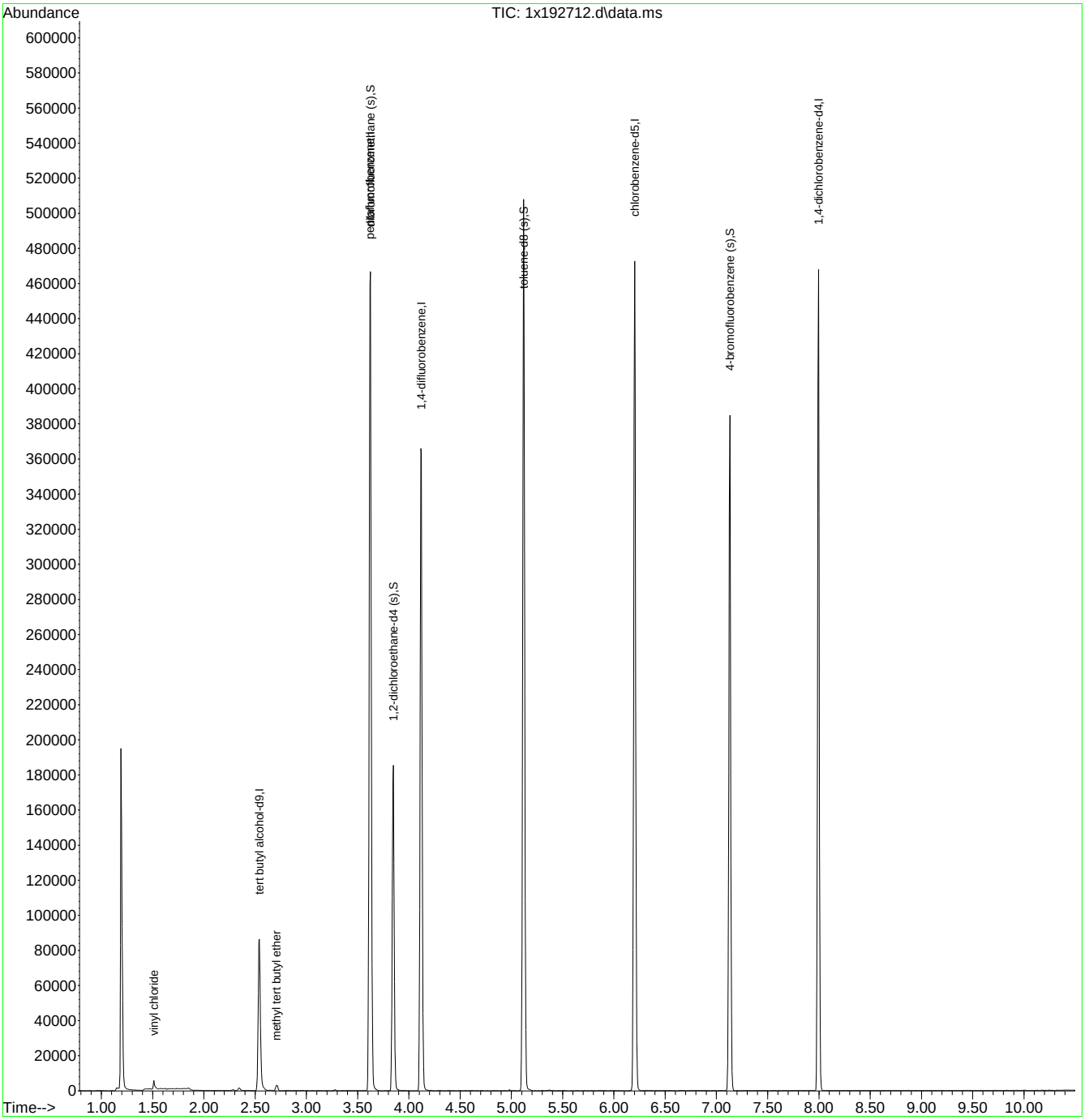
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.541	65	71703	500.00	ug/L	0.00
5) pentafluorobenzene	3.619	168	155252	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.121	114	219699	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	202837	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	88989	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	76870	49.10	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.20%			
53) 1,2-dichloroethane-d4 (s)	3.848	65	92222	49.06	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.12%			
74) toluene-d8 (s)	5.119	98	249045	50.50	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.00%			
98) 4-bromofluorobenzene (s)	7.131	95	88847	50.23	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.46%			
Target Compounds						Qvalue
9) vinyl chloride	1.511	62	3060	2.61	ug/L	92
24) methyl tert butyl ether	2.706	73	2265	0.97	ug/L	99

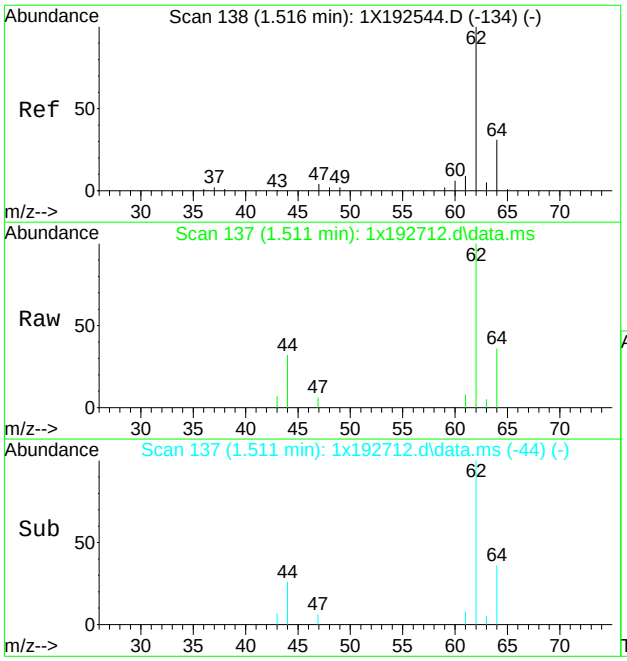
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192712.d
Acq On : 30 Nov 2021 8:07 pm
Operator : brittank
Sample : JD35517-3 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:15:48 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

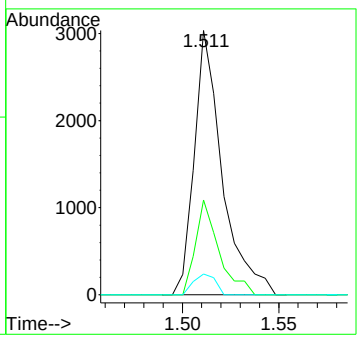


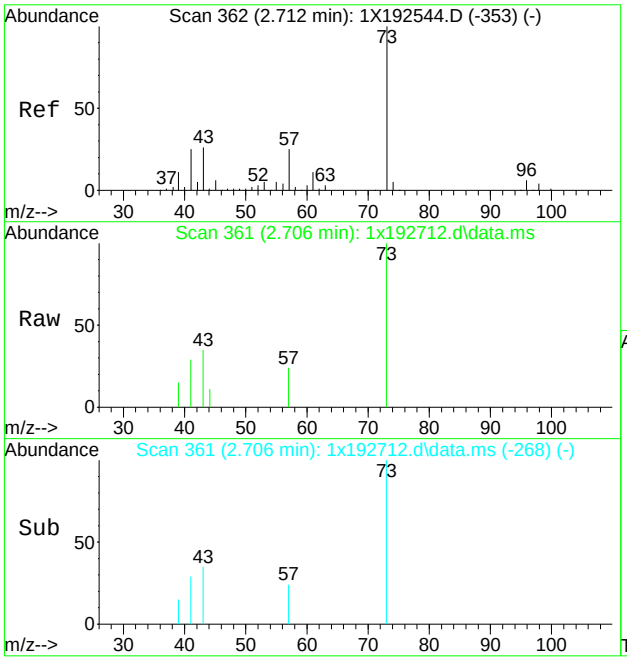


#9
vinyl chloride
Concen: 2.61 ug/L
RT: 1.511 min Scan# 137
Delta R.T. -0.005 min
Lab File: 1x192712.d
Acq: 30 Nov 2021 8:07 pm

Tgt Ion: 62 Resp: 3060

Ion	Ratio	Lower	Upper
62	100		
64	35.8	0.5	60.5
61	7.9	0.0	38.7

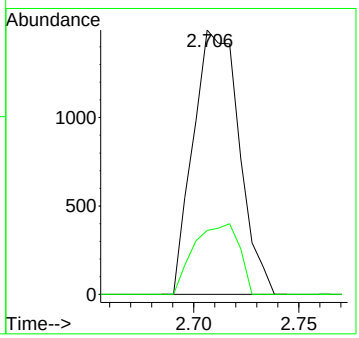




#24
methyl tert butyl ether
Concen: 0.97 ug/L
RT: 2.706 min Scan# 361
Delta R.T. -0.005 min
Lab File: 1x192712.d
Acq: 30 Nov 2021 8:07 pm

Tgt Ion: 73 Resp: 2265

Ion	Ratio	Lower	Upper
73	100		
57	24.1	0.0	54.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192697.d
Acq On : 30 Nov 2021 1:38 pm
Operator : brittank
Sample : JD35517-4 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:09:15 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

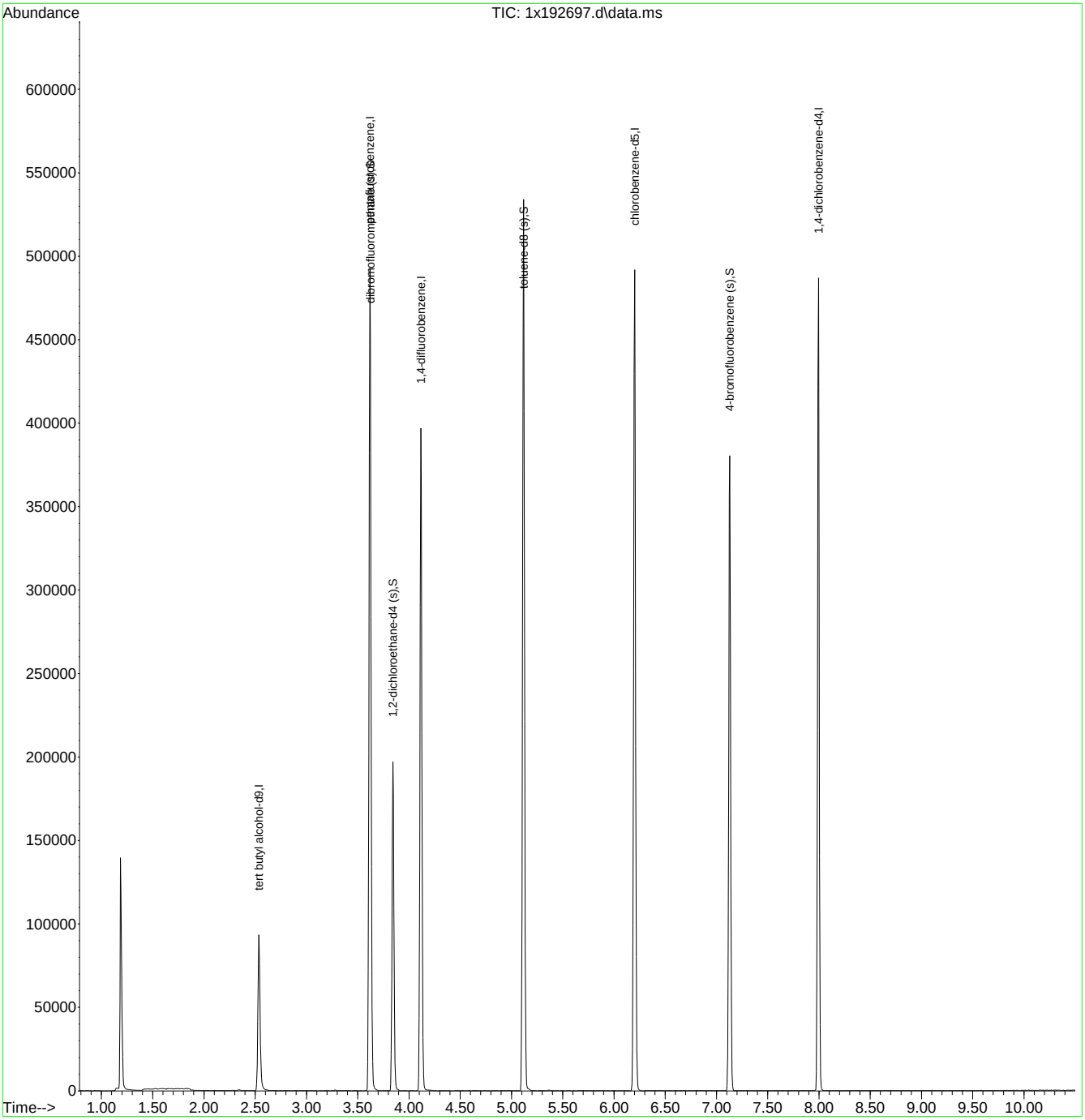
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	75652	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	159726	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	227679	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	212279	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	92129	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	79782	49.53	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.06%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	95610	49.08	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.16%			
74) toluene-d8 (s)	5.119	98	259461	50.27	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.54%			
98) 4-bromofluorobenzene (s)	7.131	95	92231	50.37	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.74%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192697.d
Acq On : 30 Nov 2021 1:38 pm
Operator : brittank
Sample : JD35517-4 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:09:15 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192698.d
Acq On : 30 Nov 2021 2:04 pm
Operator : brittank
Sample : JD35517-5 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:10:09 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

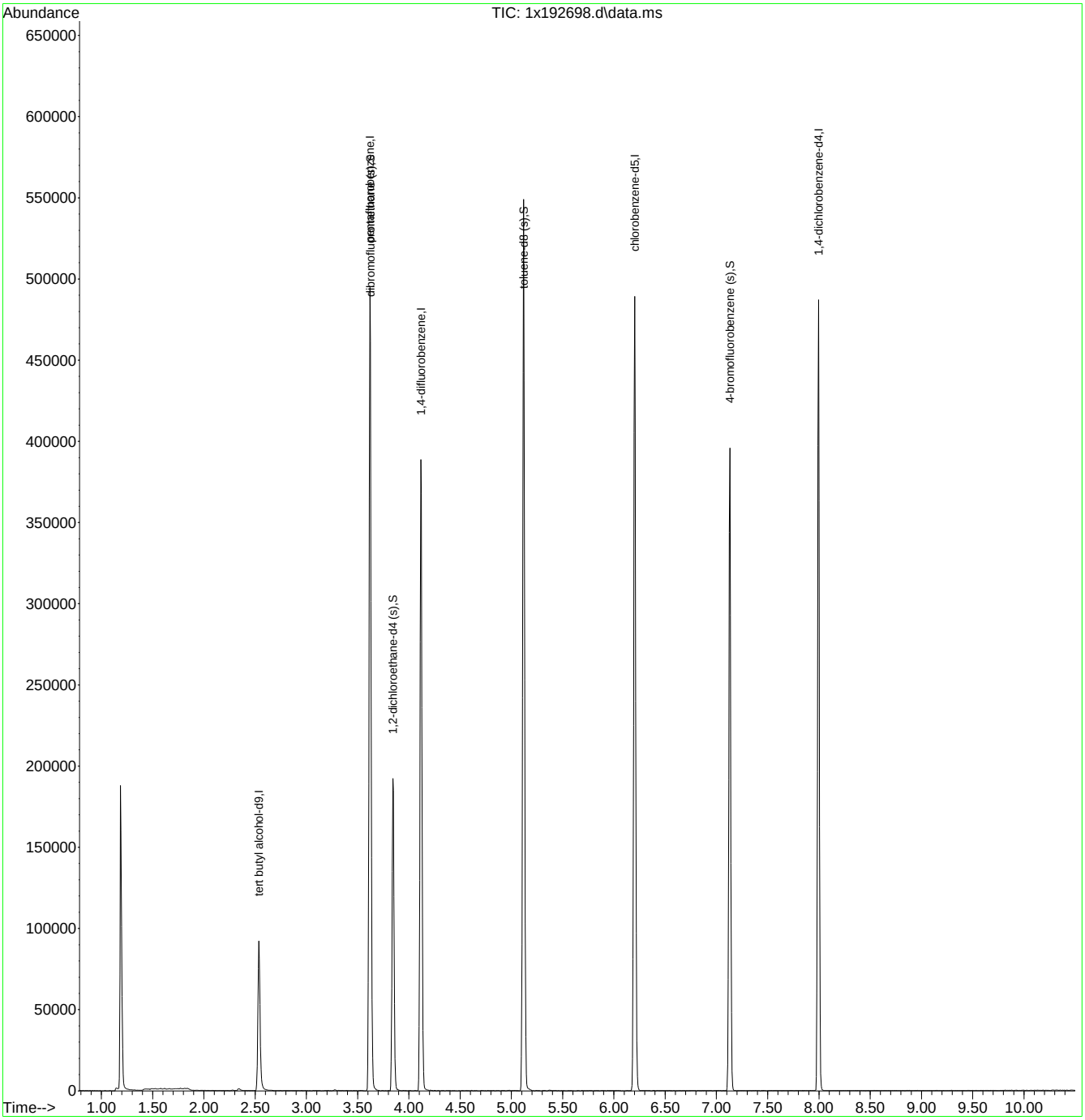
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.536	65	74855	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	160285	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	229781	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	212534	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	91543	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	80287	49.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.34%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	96150	48.91	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.82%			
74) toluene-d8 (s)	5.119	98	261785	50.66	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.32%			
98) 4-bromofluorobenzene (s)	7.131	95	93074	51.15	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.30%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192698.d
Acq On : 30 Nov 2021 2:04 pm
Operator : brittank
Sample : JD35517-5 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:10:09 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192699.d
Acq On : 30 Nov 2021 2:30 pm
Operator : brittank
Sample : JD35517-6 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:10:58 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

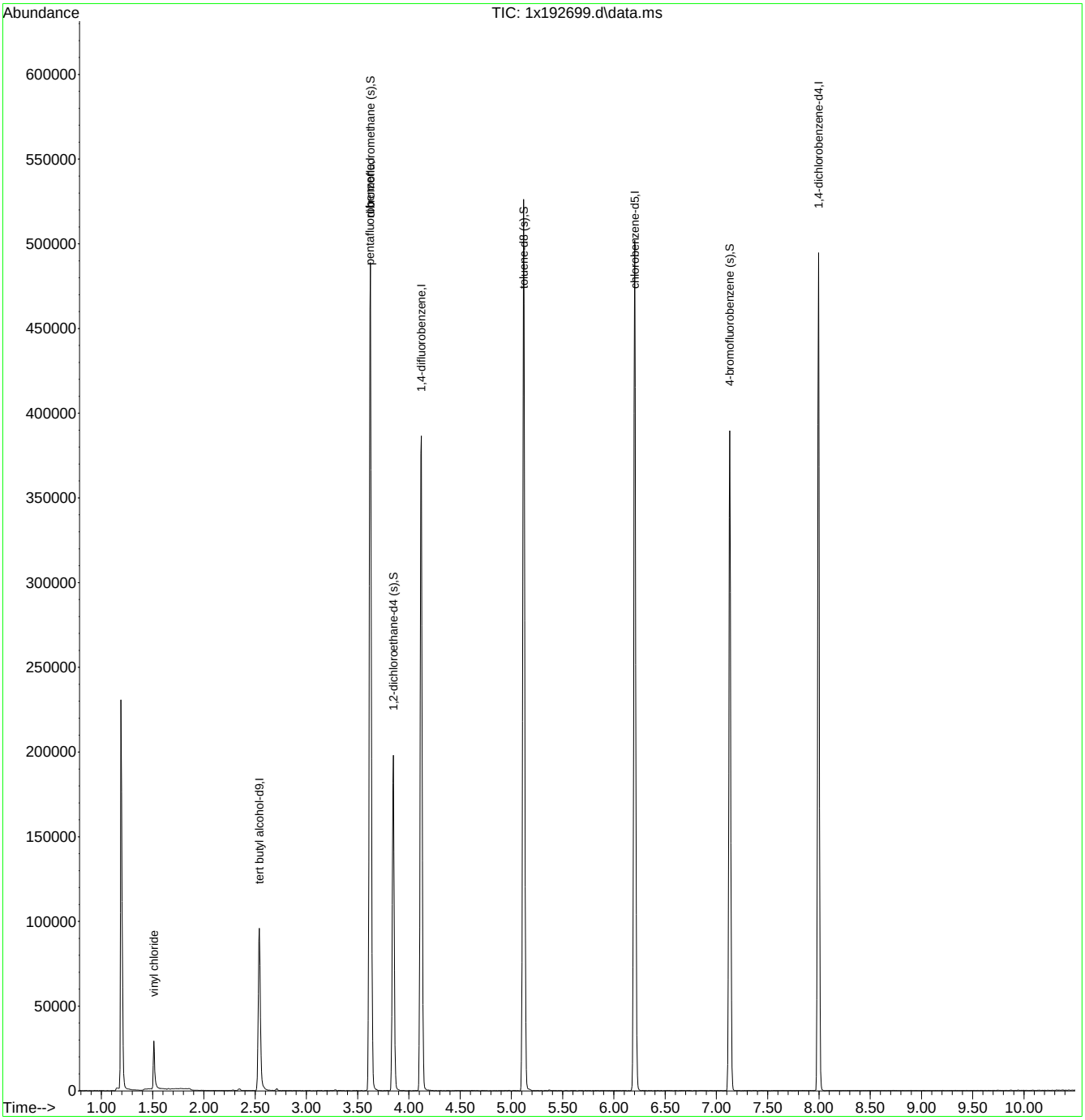
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.541	65	78281	500.00	ug/L	0.00
5) pentafluorobenzene	3.619	168	159965	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.121	114	229404	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	213243	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	92351	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	80699	50.03	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.06%			
53) 1,2-dichloroethane-d4 (s)	3.849	65	96838	49.34	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.68%			
74) toluene-d8 (s)	5.119	98	258983	49.95	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.90%			
98) 4-bromofluorobenzene (s)	7.131	95	92784	50.55	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.10%			
Target Compounds						Qvalue
9) vinyl chloride	1.511	62	18078	14.94	ug/L	98

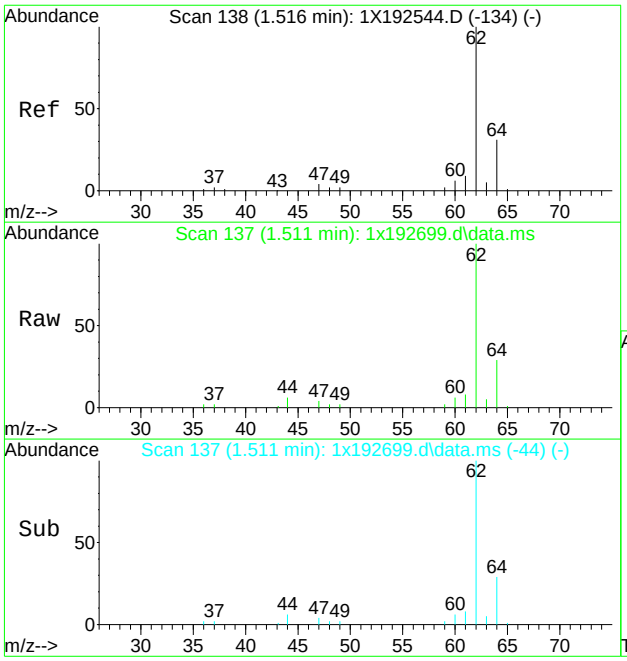
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192699.d
Acq On : 30 Nov 2021 2:30 pm
Operator : brittank
Sample : JD35517-6 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:10:58 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

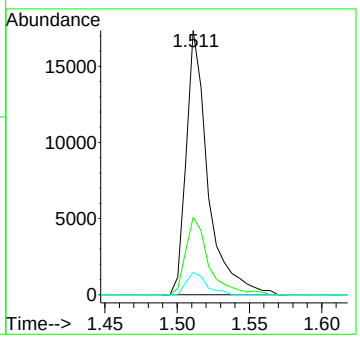




#9
vinyl chloride
Concen: 14.94 ug/L
RT: 1.511 min Scan# 137
Delta R.T. -0.005 min
Lab File: 1x192699.d
Acq: 30 Nov 2021 2:30 pm

Tgt Ion: 62 Resp: 18078

Ion	Ratio	Lower	Upper
62	100		
64	29.4	0.5	60.5
61	8.5	0.0	38.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192713.d
Acq On : 30 Nov 2021 8:33 pm
Operator : brittank
Sample : JD35517-7 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:19:39 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

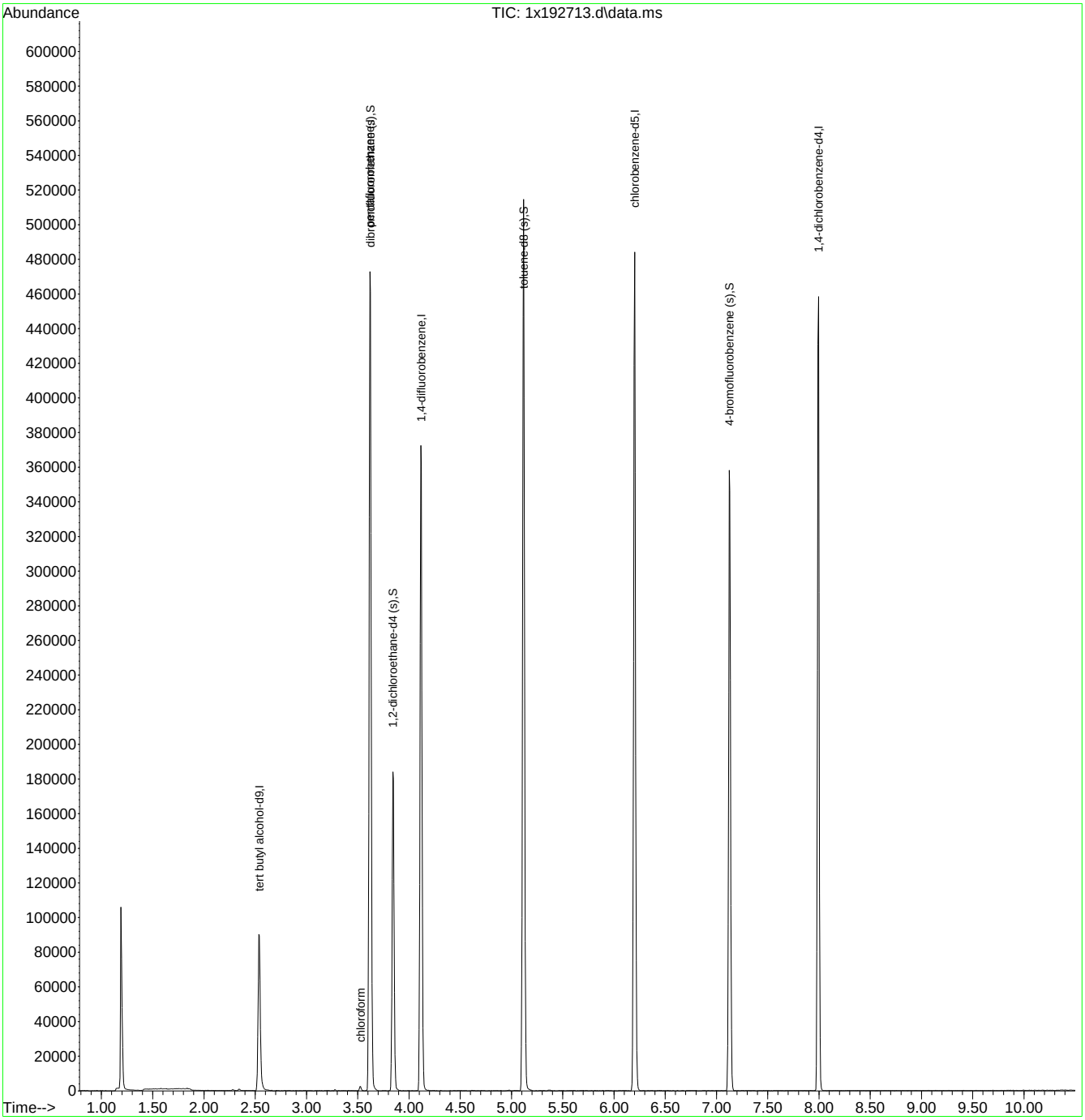
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.541	65	75107	500.00	ug/L	0.00
5) pentafluorobenzene	3.619	168	156922	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.121	114	220654	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	204279	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	88716	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	77788	49.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.32%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	92821	49.17	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.34%			
74) toluene-d8 (s)	5.119	98	250768	50.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.98%			
98) 4-bromofluorobenzene (s)	7.125	95	88389	50.13	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.26%			
Target Compounds						Qvalue
42) chloroform	3.528	83	1366	0.85	ug/L	93

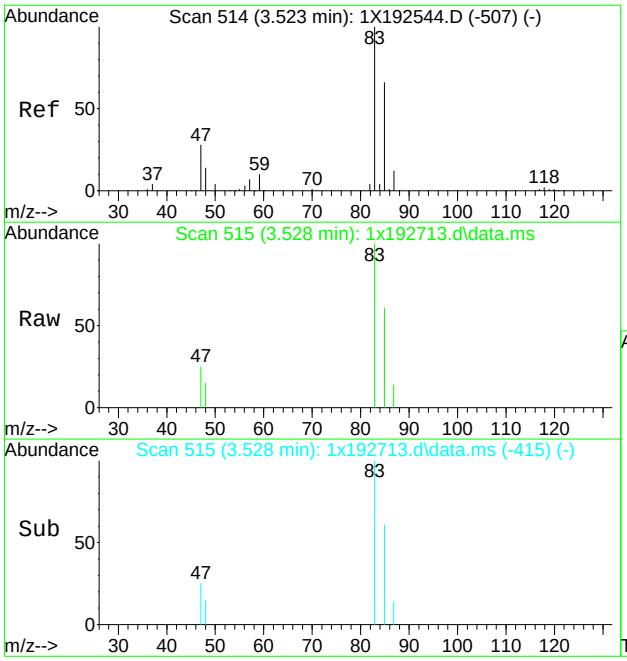
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192713.d
Acq On : 30 Nov 2021 8:33 pm
Operator : brittank
Sample : JD35517-7 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:19:39 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

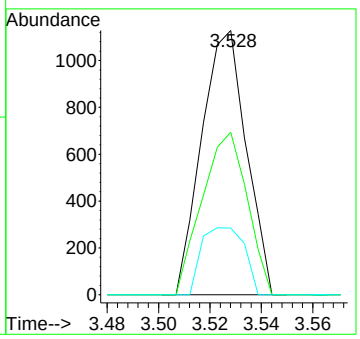




#42
chloroform
Concen: 0.85 ug/L
RT: 3.528 min Scan# 515
Delta R.T. 0.005 min
Lab File: 1x192713.d
Acq: 30 Nov 2021 8:33 pm

Tgt Ion: 83 Resp: 1366

Ion	Ratio	Lower	Upper
83	100		
85	61.5	35.8	95.8
47	25.2	0.1	60.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192706.d
Acq On : 30 Nov 2021 5:31 pm
Operator : brittank
Sample : JD35517-8 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:59:37 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

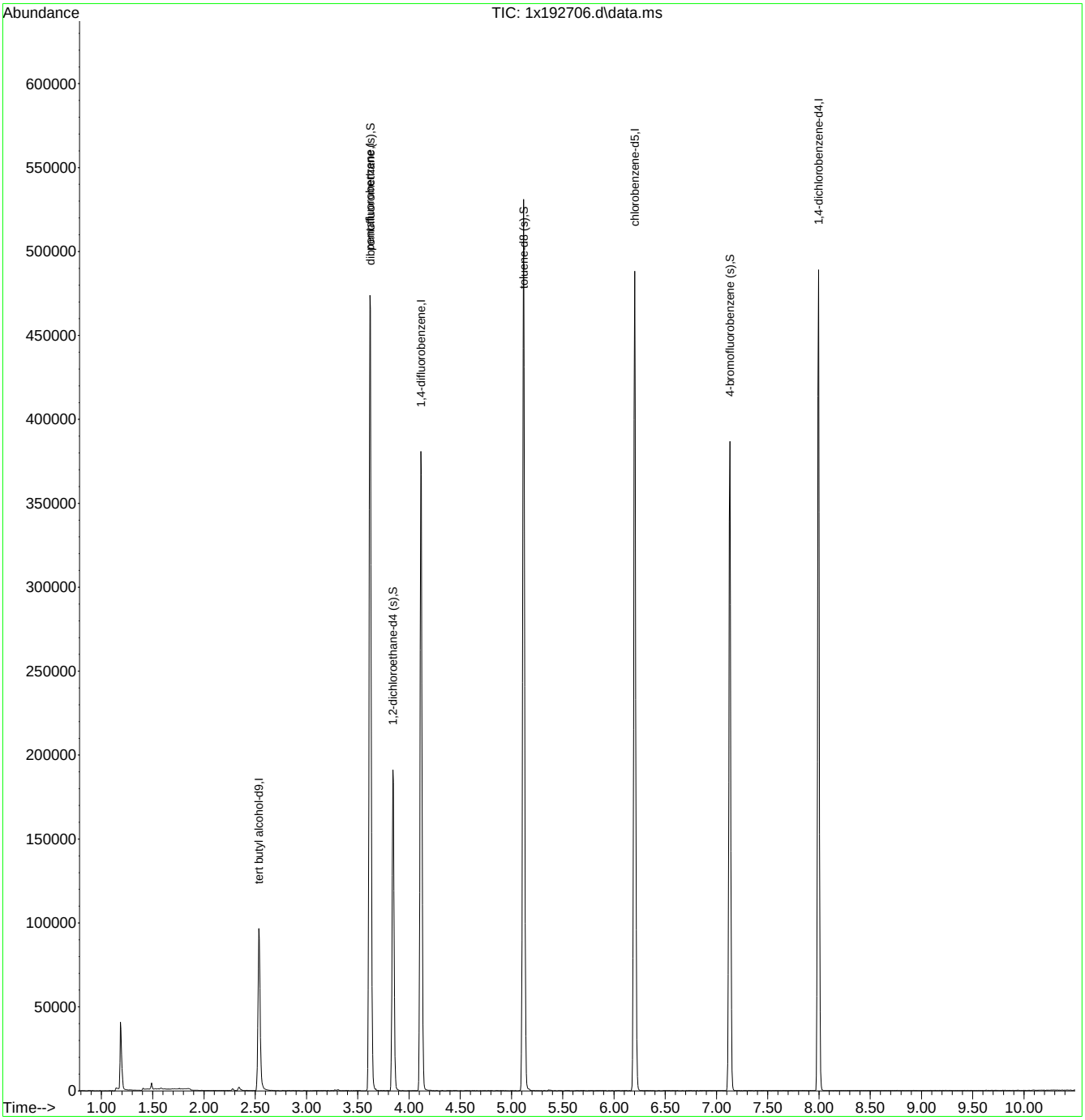
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	79093	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	158813	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	226812	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	210649	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	91807	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	78585	49.07	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.14%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	94991	48.95	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.90%			
74) toluene-d8 (s)	5.119	98	257563	50.29	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.58%			
98) 4-bromofluorobenzene (s)	7.131	95	91872	50.35	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.70%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192706.d
Acq On : 30 Nov 2021 5:31 pm
Operator : brittank
Sample : JD35517-8 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:59:37 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192707.d
Acq On : 30 Nov 2021 5:57 pm
Operator : brittank
Sample : JD35517-9 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:02:14 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

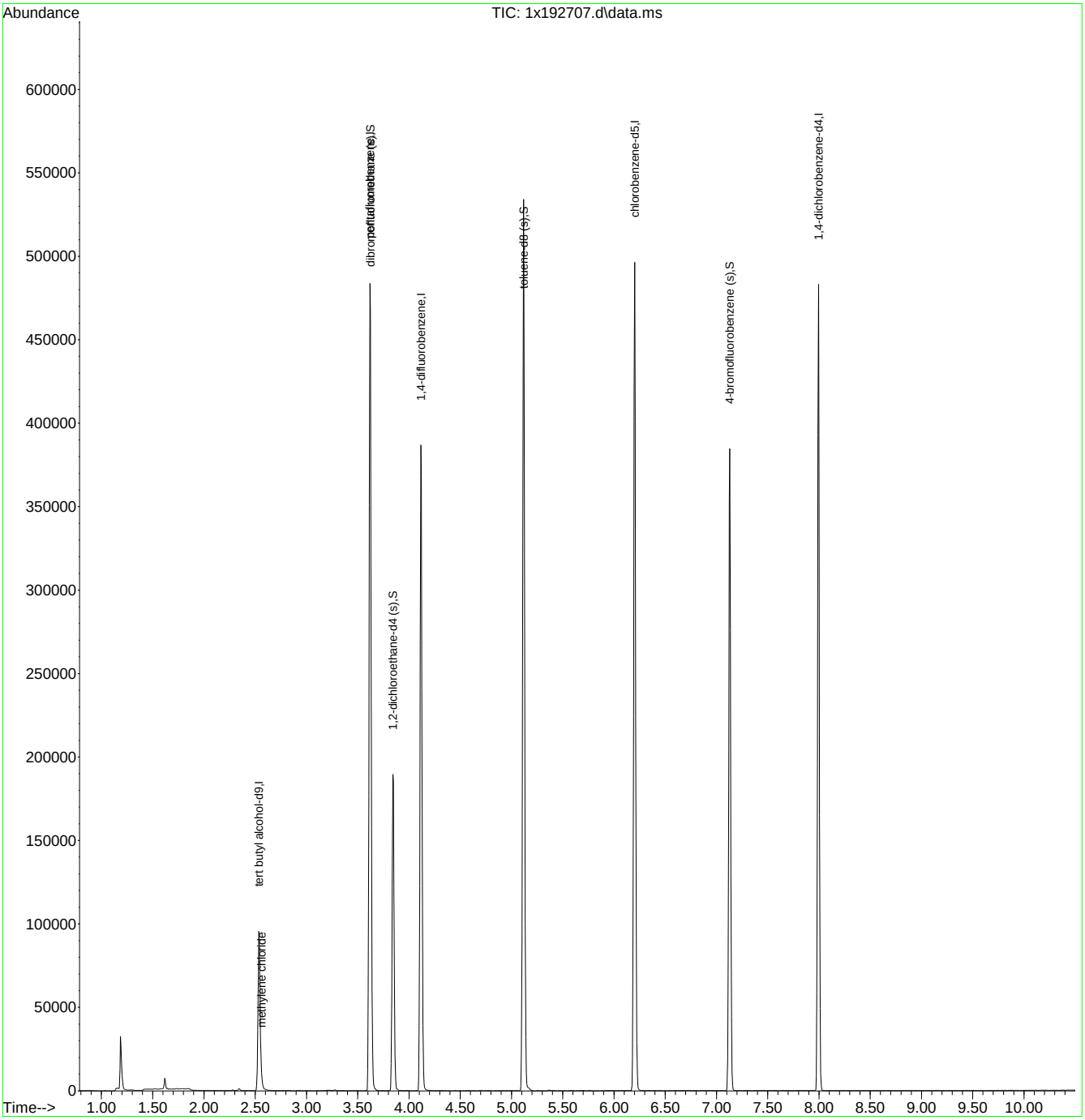
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	77636	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	161750	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	228018	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	212431	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	92047	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	79099	48.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.98%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	95804	49.11	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.22%			
74) toluene-d8 (s)	5.119	98	260413	50.42	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.84%			
98) 4-bromofluorobenzene (s)	7.131	95	92309	50.45	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.90%			
Target Compounds						Qvalue
22) methylene chloride	2.562	84	673	0.81	ug/L	95

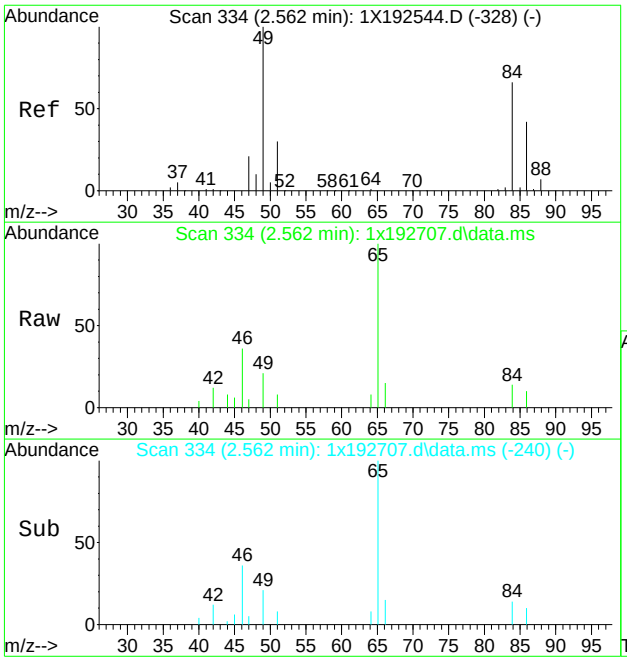
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192707.d
Acq On : 30 Nov 2021 5:57 pm
Operator : brittank
Sample : JD35517-9 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 06:02:14 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

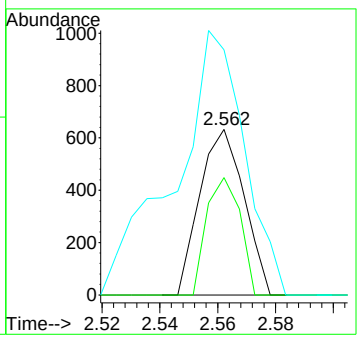




#22
methylene chloride
Concen: 0.81 ug/L
RT: 2.562 min Scan# 334
Delta R.T. -0.000 min
Lab File: 1x192707.d
Acq: 30 Nov 2021 5:57 pm

Tgt Ion: 84 Resp: 673

Ion	Ratio	Lower	Upper
84	100		
86	70.9	34.3	94.3
49	148.3	122.9	182.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192694.d
Acq On : 30 Nov 2021 12:19 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55219,V1X8346,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:05:27 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

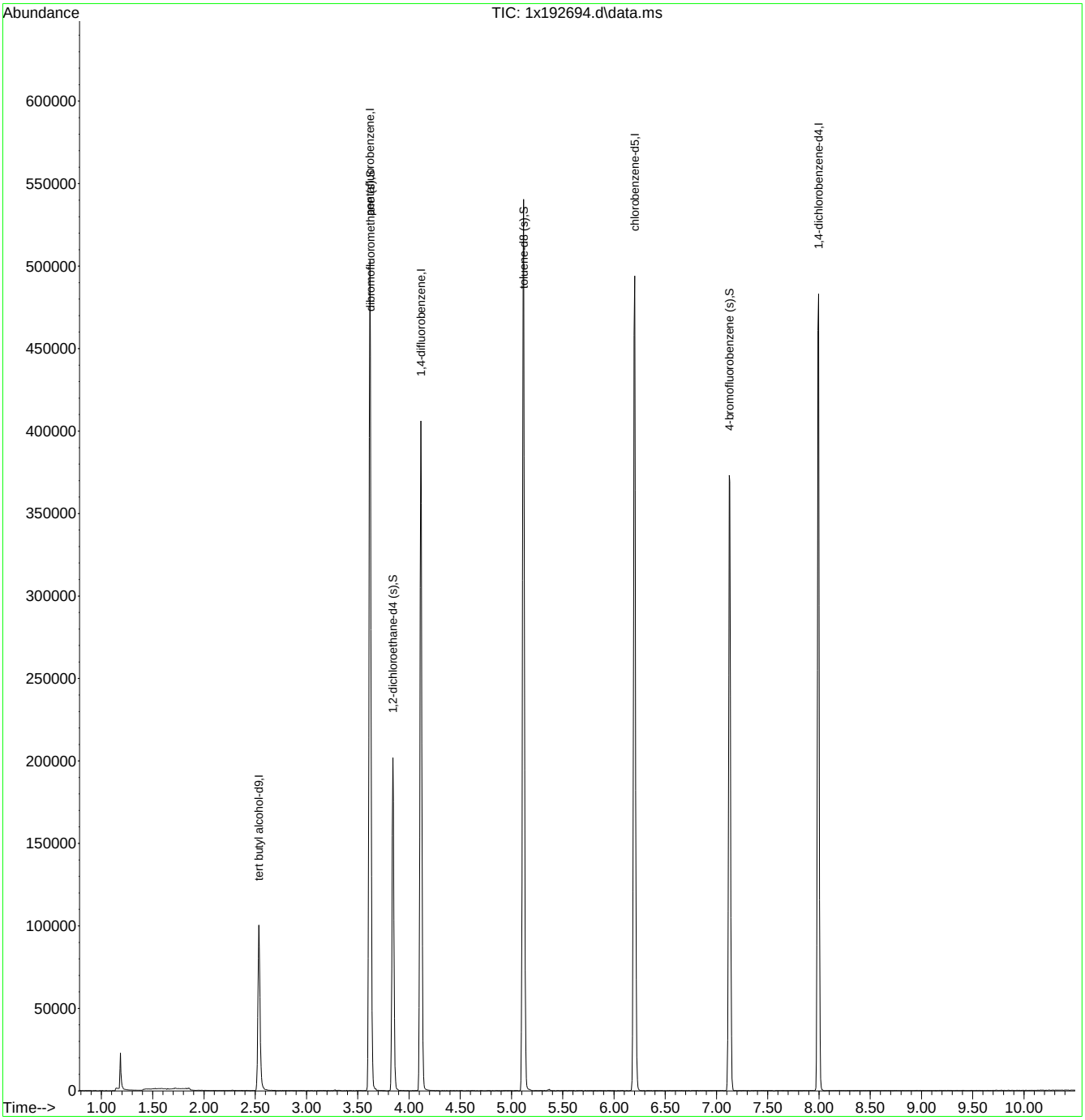
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.536	65	81009	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	162646	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	232430	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	215467	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	93426	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	80390	49.01	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.02%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	97528	49.04	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.08%			
74) toluene-d8 (s)	5.119	98	262939	50.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.38%			
98) 4-bromofluorobenzene (s)	7.125	95	94295	50.78	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.56%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192694.d
Acq On : 30 Nov 2021 12:19 pm
Operator : brittank
Sample : mb Inst : ACC-VOA-MSX
Misc : MS55219,V1X8346,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:05:27 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192692.d
Acq On : 30 Nov 2021 11:28 am
Operator : brittank
Sample : bs Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:59 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.535	65	89925	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	172344	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	242549	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	227055	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	101723	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	82795	47.64	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.28%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	100930	48.64	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.28%			
74) toluene-d8 (s)	5.119	98	277646	50.29	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.58%			
98) 4-bromofluorobenzene (s)	7.125	95	100776	49.84	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.68%			
Target Compounds						Qvalue
2) ethanol	2.028	45	50459	4913.32	ug/L	100
3) tertiary butyl alcohol	2.589	59	31981	248.08	ug/L	91
4) 1,4-dioxane	4.494	88	14142	1310.79	ug/L	93
6) chlorodifluoromethane	1.319	51	48313	35.45	ug/L	97
7) dichlorodifluoromethane	1.303	85	67785	53.11	ug/L	99
8) chloromethane	1.431	50	73407	50.02	ug/L	99
9) vinyl chloride	1.505	62	59688	45.79	ug/L	100
10) bromomethane	1.724	96	32187	48.06	ug/L	99
11) chloroethane	1.794	64	30323	50.59	ug/L	96
12) trichlorofluoromethane	1.948	101	92577	52.35	ug/L	99
13) 1,3-butadiene	1.532	54	43255	38.21	ug/L	100
14) ethyl ether	2.114	74	21554	47.88	ug/L	97
15) acrolein	2.199	56	9240	49.15	ug/L	93
16) 1,1-dichloroethene	2.269	96	40977	45.99	ug/L	97
17) freon 113	2.263	101	49228	46.56	ug/L	96
18) acetone	2.279	58	24659	213.15	ug/L	92
19) acetonitrile	2.450	41	72692	444.15	ug/L	98
20) iodomethane	2.370	142	43106	38.07	ug/L	97
21) carbon disulfide	2.418	76	104757	42.28	ug/L	99
22) methylene chloride	2.557	84	39833	45.03	ug/L	97
23) methyl acetate	2.461	43	48038	45.17	ug/L	97
24) methyl tert butyl ether	2.706	73	124346	48.04	ug/L	99
25) acrylonitrile	2.690	53	21472	45.20	ug/L	98
26) trans-1,2-dichloroethene	2.722	96	43933	46.53	ug/L	97
27) hexane	2.882	57	94469	48.39	ug/L	99
28) di-isopropyl ether	2.978	45	160658	49.14	ug/L	95
29) 2-butanone	3.304	72	24862	199.95	ug/L	99
30) 1,1-dichloroethane	2.984	63	85343	46.64	ug/L	98
31) chloroprene	3.026	53	82049	46.78	ug/L	99
32) vinyl acetate	2.962	86	9898	51.20	ug/L #	86
33) ethyl tert-butyl ether	3.197	59	153513	50.14	ug/L	98
34) ethyl acetate	3.315	45	9903	47.56	ug/L	96
35) 2,2-dichloropropane	3.336	77	74967	49.59	ug/L	99
36) cis-1,2-dichloroethene	3.325	96	47959	47.27	ug/L	96
37) methyl acrylate	3.352	55	66001	48.11	ug/L	98
38) propionitrile	3.347	54	86716	466.85	ug/L	95
39) tert-butyl formate	3.539	59	35442	45.68	ug/L	95
40) bromochloromethane	3.475	128	25385	50.32	ug/L	94
41) tetrahydrofuran	3.480	42	18158	43.78	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192692.d
Acq On : 30 Nov 2021 11:28 am
Operator : brittank
Sample : bs Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:59 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) chloroform	3.523	83	84793	47.99	ug/L		98
44) methacrylonitrile	3.437	67	21182	50.26	ug/L		97
45) 1,1,1-trichloroethane	3.646	97	81125	48.70	ug/L		100
46) cyclohexane	3.694	84	74194	56.51	ug/L		86
47) tert amyl alcohol	3.827	55	10522	250.92	ug/L		92
48) 1,1-dichloropropene	3.742	75	66300	48.48	ug/L		97
49) isobutyl alcohol	3.923	42	12147	508.83	ug/L		96
50) carbon tetrachloride	3.747	117	77298	49.45	ug/L		99
51) isopropyl acetate	3.854	87	11105	50.87	ug/L	#	77
54) iso-octane	3.928	57	183123	49.36	ug/L		99
55) epichlorohydrin	4.841	57	30680	235.43	ug/L		86
56) n-butyl alcohol	4.169	56	67752	2580.72	ug/L		98
57) benzene	3.870	78	168600	50.01	ug/L		100
58) tert-amyl methyl ether	3.923	73	138982	51.91	ug/L		100
59) heptane	4.024	57	34988	50.66	ug/L		98
60) 1,2-dichloroethane	3.891	62	71850	46.59	ug/L		100
61) trichloroethene	4.286	130	55086	48.58	ug/L		100
62) ethyl acrylate	4.302	55	72182	49.93	ug/L		98
63) 2-nitropropane	4.766	41	19942	50.42	ug/L		98
64) 2-chloroethyl vinyl ether	4.798	63	161050	249.30	ug/L		100
65) methyl methacrylate	4.462	100	13411	49.27	ug/L	#	90
66) 1,2-dichloropropane	4.457	76	19454	50.52	ug/L		94
67) dibromomethane	4.515	93	30393	49.52	ug/L		95
68) methylcyclohexane	4.446	83	82058	50.71	ug/L		96
69) bromodichloromethane	4.622	83	61916	49.76	ug/L		100
70) cis-1,3-dichloropropene	4.921	75	72044	51.09	ug/L		97
71) 4-methyl-2-pentanone	5.006	58	83240	199.28	ug/L		99
72) 3-methyl-1-butanol	5.028	70	19963	1176.94	ug/L		98
75) toluene	5.167	92	107695	52.10	ug/L		99
76) trans-1,3-dichloropropene	5.316	75	68829	53.09	ug/L		98
77) ethyl methacrylate	5.337	69	57083	51.13	ug/L		97
78) 1,1,2-trichloroethane	5.465	83	34608	50.93	ug/L		98
79) tetrachloroethene	5.545	164	45687	51.65	ug/L		98
80) 1,3-dichloropropane	5.588	76	66335	50.69	ug/L		99
81) 2-hexanone	5.604	58	86276	207.29	ug/L		99
82) butyl acetate	5.684	56	34678	48.44	ug/L		93
83) dibromochloromethane	5.754	129	54843	53.95	ug/L		98
84) 1,2-dibromoethane	5.855	107	47458	51.05	ug/L		99
85) n-butyl ether	6.266	57	188807	48.38	ug/L		100
86) chlorobenzene	6.223	112	123942	51.19	ug/L		98
87) 1,1,1,2-tetrachloroethane	6.287	131	49508	51.97	ug/L		98
88) ethylbenzene	6.287	91	205992	49.23	ug/L		100
89) m,p-xylene	6.389	106	163120	101.92	ug/L		99
90) o-xylene	6.698	91	158526	48.81	ug/L		97
91) styrene	6.709	104	130777	50.82	ug/L		98
92) butyl acrylate	6.629	55	96950	48.29	ug/L		99
93) n-amyl acetate	6.805	70	32857	48.19	ug/L		93
94) bromoform	6.864	173	40123	53.88	ug/L		98
95) isopropylbenzene	6.986	105	206009	49.88	ug/L		98
96) cis-1,4-dichloro-2-butene	7.029	88	23813	51.55	ug/L		98
99) bromobenzene	7.243	156	56966	53.50	ug/L		99
100) 1,1,2,2-tetrachloroethane	7.221	83	55392	52.15	ug/L		99
101) trans-1,4-dichloro-2-b...	7.248	53	20933	51.73	ug/L		99
102) 1,2,3-trichloropropane	7.269	110	16976	50.69	ug/L		95
103) n-propylbenzene	7.307	91	234650	50.40	ug/L		99
104) 2-chlorotoluene	7.387	126	51173	50.40	ug/L		97
105) 4-chlorotoluene	7.477	91	134149	49.40	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192692.d
Acq On : 30 Nov 2021 11:28 am
Operator : brittank
Sample : bs Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:59 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

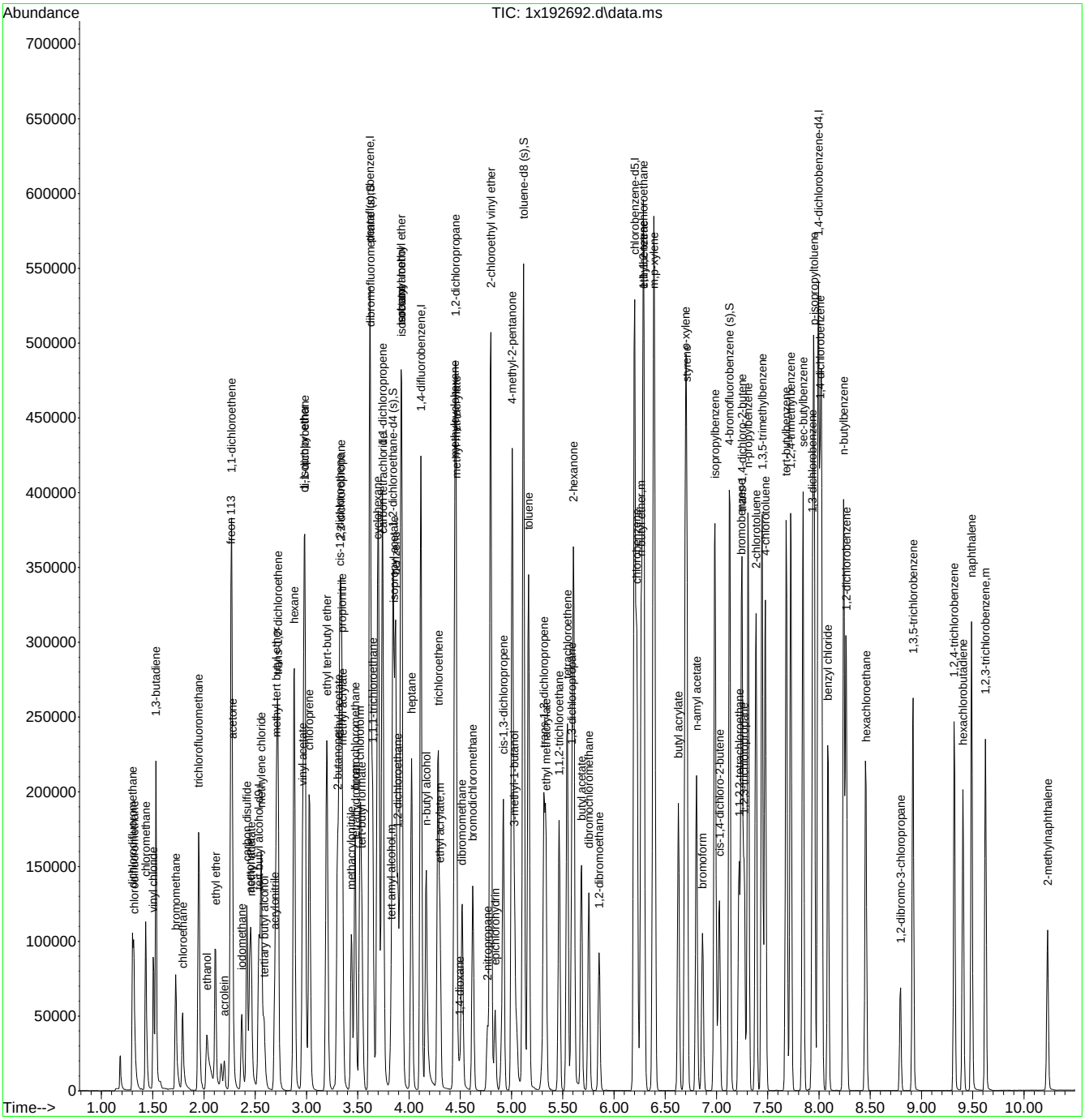
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,3,5-trimethylbenzene	7.445	105	156959	49.69	ug/L	98
107) tert-butylbenzene	7.680	119	145777	48.96	ug/L	99
108) 1,2,4-trimethylbenzene	7.723	105	157835	50.00	ug/L	99
109) sec-butylbenzene	7.846	105	204348	49.52	ug/L	98
110) 1,3-dichlorobenzene	7.936	146	98735	49.83	ug/L	99
111) p-isopropyltoluene	7.952	119	181995	50.18	ug/L	99
112) 1,4-dichlorobenzene	8.011	146	101408	49.48	ug/L	99
113) 1,2-dichlorobenzene	8.267	146	94253	50.04	ug/L	98
114) benzyl chloride	8.086	91	113628	53.07	ug/L	99
115) n-butylbenzene	8.241	92	81124	49.97	ug/L	99
116) 1,2-dibromo-3-chloropr...	8.796	157	13773	48.31	ug/L	97
117) 1,3,5-trichlorobenzene	8.918	180	62788	48.95	ug/L	97
118) hexachlorobutadiene	9.404	225	22602	47.25	ug/L	99
119) naphthalene	9.489	128	166754	47.17	ug/L	99
120) 1,2,4-trichlorobenzene	9.319	180	55478	49.12	ug/L	96
121) 1,2,3-trichlorobenzene	9.623	180	52294	47.75	ug/L	99
122) hexachloroethane	8.459	201	26338	50.01	ug/L	99
123) 2-methylnaphthalene	10.231	142	40797	24.34	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192692.d
Acq On : 30 Nov 2021 11:28 am
Operator : brittank
Sample : bs Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:59 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192702.d
Acq On : 30 Nov 2021 3:47 pm
Operator : brittank
Sample : JD35406-1ms Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:18:28 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.541	65	85116	500.00	ug/L	0.00
5) pentafluorobenzene	3.624	168	167775	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.121	114	236997	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	223324	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	100441	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	82310	48.65	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.30%			
53) 1,2-dichloroethane-d4 (s)	3.849	65	98289	48.47	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.94%			
74) toluene-d8 (s)	5.119	98	271366	49.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%			
98) 4-bromofluorobenzene (s)	7.131	95	99654	49.92	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.84%			
Target Compounds						Qvalue
2) ethanol	2.034	45	47528	4889.39	ug/L	98
3) tertiary butyl alcohol	2.589	59	30887	253.13	ug/L	92
4) 1,4-dioxane	4.500	88	13300	1302.40	ug/L	92
6) chlorodifluoromethane	1.324	51	47287	35.65	ug/L	96
7) dichlorodifluoromethane	1.308	85	60993	49.09	ug/L	99
8) chloromethane	1.436	50	70157	49.10	ug/L	100
9) vinyl chloride	1.511	62	60130	47.39	ug/L	99
10) bromomethane	1.730	96	32446	49.77	ug/L	98
11) chloroethane	1.799	64	31418	53.84	ug/L	99
12) trichlorofluoromethane	1.954	101	97260	56.49	ug/L	98
13) 1,3-butadiene	1.538	54	42674	38.72	ug/L	99
14) ethyl ether	2.114	74	20124	45.92	ug/L	98
15) acrolein	2.205	56	9095	49.70	ug/L	93
16) 1,1-dichloroethene	2.274	96	40551	46.75	ug/L	97
17) freon 113	2.269	101	49604	48.20	ug/L	96
18) acetone	2.285	58	17306	153.66	ug/L	100
19) acetonitrile	2.450	41	65924	413.76	ug/L	98
20) iodomethane	2.376	142	42486	38.55	ug/L	100
21) carbon disulfide	2.424	76	102944	42.68	ug/L	100
22) methylene chloride	2.562	84	37588	43.65	ug/L	99
23) methyl acetate	2.466	43	43757	42.26	ug/L	98
24) methyl tert butyl ether	2.712	73	119944	47.60	ug/L	99
25) acrylonitrile	2.696	53	20818	45.02	ug/L	98
26) trans-1,2-dichloroethene	2.728	96	42934	46.71	ug/L	100
27) hexane	2.883	57	94079	49.51	ug/L	99
28) di-isopropyl ether	2.984	45	149608	47.00	ug/L	99
29) 2-butanone	3.304	72	21905	180.97	ug/L #	79
30) 1,1-dichloroethane	2.989	63	83824	47.06	ug/L	98
31) chloroprene	3.032	53	79428	46.52	ug/L	99
32) vinyl acetate	2.968	86	9249	49.15	ug/L #	79
33) ethyl tert-butyl ether	3.203	59	143198	48.05	ug/L	100
34) ethyl acetate	3.315	45	9071	44.75	ug/L	99
35) 2,2-dichloropropane	3.342	77	73108	49.67	ug/L	99
36) cis-1,2-dichloroethene	3.331	96	49306	49.92	ug/L	96
37) methyl acrylate	3.352	55	60731	45.47	ug/L	99
38) propionitrile	3.347	54	80215	443.61	ug/L	81
39) tert-butyl formate	3.544	59	16799	22.24	ug/L	94
40) bromochloromethane	3.475	128	24199	49.28	ug/L	98
41) tetrahydrofuran	3.486	42	16334	40.46	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192702.d
Acq On : 30 Nov 2021 3:47 pm
Operator : brittank
Sample : JD35406-1ms Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:18:28 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) chloroform	3.528	83	78985	45.92	ug/L		99
44) methacrylonitrile	3.443	67	19421	47.33	ug/L		96
45) 1,1,1-trichloroethane	3.646	97	80038	49.36	ug/L		99
46) cyclohexane	3.699	84	75913	59.39	ug/L		91
47) tert amyl alcohol	3.833	55	9778	239.53	ug/L		89
48) 1,1-dichloropropene	3.742	75	65140	48.93	ug/L		100
49) isobutyl alcohol	3.929	42	11584	498.46	ug/L	#	96
50) carbon tetrachloride	3.747	117	75805	49.82	ug/L		98
51) isopropyl acetate	3.854	87	10234	48.15	ug/L	#	90
54) iso-octane	3.929	57	188585	52.02	ug/L		99
55) epichlorohydrin	4.841	57	26217	205.89	ug/L		87
56) n-butyl alcohol	4.169	56	63346	2469.42	ug/L		98
57) benzene	3.875	78	162266	49.26	ug/L		100
58) tert-amyl methyl ether	3.929	73	129548	49.52	ug/L		99
59) heptane	4.030	57	36094	53.49	ug/L		98
60) 1,2-dichloroethane	3.897	62	68914	45.74	ug/L		99
61) trichloroethene	4.286	130	208927	188.58	ug/L		99
62) ethyl acrylate	4.308	55	65185	46.14	ug/L		97
63) 2-nitropropane	4.767	41	16430	42.52	ug/L		99
65) methyl methacrylate	4.462	100	12433	46.75	ug/L		95
66) 1,2-dichloropropane	4.462	76	18897	50.23	ug/L		98
67) dibromomethane	4.521	93	28471	47.48	ug/L		97
68) methylcyclohexane	4.452	83	81722	51.68	ug/L		97
69) bromodichloromethane	4.628	83	58514	48.13	ug/L		100
70) cis-1,3-dichloropropene	4.921	75	68184	49.48	ug/L		98
71) 4-methyl-2-pentanone	5.007	58	75413	184.77	ug/L		100
72) 3-methyl-1-butanol	5.028	70	18726	1129.87	ug/L		93
75) toluene	5.167	92	103924	51.11	ug/L		99
76) trans-1,3-dichloropropene	5.322	75	64694	50.73	ug/L		99
77) ethyl methacrylate	5.338	69	52801	48.08	ug/L		96
78) 1,1,2-trichloroethane	5.466	83	32523	48.66	ug/L		97
79) tetrachloroethene	5.546	164	57364	65.94	ug/L		98
80) 1,3-dichloropropane	5.594	76	62296	48.40	ug/L		98
81) 2-hexanone	5.610	58	71612	174.93	ug/L		98
82) butyl acetate	5.684	56	31085	44.15	ug/L		99
83) dibromochloromethane	5.759	129	51973	51.98	ug/L		99
84) 1,2-dibromoethane	5.855	107	44524	48.69	ug/L		97
85) n-butyl ether	6.266	57	181484	47.28	ug/L		99
86) chlorobenzene	6.229	112	120403	50.56	ug/L		99
87) 1,1,1,2-tetrachloroethane	6.288	131	47827	51.04	ug/L		99
88) ethylbenzene	6.293	91	201001	48.84	ug/L		99
89) m,p-xylene	6.394	106	157649	100.15	ug/L		99
90) o-xylene	6.698	91	155111	48.56	ug/L		100
91) styrene	6.714	104	126291	49.90	ug/L		97
92) butyl acrylate	6.629	55	89748	45.45	ug/L		99
93) n-amyl acetate	6.811	70	29769	44.39	ug/L		97
94) bromoform	6.864	173	37196	50.78	ug/L		97
95) isopropylbenzene	6.987	105	203499	50.09	ug/L		99
96) cis-1,4-dichloro-2-butene	7.029	88	21727	47.82	ug/L		98
99) bromobenzene	7.248	156	53435	50.82	ug/L		97
100) 1,1,2,2-tetrachloroethane	7.221	83	52215	49.79	ug/L		97
101) trans-1,4-dichloro-2-b...	7.254	53	19709	49.33	ug/L		92
102) 1,2,3-trichloropropane	7.270	110	16240	49.11	ug/L		89
103) n-propylbenzene	7.312	91	231741	50.41	ug/L		100
104) 2-chlorotoluene	7.387	126	49717	49.60	ug/L		97
105) 4-chlorotoluene	7.478	91	131564	49.07	ug/L		99
106) 1,3,5-trimethylbenzene	7.446	105	153524	49.22	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192702.d
Acq On : 30 Nov 2021 3:47 pm
Operator : brittank
Sample : JD35406-1ms Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:18:28 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

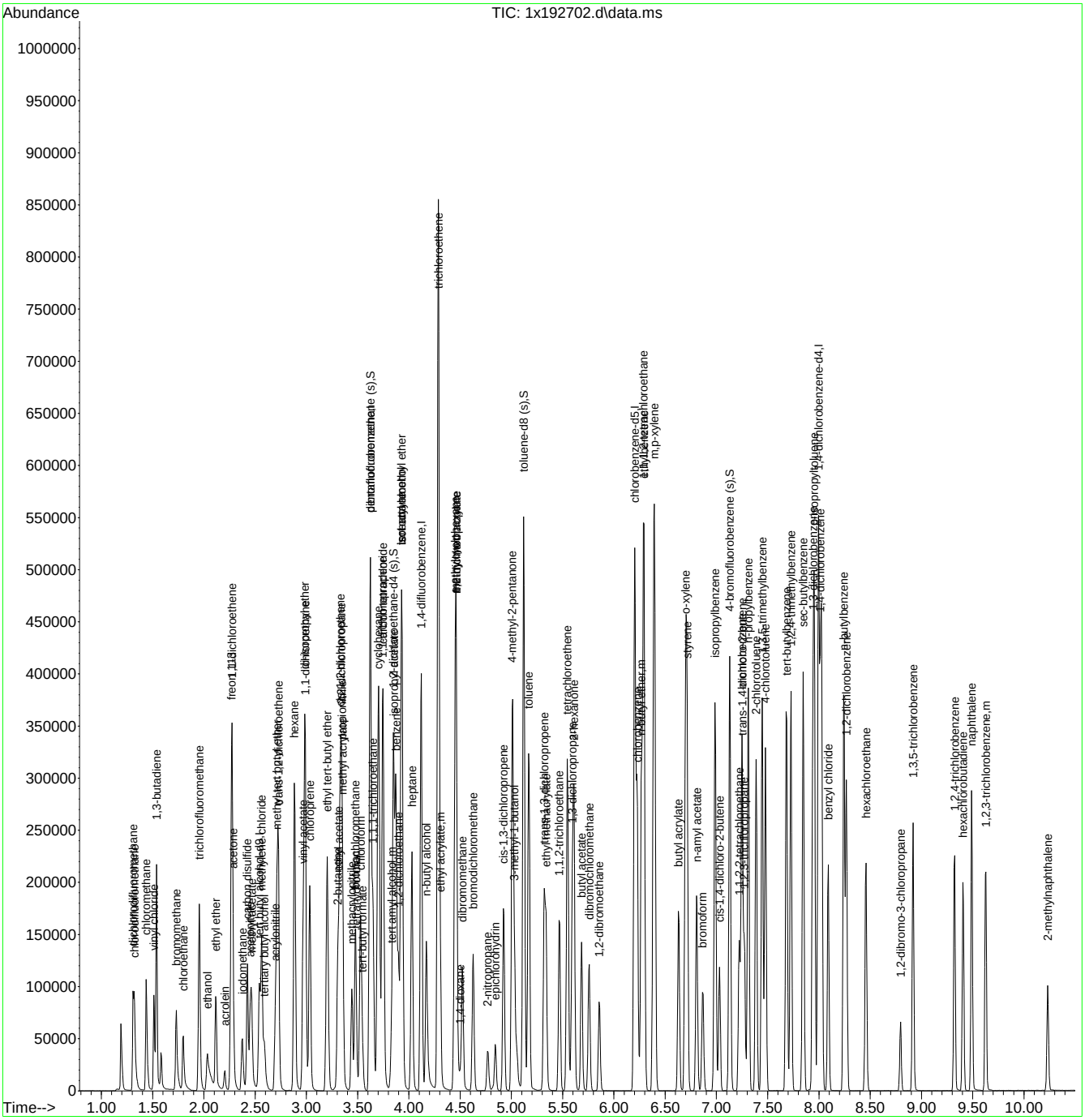
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) tert-butylbenzene	7.686	119	146993	50.00	ug/L	100
108) 1,2,4-trimethylbenzene	7.729	105	153345	49.20	ug/L	99
109) sec-butylbenzene	7.846	105	207954	51.04	ug/L	100
110) 1,3-dichlorobenzene	7.942	146	96403	49.28	ug/L	100
111) p-isopropyltoluene	7.953	119	182779	51.03	ug/L	98
112) 1,4-dichlorobenzene	8.011	146	97157	48.01	ug/L	99
113) 1,2-dichlorobenzene	8.268	146	90124	48.46	ug/L	100
114) benzyl chloride	8.091	91	104879	49.61	ug/L	99
115) n-butylbenzene	8.241	92	81076	50.58	ug/L	99
116) 1,2-dibromo-3-chloropr...	8.796	157	13163	46.76	ug/L	99
117) 1,3,5-trichlorobenzene	8.919	180	60000	47.37	ug/L	98
118) hexachlorobutadiene	9.404	225	22989	48.67	ug/L	99
119) naphthalene	9.490	128	154650	44.30	ug/L	98
120) 1,2,4-trichlorobenzene	9.324	180	53134	47.65	ug/L	98
121) 1,2,3-trichlorobenzene	9.628	180	49822	46.07	ug/L	99
122) hexachloroethane	8.460	201	26162	50.31	ug/L	97
123) 2-methylnaphthalene	10.232	142	38445	23.23	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192702.d
Acq On : 30 Nov 2021 3:47 pm
Operator : brittank
Sample : JD35406-1ms Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:18:28 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192703.d
Acq On : 30 Nov 2021 4:13 pm
Operator : brittank
Sample : JD35406-1msd Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:21:35 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.541	65	89764	500.00	ug/L	0.00
5) pentafluorobenzene	3.624	168	172453	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.121	114	241197	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	229019	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	102511	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	83823	48.20	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.40%			
53) 1,2-dichloroethane-d4 (s)	3.848	65	100221	48.57	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.14%			
74) toluene-d8 (s)	5.119	98	277066	49.76	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.52%			
98) 4-bromofluorobenzene (s)	7.131	95	101933	50.03	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.06%			
Target Compounds						Qvalue
2) ethanol	2.034	45	51063	4981.05	ug/L	98
3) tertiary butyl alcohol	2.594	59	34204	265.80	ug/L	97
4) 1,4-dioxane	4.494	88	14379	1335.15	ug/L	91
6) chlorodifluoromethane	1.324	51	51860	38.03	ug/L	97
7) dichlorodifluoromethane	1.308	85	60295	47.21	ug/L	99
8) chloromethane	1.436	50	67395	45.89	ug/L	100
9) vinyl chloride	1.511	62	58520	44.87	ug/L	97
10) bromomethane	1.730	96	31986	47.73	ug/L	99
11) chloroethane	1.799	64	30529	50.90	ug/L	99
12) trichlorofluoromethane	1.954	101	96150	54.33	ug/L	100
13) 1,3-butadiene	1.538	54	44938	39.67	ug/L	99
14) ethyl ether	2.119	74	21011	46.65	ug/L	97
15) acrolein	2.205	56	9703	51.58	ug/L	98
16) 1,1-dichloroethene	2.274	96	44271	49.66	ug/L	100
17) freon 113	2.269	101	53866	50.92	ug/L	98
18) acetone	2.285	58	18983	163.98	ug/L	93
19) acetonitrile	2.456	41	70998	433.52	ug/L	99
20) iodomethane	2.375	142	49585	43.77	ug/L	98
21) carbon disulfide	2.424	76	112367	45.32	ug/L	99
22) methylene chloride	2.562	84	40405	45.65	ug/L	99
23) methyl acetate	2.466	43	47507	44.64	ug/L	98
24) methyl tert butyl ether	2.712	73	128007	49.42	ug/L	99
25) acrylonitrile	2.696	53	21487	45.20	ug/L	99
26) trans-1,2-dichloroethene	2.728	96	46586	49.31	ug/L	98
27) hexane	2.882	57	100787	51.60	ug/L	99
28) di-isopropyl ether	2.984	45	160664	49.11	ug/L	99
29) 2-butanone	3.304	72	23246	186.84	ug/L #	84
30) 1,1-dichloroethane	2.989	63	89948	49.13	ug/L	98
31) chloroprene	3.032	53	85848	48.92	ug/L	99
32) vinyl acetate	2.968	86	9726	50.28	ug/L #	81
33) ethyl tert-butyl ether	3.203	59	152811	49.88	ug/L	99
34) ethyl acetate	3.320	45	9754	46.81	ug/L	91
35) 2,2-dichloropropane	3.341	77	78151	51.66	ug/L	99
36) cis-1,2-dichloroethene	3.331	96	52257	51.47	ug/L	96
37) methyl acrylate	3.352	55	64720	47.15	ug/L	100
38) propionitrile	3.347	54	85691	461.04	ug/L	80
39) tert-butyl formate	3.544	59	14995	19.31	ug/L	95
40) bromochloromethane	3.480	128	25552	50.62	ug/L	92
41) tetrahydrofuran	3.486	42	17788	42.86	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192703.d
Acq On : 30 Nov 2021 4:13 pm
Operator : brittank
Sample : JD35406-1msd Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:21:35 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) chloroform	3.528	83	84452	47.77	ug/L		99
44) methacrylonitrile	3.443	67	20521	48.66	ug/L		98
45) 1,1,1-trichloroethane	3.651	97	87069	52.24	ug/L		99
46) cyclohexane	3.699	84	75263	57.29	ug/L		96
47) tert amyl alcohol	3.832	55	10532	251.00	ug/L		91
48) 1,1-dichloropropene	3.742	75	71023	51.90	ug/L		98
49) isobutyl alcohol	3.929	42	12061	504.91	ug/L	#	95
50) carbon tetrachloride	3.747	117	82893	53.00	ug/L		99
51) isopropyl acetate	3.854	87	10666	48.83	ug/L	#	93
54) iso-octane	3.929	57	199698	54.12	ug/L		99
55) epichlorohydrin	4.841	57	27106	209.17	ug/L		85
56) n-butyl alcohol	4.169	56	68163	2610.93	ug/L		99
57) benzene	3.875	78	174276	51.99	ug/L		99
58) tert-amyl methyl ether	3.929	73	138828	52.14	ug/L		99
59) heptane	4.030	57	38957	56.72	ug/L		96
60) 1,2-dichloroethane	3.897	62	73012	47.61	ug/L		99
61) trichloroethene	4.286	130	214039	189.83	ug/L		99
62) ethyl acrylate	4.307	55	69745	48.51	ug/L		97
63) 2-nitropropane	4.766	41	17742	45.11	ug/L		99
65) methyl methacrylate	4.462	100	13673	50.51	ug/L	#	91
66) 1,2-dichloropropane	4.462	76	19960	52.13	ug/L		98
67) dibromomethane	4.521	93	30686	50.28	ug/L		99
68) methylcyclohexane	4.452	83	87864	54.60	ug/L		98
69) bromodichloromethane	4.628	83	62497	50.51	ug/L		98
70) cis-1,3-dichloropropene	4.927	75	72312	51.56	ug/L		97
71) 4-methyl-2-pentanone	5.012	58	80743	194.38	ug/L		99
72) 3-methyl-1-butanol	5.033	70	19721	1169.19	ug/L		92
75) toluene	5.172	92	111589	53.52	ug/L		100
76) trans-1,3-dichloropropene	5.321	75	68991	52.76	ug/L		99
77) ethyl methacrylate	5.337	69	56181	49.89	ug/L		98
78) 1,1,2-trichloroethane	5.471	83	34620	50.51	ug/L		98
79) tetrachloroethene	5.546	164	61054	68.43	ug/L		99
80) 1,3-dichloropropane	5.594	76	66284	50.21	ug/L		98
81) 2-hexanone	5.610	58	76674	182.64	ug/L		98
82) butyl acetate	5.684	56	32780	45.40	ug/L		99
83) dibromochloromethane	5.759	129	55297	53.93	ug/L		99
84) 1,2-dibromoethane	5.860	107	47405	50.55	ug/L		99
85) n-butyl ether	6.271	57	193284	49.10	ug/L		99
86) chlorobenzene	6.229	112	127696	52.28	ug/L		99
87) 1,1,1,2-tetrachloroethane	6.287	131	50524	52.58	ug/L		97
88) ethylbenzene	6.293	91	216095	51.20	ug/L		100
89) m,p-xylene	6.394	106	169031	104.71	ug/L		99
90) o-xylene	6.698	91	164849	50.33	ug/L		100
91) styrene	6.714	104	134229	51.72	ug/L		98
92) butyl acrylate	6.629	55	94892	46.86	ug/L		99
93) n-amyl acetate	6.805	70	31622	45.98	ug/L		93
94) bromoform	6.869	173	40009	53.26	ug/L		99
95) isopropylbenzene	6.987	105	216422	51.95	ug/L		99
96) cis-1,4-dichloro-2-butene	7.029	88	23237	49.88	ug/L		98
99) bromobenzene	7.248	156	57887	53.94	ug/L		98
100) 1,1,2,2-tetrachloroethane	7.221	83	55317	51.68	ug/L		98
101) trans-1,4-dichloro-2-b...	7.253	53	20709	50.79	ug/L		95
102) 1,2,3-trichloropropane	7.275	110	16779	49.72	ug/L		99
103) n-propylbenzene	7.312	91	247953	52.85	ug/L		100
104) 2-chlorotoluene	7.387	126	53273	52.07	ug/L		99
105) 4-chlorotoluene	7.478	91	140984	51.52	ug/L		99
106) 1,3,5-trimethylbenzene	7.446	105	165024	51.84	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192703.d
Acq On : 30 Nov 2021 4:13 pm
Operator : brittank
Sample : JD35406-1msd Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:21:35 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

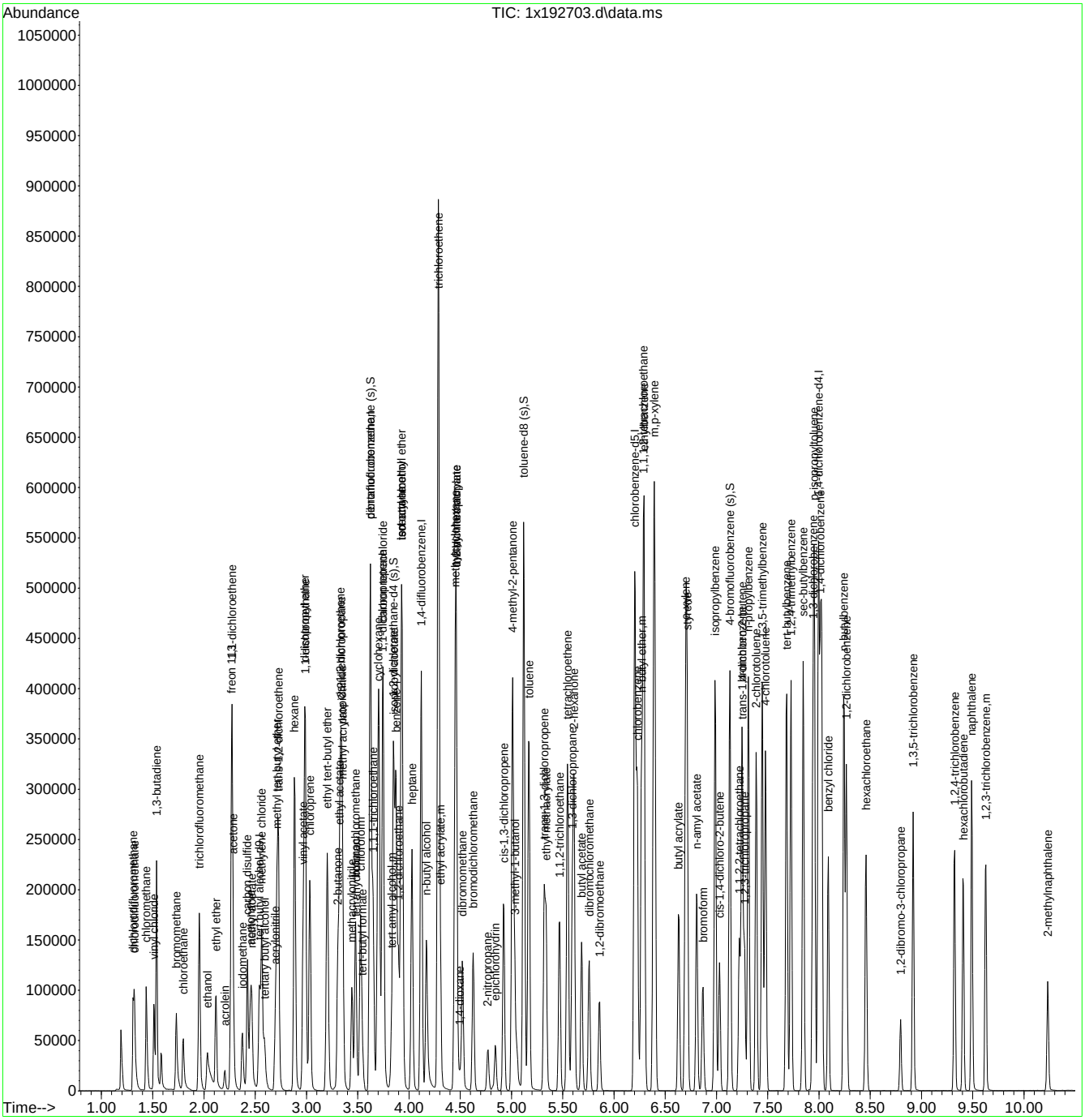
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) tert-butylbenzene	7.686	119	155687	51.89	ug/L	99
108) 1,2,4-trimethylbenzene	7.728	105	164273	51.64	ug/L	100
109) sec-butylbenzene	7.846	105	219296	52.73	ug/L	99
110) 1,3-dichlorobenzene	7.942	146	102484	51.33	ug/L	100
111) p-isopropyltoluene	7.953	119	195039	53.36	ug/L	98
112) 1,4-dichlorobenzene	8.011	146	103649	50.19	ug/L	98
113) 1,2-dichlorobenzene	8.267	146	95833	50.49	ug/L	99
114) benzyl chloride	8.091	91	111232	51.56	ug/L	99
115) n-butylbenzene	8.241	92	86219	52.70	ug/L	99
116) 1,2-dibromo-3-chloropr...	8.796	157	14295	49.75	ug/L	94
117) 1,3,5-trichlorobenzene	8.919	180	64565	49.95	ug/L	95
118) hexachlorobutadiene	9.410	225	24100	49.99	ug/L	99
119) naphthalene	9.490	128	166787	46.81	ug/L	98
120) 1,2,4-trichlorobenzene	9.324	180	56269	49.44	ug/L	97
121) 1,2,3-trichlorobenzene	9.628	180	53529	48.50	ug/L	99
122) hexachloroethane	8.460	201	28113	52.97	ug/L	98
123) 2-methylnaphthalene	10.231	142	41676	24.67	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192703.d
Acq On : 30 Nov 2021 4:13 pm
Operator : brittank
Sample : JD35406-1msd Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

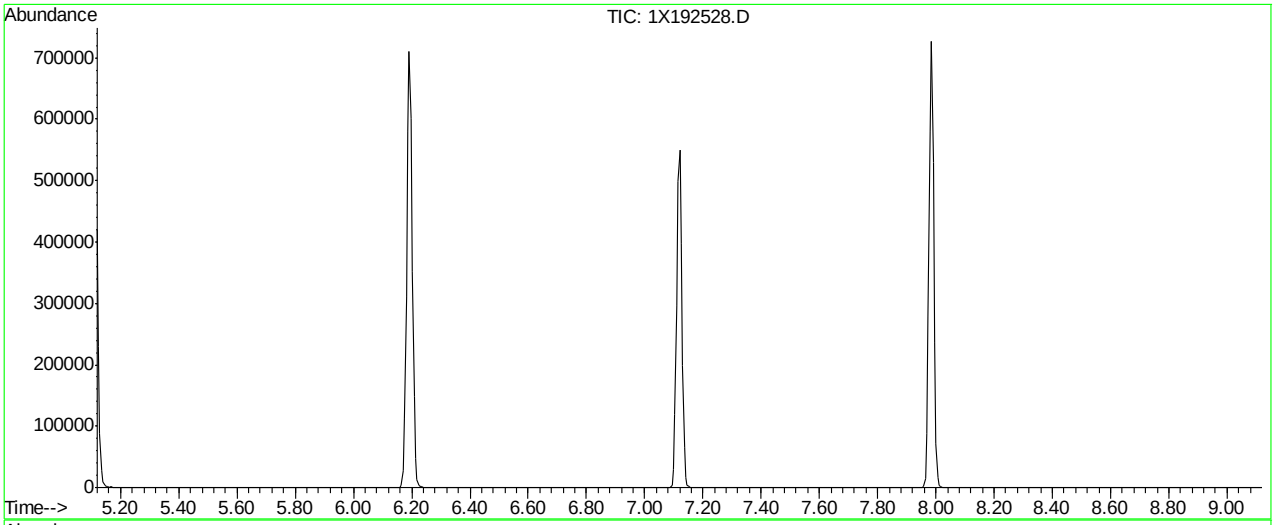
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 02 05:21:35 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



BFB

Data File : C:\msdchem\1\data\VX8342\1X192528.D Vial: 5
Acq On : 17 Nov 2021 7:07 pm Operator: benk
Sample : bfb Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)



AutoFind: Scans 1187, 1188, 1189; Background Corrected with Scan 1180

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.0	20418	PASS
75	95	30	60	48.7	45120	PASS
95	95	100	100	100.0	92688	PASS
96	95	5	9	6.6	6083	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	93.4	86586	PASS
175	174	5	9	7.7	6662	PASS
176	174	95	101	98.7	85501	PASS
177	176	5	9	6.9	5877	PASS

1X192528.D M1X8342.M Sat Nov 27 09:33:00 2021 GCMSX

Average of 7.115 to 7.125 min.: 1X192528.D
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	949	52.00	266	69.00	9405	80.90	3525
37.00	5362	54.95	265	70.00	693	81.85	700
38.05	4853	56.00	1681	72.00	514	86.10	51
39.05	1705	57.00	2836	73.00	4297	86.95	3694
44.00	819	60.00	906	74.00	15857	87.95	3557
45.05	956	61.00	4728	75.00	45120	90.95	363
47.00	1108	62.00	4624	76.00	3824	92.00	2704
48.00	643	63.00	3489	77.00	424	93.00	3959
49.00	4618	64.05	301	77.95	357	94.00	11377
50.00	20418	67.00	251	78.90	3236	95.00	92688
51.00	6125	68.00	9495	79.90	907	96.00	6083

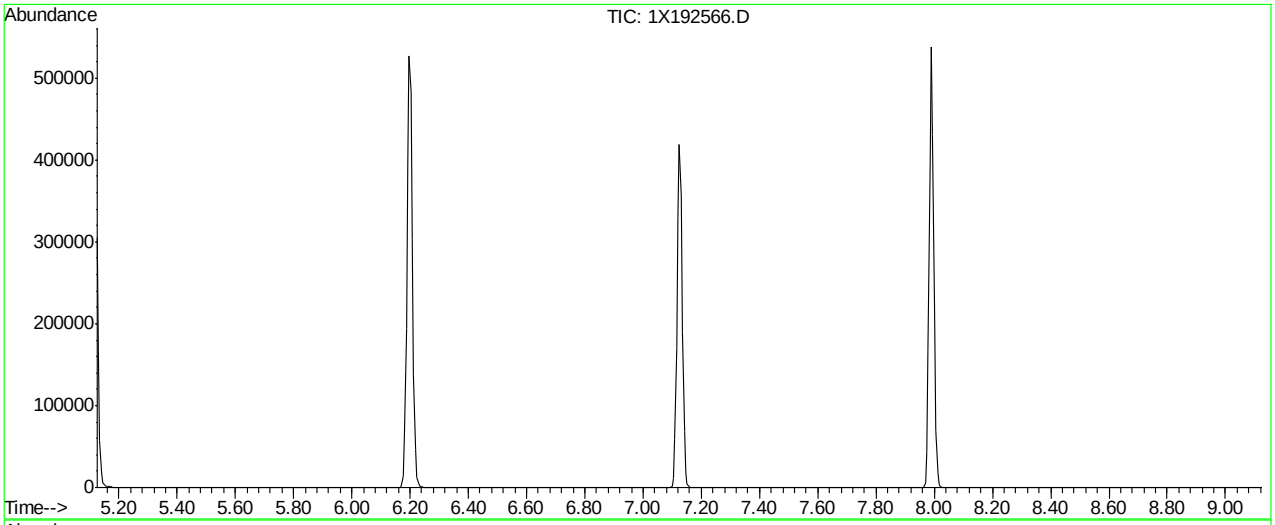
Average of 7.115 to 7.125 min.: 1X192528.D
bfb
Modified:subtracted

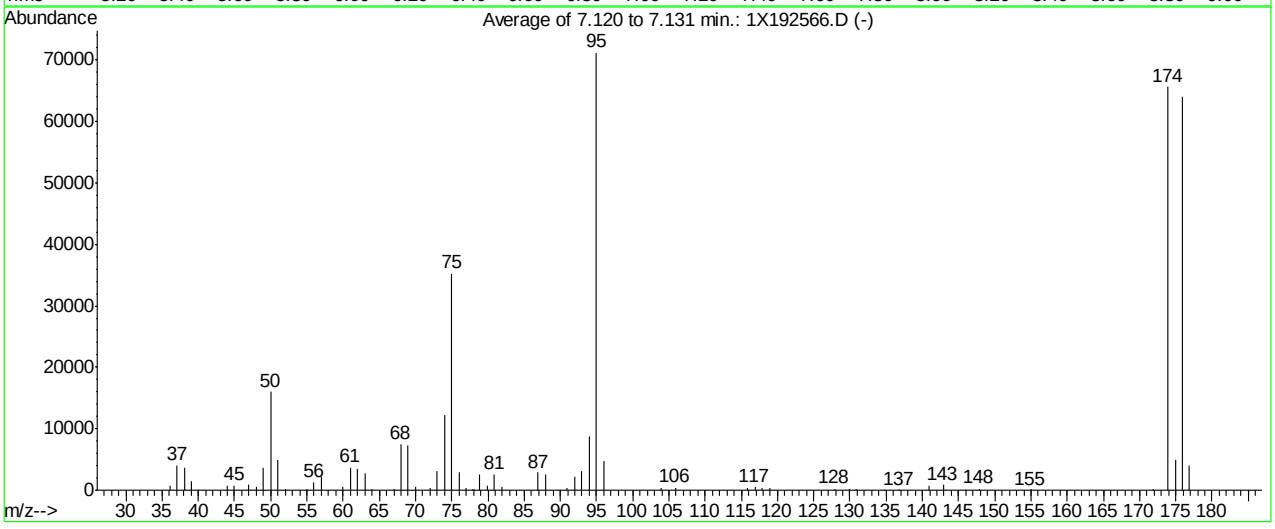
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.90	83	129.85	374	160.90	126		
103.90	458	130.90	66	173.90	86586		
104.95	113	134.90	189	174.90	6662		
105.90	464	136.90	175	175.90	85501		
112.90	50	140.90	1060	176.90	5877		
115.90	383	141.90	51	177.90	125		
116.90	662	142.90	1139				
117.90	429	145.90	102				
118.90	528	147.85	262				
127.90	402	154.95	221				
128.90	70	156.90	58				

BFB

Data File : C:\msdchem\1\data\VX8342\1X192566.D Vial: 43
Acq On : 23 Nov 2021 10:03 am Operator: benk
Sample : bfb2 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)





AutoFind: Scans 1188, 1189, 1190; Background Corrected with Scan 1181

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	15983	PASS
75	95	30	60	49.6	35298	PASS
95	95	100	100	100.0	71226	PASS
96	95	5	9	6.7	4783	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	92.2	65664	PASS
175	174	5	9	7.5	4944	PASS
176	174	95	101	97.5	64024	PASS
177	176	5	9	6.4	4107	PASS

1X192566.D M1X8342.M Sat Nov 27 09:40:27 2021 GCMSX

Average of 7.120 to 7.131 min.: 1X192566.D
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	715	51.00	5009	68.00	7501	78.90	2474
37.05	4050	52.05	199	69.00	7325	79.90	735
38.10	3742	55.00	222	70.00	615	80.90	2618
39.05	1451	56.00	1308	72.00	406	81.90	542
40.00	61	57.00	2275	73.00	3149	86.95	2887
44.00	700	60.00	647	74.00	12311	88.00	2610
45.00	752	61.00	3731	75.00	35298	90.90	329
47.00	905	62.00	3542	76.00	2973	92.00	2118
48.00	508	63.00	2752	76.95	370	93.00	3145
49.00	3590	63.95	229	77.90	159	94.00	8673
50.00	15983	67.05	203	78.10	94	95.00	71226

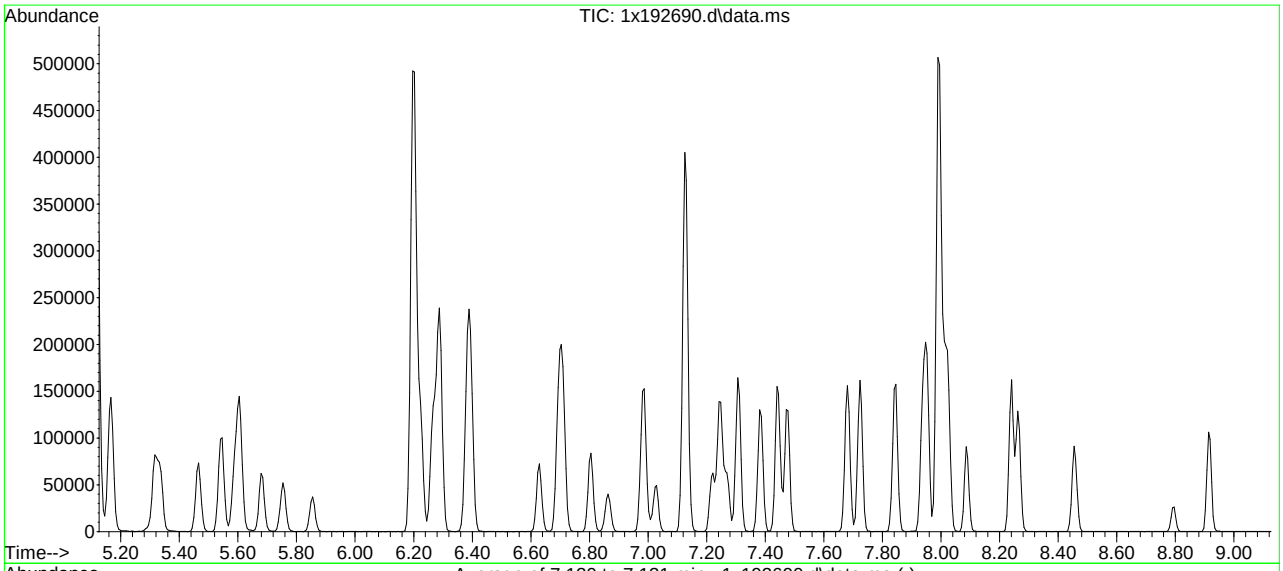
Average of 7.120 to 7.131 min.: 1X192566.D
bfb2
Modified:subtracted

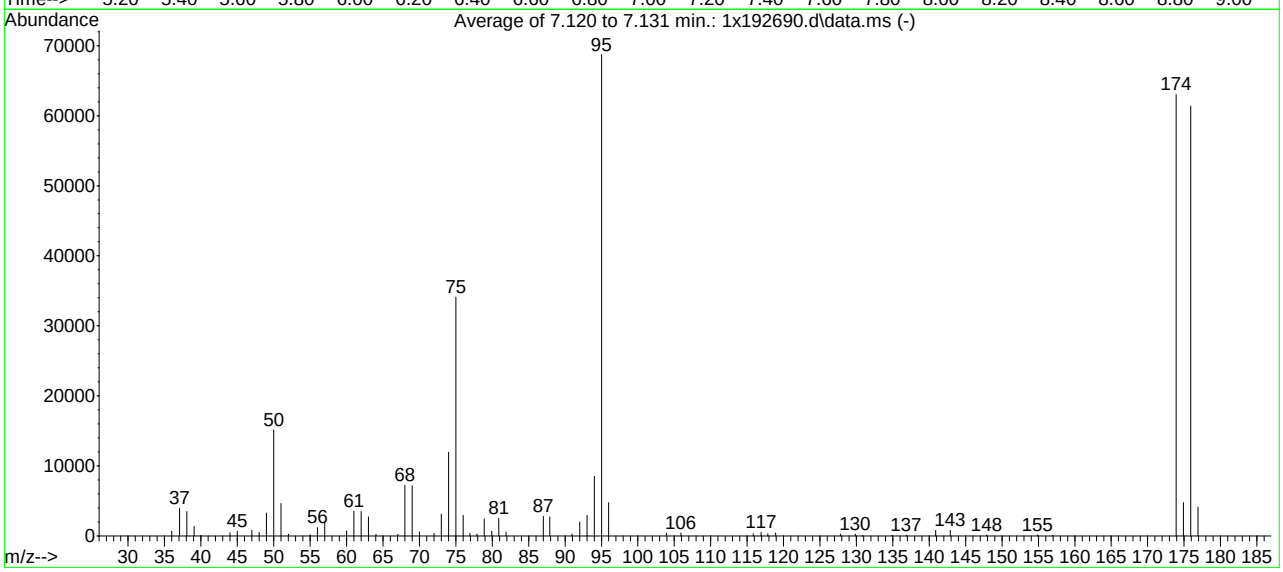
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	4783	136.80	77				
103.90	369	140.90	827				
105.90	387	142.90	870				
115.90	301	145.80	54				
116.90	500	147.85	184				
117.90	290	154.95	137				
118.90	429	171.85	109				
127.85	275	173.90	65664				
129.90	257	174.90	4944				
130.90	105	175.90	64024				
134.80	59	176.90	4107				

BFB

Data File : C:\msdchem\1\data\ke...46\v1x8346\1x192690.d Vial: 2
Acq On : 30 Nov 2021 10:36 am Operator: brittank
Sample : BFB Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)





AutoFind: Scans 1188, 1189, 1190; Background Corrected with Scan 1181

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.1	15161	PASS
75	95	30	60	49.6	34109	PASS
95	95	100	100	100.0	68707	PASS
96	95	5	9	6.9	4750	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	91.7	63029	PASS
175	174	5	9	7.5	4748	PASS
176	174	95	101	97.4	61392	PASS
177	176	5	9	6.7	4124	PASS

1x192690.d M1X8342.M Thu Dec 02 06:24:02 2021

Average of 7.120 to 7.131 min.: 1x192690.d\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	682	51.00	4615	68.00	7217	79.95	656
37.05	3946	52.05	212	69.00	7146	80.90	2523
38.05	3457	55.00	154	70.00	577	81.90	547
39.05	1361	56.00	1197	72.00	386	87.00	2794
40.00	58	57.00	2030	73.00	3101	87.90	2708
44.00	467	60.00	721	74.00	11970	90.95	276
45.00	656	61.00	3542	75.00	34109	92.00	1965
47.00	809	62.00	3483	76.00	2950	93.00	2956
48.00	494	63.00	2692	76.95	396	94.00	8519
49.00	3265	64.05	243	77.90	274	95.00	68707
50.00	15161	67.05	216	78.90	2422	96.00	4750

Average of 7.120 to 7.131 min.: 1x192690.d\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.90	368	140.90	767				
105.90	404	142.90	793				
115.85	287	147.90	130				
116.90	500	154.85	155				
117.85	286	156.90	51				
118.90	414	173.90	63029				
127.80	247	174.90	4748				
129.85	281	175.90	61392				
130.80	51	176.90	4124				
134.90	65						
136.85	119						

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192530.D
Acq On : 17 Nov 2021 7:41 pm
Operator : benk
Sample : ic8342-0.2
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 27 09:34:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 22 15:45:14 2021
Response via : Initial Calibration

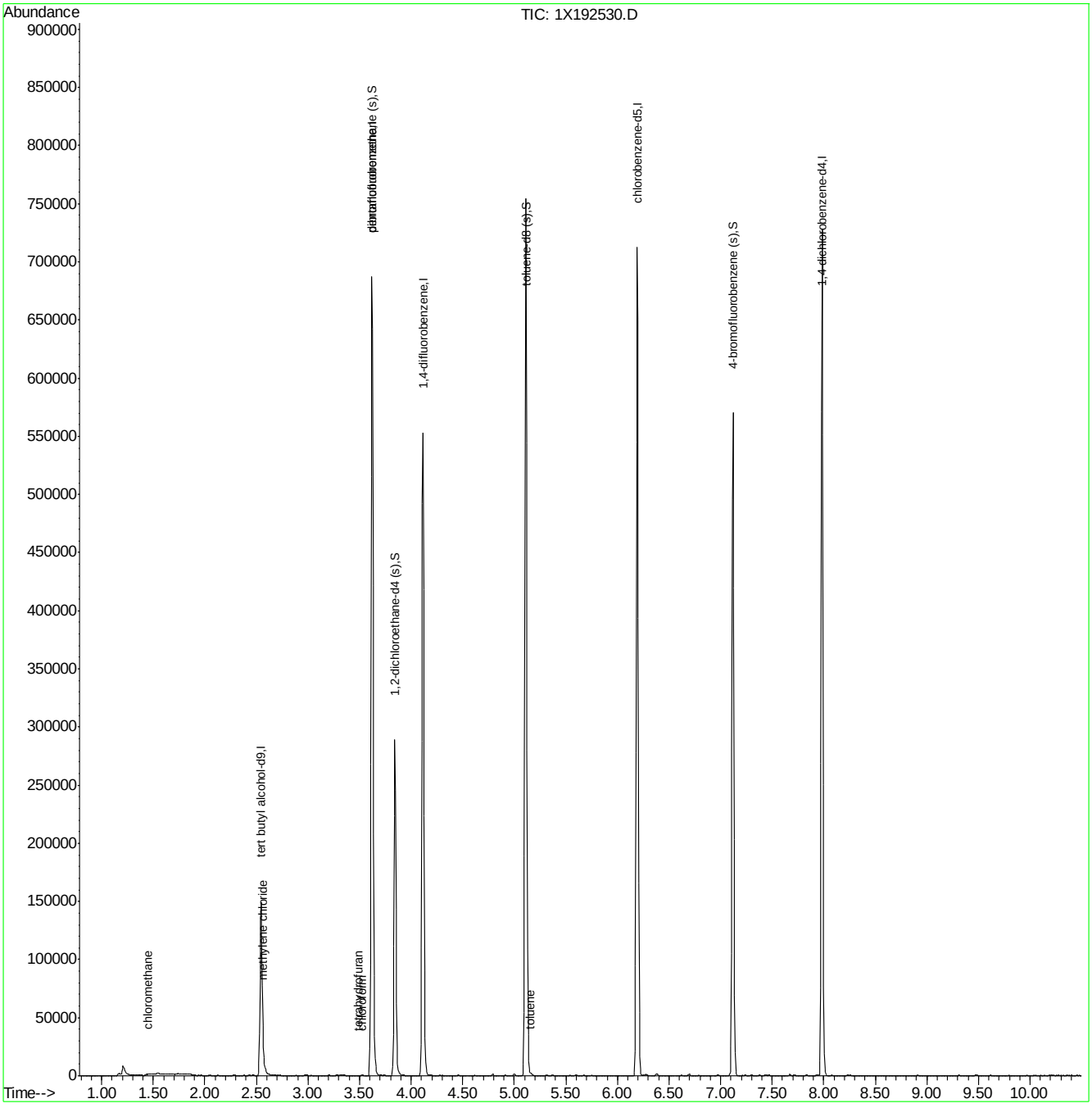
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	2.55	65	130000	500.00	ug/L	0.00
5) pentafluorobenzene	3.62	168	224396	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.12	114	319895	50.00	ug/L	0.00
73) chlorobenzene-d5	6.19	117	308746	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.98	152	135308	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.62	113	114165	51.13	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.26%			
53) 1,2-dichloroethane-d4 (s)	3.84	65	137721	51.09	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.18%			
74) toluene-d8 (s)	5.11	98	376158	50.37	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.74%			
98) 4-bromofluorobenzene (s)	7.12	95	136287	51.61	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.22%			
Target Compounds						Qvalue
8) chloromethane	1.45	50	357	0.19	ug/L #	50
22) methylene chloride	2.57	84	255	0.23	ug/L	81
41) tetrahydrofuran	3.49	42	111	0.22	ug/L #	39
42) chloroform	3.52	83	542	0.24	ug/L #	81
75) toluene	5.16	92	479	0.16	ug/L #	82

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192530.D
Acq On : 17 Nov 2021 7:41 pm
Operator : benk
Sample : ic8342-0.2
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Nov 27 09:34:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 22 15:45:14 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192532.D
Acq On : 17 Nov 2021 8:15 pm
Operator : benk
Sample : ic8342-0.5
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 29 11:12:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 22 15:45:14 2021
Response via : Initial Calibration

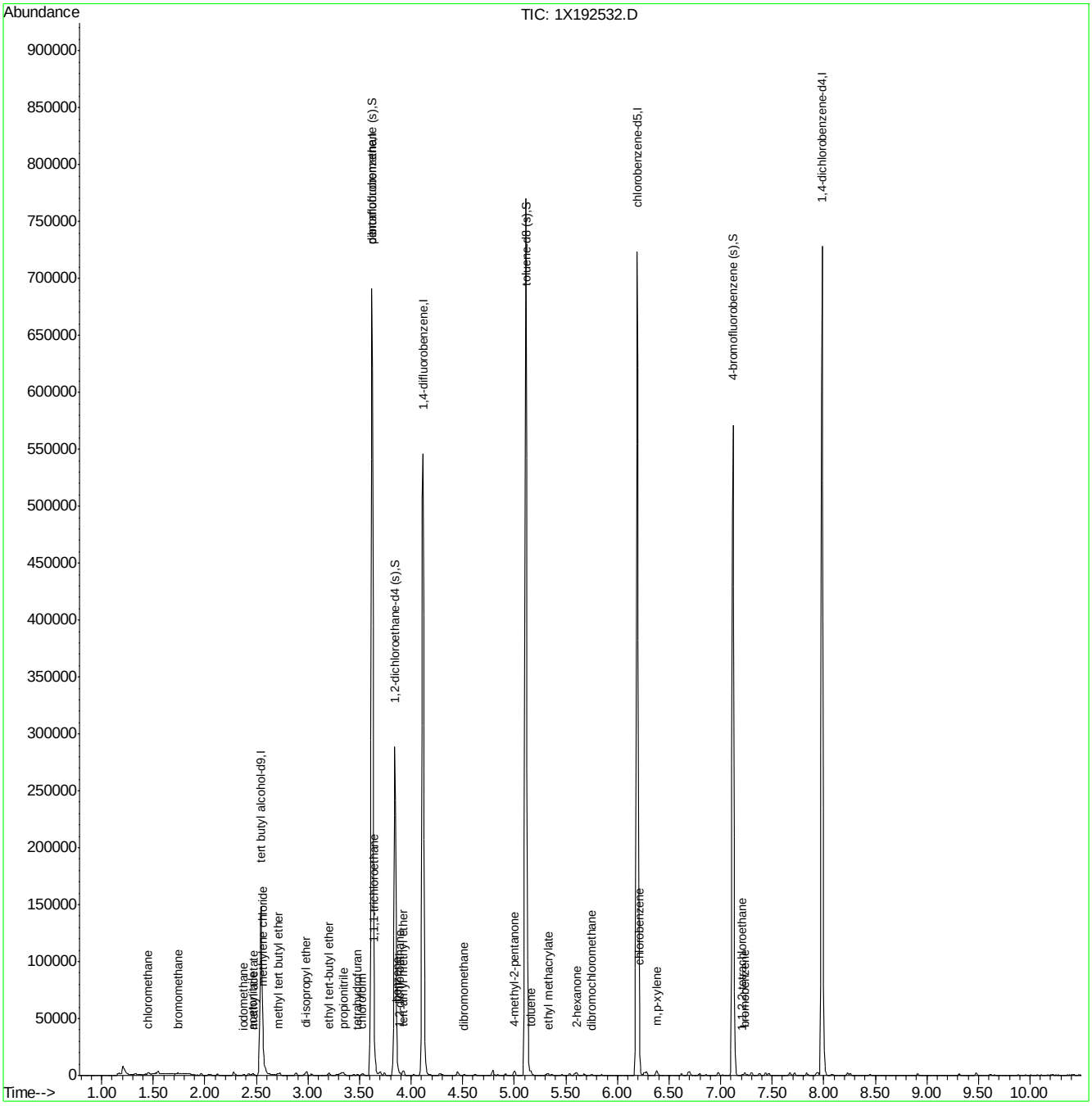
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	2.55	65	129350	500.00	ug/L	0.00
5) pentafluorobenzene	3.62	168	223061	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.12	114	321817	50.00	ug/L	0.00
73) chlorobenzene-d5	6.19	117	307088	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.98	152	134912	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.62	113	114067	51.39	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.78%			
53) 1,2-dichloroethane-d4 (s)	3.84	65	139013	51.26	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.52%			
74) toluene-d8 (s)	5.11	98	375597	50.57	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.14%			
98) 4-bromofluorobenzene (s)	7.12	95	135923	51.62	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.24%			
Target Compounds						Qvalue
8) chloromethane	1.45	50	945	0.52	ug/L	93
10) bromomethane	1.74	96	387	0.51	ug/L #	85
19) acetonitrile	2.46	41	828	3.83	ug/L	70
20) iodomethane	2.38	142	593	0.38	ug/L	82
22) methylene chloride	2.57	84	515	0.46	ug/L	93
23) methyl acetate	2.47	43	543	0.38	ug/L	63
24) methyl tert butyl ether	2.71	73	1371	0.41	ug/L	96
28) di-isopropyl ether	2.98	45	1579	0.36	ug/L	97
33) ethyl tert-butyl ether	3.20	59	1563	0.38	ug/L	98
38) propionitrile	3.35	54	912	3.68	ug/L	99
41) tetrahydrofuran	3.49	42	275	0.55	ug/L #	39
42) chloroform	3.52	83	1032	0.47	ug/L	98
45) 1,1,1-trichloroethane	3.65	97	772	0.34	ug/L #	1
57) benzene	3.87	78	1611	0.34	ug/L	98
58) tert-amyl methyl ether	3.92	73	1305	0.35	ug/L	95
60) 1,2-dichloroethane	3.89	62	1061	0.54	ug/L	91
67) dibromomethane	4.52	93	306	0.38	ug/L	82
71) 4-methyl-2-pentanone	5.00	58	852	1.48	ug/L	87
75) toluene	5.16	92	1037	0.35	ug/L	97
77) ethyl methacrylate	5.33	69	582	0.37	ug/L #	79
81) 2-hexanone	5.60	58	844	1.49	ug/L #	83
83) dibromochloromethane	5.75	129	490	0.34	ug/L	63
86) chlorobenzene	6.22	112	1248	0.37	ug/L	89
89) m,p-xylene	6.38	106	1524	0.66	ug/L	98
99) bromobenzene	7.24	156	529	0.36	ug/L	84
100) 1,1,2,2-tetrachloroethane	7.21	83	549	0.38	ug/L	65

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192532.D
Acq On : 17 Nov 2021 8:15 pm
Operator : benk
Sample : ic8342-0.5
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Nov 29 11:12:03 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 22 15:45:14 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192534.D
Acq On : 17 Nov 2021 8:49 pm
Operator : benk
Sample : ic8342-1
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 29 10:42:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Sat Nov 27 09:42:01 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	2.54	65	122747	500.00	ug/L		0.00
5) pentafluorobenzene	3.62	168	223817	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.11	114	321198	50.00	ug/L		0.00
73) chlorobenzene-d5	6.19	117	308565	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.98	152	134461	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.62	113	113702	50.38	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.76%				
53) 1,2-dichloroethane-d4 (s)	3.84	65	139694	50.83	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.66%				
74) toluene-d8 (s)	5.11	98	375635	50.07	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.14%				
98) 4-bromofluorobenzene (s)	7.12	95	136162	50.95	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.90%				
Target Compounds							Qvalue
2) ethanol	2.04	45	1589	113.35	ug/L		90
3) tertiary butyl alcohol	2.59	59	834	4.74	ug/L		71
6) chlorodifluoromethane	1.33	51	1605	0.91	ug/L		88
7) dichlorodifluoromethane	1.31	85	1511	0.91	ug/L		93
8) chloromethane	1.45	50	2104	1.10	ug/L		93
9) vinyl chloride	1.52	62	1626	0.96	ug/L		88
10) bromomethane	1.73	96	943	1.08	ug/L		89
11) chloroethane	1.80	64	774	0.99	ug/L		93
12) trichlorofluoromethane	1.96	101	2230	0.97	ug/L		96
13) 1,3-butadiene	1.54	54	1249	0.85	ug/L		98
14) ethyl ether	2.12	74	474	0.81	ug/L	#	65
15) acrolein	2.20	56	206	0.84	ug/L		91
16) 1,1-dichloroethene	2.27	96	946	0.82	ug/L		95
18) acetone	2.28	58	513	3.41	ug/L		87
19) acetonitrile	2.46	41	1947	9.16	ug/L		90
20) iodomethane	2.38	142	1331	0.91	ug/L		87
21) carbon disulfide	2.42	76	2917	0.91	ug/L		86
22) methylene chloride	2.56	84	1191	1.04	ug/L		97
23) methyl acetate	2.47	43	1315	0.95	ug/L		97
24) methyl tert butyl ether	2.71	73	3276	0.97	ug/L		97
25) acrylonitrile	2.70	53	542	0.88	ug/L		92
26) trans-1,2-dichloroethene	2.72	96	998	0.81	ug/L		88
28) di-isopropyl ether	2.98	45	4035	0.95	ug/L		97
30) 1,1-dichloroethane	2.99	63	2116	0.89	ug/L		94
33) ethyl tert-butyl ether	3.20	59	3716	0.93	ug/L		99
35) 2,2-dichloropropane	3.34	77	1754	0.89	ug/L		98
36) cis-1,2-dichloroethene	3.33	96	1291	0.98	ug/L		94
37) methyl acrylate	3.35	55	1596	0.90	ug/L		71
38) propionitrile	3.35	54	2414	10.01	ug/L		93
40) bromochloromethane	3.47	128	603	0.92	ug/L	#	74
41) tetrahydrofuran	3.48	42	588	1.09	ug/L		92
42) chloroform	3.52	83	2169	0.95	ug/L		93
44) methacrylonitrile	3.44	67	421	0.77	ug/L		80

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192534.D
Acq On : 17 Nov 2021 8:49 pm
Operator : benk
Sample : ic8342-1
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 29 10:42:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Sat Nov 27 09:42:01 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) 1,1,1-trichloroethane	3.64	97	2032	0.94 ug/L #	1
46) cyclohexane	3.69	84	1562	0.92 ug/L	89
48) 1,1-dichloropropene	3.74	75	1487	0.84 ug/L	90
50) carbon tetrachloride	3.74	117	1638	0.81 ug/L	97
51) isopropyl acetate	3.85	87	251	0.89 ug/L #	1
55) epichlorohydrin	4.84	57	769	4.46 ug/L	74
57) benzene	3.87	78	4015	0.90 ug/L	97
58) tert-amyl methyl ether	3.92	73	3474	0.98 ug/L	98
60) 1,2-dichloroethane	3.89	62	2136	1.05 ug/L	92
61) trichloroethene	4.28	130	1322	0.88 ug/L	89
62) ethyl acrylate	4.30	55	1697	0.89 ug/L	84
64) 2-chloroethyl vinyl ether	4.79	63	3778	4.42 ug/L	96
66) 1,2-dichloropropane	4.45	76	360	0.71 ug/L	92
67) dibromomethane	4.52	93	833	1.02 ug/L	93
69) bromodichloromethane	4.62	83	1502	0.91 ug/L	90
70) cis-1,3-dichloropropene	4.92	75	1592	0.88 ug/L	87
71) 4-methyl-2-pentanone	5.00	58	2036	3.68 ug/L	86
75) toluene	5.16	92	2650	0.93 ug/L	99
76) trans-1,3-dichloropropene	5.31	75	1450	0.82 ug/L	96
77) ethyl methacrylate	5.33	69	1415	0.93 ug/L	87
78) 1,1,2-trichloroethane	5.45	83	866	0.94 ug/L	84
79) tetrachloroethene	5.54	164	1072	0.89 ug/L	87
80) 1,3-dichloropropane	5.58	76	1570	0.88 ug/L	96
81) 2-hexanone	5.60	58	2181	3.86 ug/L	95
82) butyl acetate	5.67	56	847	0.87 ug/L	93
83) dibromochloromethane	5.75	129	1306	0.95 ug/L	97
84) 1,2-dibromoethane	5.84	107	1168	0.92 ug/L	77
85) n-butyl ether	6.26	57	4595	0.87 ug/L	96
86) chlorobenzene	6.22	112	3072	0.93 ug/L	96
87) 1,1,1,2-tetrachloroethane	6.28	131	1102	0.85 ug/L	92
88) ethylbenzene	6.28	91	5181	0.91 ug/L	100
89) m,p-xylene	6.38	106	4111	1.89 ug/L	88
90) o-xylene	6.69	91	3874	0.88 ug/L	98
91) styrene	6.70	104	2941	0.84 ug/L	97
94) bromoform	6.86	173	880	0.87 ug/L	87
95) isopropylbenzene	6.98	105	4734	0.84 ug/L	96
99) bromobenzene	7.24	156	1339	0.95 ug/L	87
100) 1,1,2,2-tetrachloroethane	7.21	83	1354	0.96 ug/L	97
101) trans-1,4-dichloro-2-buten	7.24	53	460	0.86 ug/L #	67
102) 1,2,3-trichloropropane	7.26	110	380	0.86 ug/L #	60
103) n-propylbenzene	7.30	91	5331	0.87 ug/L	99
104) 2-chlorotoluene	7.38	126	1178	0.88 ug/L	88
105) 4-chlorotoluene	7.47	91	3196	0.89 ug/L	97
106) 1,3,5-trimethylbenzene	7.43	105	3616	0.87 ug/L	97
107) tert-butylbenzene	7.67	119	3443	0.87 ug/L	99
108) 1,2,4-trimethylbenzene	7.72	105	3452	0.83 ug/L	90
109) sec-butylbenzene	7.84	105	4604	0.84 ug/L	97
110) 1,3-dichlorobenzene	7.93	146	2278	0.87 ug/L	89
111) p-isopropyltoluene	7.94	119	3951	0.82 ug/L	97
112) 1,4-dichlorobenzene	8.00	146	2602	0.96 ug/L	78

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192534.D
Acq On : 17 Nov 2021 8:49 pm
Operator : benk
Sample : ic8342-1
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 29 10:42:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Sat Nov 27 09:42:01 2021
Response via : Initial Calibration

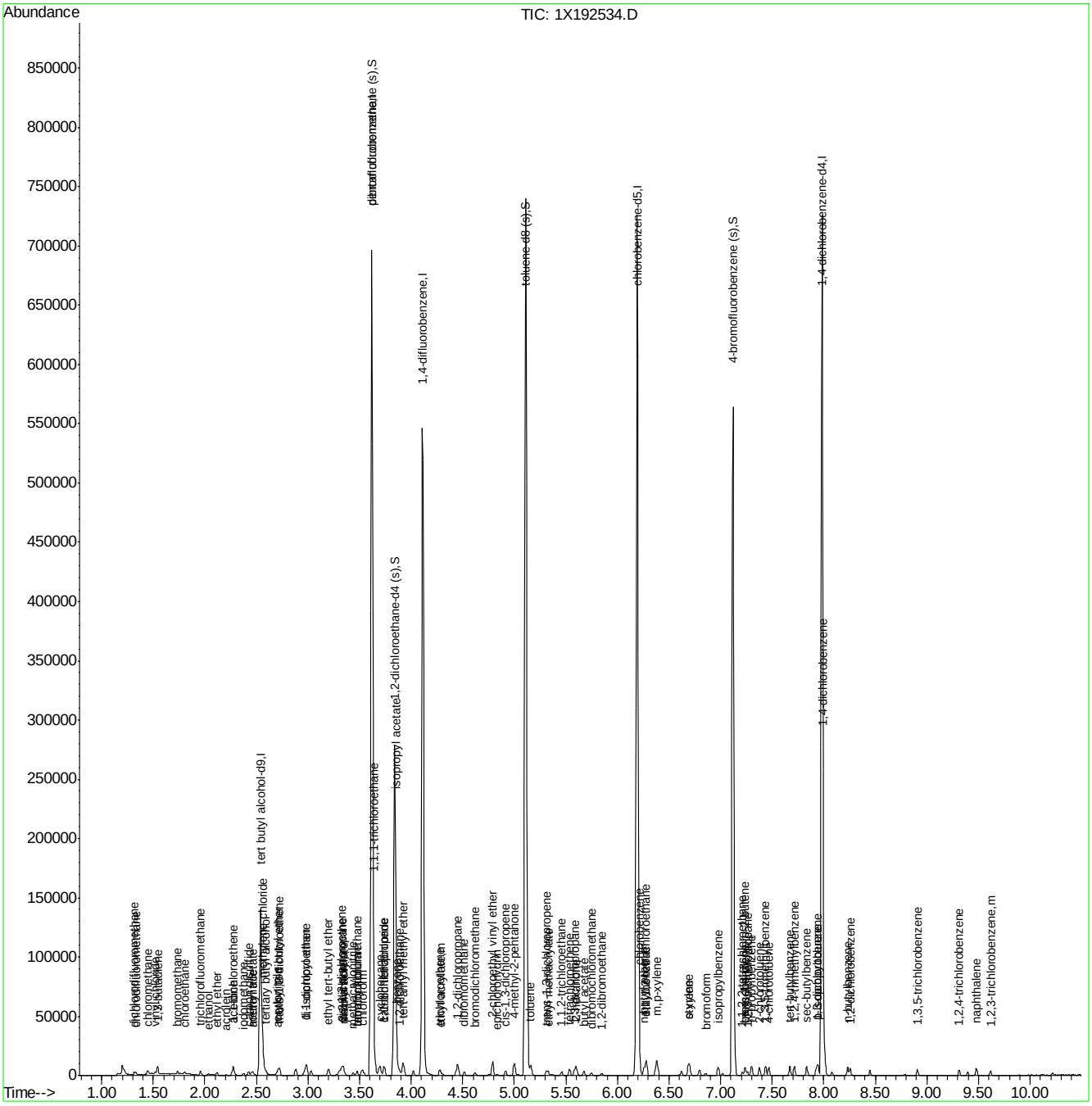
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
113) 1,2-dichlorobenzene	8.26	146	2301	0.92	ug/L	96
115) n-butylbenzene	8.24	92	1739	0.81	ug/L	91
117) 1,3,5-trichlorobenzene	8.91	180	1350	0.80	ug/L	89
119) naphthalene	9.48	128	4190	0.90	ug/L	93
120) 1,2,4-trichlorobenzene	9.31	180	1274	0.75	ug/L	94
121) 1,2,3-trichlorobenzene	9.62	180	1300	0.87	ug/L	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192534.D
Acq On : 17 Nov 2021 8:49 pm
Operator : benk
Sample : ic8342-1
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Nov 29 10:42:39 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Sat Nov 27 09:42:01 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192536.D
Acq On : 17 Nov 2021 9:22 pm
Operator : benk
Sample : ic8342-2
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 29 11:04:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	2.54	65	128797	500.00	ug/L		0.00
5) pentafluorobenzene	3.62	168	224597	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.12	114	324033	50.00	ug/L		0.00
73) chlorobenzene-d5	6.19	117	312548	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.98	152	138763	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.62	113	115583	51.03	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.06%				
53) 1,2-dichloroethane-d4 (s)	3.84	65	140902	50.82	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.64%				
74) toluene-d8 (s)	5.11	98	381665	50.22	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.44%				
98) 4-bromofluorobenzene (s)	7.12	95	138818	50.33	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.66%				
Target Compounds							Qvalue
2) ethanol	2.04	45	3503	238.15	ug/L		97
3) tertiary butyl alcohol	2.59	59	2035	11.02	ug/L		81
4) 1,4-dioxane	4.48	88	596	38.57	ug/L	#	68
6) chlorodifluoromethane	1.33	51	3938	2.22	ug/L		99
7) dichlorodifluoromethane	1.32	85	3733	2.24	ug/L		99
8) chloromethane	1.45	50	4330	2.26	ug/L		96
9) vinyl chloride	1.52	62	3795	2.23	ug/L		96
10) bromomethane	1.74	96	2092	2.40	ug/L		98
11) chloroethane	1.80	64	1821	2.33	ug/L		92
12) trichlorofluoromethane	1.96	101	5210	2.26	ug/L		99
13) 1,3-butadiene	1.54	54	3398	2.30	ug/L		99
14) ethyl ether	2.12	74	1177	2.01	ug/L	#	79
15) acrolein	2.21	56	457	1.87	ug/L		97
16) 1,1-dichloroethene	2.27	96	2448	2.11	ug/L		97
17) freon 113	2.27	101	2882	2.09	ug/L		94
18) acetone	2.28	58	1259	8.35	ug/L		98
19) acetonitrile	2.46	41	4539	21.28	ug/L		95
20) iodomethane	2.38	142	3187	2.16	ug/L		99
21) carbon disulfide	2.42	76	7157	2.22	ug/L		99
22) methylene chloride	2.56	84	2452	2.13	ug/L		87
23) methyl acetate	2.47	43	2922	2.11	ug/L		94
24) methyl tert butyl ether	2.71	73	7401	2.19	ug/L		97
25) acrylonitrile	2.69	53	1277	2.06	ug/L		93
26) trans-1,2-dichloroethene	2.73	96	2675	2.17	ug/L		96
27) hexane	2.88	57	5010	1.97	ug/L		94
28) di-isopropyl ether	2.98	45	8963	2.10	ug/L		95
29) 2-butanone	3.30	72	1324	8.17	ug/L	#	77
30) 1,1-dichloroethane	2.99	63	4949	2.08	ug/L		93
31) chloroprene	3.03	53	4474	1.96	ug/L		94
33) ethyl tert-butyl ether	3.20	59	8275	2.07	ug/L		95
34) ethyl acetate	3.31	45	523	1.93	ug/L		83
35) 2,2-dichloropropane	3.34	77	3982	2.02	ug/L		84
36) cis-1,2-dichloroethene	3.33	96	2734	2.07	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192536.D
Acq On : 17 Nov 2021 9:22 pm
Operator : benk
Sample : ic8342-2
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 29 11:04:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
37) methyl acrylate	3.35	55	3561	1.99 ug/L		99
38) propionitrile	3.35	54	5227	21.59 ug/L		92
39) tert-butyl formate	3.54	59	1639	1.62 ug/L		85
40) bromochloromethane	3.47	128	1407	2.14 ug/L		93
41) tetrahydrofuran	3.48	42	1149	2.13 ug/L		94
42) chloroform	3.52	83	5051	2.19 ug/L		92
44) methacrylonitrile	3.44	67	1066	1.94 ug/L	#	78
45) 1,1,1-trichloroethane	3.64	97	4782	2.20 ug/L	#	9
46) cyclohexane	3.69	84	3577	2.09 ug/L		99
47) tert amyl alcohol	3.82	55	481	8.80 ug/L	#	82
48) 1,1-dichloropropene	3.74	75	3672	2.06 ug/L		99
49) isobutyl alcohol	3.92	42	611	19.64 ug/L	#	65
50) carbon tetrachloride	3.74	117	4245	2.08 ug/L		95
51) isopropyl acetate	3.85	87	489	1.72 ug/L	#	67
54) iso-octane	3.92	57	9939	2.01 ug/L		96
55) epichlorohydrin	4.84	57	1711	9.83 ug/L		68
57) benzene	3.86	78	9838	2.18 ug/L		97
58) tert-amyl methyl ether	3.92	73	7144	2.00 ug/L		96
59) heptane	4.02	57	1845	2.00 ug/L		93
60) 1,2-dichloroethane	3.89	62	4509	2.19 ug/L		94
61) trichloroethene	4.28	130	3139	2.07 ug/L		95
62) ethyl acrylate	4.30	55	3848	1.99 ug/L		97
63) 2-nitropropane	4.76	41	1030	1.85 ug/L		97
64) 2-chloroethyl vinyl ether	4.79	63	8646	10.02 ug/L		97
65) methyl methacrylate	4.46	100	731	2.01 ug/L	#	90
66) 1,2-dichloropropane	4.46	76	1016	1.98 ug/L		96
67) dibromomethane	4.52	93	1789	2.18 ug/L		94
68) methylcyclohexane	4.45	83	4155	1.92 ug/L		97
69) bromodichloromethane	4.62	83	3363	2.02 ug/L		94
70) cis-1,3-dichloropropene	4.92	75	3574	1.96 ug/L		93
71) 4-methyl-2-pentanone	5.00	58	4519	8.10 ug/L		93
75) toluene	5.16	92	6238	2.16 ug/L		97
76) trans-1,3-dichloropropene	5.31	75	3440	1.93 ug/L		97
77) ethyl methacrylate	5.33	69	3083	2.01 ug/L		98
78) 1,1,2-trichloroethane	5.45	83	1742	1.86 ug/L		94
79) tetrachloroethene	5.53	164	2484	2.04 ug/L		96
80) 1,3-dichloropropane	5.58	76	3767	2.09 ug/L		97
81) 2-hexanone	5.60	58	4748	8.29 ug/L		97
82) butyl acetate	5.67	56	1926	1.95 ug/L		99
83) dibromochloromethane	5.75	129	2779	1.99 ug/L		93
84) 1,2-dibromoethane	5.84	107	2527	1.97 ug/L		89
85) n-butyl ether	6.26	57	10653	1.98 ug/L		98
86) chlorobenzene	6.22	112	7063	2.12 ug/L		94
87) 1,1,1,2-tetrachloroethane	6.28	131	2507	1.91 ug/L		88
88) ethylbenzene	6.28	91	11750	2.04 ug/L		98
89) m,p-xylene	6.38	106	9227	4.19 ug/L		98
90) o-xylene	6.69	91	8840	1.98 ug/L		100
91) styrene	6.70	104	6839	1.93 ug/L		97
92) butyl acrylate	6.62	55	4917	1.78 ug/L		95
93) n-amyl acetate	6.79	70	1660	1.77 ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192536.D
Acq On : 17 Nov 2021 9:22 pm
Operator : benk
Sample : ic8342-2
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 29 11:04:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

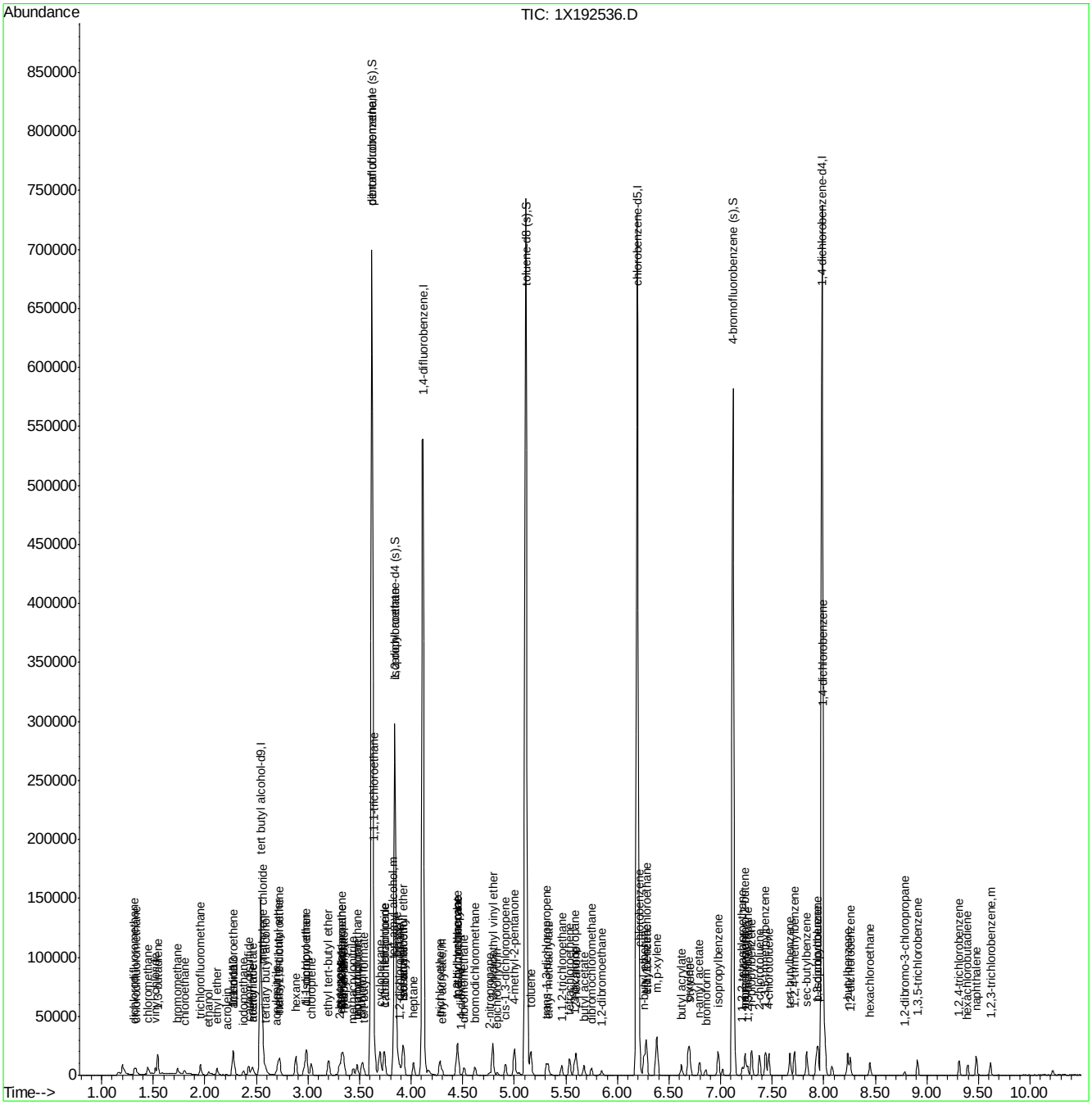
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
94) bromoform	6.85	173	1917	1.87 ug/L	98
95) isopropylbenzene	6.98	105	11567	2.03 ug/L	95
99) bromobenzene	7.24	156	2985	2.05 ug/L	87
100) 1,1,2,2-tetrachloroethane	7.21	83	3095	2.14 ug/L	95
101) trans-1,4-dichloro-2-buten	7.24	53	1028	1.86 ug/L	97
102) 1,2,3-trichloropropane	7.26	110	949	2.08 ug/L #	88
103) n-propylbenzene	7.30	91	12874	2.03 ug/L	100
104) 2-chlorotoluene	7.38	126	2823	2.04 ug/L	97
105) 4-chlorotoluene	7.47	91	7515	2.03 ug/L	99
106) 1,3,5-trimethylbenzene	7.43	105	8708	2.02 ug/L	99
107) tert-butylbenzene	7.68	119	8347	2.06 ug/L	98
108) 1,2,4-trimethylbenzene	7.72	105	8650	2.01 ug/L	96
109) sec-butylbenzene	7.84	105	11068	1.97 ug/L	97
110) 1,3-dichlorobenzene	7.93	146	5474	2.03 ug/L	97
111) p-isopropyltoluene	7.94	119	9622	1.94 ug/L	97
112) 1,4-dichlorobenzene	8.00	146	5698	2.04 ug/L	96
113) 1,2-dichlorobenzene	8.26	146	5115	1.99 ug/L	98
115) n-butylbenzene	8.23	92	4271	1.93 ug/L	96
116) 1,2-dibromo-3-chloropropan	8.79	157	626	1.61 ug/L	89
117) 1,3,5-trichlorobenzene	8.91	180	3423	1.96 ug/L	99
118) hexachlorobutadiene	9.40	225	1207	1.85 ug/L	87
119) naphthalene	9.48	128	9328	1.93 ug/L	95
120) 1,2,4-trichlorobenzene	9.31	180	2876	1.64 ug/L	89
121) 1,2,3-trichlorobenzene	9.62	180	2897	1.88 ug/L	95
122) hexachloroethane	8.45	201	1289	1.79 ug/L	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192536.D
Acq On : 17 Nov 2021 9:22 pm
Operator : benk
Sample : ic8342-2
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Nov 29 11:04:54 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192538.D
Acq On : 17 Nov 2021 9:56 pm
Operator : benk
Sample : ic8342-4
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 29 10:40:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	2.55	65	130446	500.00	ug/L		0.00
5) pentafluorobenzene	3.62	168	226265	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.12	114	326419	50.00	ug/L		0.00
73) chlorobenzene-d5	6.19	117	313314	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.98	152	140493	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.62	113	116002	50.84	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.68%				
53) 1,2-dichloroethane-d4 (s)	3.84	65	142090	50.88	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.76%				
74) toluene-d8 (s)	5.11	98	383012	50.28	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.56%				
98) 4-bromofluorobenzene (s)	7.12	95	140583	50.34	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.68%				
Target Compounds							Qvalue
2) ethanol	2.04	45	6273	421.08	ug/L		99
3) tertiary butyl alcohol	2.59	59	3659	19.57	ug/L		84
4) 1,4-dioxane	4.49	88	1490	95.20	ug/L		94
6) chlorodifluoromethane	1.33	51	6820	3.81	ug/L		99
7) dichlorodifluoromethane	1.32	85	5795	3.46	ug/L		97
8) chloromethane	1.45	50	7453	3.87	ug/L		98
9) vinyl chloride	1.53	62	6575	3.84	ug/L		98
10) bromomethane	1.74	96	3837	4.36	ug/L		95
11) chloroethane	1.80	64	3188	4.05	ug/L		94
12) trichlorofluoromethane	1.96	101	8186	3.53	ug/L		95
13) 1,3-butadiene	1.55	54	5532	3.72	ug/L		98
14) ethyl ether	2.12	74	2236	3.78	ug/L		98
15) acrolein	2.21	56	858	3.48	ug/L		85
16) 1,1-dichloroethene	2.28	96	4408	3.77	ug/L		96
17) freon 113	2.27	101	4876	3.51	ug/L		95
18) acetone	2.29	58	2398	15.79	ug/L	#	81
19) acetonitrile	2.46	41	9569	44.53	ug/L		97
20) iodomethane	2.38	142	5454	3.67	ug/L		96
21) carbon disulfide	2.43	76	11909	3.66	ug/L		99
22) methylene chloride	2.57	84	4362	3.76	ug/L		91
23) methyl acetate	2.47	43	5812	4.16	ug/L		99
24) methyl tert butyl ether	2.72	73	13103	3.86	ug/L		97
25) acrylonitrile	2.70	53	2332	3.74	ug/L		96
26) trans-1,2-dichloroethene	2.73	96	4682	3.78	ug/L		92
27) hexane	2.89	57	8549	3.34	ug/L		97
28) di-isopropyl ether	2.98	45	17235	4.02	ug/L		97
29) 2-butanone	3.30	72	2447	14.99	ug/L	#	86
30) 1,1-dichloroethane	2.99	63	9304	3.87	ug/L		95
31) chloroprene	3.03	53	8406	3.65	ug/L		94
32) vinyl acetate	2.97	86	785	3.09	ug/L	#	94
33) ethyl tert-butyl ether	3.20	59	15830	3.94	ug/L		97
34) ethyl acetate	3.31	45	1067	3.90	ug/L		88
35) 2,2-dichloropropane	3.34	77	7443	3.75	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192538.D
Acq On : 17 Nov 2021 9:56 pm
Operator : benk
Sample : ic8342-4
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 29 10:40:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
36) cis-1,2-dichloroethene	3.33	96	4861	3.65 ug/L		95
37) methyl acrylate	3.35	55	7019	3.90 ug/L		97
38) propionitrile	3.35	54	9902	40.61 ug/L		86
39) tert-butyl formate	3.54	59	3460	3.40 ug/L		93
40) bromochloromethane	3.47	128	2646	4.00 ug/L		95
41) tetrahydrofuran	3.49	42	2265	4.16 ug/L		91
42) chloroform	3.52	83	8867	3.82 ug/L		96
44) methacrylonitrile	3.44	67	2048	3.70 ug/L		100
45) 1,1,1-trichloroethane	3.65	97	8562	3.92 ug/L	#	68
46) cyclohexane	3.69	84	6058	3.51 ug/L		98
47) tert amyl alcohol	3.82	55	1135	20.62 ug/L	#	65
48) 1,1-dichloropropene	3.74	75	6612	3.68 ug/L		94
49) isobutyl alcohol	3.93	42	1238	39.50 ug/L	#	56
50) carbon tetrachloride	3.74	117	7367	3.59 ug/L		98
51) isopropyl acetate	3.85	87	1110	3.87 ug/L	#	64
54) iso-octane	3.92	57	17103	3.43 ug/L		97
55) epichlorohydrin	4.84	57	3337	19.03 ug/L		85
56) n-butyl alcohol	4.17	56	5124	145.03 ug/L		95
57) benzene	3.87	78	17760	3.91 ug/L		99
58) tert-amyl methyl ether	3.92	73	14121	3.92 ug/L		99
59) heptane	4.02	57	2998	3.23 ug/L		94
60) 1,2-dichloroethane	3.89	62	8003	3.86 ug/L		98
61) trichloroethene	4.28	130	5611	3.68 ug/L		99
62) ethyl acrylate	4.30	55	7310	3.76 ug/L		98
63) 2-nitropropane	4.76	41	2079	3.70 ug/L		88
64) 2-chloroethyl vinyl ether	4.79	63	16383	18.84 ug/L		96
65) methyl methacrylate	4.46	100	1313	3.58 ug/L	#	77
66) 1,2-dichloropropane	4.45	76	1965	3.79 ug/L		98
67) dibromomethane	4.52	93	3299	3.99 ug/L		97
68) methylcyclohexane	4.45	83	7246	3.33 ug/L		97
69) bromodichloromethane	4.62	83	6455	3.86 ug/L		98
70) cis-1,3-dichloropropene	4.92	75	7032	3.83 ug/L		98
71) 4-methyl-2-pentanone	5.00	58	8890	15.81 ug/L		99
72) 3-methyl-1-butanol	5.04	70	766	33.56 ug/L	#	65
75) toluene	5.16	92	11386	3.93 ug/L		99
76) trans-1,3-dichloropropene	5.31	75	6559	3.67 ug/L		97
77) ethyl methacrylate	5.33	69	5922	3.84 ug/L		90
78) 1,1,2-trichloroethane	5.46	83	3786	4.04 ug/L		96
79) tetrachloroethene	5.54	164	4421	3.62 ug/L		100
80) 1,3-dichloropropane	5.58	76	6993	3.87 ug/L		95
81) 2-hexanone	5.60	58	9271	16.14 ug/L		97
82) butyl acetate	5.67	56	3805	3.85 ug/L		95
83) dibromochloromethane	5.75	129	5396	3.85 ug/L		99
84) 1,2-dibromoethane	5.85	107	4853	3.78 ug/L		98
85) n-butyl ether	6.26	57	19806	3.68 ug/L		99
86) chlorobenzene	6.22	112	13037	3.90 ug/L		99
87) 1,1,1,2-tetrachloroethane	6.28	131	4773	3.63 ug/L		92
88) ethylbenzene	6.28	91	21353	3.70 ug/L		98
89) m,p-xylene	6.38	106	16808	7.61 ug/L		97
90) o-xylene	6.69	91	16783	3.75 ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192538.D
Acq On : 17 Nov 2021 9:56 pm
Operator : benk
Sample : ic8342-4
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 29 10:40:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

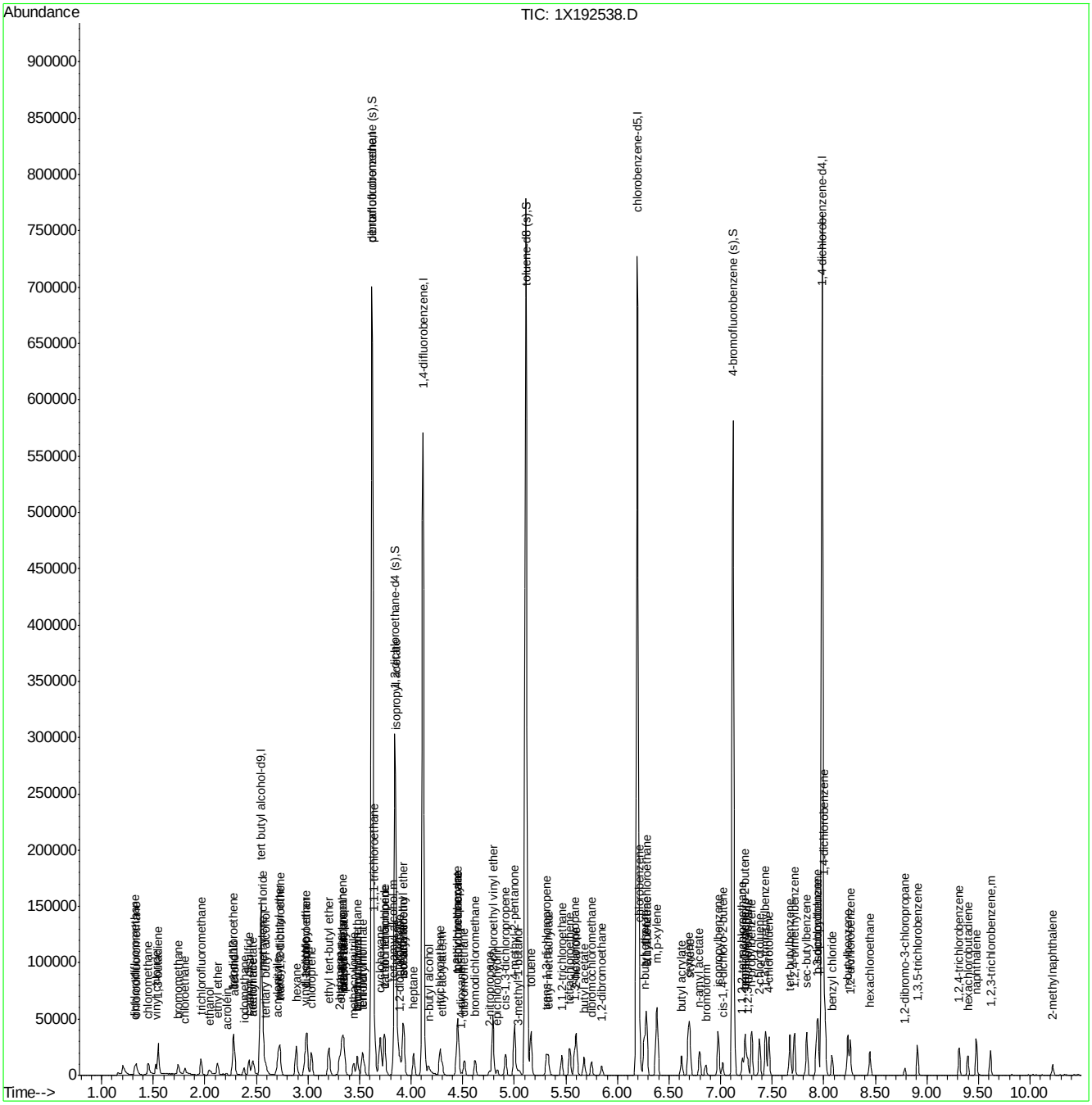
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
91) styrene	6.70	104	12550	3.53	ug/L		98
92) butyl acrylate	6.62	55	9709	3.50	ug/L		98
93) n-amyl acetate	6.80	70	3412	3.63	ug/L		90
94) bromoform	6.86	173	3542	3.45	ug/L		97
95) isopropylbenzene	6.98	105	20718	3.63	ug/L		99
96) cis-1,4-dichloro-2-butene	7.02	88	2067	3.24	ug/L		98
99) bromobenzene	7.24	156	5719	3.89	ug/L		98
100) 1,1,2,2-tetrachloroethane	7.21	83	5962	4.06	ug/L		93
101) trans-1,4-dichloro-2-buten	7.24	53	2118	3.79	ug/L		95
102) 1,2,3-trichloropropane	7.26	110	1828	3.95	ug/L	#	86
103) n-propylbenzene	7.30	91	23764	3.70	ug/L		99
104) 2-chlorotoluene	7.38	126	5265	3.75	ug/L		95
105) 4-chlorotoluene	7.47	91	13901	3.71	ug/L		99
106) 1,3,5-trimethylbenzene	7.43	105	15986	3.66	ug/L		98
107) tert-butylbenzene	7.68	119	14945	3.63	ug/L		97
108) 1,2,4-trimethylbenzene	7.72	105	16237	3.72	ug/L		98
109) sec-butylbenzene	7.84	105	20490	3.60	ug/L		100
110) 1,3-dichlorobenzene	7.93	146	10369	3.79	ug/L		98
111) p-isopropyltoluene	7.95	119	17798	3.55	ug/L		99
112) 1,4-dichlorobenzene	8.01	146	10383	3.67	ug/L		97
113) 1,2-dichlorobenzene	8.26	146	9591	3.69	ug/L		96
114) benzyl chloride	8.08	91	9363	3.17	ug/L		98
115) n-butylbenzene	8.24	92	7958	3.55	ug/L		96
116) 1,2-dibromo-3-chloropropan	8.79	157	1337	3.40	ug/L		98
117) 1,3,5-trichlorobenzene	8.91	180	6530	3.69	ug/L		100
118) hexachlorobutadiene	9.40	225	2104	3.18	ug/L		98
119) naphthalene	9.48	128	17807	3.65	ug/L		98
120) 1,2,4-trichlorobenzene	9.31	180	5456	3.08	ug/L		89
121) 1,2,3-trichlorobenzene	9.62	180	5277	3.38	ug/L		93
122) hexachloroethane	8.45	201	2345	3.22	ug/L		90
123) 2-methylnaphthalene	10.22	142	3813	1.59	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192538.D
Acq On : 17 Nov 2021 9:56 pm
Operator : benk
Sample : ic8342-4
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Nov 29 10:40:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192540.D
Acq On : 17 Nov 2021 10:30 pm
Operator : benk
Sample : ic8342-8
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 29 10:40:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	2.54	65	136160	500.00	ug/L		0.00
5) pentafluorobenzene	3.62	168	230801	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.11	114	329323	50.00	ug/L		0.00
73) chlorobenzene-d5	6.19	117	319001	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.98	152	143118	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.62	113	116788	50.18	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%				
53) 1,2-dichloroethane-d4 (s)	3.84	65	144257	51.20	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.40%				
74) toluene-d8 (s)	5.11	98	385947	49.76	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.52%				
98) 4-bromofluorobenzene (s)	7.12	95	142382	50.05	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.10%				
Target Compounds							Qvalue
2) ethanol	2.03	45	13114	843.34	ug/L		95
3) tertiary butyl alcohol	2.59	59	7746	39.68	ug/L		89
4) 1,4-dioxane	4.49	88	3497	214.07	ug/L		89
6) chlorodifluoromethane	1.33	51	15478	8.48	ug/L		98
7) dichlorodifluoromethane	1.31	85	13737	8.04	ug/L		95
8) chloromethane	1.44	50	15966	8.12	ug/L		97
9) vinyl chloride	1.52	62	14621	8.38	ug/L		99
10) bromomethane	1.73	96	7863	8.77	ug/L		98
11) chloroethane	1.80	64	6993	8.71	ug/L		97
12) trichlorofluoromethane	1.95	101	19048	8.04	ug/L		99
13) 1,3-butadiene	1.54	54	12995	8.57	ug/L		99
14) ethyl ether	2.12	74	5036	8.35	ug/L		95
15) acrolein	2.20	56	2065	8.20	ug/L		94
16) 1,1-dichloroethene	2.27	96	9938	8.33	ug/L		97
17) freon 113	2.27	101	11423	8.07	ug/L		97
18) acetone	2.28	58	5232	33.77	ug/L		93
19) acetonitrile	2.45	41	19088	87.09	ug/L		96
20) iodomethane	2.38	142	12243	8.07	ug/L		97
21) carbon disulfide	2.42	76	26806	8.08	ug/L		98
22) methylene chloride	2.56	84	9511	8.03	ug/L		95
23) methyl acetate	2.47	43	11941	8.38	ug/L		98
24) methyl tert butyl ether	2.71	73	28335	8.17	ug/L		100
25) acrylonitrile	2.69	53	5123	8.05	ug/L		97
26) trans-1,2-dichloroethene	2.73	96	10426	8.25	ug/L		97
27) hexane	2.88	57	20737	7.93	ug/L		97
28) di-isopropyl ether	2.98	45	36044	8.23	ug/L		94
29) 2-butanone	3.30	72	5310	31.89	ug/L		94
30) 1,1-dichloroethane	2.98	63	20111	8.21	ug/L		98
31) chloroprene	3.03	53	19250	8.20	ug/L		100
32) vinyl acetate	2.96	86	1987	7.68	ug/L	#	70
33) ethyl tert-butyl ether	3.20	59	33243	8.11	ug/L		96
34) ethyl acetate	3.31	45	2044	7.33	ug/L		96
35) 2,2-dichloropropane	3.34	77	16839	8.32	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192540.D
Acq On : 17 Nov 2021 10:30 pm
Operator : benk
Sample : ic8342-8
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 29 10:40:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	3.33	96	10979	8.08	ug/L		97
37) methyl acrylate	3.35	55	14881	8.10	ug/L		97
38) propionitrile	3.34	54	20802	83.63	ug/L		82
39) tert-butyl formate	3.54	59	7709	7.42	ug/L		94
40) bromochloromethane	3.47	128	5560	8.23	ug/L		89
41) tetrahydrofuran	3.48	42	4486	8.08	ug/L		96
42) chloroform	3.52	83	18690	7.90	ug/L		98
44) methacrylonitrile	3.44	67	4768	8.45	ug/L		91
45) 1,1,1-trichloroethane	3.64	97	18970	8.50	ug/L		81
46) cyclohexane	3.69	84	13772	7.83	ug/L		82
47) tert amyl alcohol	3.82	55	2273	40.48	ug/L		94
48) 1,1-dichloropropene	3.74	75	15138	8.27	ug/L		97
49) isobutyl alcohol	3.92	42	2665	83.36	ug/L	#	88
50) carbon tetrachloride	3.74	117	17178	8.21	ug/L		97
51) isopropyl acetate	3.85	87	2403	8.22	ug/L	#	85
54) iso-octane	3.92	57	41314	8.20	ug/L		98
55) epichlorohydrin	4.84	57	7034	39.75	ug/L		88
56) n-butyl alcohol	4.17	56	12616	353.93	ug/L		98
57) benzene	3.86	78	38890	8.50	ug/L		99
58) tert-amyl methyl ether	3.92	73	29774	8.19	ug/L		99
59) heptane	4.02	57	7789	8.31	ug/L		90
60) 1,2-dichloroethane	3.89	62	16583	7.92	ug/L		99
61) trichloroethene	4.28	130	12663	8.23	ug/L		99
62) ethyl acrylate	4.30	55	16139	8.22	ug/L		99
63) 2-nitropropane	4.76	41	4088	7.21	ug/L		96
64) 2-chloroethyl vinyl ether	4.79	63	35474	40.44	ug/L		98
65) methyl methacrylate	4.45	100	2745	7.43	ug/L	#	73
66) 1,2-dichloropropane	4.45	76	4555	8.71	ug/L		92
67) dibromomethane	4.51	93	6822	8.19	ug/L		90
68) methylcyclohexane	4.44	83	17234	7.84	ug/L		97
69) bromodichloromethane	4.62	83	13359	7.91	ug/L		98
70) cis-1,3-dichloropropene	4.92	75	15359	8.29	ug/L		99
71) 4-methyl-2-pentanone	5.00	58	19081	33.64	ug/L		95
72) 3-methyl-1-butanol	5.03	70	2534	110.03	ug/L		85
75) toluene	5.16	92	24658	8.35	ug/L		95
76) trans-1,3-dichloropropene	5.31	75	14084	7.73	ug/L		98
77) ethyl methacrylate	5.33	69	12789	8.15	ug/L		95
78) 1,1,2-trichloroethane	5.46	83	7635	8.00	ug/L		92
79) tetrachloroethene	5.53	164	9856	7.93	ug/L		93
80) 1,3-dichloropropane	5.58	76	14432	7.85	ug/L		99
81) 2-hexanone	5.60	58	19881	34.00	ug/L		98
82) butyl acetate	5.67	56	8101	8.05	ug/L		99
83) dibromochloromethane	5.75	129	11414	7.99	ug/L		95
84) 1,2-dibromoethane	5.85	107	10482	8.03	ug/L		97
85) n-butyl ether	6.26	57	44002	8.02	ug/L		97
86) chlorobenzene	6.22	112	27935	8.21	ug/L		99
87) 1,1,1,2-tetrachloroethane	6.28	131	10467	7.82	ug/L		98
88) ethylbenzene	6.28	91	47170	8.02	ug/L		99
89) m,p-xylene	6.38	106	37269	16.57	ug/L		98
90) o-xylene	6.69	91	36557	8.01	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192540.D
Acq On : 17 Nov 2021 10:30 pm
Operator : benk
Sample : ic8342-8
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 29 10:40:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

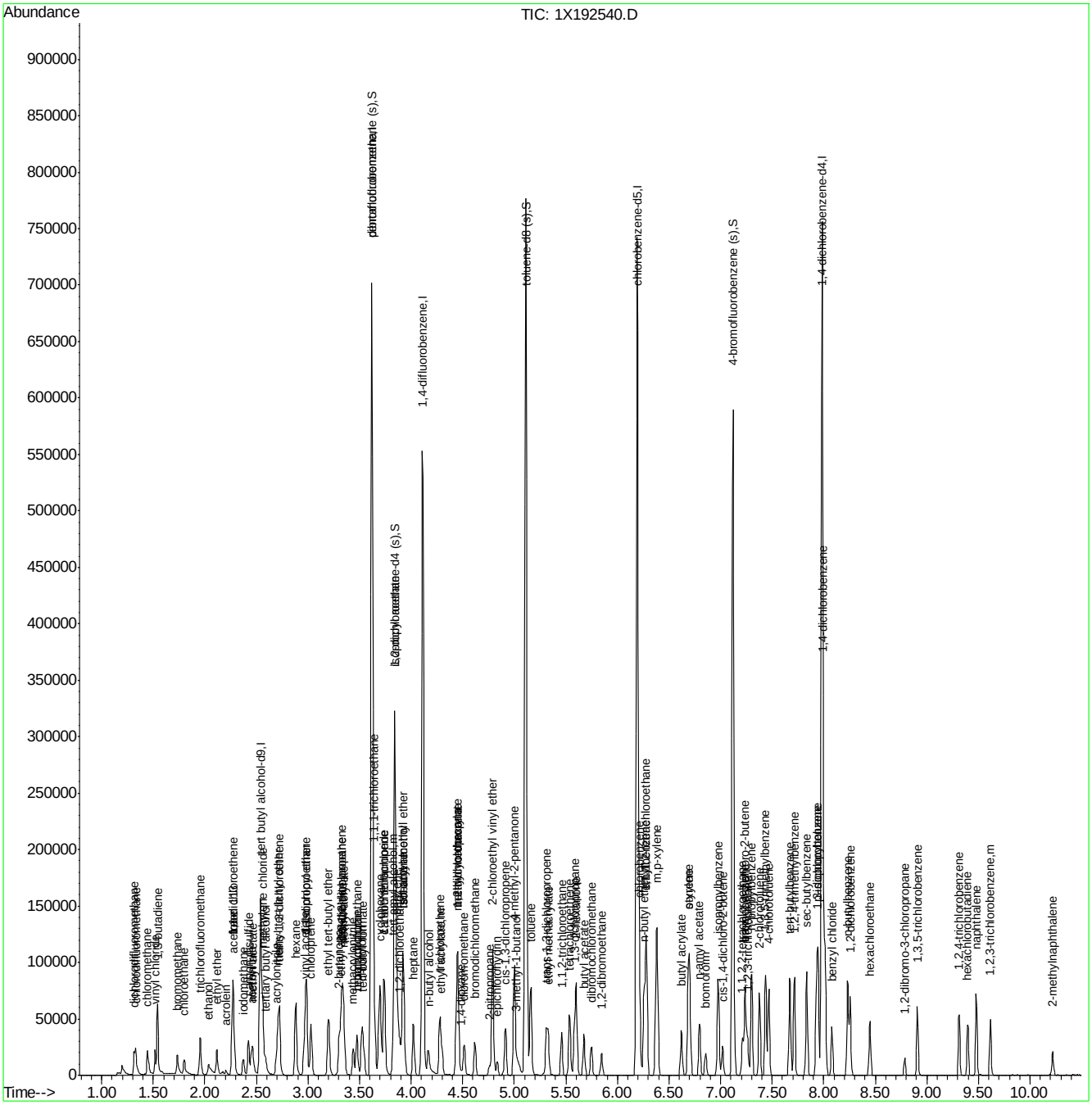
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) styrene	6.70	104	28492	7.88	ug/L	96
92) butyl acrylate	6.62	55	21619	7.66	ug/L	96
93) n-amyl acetate	6.79	70	7389	7.71	ug/L	96
94) bromoform	6.85	173	7847	7.50	ug/L	93
95) isopropylbenzene	6.98	105	46870	8.08	ug/L	98
96) cis-1,4-dichloro-2-butene	7.02	88	4786	7.38	ug/L	97
99) bromobenzene	7.24	156	12332	8.23	ug/L	98
100) 1,1,2,2-tetrachloroethane	7.21	83	12321	8.25	ug/L	97
101) trans-1,4-dichloro-2-buten	7.24	53	4687	8.23	ug/L	98
102) 1,2,3-trichloropropane	7.26	110	3987	8.46	ug/L	85
103) n-propylbenzene	7.30	91	53946	8.24	ug/L	99
104) 2-chlorotoluene	7.38	126	11525	8.07	ug/L	98
105) 4-chlorotoluene	7.47	91	30708	8.04	ug/L	99
106) 1,3,5-trimethylbenzene	7.43	105	36194	8.14	ug/L	98
107) tert-butylbenzene	7.68	119	34446	8.22	ug/L	98
108) 1,2,4-trimethylbenzene	7.72	105	35925	8.09	ug/L	98
109) sec-butylbenzene	7.84	105	47973	8.26	ug/L	99
110) 1,3-dichlorobenzene	7.93	146	22142	7.94	ug/L	100
111) p-isopropyltoluene	7.94	119	41438	8.12	ug/L	98
112) 1,4-dichlorobenzene	8.00	146	22872	7.93	ug/L	99
113) 1,2-dichlorobenzene	8.26	146	20872	7.88	ug/L	100
114) benzyl chloride	8.08	91	21977	7.30	ug/L	99
115) n-butylbenzene	8.23	92	18657	8.17	ug/L	98
116) 1,2-dibromo-3-chloropropan	8.79	157	3230	8.05	ug/L	94
117) 1,3,5-trichlorobenzene	8.91	180	14227	7.88	ug/L	97
118) hexachlorobutadiene	9.40	225	5180	7.70	ug/L	97
119) naphthalene	9.48	128	39231	7.89	ug/L	99
120) 1,2,4-trichlorobenzene	9.31	180	12031	6.67	ug/L	97
121) 1,2,3-trichlorobenzene	9.62	180	11512	7.25	ug/L	100
122) hexachloroethane	8.45	201	5362	7.24	ug/L	93
123) 2-methylnaphthalene	10.22	142	8629	3.53	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192540.D
Acq On : 17 Nov 2021 10:30 pm
Operator : benk
Sample : ic8342-8
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Nov 29 10:40:15 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192542.D
Acq On : 17 Nov 2021 11:04 pm
Operator : benk
Sample : ic8342-20
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 29 10:40:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	2.54	65	135418	500.00	ug/L		0.00
5) pentafluorobenzene	3.62	168	237341	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.12	114	338608	50.00	ug/L		0.00
73) chlorobenzene-d5	6.19	117	324638	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.98	152	150260	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.62	113	119368	49.87	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.74%				
53) 1,2-dichloroethane-d4 (s)	3.84	65	146763	50.66	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.32%				
74) toluene-d8 (s)	5.11	98	396331	50.21	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.42%				
98) 4-bromofluorobenzene (s)	7.12	95	147594	49.42	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.84%				
Target Compounds							Qvalue
2) ethanol	2.04	45	29286	1893.65	ug/L		98
3) tertiary butyl alcohol	2.59	59	19545	100.68	ug/L		88
4) 1,4-dioxane	4.49	88	8366	514.93	ug/L		96
6) chlorodifluoromethane	1.33	51	37005	19.72	ug/L		98
7) dichlorodifluoromethane	1.32	85	35452	20.17	ug/L		99
8) chloromethane	1.45	50	40295	19.94	ug/L		97
9) vinyl chloride	1.52	62	35285	19.66	ug/L		100
10) bromomethane	1.73	96	18232	19.77	ug/L		99
11) chloroethane	1.80	64	17284	20.94	ug/L		98
12) trichlorofluoromethane	1.96	101	48852	20.06	ug/L		98
13) 1,3-butadiene	1.55	54	31638	20.29	ug/L		99
14) ethyl ether	2.12	74	12815	20.67	ug/L		90
15) acrolein	2.21	56	5369	20.74	ug/L		96
16) 1,1-dichloroethene	2.27	96	24546	20.01	ug/L		94
17) freon 113	2.27	101	28327	19.46	ug/L		97
18) acetone	2.28	58	13314	83.57	ug/L		100
19) acetonitrile	2.46	41	45907	203.68	ug/L		98
20) iodomethane	2.38	142	31269	20.05	ug/L		97
21) carbon disulfide	2.42	76	65646	19.24	ug/L		98
22) methylene chloride	2.57	84	23823	19.56	ug/L		99
23) methyl acetate	2.47	43	31658	21.61	ug/L		97
24) methyl tert butyl ether	2.71	73	73536	20.63	ug/L		98
25) acrylonitrile	2.70	53	13659	20.88	ug/L		95
26) trans-1,2-dichloroethene	2.73	96	26124	20.09	ug/L		96
27) hexane	2.88	57	52516	19.54	ug/L		100
28) di-isopropyl ether	2.98	45	93061	20.67	ug/L		100
29) 2-butanone	3.30	72	13785	80.51	ug/L		94
30) 1,1-dichloroethane	2.99	63	50669	20.11	ug/L		99
31) chloroprene	3.03	53	48224	19.97	ug/L		99
32) vinyl acetate	2.97	86	5419	20.36	ug/L	#	83
33) ethyl tert-butyl ether	3.20	59	88497	20.99	ug/L		99
34) ethyl acetate	3.31	45	5987	20.88	ug/L		97
35) 2,2-dichloropropane	3.34	77	41351	19.86	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192542.D
Acq On : 17 Nov 2021 11:04 pm
Operator : benk
Sample : ic8342-20
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 29 10:40:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	3.33	96	28035	20.06	ug/L		99
37) methyl acrylate	3.35	55	38365	20.31	ug/L		99
38) propionitrile	3.35	54	52844	206.59	ug/L		99
39) tert-butyl formate	3.54	59	21643	20.26	ug/L		97
40) bromochloromethane	3.47	128	13997	20.15	ug/L		95
41) tetrahydrofuran	3.48	42	10674	18.69	ug/L		98
42) chloroform	3.52	83	47879	19.68	ug/L		99
44) methacrylonitrile	3.44	67	12211	21.04	ug/L		98
45) 1,1,1-trichloroethane	3.65	97	47003	20.49	ug/L		96
46) cyclohexane	3.69	84	35894	19.85	ug/L		99
47) tert amyl alcohol	3.83	55	6111	105.82	ug/L		96
48) 1,1-dichloropropene	3.74	75	37974	20.16	ug/L		98
49) isobutyl alcohol	3.92	42	6971	212.04	ug/L	#	90
50) carbon tetrachloride	3.75	117	42971	19.96	ug/L		97
51) isopropyl acetate	3.85	87	6220	20.69	ug/L	#	89
54) iso-octane	3.92	57	102851	19.86	ug/L		99
55) epichlorohydrin	4.84	57	18893	103.85	ug/L		98
56) n-butyl alcohol	4.16	56	36558	997.48	ug/L		98
57) benzene	3.87	78	97904	20.80	ug/L		99
58) tert-amyl methyl ether	3.92	73	78158	20.91	ug/L		99
59) heptane	4.02	57	19192	19.91	ug/L		96
60) 1,2-dichloroethane	3.89	62	42635	19.81	ug/L		99
61) trichloroethene	4.28	130	31422	19.85	ug/L		99
62) ethyl acrylate	4.30	55	41509	20.57	ug/L		98
63) 2-nitropropane	4.76	41	11440	19.64	ug/L		96
64) 2-chloroethyl vinyl ether	4.79	63	92757	102.85	ug/L		99
65) methyl methacrylate	4.46	100	7712	20.29	ug/L		93
66) 1,2-dichloropropane	4.46	76	11428	21.26	ug/L		98
67) dibromomethane	4.52	93	17487	20.41	ug/L		98
68) methylcyclohexane	4.45	83	44346	19.63	ug/L		97
69) bromodichloromethane	4.62	83	35468	20.42	ug/L		99
70) cis-1,3-dichloropropene	4.92	75	40942	21.50	ug/L		98
71) 4-methyl-2-pentanone	5.00	58	49063	84.14	ug/L		95
72) 3-methyl-1-butanol	5.03	70	9274	391.65	ug/L		96
75) toluene	5.16	92	61928	20.61	ug/L		97
76) trans-1,3-dichloropropene	5.31	75	38607	20.83	ug/L		100
77) ethyl methacrylate	5.33	69	33850	21.20	ug/L		99
78) 1,1,2-trichloroethane	5.46	83	19776	20.35	ug/L		99
79) tetrachloroethene	5.54	164	25245	19.96	ug/L		99
80) 1,3-dichloropropane	5.58	76	37844	20.22	ug/L		96
81) 2-hexanone	5.60	58	49909	83.87	ug/L		96
82) butyl acetate	5.67	56	20745	20.27	ug/L		96
83) dibromochloromethane	5.75	129	31125	21.42	ug/L		97
84) 1,2-dibromoethane	5.85	107	26781	20.15	ug/L		97
85) n-butyl ether	6.26	57	113878	20.41	ug/L		98
86) chlorobenzene	6.22	112	71506	20.65	ug/L		98
87) 1,1,1,2-tetrachloroethane	6.28	131	27761	20.38	ug/L		98
88) ethylbenzene	6.28	91	120192	20.09	ug/L		99
89) m,p-xylene	6.38	106	95076	41.55	ug/L		98
90) o-xylene	6.69	91	93389	20.11	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192542.D
Acq On : 17 Nov 2021 11:04 pm
Operator : benk
Sample : ic8342-20
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 29 10:40:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

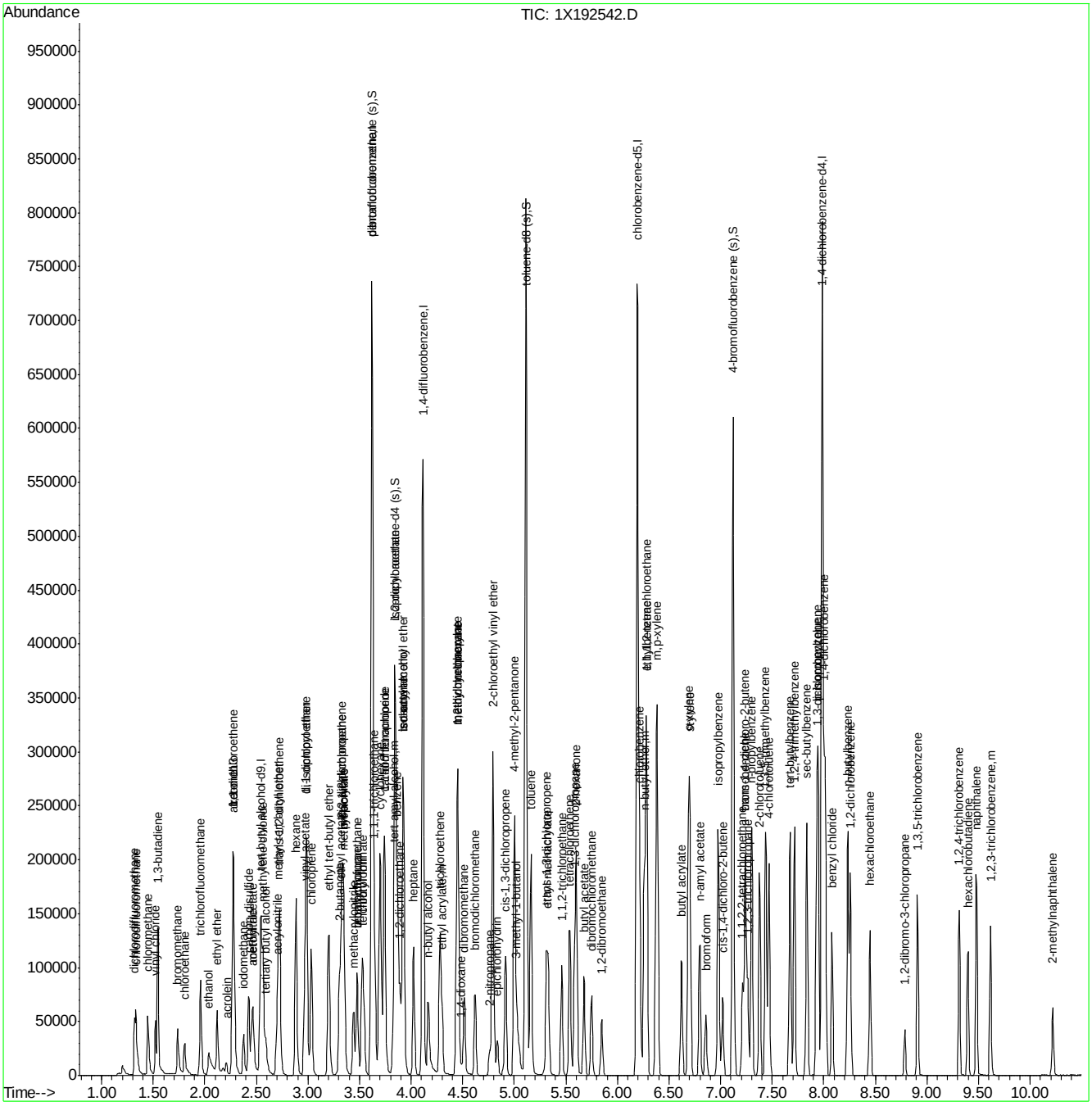
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) styrene	6.70	104	76136	20.69	ug/L	99
92) butyl acrylate	6.62	55	58931	20.53	ug/L	98
93) n-amyl acetate	6.80	70	19891	20.40	ug/L	98
94) bromoform	6.86	173	21872	20.54	ug/L	97
95) isopropylbenzene	6.98	105	119360	20.21	ug/L	99
96) cis-1,4-dichloro-2-butene	7.02	88	13339	20.20	ug/L	98
99) bromobenzene	7.24	156	32214	20.48	ug/L	99
100) 1,1,2,2-tetrachloroethane	7.21	83	32363	20.63	ug/L	99
101) trans-1,4-dichloro-2-buten	7.24	53	12440	20.81	ug/L	97
102) 1,2,3-trichloropropane	7.26	110	9868	19.95	ug/L	94
103) n-propylbenzene	7.30	91	138391	20.12	ug/L	99
104) 2-chlorotoluene	7.38	126	30117	20.08	ug/L	100
105) 4-chlorotoluene	7.47	91	81265	20.26	ug/L	97
106) 1,3,5-trimethylbenzene	7.43	105	93973	20.14	ug/L	99
107) tert-butylbenzene	7.67	119	86965	19.77	ug/L	99
108) 1,2,4-trimethylbenzene	7.72	105	93985	20.16	ug/L	100
109) sec-butylbenzene	7.83	105	122873	20.16	ug/L	99
110) 1,3-dichlorobenzene	7.93	146	58688	20.05	ug/L	99
111) p-isopropyltoluene	7.95	119	107726	20.11	ug/L	99
112) 1,4-dichlorobenzene	8.01	146	60314	19.92	ug/L	99
113) 1,2-dichlorobenzene	8.26	146	56080	20.16	ug/L	98
114) benzyl chloride	8.08	91	63057	19.94	ug/L	99
115) n-butylbenzene	8.24	92	48909	20.40	ug/L	97
116) 1,2-dibromo-3-chloropropan	8.78	157	8691	20.64	ug/L	98
117) 1,3,5-trichlorobenzene	8.91	180	37844	19.97	ug/L	97
118) hexachlorobutadiene	9.40	225	13544	19.17	ug/L	97
119) naphthalene	9.48	128	105628	20.23	ug/L	98
120) 1,2,4-trichlorobenzene	9.31	180	32963	17.40	ug/L	95
121) 1,2,3-trichlorobenzene	9.62	180	31942	19.15	ug/L	99
122) hexachloroethane	8.45	201	15022	19.31	ug/L	91
123) 2-methylnaphthalene	10.22	142	23872	9.31	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192542.D
Acq On : 17 Nov 2021 11:04 pm
Operator : benk
Sample : ic8342-20
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Nov 29 10:40:16 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192544.D
Acq On : 17 Nov 2021 11:38 pm
Operator : benk
Sample : icc8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 29 10:40:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	2.55	65	144251	500.00	ug/L	0.00
5) pentafluorobenzene	3.62	168	247544	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.12	114	353189	50.00	ug/L	0.00
73) chlorobenzene-d5	6.20	117	339286	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.98	152	157546	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.62	113	123158	49.34	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.68%			
53) 1,2-dichloroethane-d4 (s)	3.84	65	148811	49.25	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.50%			
74) toluene-d8 (s)	5.11	98	410317	49.74	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.48%			
98) 4-bromofluorobenzene (s)	7.12	95	153736	49.09	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.18%			
Target Compounds						Qvalue
2) ethanol	2.04	45	78011	4735.37	ug/L	100
3) tertiary butyl alcohol	2.59	59	50789	245.61	ug/L	100
4) 1,4-dioxane	4.49	88	22799	1317.35	ug/L	100
6) chlorodifluoromethane	1.33	51	97958	50.05	ug/L	100
7) dichlorodifluoromethane	1.32	85	92716	50.58	ug/L	100
8) chloromethane	1.45	50	101221	48.02	ug/L	100
9) vinyl chloride	1.52	62	91645	48.95	ug/L	100
10) bromomethane	1.74	96	42430	44.11	ug/L	100
11) chloroethane	1.80	64	42894	49.82	ug/L	100
12) trichlorofluoromethane	1.96	101	128150	50.45	ug/L	100
13) 1,3-butadiene	1.54	54	83185	51.16	ug/L	100
14) ethyl ether	2.12	74	33489	51.80	ug/L	100
15) acrolein	2.20	56	15000	55.55	ug/L	100
16) 1,1-dichloroethene	2.27	96	66105	51.66	ug/L	100
17) freon 113	2.27	101	76892	50.64	ug/L	100
18) acetone	2.28	58	31030	186.74	ug/L	100
19) acetonitrile	2.46	41	120062	510.73	ug/L	100
20) iodomethane	2.38	142	86280	53.05	ug/L	100
21) carbon disulfide	2.42	76	180980	50.85	ug/L	100
22) methylene chloride	2.56	84	62403	49.11	ug/L	100
23) methyl acetate	2.47	43	78596	51.45	ug/L	100
24) methyl tert butyl ether	2.71	73	186723	50.22	ug/L	100
25) acrylonitrile	2.70	53	35378	51.85	ug/L	100
26) trans-1,2-dichloroethene	2.73	96	69352	51.14	ug/L	100
27) hexane	2.88	57	145441	51.87	ug/L	100
28) di-isopropyl ether	2.98	45	242513	51.64	ug/L	100
29) 2-butanone	3.30	72	35190	197.04	ug/L	100
30) 1,1-dichloroethane	2.98	63	133494	50.79	ug/L	100
31) chloroprene	3.03	53	128534	51.02	ug/L	100
32) vinyl acetate	2.97	86	15210	54.78	ug/L	100
33) ethyl tert-butyl ether	3.20	59	226767	51.57	ug/L	100
34) ethyl acetate	3.31	45	15252	50.99	ug/L	100
35) 2,2-dichloropropane	3.34	77	111441	51.32	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192544.D
Acq On : 17 Nov 2021 11:38 pm
Operator : benk
Sample : icc8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 29 10:40:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) cis-1,2-dichloroethene	3.33	96	72478	49.73	ug/L	100
37) methyl acrylate	3.35	55	101942	51.73	ug/L	100
38) propionitrile	3.35	54	137675	516.04	ug/L	100
39) tert-butyl formate	3.54	59	60935	54.68	ug/L	100
40) bromochloromethane	3.47	128	35676	49.24	ug/L	100
41) tetrahydrofuran	3.48	42	27924	46.88	ug/L	100
42) chloroform	3.52	83	123077	48.50	ug/L	100
44) methacrylonitrile	3.44	67	31764	52.47	ug/L	100
45) 1,1,1-trichloroethane	3.65	97	125216	52.34	ug/L	100
46) cyclohexane	3.69	84	96063	50.94	ug/L	100
47) tert amyl alcohol	3.83	55	15093	250.58	ug/L	100
48) 1,1-dichloropropene	3.74	75	101820	51.83	ug/L	100
49) isobutyl alcohol	3.92	42	16892	492.64	ug/L	100
50) carbon tetrachloride	3.74	117	117929	52.53	ug/L	100
51) isopropyl acetate	3.85	87	16183	51.61	ug/L	100
54) iso-octane	3.92	57	275203	50.94	ug/L	100
55) epichlorohydrin	4.84	57	49399	260.32	ug/L	100
56) n-butyl alcohol	4.17	56	101529	2655.84	ug/L	100
57) benzene	3.87	78	258171	52.59	ug/L	100
58) tert-amyl methyl ether	3.92	73	202702	51.99	ug/L	100
59) heptane	4.02	57	51405	51.11	ug/L	100
60) 1,2-dichloroethane	3.89	62	107037	47.67	ug/L	100
61) trichloroethene	4.28	130	84127	50.95	ug/L	100
62) ethyl acrylate	4.30	55	106223	50.46	ug/L	100
63) 2-nitropropane	4.76	41	30131	49.58	ug/L	100
64) 2-chloroethyl vinyl ether	4.79	63	240894	256.08	ug/L	100
65) methyl methacrylate	4.46	100	19689	49.67	ug/L	100
66) 1,2-dichloropropane	4.46	76	29470	52.56	ug/L	100
67) dibromomethane	4.52	93	44685	50.00	ug/L	100
68) methylcyclohexane	4.45	83	121599	51.60	ug/L	100
69) bromodichloromethane	4.62	83	90950	50.20	ug/L	100
70) cis-1,3-dichloropropene	4.92	75	106684	53.72	ug/L	100
71) 4-methyl-2-pentanone	5.00	58	126277	207.61	ug/L	100
72) 3-methyl-1-butanol	5.03	70	27251	1103.32	ug/L	100
75) toluene	5.16	92	163044	51.93	ug/L	100
76) trans-1,3-dichloropropene	5.31	75	101527	52.40	ug/L	100
77) ethyl methacrylate	5.33	69	86565	51.88	ug/L	100
78) 1,1,2-trichloroethane	5.46	83	50857	50.08	ug/L	100
79) tetrachloroethene	5.54	164	67560	51.12	ug/L	100
80) 1,3-dichloropropane	5.58	76	98263	50.25	ug/L	100
81) 2-hexanone	5.60	58	125047	201.06	ug/L	100
82) butyl acetate	5.67	56	54207	50.68	ug/L	100
83) dibromochloromethane	5.75	129	80263	52.84	ug/L	100
84) 1,2-dibromoethane	5.85	107	70412	50.69	ug/L	100
85) n-butyl ether	6.26	57	305127	52.32	ug/L	100
86) chlorobenzene	6.22	112	188249	52.03	ug/L	100
87) 1,1,1,2-tetrachloroethane	6.28	131	74393	52.26	ug/L	100
88) ethylbenzene	6.28	91	321590	51.43	ug/L	100
89) m,p-xylene	6.38	106	254367	106.36	ug/L	100
90) o-xylene	6.69	91	252191	51.97	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192544.D
Acq On : 17 Nov 2021 11:38 pm
Operator : benk
Sample : icc8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 29 10:40:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

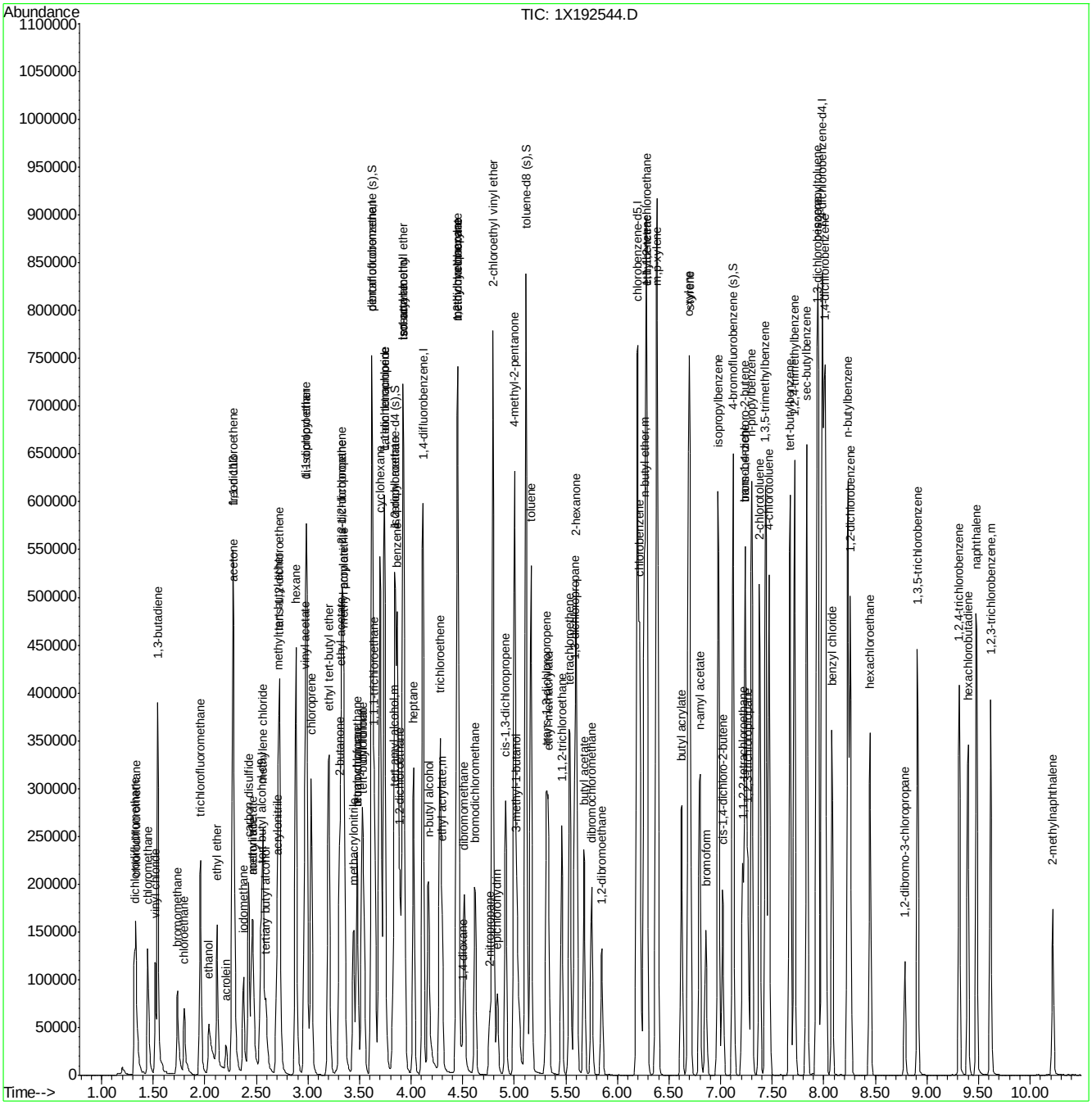
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) styrene	6.70	104	202832	52.75	ug/L	100
92) butyl acrylate	6.62	55	155484	51.83	ug/L	100
93) n-amyl acetate	6.80	70	51585	50.63	ug/L	100
94) bromoform	6.86	173	59303	53.29	ug/L	100
95) isopropylbenzene	6.98	105	322217	52.21	ug/L	100
96) cis-1,4-dichloro-2-butene	7.02	88	35945	52.08	ug/L	100
99) bromobenzene	7.24	156	85877	52.07	ug/L	100
100) 1,1,2,2-tetrachloroethane	7.21	83	84369	51.29	ug/L	100
101) trans-1,4-dichloro-2-buten	7.24	53	32742	52.25	ug/L	100
102) 1,2,3-trichloropropane	7.26	110	26069	50.26	ug/L	100
103) n-propylbenzene	7.30	91	374134	51.89	ug/L	100
104) 2-chlorotoluene	7.38	126	80449	51.16	ug/L	100
105) 4-chlorotoluene	7.47	91	215089	51.14	ug/L	100
106) 1,3,5-trimethylbenzene	7.43	105	252294	51.57	ug/L	100
107) tert-butylbenzene	7.68	119	236519	51.29	ug/L	100
108) 1,2,4-trimethylbenzene	7.72	105	254098	51.98	ug/L	100
109) sec-butylbenzene	7.84	105	337336	52.78	ug/L	100
110) 1,3-dichlorobenzene	7.93	146	156964	51.15	ug/L	100
111) p-isopropyltoluene	7.95	119	301787	53.72	ug/L	100
112) 1,4-dichlorobenzene	8.01	146	160368	50.53	ug/L	100
113) 1,2-dichlorobenzene	8.26	146	148753	51.00	ug/L	100
114) benzyl chloride	8.08	91	175079	52.80	ug/L	100
115) n-butylbenzene	8.24	92	134257	53.40	ug/L	100
116) 1,2-dibromo-3-chloropropan	8.79	157	23414	53.03	ug/L	100
117) 1,3,5-trichlorobenzene	8.91	180	104081	52.39	ug/L	100
118) hexachlorobutadiene	9.40	225	38872	52.47	ug/L	100
119) naphthalene	9.48	128	277983	50.77	ug/L	100
120) 1,2,4-trichlorobenzene	9.31	180	91726	46.17	ug/L	97
121) 1,2,3-trichlorobenzene	9.62	180	86586	49.50	ug/L	98
122) hexachloroethane	8.45	201	43443	53.26	ug/L	100
123) 2-methylnaphthalene	10.22	142	65773	24.47	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192544.D
Acq On : 17 Nov 2021 11:38 pm
Operator : benk
Sample : icc8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Nov 29 10:40:17 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192546.D
Acq On : 18 Nov 2021 12:12 am
Operator : benk
Sample : ic8342-100
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 29 10:40:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	2.55	65	146253	500.00	ug/L		0.00
5) pentafluorobenzene	3.62	168	258729	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.12	114	368374	50.00	ug/L		0.00
73) chlorobenzene-d5	6.20	117	352853	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.99	152	166676	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.62	113	127207	48.76	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.52%				
53) 1,2-dichloroethane-d4 (s)	3.84	65	152345	48.34	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.68%				
74) toluene-d8 (s)	5.11	98	425364	49.58	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.16%				
98) 4-bromofluorobenzene (s)	7.12	95	160544	48.46	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.92%				
Target Compounds							Qvalue
2) ethanol	2.04	45	148629	8898.47	ug/L		97
3) tertiary butyl alcohol	2.59	59	105702	504.16	ug/L		99
4) 1,4-dioxane	4.49	88	46355	2641.77	ug/L		98
6) chlorodifluoromethane	1.33	51	204430	99.93	ug/L		99
7) dichlorodifluoromethane	1.32	85	187181	97.70	ug/L		99
8) chloromethane	1.45	50	200661	91.07	ug/L		99
9) vinyl chloride	1.52	62	183756	93.90	ug/L		99
10) bromomethane	1.74	96	77071	76.66	ug/L		99
11) chloroethane	1.80	64	81438	90.50	ug/L		98
12) trichlorofluoromethane	1.96	101	261902	98.64	ug/L		99
13) 1,3-butadiene	1.55	54	167497	98.56	ug/L		99
14) ethyl ether	2.12	74	72153	106.78	ug/L		94
15) acrolein	2.21	56	31747	112.49	ug/L		99
16) 1,1-dichloroethene	2.27	96	139665	104.42	ug/L		96
17) freon 113	2.27	101	165170	104.07	ug/L		99
18) acetone	2.29	58	64364	370.59	ug/L		95
19) acetonitrile	2.46	41	248202	1010.18	ug/L		99
20) iodomethane	2.38	142	185719	109.26	ug/L		100
21) carbon disulfide	2.42	76	384287	103.31	ug/L		99
22) methylene chloride	2.57	84	132487	99.76	ug/L		97
23) methyl acetate	2.47	43	166984	104.58	ug/L		99
24) methyl tert butyl ether	2.71	73	408250	105.06	ug/L		100
25) acrylonitrile	2.70	53	74217	104.07	ug/L		99
26) trans-1,2-dichloroethene	2.73	96	147182	103.83	ug/L		99
27) hexane	2.88	57	318066	108.54	ug/L		99
28) di-isopropyl ether	2.98	45	530155	108.01	ug/L		96
29) 2-butanone	3.30	72	76200	408.23	ug/L		93
30) 1,1-dichloroethane	2.99	63	281566	102.50	ug/L		99
31) chloroprene	3.03	53	269902	102.51	ug/L		99
32) vinyl acetate	2.97	86	33284	114.69	ug/L	#	85
33) ethyl tert-butyl ether	3.20	59	497720	108.29	ug/L		99
34) ethyl acetate	3.31	45	33030	105.66	ug/L		97
35) 2,2-dichloropropane	3.34	77	237041	104.44	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192546.D
Acq On : 18 Nov 2021 12:12 am
Operator : benk
Sample : ic8342-100
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 29 10:40:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	3.33	96	156147	102.51	ug/L		96
37) methyl acrylate	3.35	55	215128	104.45	ug/L		99
38) propionitrile	3.35	54	288615	1035.02	ug/L		95
39) tert-butyl formate	3.54	59	137870	118.36	ug/L		97
40) bromochloromethane	3.47	128	75595	99.83	ug/L		96
41) tetrahydrofuran	3.49	42	59824	96.08	ug/L		99
42) chloroform	3.52	83	261767	98.69	ug/L		99
44) methacrylonitrile	3.44	67	69065	109.15	ug/L		99
45) 1,1,1-trichloroethane	3.65	97	263784	105.49	ug/L		98
46) cyclohexane	3.69	84	201192	102.07	ug/L		91
47) tert amyl alcohol	3.83	55	32556	517.15	ug/L		99
48) 1,1-dichloropropene	3.74	75	217809	106.09	ug/L		99
49) isobutyl alcohol	3.92	42	35817	999.41	ug/L		96
50) carbon tetrachloride	3.75	117	253665	108.10	ug/L		98
51) isopropyl acetate	3.85	87	35823	109.30	ug/L		98
54) iso-octane	3.93	57	598132	106.15	ug/L		98
55) epichlorohydrin	4.84	57	105500	533.05	ug/L		89
56) n-butyl alcohol	4.17	56	230870	5790.25	ug/L		99
57) benzene	3.87	78	549792	107.38	ug/L		99
58) tert-amyl methyl ether	3.92	73	449089	110.44	ug/L		100
59) heptane	4.02	57	112241	107.01	ug/L		99
60) 1,2-dichloroethane	3.89	62	229475	97.98	ug/L		99
61) trichloroethene	4.28	130	179846	104.44	ug/L		97
62) ethyl acrylate	4.30	55	232312	105.80	ug/L		99
63) 2-nitropropane	4.76	41	63165	99.66	ug/L		97
64) 2-chloroethyl vinyl ether	4.79	63	526478	536.61	ug/L		99
65) methyl methacrylate	4.46	100	44504	107.65	ug/L	#	93
66) 1,2-dichloropropane	4.46	76	63637	108.82	ug/L		99
67) dibromomethane	4.52	93	98741	105.93	ug/L		99
68) methylcyclohexane	4.45	83	267930	109.02	ug/L		99
69) bromodichloromethane	4.62	83	198364	104.98	ug/L		99
70) cis-1,3-dichloropropene	4.92	75	234287	113.12	ug/L		99
71) 4-methyl-2-pentanone	5.00	58	275939	434.96	ug/L		98
72) 3-methyl-1-butanol	5.02	70	68583	2662.29	ug/L		85
75) toluene	5.16	92	351290	107.58	ug/L		98
76) trans-1,3-dichloropropene	5.31	75	224309	111.33	ug/L		99
77) ethyl methacrylate	5.33	69	192789	111.11	ug/L		98
78) 1,1,2-trichloroethane	5.46	83	111485	105.57	ug/L		99
79) tetrachloroethene	5.54	164	146157	106.33	ug/L		100
80) 1,3-dichloropropane	5.58	76	215033	105.73	ug/L		99
81) 2-hexanone	5.60	58	271176	419.25	ug/L		98
82) butyl acetate	5.68	56	118471	106.50	ug/L		97
83) dibromochloromethane	5.75	129	178945	113.28	ug/L		100
84) 1,2-dibromoethane	5.85	107	154174	106.71	ug/L		99
85) n-butyl ether	6.26	57	654374	107.89	ug/L		100
86) chlorobenzene	6.22	112	406834	108.12	ug/L		99
87) 1,1,1,2-tetrachloroethane	6.28	131	165279	111.64	ug/L		98
88) ethylbenzene	6.28	91	686252	105.54	ug/L		100
89) m,p-xylene	6.38	106	549107	220.78	ug/L		99
90) o-xylene	6.69	91	541329	107.26	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192546.D
Acq On : 18 Nov 2021 12:12 am
Operator : benk
Sample : ic8342-100
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 29 10:40:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

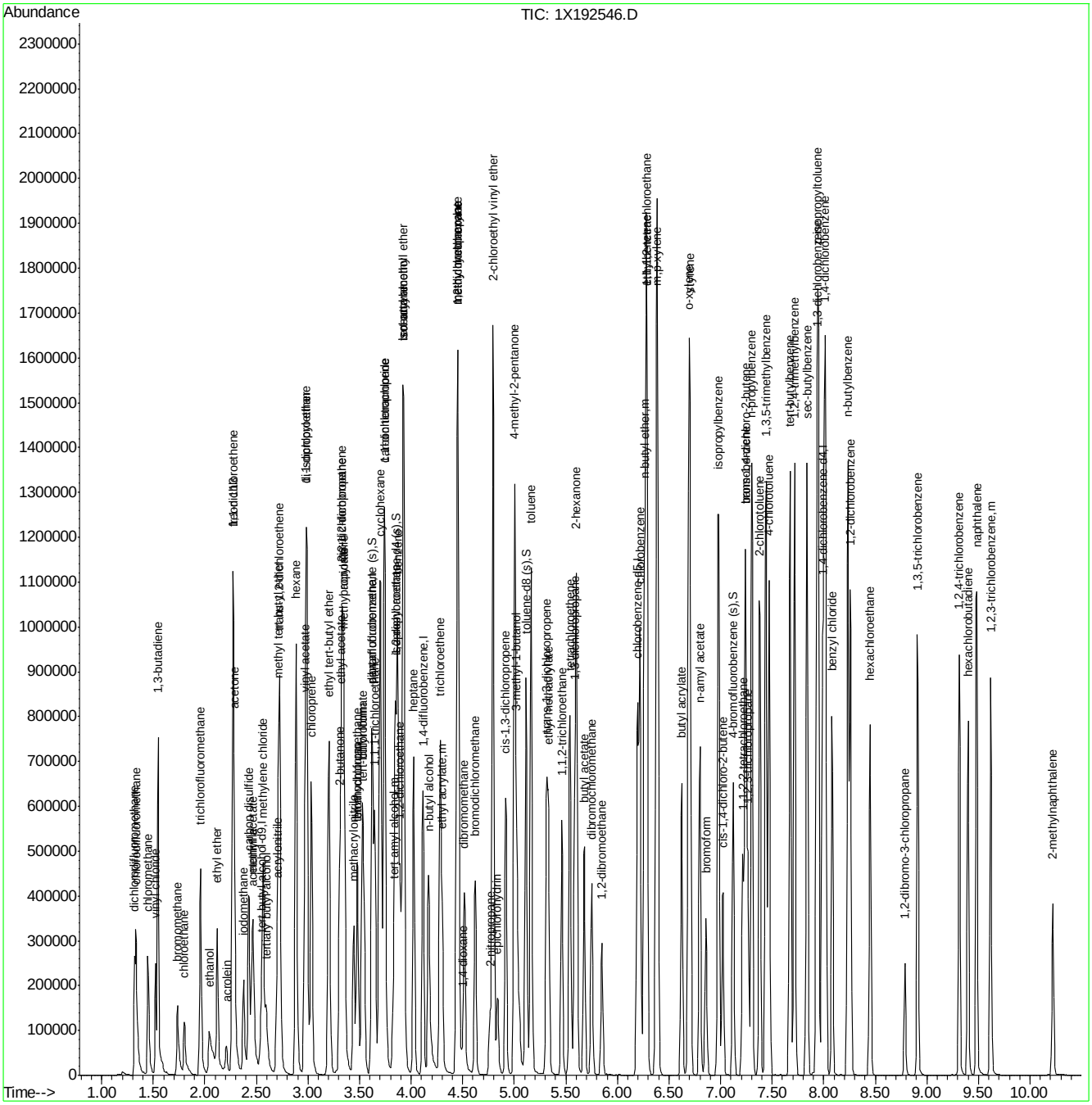
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
91) styrene	6.70	104	448145	112.07 ug/L	99
92) butyl acrylate	6.62	55	345445	110.72 ug/L	99
93) n-amyl acetate	6.80	70	116464	109.91 ug/L	98
94) bromoform	6.86	173	133391	115.26 ug/L	99
95) isopropylbenzene	6.98	105	694610	108.21 ug/L	98
96) cis-1,4-dichloro-2-butene	7.02	88	80823	112.60 ug/L	96
99) bromobenzene	7.24	156	189752	108.75 ug/L	98
100) 1,1,2,2-tetrachloroethane	7.21	83	183104	105.22 ug/L	98
101) trans-1,4-dichloro-2-buten	7.24	53	71873	108.41 ug/L	98
102) 1,2,3-trichloropropane	7.26	110	56110	102.26 ug/L #	86
103) n-propylbenzene	7.30	91	800831	104.98 ug/L	100
104) 2-chlorotoluene	7.38	126	172985	103.99 ug/L	94
105) 4-chlorotoluene	7.47	91	470249	105.69 ug/L	99
106) 1,3,5-trimethylbenzene	7.44	105	551123	106.48 ug/L	98
107) tert-butylbenzene	7.68	119	514863	105.54 ug/L	99
108) 1,2,4-trimethylbenzene	7.72	105	555932	107.49 ug/L	100
109) sec-butylbenzene	7.84	105	728819	107.79 ug/L	98
110) 1,3-dichlorobenzene	7.93	146	345289	106.36 ug/L	99
111) p-isopropyltoluene	7.95	119	652400	109.77 ug/L	99
112) 1,4-dichlorobenzene	8.01	146	350333	104.33 ug/L	99
113) 1,2-dichlorobenzene	8.26	146	328873	106.57 ug/L	99
114) benzyl chloride	8.08	91	391846	111.70 ug/L	100
115) n-butylbenzene	8.24	92	291654	109.65 ug/L	98
116) 1,2-dibromo-3-chloropropan	8.79	157	51628	110.52 ug/L	91
117) 1,3,5-trichlorobenzene	8.91	180	229343	109.12 ug/L	98
118) hexachlorobutadiene	9.40	225	85993	109.71 ug/L	99
119) naphthalene	9.48	128	627666	108.35 ug/L	100
120) 1,2,4-trichlorobenzene	9.31	180	210340	100.08 ug/L	97
121) 1,2,3-trichlorobenzene	9.62	180	202873	109.63 ug/L	98
122) hexachloroethane	8.45	201	98520	114.18 ug/L	98
123) 2-methylnaphthalene	10.22	142	151228	53.18 ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192546.D
Acq On : 18 Nov 2021 12:12 am
Operator : benk
Sample : ic8342-100
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Nov 29 10:40:18 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kanya Veerawat 12/02/21 00:40

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192548.D
Acq On : 18 Nov 2021 12:45 am
Operator : benk
Sample : ic8342-200
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 01 10:48:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	2.55	65	151164	500.00	ug/L	0.00
5) pentafluorobenzene	3.62	168	274893	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.12	114	396173	50.00	ug/L	0.00
73) chlorobenzene-d5	6.20	117	376601	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.99	152	171642	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.62	113	134275	48.44	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.88%			
53) 1,2-dichloroethane-d4 (s)	3.85	65	160018	47.21	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 94.42%			
74) toluene-d8 (s)	5.11	98	455301	49.72	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.44%			
98) 4-bromofluorobenzene (s)	7.12	95	170558	49.99	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.98%			
Target Compounds						Qvalue
2) ethanol	2.05	45	271079	15702.33	ug/L	99
3) tertiary butyl alcohol	2.60	59	212786	981.93	ug/L	96
4) 1,4-dioxane	4.50	88	96646	5328.92	ug/L	95
6) chlorodifluoromethane	1.33	51	428076	196.95	ug/L	99
7) dichlorodifluoromethane	1.32	85	447747	219.95	ug/L	100
8) chloromethane	1.45	50	461121	196.98	ug/L	100
9) vinyl chloride	1.53	62	421751	202.85	ug/L	99
11) chloroethane	1.80	64	151051	157.99	ug/L	98
12) trichlorofluoromethane	1.96	101	571953	202.76	ug/L	99
13) 1,3-butadiene	1.55	54	351563	194.70	ug/L	99
14) ethyl ether	2.12	74	151969	211.67	ug/L	94
15) acrolein	2.21	56	63359	211.29	ug/L	97
16) 1,1-dichloroethene	2.28	96	303355	213.47	ug/L	95
17) freon 113	2.27	101	351118	208.22	ug/L	95
18) acetone	2.29	58	170612	924.58	ug/L	91
19) acetonitrile	2.46	41	514896	1972.39	ug/L	99
20) iodomethane	2.38	142	405420	224.49	ug/L	100
21) carbon disulfide	2.43	76	828526	209.64	ug/L	97
22) methylene chloride	2.57	84	280226	198.60	ug/L	99
23) methyl acetate	2.47	43	326046	192.19	ug/L	98
24) methyl tert butyl ether	2.72	73	856733	207.51	ug/L	100
25) acrylonitrile	2.70	53	155590	205.35	ug/L	98
26) trans-1,2-dichloroethene	2.73	96	318909	211.75	ug/L	96
27) hexane	2.89	57	678909	218.05	ug/L	99
28) di-isopropyl ether	2.99	45	1118865	214.54	ug/L	96
29) 2-butanone	3.31	72	163908	826.47	ug/L	98
30) 1,1-dichloroethane	2.99	63	602092	206.30	ug/L	99
31) chloroprene	3.03	53	582030	208.06	ug/L	100
32) vinyl acetate	2.97	86	62113	201.44	ug/L #	83
33) ethyl tert-butyl ether	3.20	59	1052221	215.48	ug/L	98
34) ethyl acetate	3.32	45	68022	204.80	ug/L	96
35) 2,2-dichloropropane	3.34	77	508835	211.01	ug/L	96
36) cis-1,2-dichloroethene	3.33	96	337016	208.24	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192548.D
Acq On : 18 Nov 2021 12:45 am
Operator : benk
Sample : ic8342-200
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 01 10:48:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
37) methyl acrylate	3.36	55	449511	205.42 ug/L	99
38) propionitrile	3.35	54	592766	2000.77 ug/L	84
39) tert-butyl formate	3.54	59	277946	224.59 ug/L	97
40) bromochloromethane	3.48	128	159486	198.22 ug/L	99
41) tetrahydrofuran	3.49	42	120474	182.12 ug/L	99
42) chloroform	3.53	83	559753	198.63 ug/L	98
44) methacrylonitrile	3.45	67	146095	217.31 ug/L	100
45) 1,1,1-trichloroethane	3.65	97	571104	214.96 ug/L	98
46) cyclohexane	3.70	84	481220	229.79 ug/L	96
47) tert amyl alcohol	3.83	55	65702	982.30 ug/L	98
48) 1,1-dichloropropene	3.74	75	468114	214.60 ug/L	99
49) isobutyl alcohol	3.93	42	71861	1887.24 ug/L #	86
50) carbon tetrachloride	3.75	117	547654	219.66 ug/L	98
51) isopropyl acetate	3.85	87	76613	220.02 ug/L #	92
54) iso-octane	3.93	57	1264084	208.59 ug/L	98
55) epichlorohydrin	4.84	57	220268	1034.83 ug/L	86
56) n-butyl alcohol	4.17	56	502640	11721.70 ug/L	99
57) benzene	3.87	78	1190841	216.27 ug/L	100
58) tert-amyl methyl ether	3.93	73	956432	218.70 ug/L	99
59) heptane	4.02	57	240940	213.58 ug/L	99
60) 1,2-dichloroethane	3.90	62	475956	188.97 ug/L	98
61) trichloroethene	4.29	130	400007	215.99 ug/L	98
62) ethyl acrylate	4.30	55	498350	211.03 ug/L	99
63) 2-nitropropane	4.77	41	124460m	182.59 ug/L	
64) 2-chloroethyl vinyl ether	4.80	63	1092652	1035.53 ug/L	98
65) methyl methacrylate	4.46	100	96545	217.15 ug/L #	77
66) 1,2-dichloropropane	4.46	76	134202	213.38 ug/L	93
67) dibromomethane	4.52	93	206661	206.16 ug/L	95
68) methylcyclohexane	4.45	83	593694	224.61 ug/L	98
69) bromodichloromethane	4.62	83	426667	209.95 ug/L	99
70) cis-1,3-dichloropropene	4.92	75	505527	226.95 ug/L	95
71) 4-methyl-2-pentanone	5.01	58	590619	865.66 ug/L	99
72) 3-methyl-1-butanol	5.03	70	163931	5917.03 ug/L	88
75) toluene	5.17	92	761586	218.53 ug/L	97
76) trans-1,3-dichloropropene	5.32	75	484973	225.52 ug/L	99
77) ethyl methacrylate	5.33	69	409126	220.92 ug/L	98
78) 1,1,2-trichloroethane	5.47	83	236041	209.42 ug/L	99
79) tetrachloroethene	5.54	164	324929	221.48 ug/L	99
80) 1,3-dichloropropane	5.59	76	455446	209.82 ug/L	99
81) 2-hexanone	5.60	58	595002	861.89 ug/L	98
82) butyl acetate	5.68	56	258892	218.05 ug/L	96
83) dibromochloromethane	5.75	129	380133	225.47 ug/L	99
84) 1,2-dibromoethane	5.85	107	324121	210.20 ug/L	98
85) n-butyl ether	6.26	57	1390296	214.78 ug/L	99
86) chlorobenzene	6.22	112	874300	217.69 ug/L	98
87) 1,1,1,2-tetrachloroethane	6.28	131	356124	225.38 ug/L	98
88) ethylbenzene	6.29	91	1461235	210.55 ug/L	98
89) m,p-xylene	6.39	106	1178840	444.09 ug/L	96
90) o-xylene	6.69	91	1161253	215.59 ug/L	98
91) styrene	6.70	104	951459	222.92 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192548.D
Acq On : 18 Nov 2021 12:45 am
Operator : benk
Sample : ic8342-200
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 01 10:48:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration

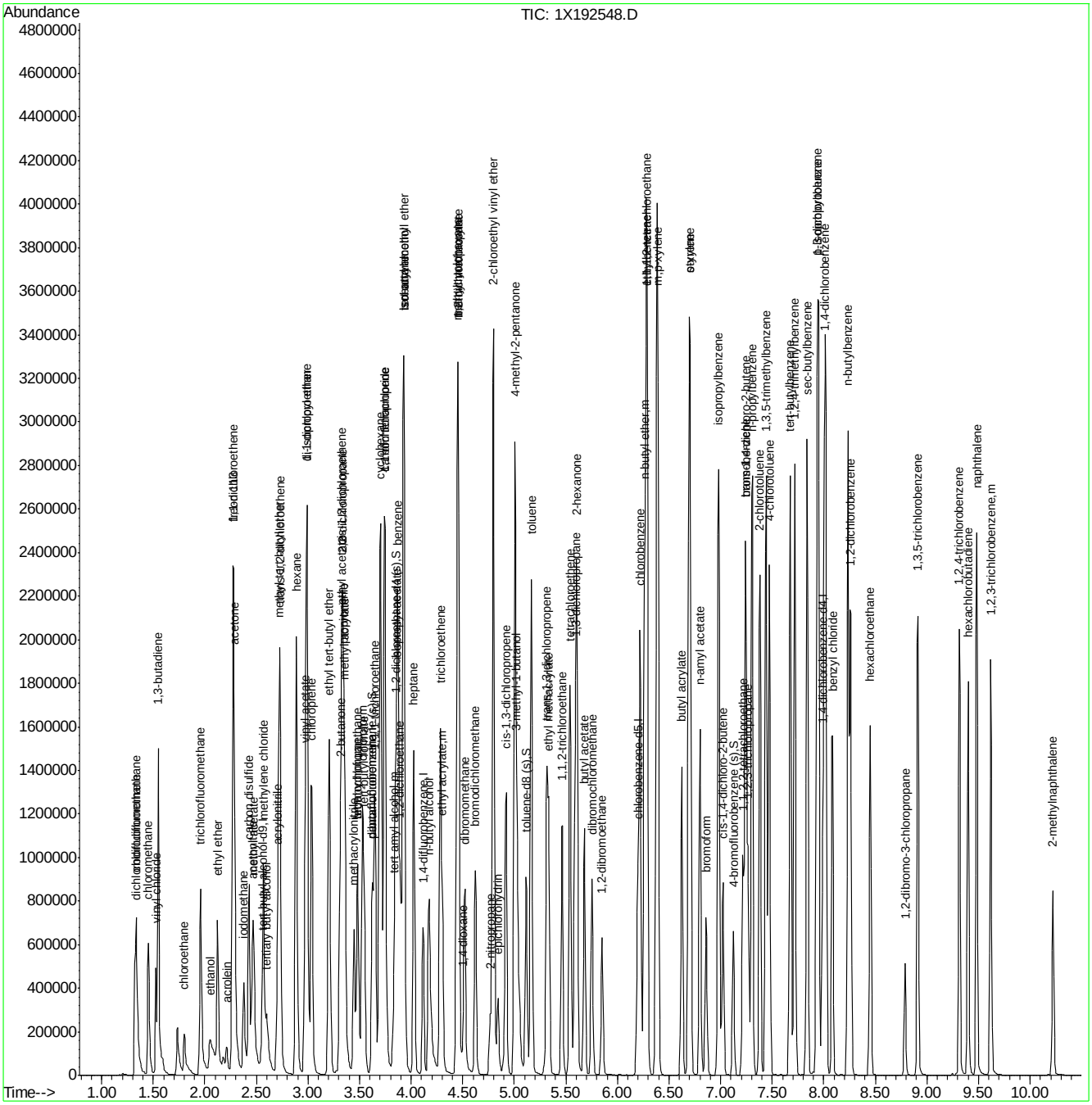
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) butyl acrylate	6.62	55	736656	221.22	ug/L		98
93) n-amyl acetate	6.80	70	251826	222.66	ug/L		98
94) bromoform	6.86	173	284280	230.15	ug/L		99
95) isopropylbenzene	6.98	105	1485698	216.86	ug/L		97
96) cis-1,4-dichloro-2-butene	7.02	88	167005	217.99	ug/L		97
99) bromobenzene	7.24	156	401871	223.66	ug/L		95
100) 1,1,2,2-tetrachloroethane	7.22	83	369803	206.35	ug/L		98
101) trans-1,4-dichloro-2-buten	7.25	53	145081	212.49	ug/L		88
102) 1,2,3-trichloropropane	7.26	110	116598	206.35	ug/L	#	77
103) n-propylbenzene	7.31	91	1685342	214.55	ug/L		98
104) 2-chlorotoluene	7.38	126	372915	217.69	ug/L		96
105) 4-chlorotoluene	7.47	91	981441	214.20	ug/L		98
106) 1,3,5-trimethylbenzene	7.44	105	1158015	217.26	ug/L		98
107) tert-butylbenzene	7.67	119	1096223	218.21	ug/L		100
108) 1,2,4-trimethylbenzene	7.72	105	1175371	220.69	ug/L		100
109) sec-butylbenzene	7.84	105	1531648	219.97	ug/L		98
110) 1,3-dichlorobenzene	7.94	146	727324	217.56	ug/L		99
111) p-isopropyltoluene	7.95	119	1374573	224.59	ug/L		99
112) 1,4-dichlorobenzene	8.01	146	734320	212.35	ug/L		99
113) 1,2-dichlorobenzene	8.26	146	686622	216.06	ug/L		99
114) benzyl chloride	8.09	91	813825	225.28	ug/L		97
115) n-butylbenzene	8.24	92	620373	226.49	ug/L		98
116) 1,2-dibromo-3-chloropropan	8.79	157	109905	228.46	ug/L		95
117) 1,3,5-trichlorobenzene	8.91	180	511246	236.21	ug/L		98
118) hexachlorobutadiene	9.40	225	195690	242.44	ug/L		99
119) naphthalene	9.48	128	1346458	225.71	ug/L		100
120) 1,2,4-trichlorobenzene	9.31	180	464497	214.61	ug/L		98
121) 1,2,3-trichlorobenzene	9.62	180	438819	230.28	ug/L		98
122) hexachloroethane	8.45	201	216726	243.90	ug/L		94
123) 2-methylnaphthalene	10.22	142	334697	114.29	ug/L		98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192548.D
Acq On : 18 Nov 2021 12:45 am
Operator : benk
Sample : ic8342-200
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Dec 01 10:48:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Mon Nov 29 10:39:58 2021
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:	V1X8342-IC8342	**Method:**	SW846 8260D
Lab FileID:	1X192548.D	**Analyst approved:**	12/01/21 10:50 Bridget Kelly
Injection Time:	11/18/21 00:45	**Supervisor approved:**	12/02/21 00:40 Kanya Veerawat

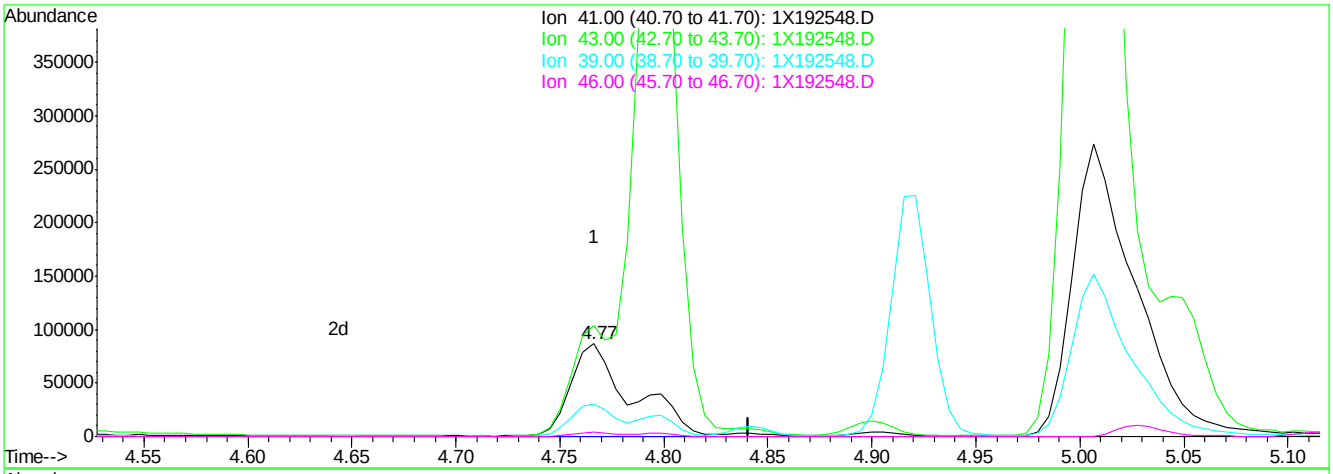
Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Nitropropane	79-46-9		4.77	Overlapping peak

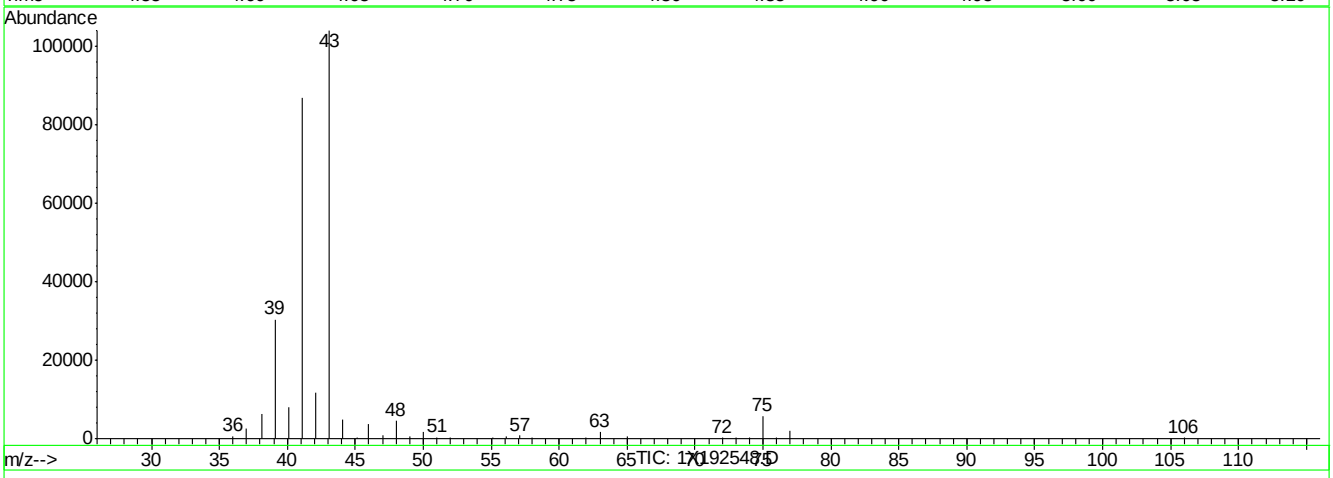
Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\VX8342\1X192548.D Vial: 25
Acq On : 18 Nov 2021 12:45 am Operator: benk
Sample : ic8342-200 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Quant Time: Nov 29 11:17:57 2021 Results File: M1X8342.RES

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Mon Nov 29 11:17:50 2021
Response via : Multiple Level Calibration





(63) 2-nitropropane

4.77min 255.76ug/L

response 174335

Ion	Exp%	Act%
41.00	100	100
43.00	112.40	119.75
39.00	37.60	34.91
46.00	5.10	4.36

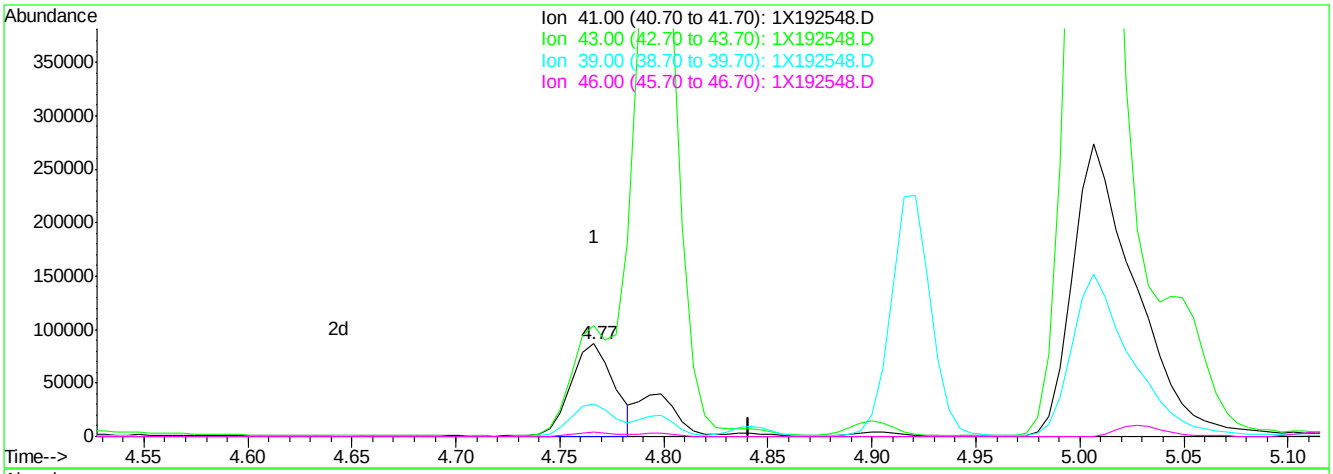
1X192548.D M1X8342.M Wed Dec 01 10:48:49 2021 GCMSX

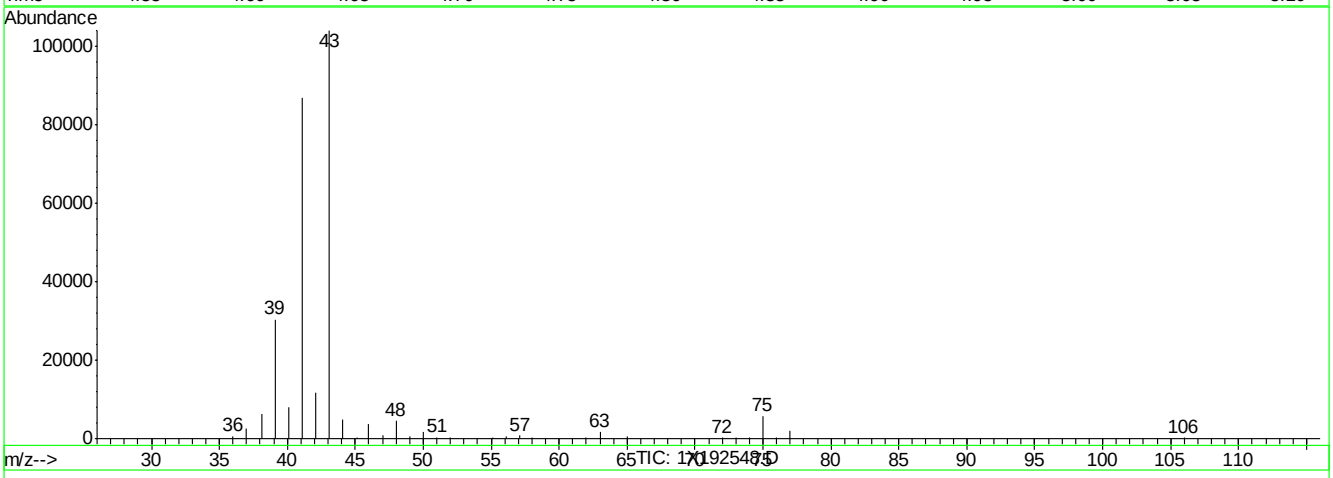
Quantitation Report (Qedit)

Data File : C:\msdchem\1\data\VX8342\1X192548.D Vial: 25
Acq On : 18 Nov 2021 12:45 am Operator: benk
Sample : ic8342-200 Inst : ACC-VOA-M
Misc : MS52750,V1X8342,5,,,,1 Multiplr: 1.00
MS Integration Params: MET...TE.P

Quant Time: Nov 29 11:17:57 2021 Results File: M1X8342.RES

Method : C:\MSDCHEM\1\METHODS\M1X8342.M (RTE Integrator)
Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
Last Update : Mon Nov 29 11:17:50 2021
Response via : Multiple Level Calibration





(63) 2-nitropropane

4.77min 182.59ug/L m

response 124460

Ion	Exp%	Act%
41.00	100	100
43.00	112.40	119.69
39.00	37.60	34.99
46.00	5.10	4.33

1X192548.D M1X8342.M Wed Dec 01 10:48:57 2021 GCMSX

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192554.D
Acq On : 18 Nov 2021 2:25 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 01 10:49:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) tert butyl alcohol-d9	2.55	65	139449	500.00	ug/L		0.00
5) pentafluorobenzene	3.62	168	259092	50.00	ug/L		0.00
52) 1,4-difluorobenzene	4.12	114	363359	50.00	ug/L		0.00
73) chlorobenzene-d5	6.20	117	351925	50.00	ug/L		0.00
97) 1,4-dichlorobenzene-d4	7.99	152	166215	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	3.62	113	127246	48.70	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.40%				
53) 1,2-dichloroethane-d4 (s)	3.84	65	153306	49.31	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.62%				
74) toluene-d8 (s)	5.11	98	422363	49.36	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.72%				
98) 4-bromofluorobenzene (s)	7.12	95	161712	48.95	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.90%				
Target Compounds							Qvalue
2) ethanol	2.04	45	78860	4951.74	ug/L		99
3) tertiary butyl alcohol	2.59	59	48971	244.97	ug/L		97
4) 1,4-dioxane	4.49	88	22952	1371.86	ug/L	#	1
7) dichlorodifluoromethane	1.32	85	82710	43.11	ug/L		100
8) chloromethane	1.45	50	99659	45.17	ug/L		100
9) vinyl chloride	1.52	62	91176	46.53	ug/L		99
10) bromomethane	1.74	96	47029	46.71	ug/L		99
11) chloroethane	1.80	64	41868	46.46	ug/L		97
12) trichlorofluoromethane	1.96	101	122384	46.03	ug/L		99
13) 1,3-butadiene	1.55	54	79732	46.85	ug/L		99
14) ethyl ether	2.12	74	33491	49.49	ug/L		99
15) acrolein	2.21	56	14282	50.53	ug/L		93
16) 1,1-dichloroethene	2.28	96	59119	44.14	ug/L		98
17) freon 113	2.27	101	69537	43.75	ug/L		98
18) acetone	2.29	58	38648	222.21	ug/L		91
20) iodomethane	2.38	142	87579	51.45	ug/L		98
21) carbon disulfide	2.43	76	163846	43.99	ug/L		99
22) methylene chloride	2.57	84	61295	46.09	ug/L		100
23) methyl acetate	2.47	43	70440	44.05	ug/L		96
24) methyl tert butyl ether	2.72	73	186633	47.96	ug/L		99
26) trans-1,2-dichloroethene	2.73	96	65998	46.49	ug/L		97
27) hexane	2.89	57	115655	39.41	ug/L		99
28) di-isopropyl ether	2.98	45	225341	45.84	ug/L		95
29) 2-butanone	3.30	72	38273	204.75	ug/L	#	85
30) 1,1-dichloroethane	2.99	63	128456	46.70	ug/L		99
31) chloroprene	3.04	53	127538	48.37	ug/L		98
32) vinyl acetate	2.97	86	12203	41.99	ug/L	#	87
33) ethyl tert-butyl ether	3.20	59	213012	46.28	ug/L		99
34) ethyl acetate	3.32	45	15537	49.63	ug/L		91
35) 2,2-dichloropropane	3.34	77	105318	46.34	ug/L		98
36) cis-1,2-dichloroethene	3.33	96	72365	47.44	ug/L		97
37) methyl acrylate	3.35	55	98012	47.52	ug/L		99
38) propionitrile	3.35	54	121881	436.47	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192554.D
Acq On : 18 Nov 2021 2:25 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 01 10:49:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
39) tert-butyl formate	3.54	59	57366	49.18	ug/L		98
40) bromochloromethane	3.48	128	37446	49.38	ug/L		94
41) tetrahydrofuran	3.49	42	27623	44.30	ug/L		99
42) chloroform	3.53	83	122821	46.24	ug/L		99
44) methacrylonitrile	3.44	67	33029	52.13	ug/L		96
45) 1,1,1-trichloroethane	3.65	97	120940	48.30	ug/L		98
46) cyclohexane	3.70	84	106813	54.11	ug/L		95
47) tert amyl alcohol	3.83	55	14988	237.75	ug/L		92
48) 1,1-dichloropropene	3.74	75	99353	48.32	ug/L		99
49) isobutyl alcohol	3.92	42	15478	431.28	ug/L	#	96
50) carbon tetrachloride	3.75	117	113789	48.42	ug/L		99
51) isopropyl acetate	3.85	87	15580	47.47	ug/L	#	94
54) iso-octane	3.93	57	236567	42.56	ug/L		98
55) epichlorohydrin	4.84	57	50585	259.11	ug/L		87
56) n-butyl alcohol	4.17	56	105154	2673.67	ug/L		99
57) benzene	3.87	78	251572	49.81	ug/L		99
58) tert-amyl methyl ether	3.93	73	182348	45.46	ug/L		99
59) heptane	4.02	57	48879	47.24	ug/L		99
60) 1,2-dichloroethane	3.90	62	107368	46.48	ug/L		98
61) trichloroethene	4.29	130	83983	49.44	ug/L		98
62) ethyl acrylate	4.30	55	81370	37.57	ug/L		99
63) 2-nitropropane	4.77	41	30140	50.87	ug/L		95
64) 2-chloroethyl vinyl ether	4.79	63	269209	278.18	ug/L		99
65) methyl methacrylate	4.46	100	20483	50.23	ug/L	#	71
66) 1,2-dichloropropane	4.46	76	29767	51.60	ug/L		98
67) dibromomethane	4.52	93	46301	50.36	ug/L		97
68) methylcyclohexane	4.45	83	121647	50.18	ug/L		98
69) bromodichloromethane	4.62	83	93528	50.18	ug/L		99
70) cis-1,3-dichloropropene	4.92	75	109897	52.02	ug/L		100
71) 4-methyl-2-pentanone	5.01	58	126054	201.44	ug/L		99
72) 3-methyl-1-butanol	5.03	70	30122	1185.43	ug/L		95
75) toluene	5.16	92	160799	50.19	ug/L		97
76) trans-1,3-dichloropropene	5.31	75	104097	51.80	ug/L		98
77) ethyl methacrylate	5.33	69	86898	50.21	ug/L		97
78) 1,1,2-trichloroethane	5.46	83	52270	49.63	ug/L		99
80) 1,3-dichloropropane	5.59	76	100178	49.39	ug/L		94
81) 2-hexanone	5.60	58	131209	203.39	ug/L		99
82) butyl acetate	5.68	56	53270	48.01	ug/L		95
83) dibromochloromethane	5.75	129	83113	52.75	ug/L		100
84) 1,2-dibromoethane	5.85	107	72401	50.25	ug/L		97
85) n-butyl ether	6.26	57	236558	39.11	ug/L		100
86) chlorobenzene	6.22	112	189222	50.42	ug/L		98
87) 1,1,1,2-tetrachloroethane	6.28	131	75896	51.40	ug/L		99
88) ethylbenzene	6.29	91	315702	48.68	ug/L		99
89) m,p-xylene	6.38	106	251624	101.44	ug/L		98
90) o-xylene	6.69	91	243925	48.46	ug/L		100
91) styrene	6.70	104	205563	51.54	ug/L		99
92) butyl acrylate	6.62	55	144058	46.29	ug/L		99
93) n-amyl acetate	6.80	70	48857	46.23	ug/L		97
94) bromoform	6.86	173	62296	53.97	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192554.D
Acq On : 18 Nov 2021 2:25 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 01 10:49:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

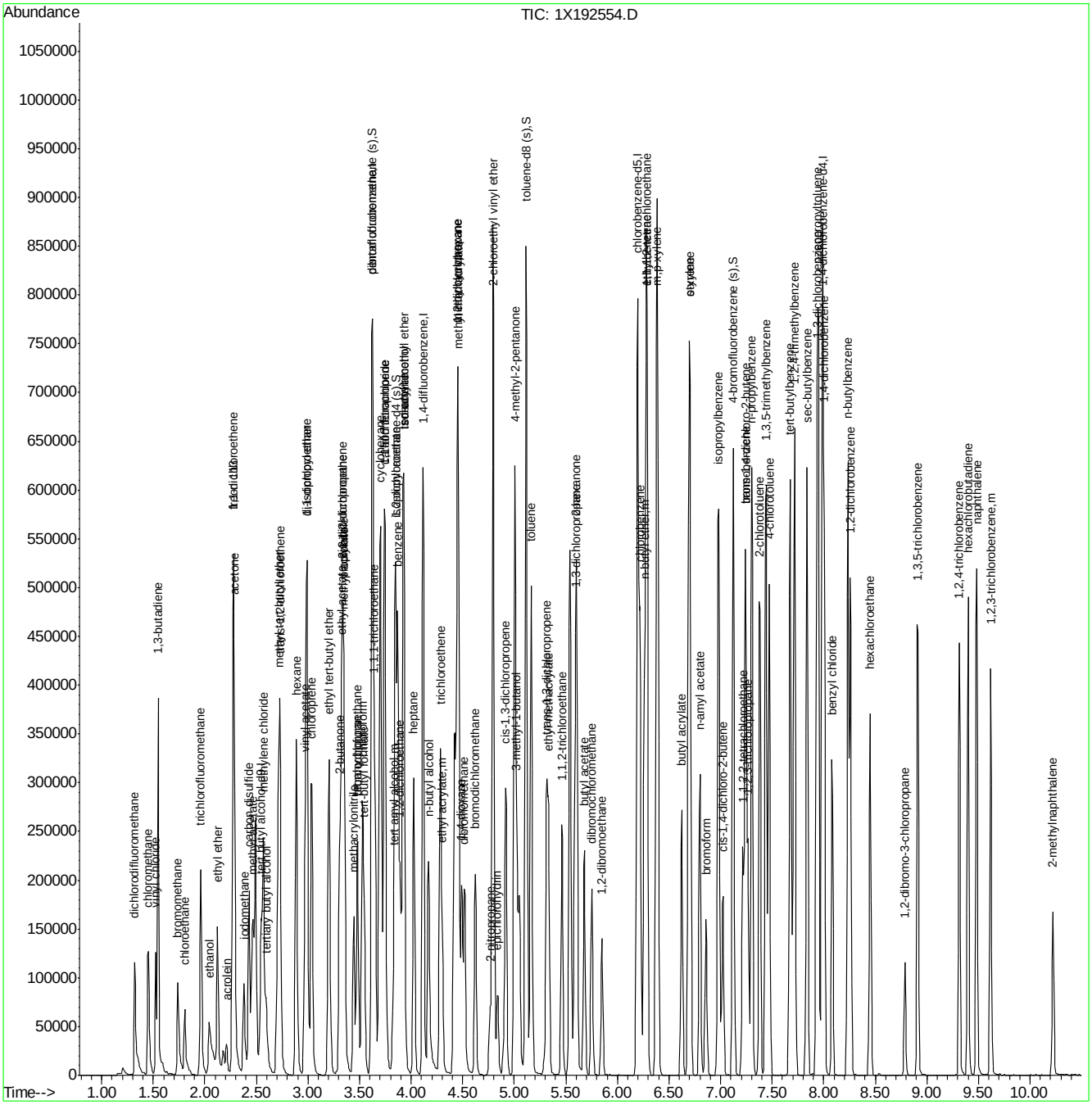
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
95) isopropylbenzene	6.98	105	322514	50.38 ug/L	98
96) cis-1,4-dichloro-2-butene	7.02	88	35348	49.37 ug/L	97
99) bromobenzene	7.24	156	88134	50.65 ug/L	97
100) 1,1,2,2-tetrachloroethane	7.22	83	84997	48.98 ug/L	97
101) trans-1,4-dichloro-2-buten	7.24	53	33174	50.18 ug/L	99
102) 1,2,3-trichloropropane	7.26	110	26857	49.08 ug/L	93
103) n-propylbenzene	7.30	91	369285	48.55 ug/L	99
104) 2-chlorotoluene	7.38	126	80593	48.58 ug/L	94
105) 4-chlorotoluene	7.47	91	213474	48.11 ug/L	99
106) 1,3,5-trimethylbenzene	7.44	105	253321	49.08 ug/L	98
107) tert-butylbenzene	7.68	119	288976	59.40 ug/L	100
108) 1,2,4-trimethylbenzene	7.72	105	255967	49.63 ug/L	99
109) sec-butylbenzene	7.84	105	332424	49.30 ug/L	98
110) 1,3-dichlorobenzene	7.93	146	160075	49.45 ug/L	98
111) p-isopropyltoluene	7.95	119	297205	50.15 ug/L	99
112) 1,4-dichlorobenzene	8.01	146	162551	48.54 ug/L	99
113) 1,2-dichlorobenzene	8.26	146	154592	50.23 ug/L	98
114) benzyl chloride	8.08	91	157863	45.13 ug/L	99
115) n-butylbenzene	8.24	92	131998	49.76 ug/L	99
116) 1,2-dibromo-3-chloropropan	8.79	157	24529	52.65 ug/L	93
117) 1,3,5-trichlorobenzene	8.91	180	109053	52.03 ug/L	95
118) hexachlorobutadiene	9.40	225	40155	51.37 ug/L	99
119) naphthalene	9.48	128	293206	50.76 ug/L	100
120) 1,2,4-trichlorobenzene	9.31	180	97291	52.72 ug/L	99
121) 1,2,3-trichlorobenzene	9.62	180	93683	52.35 ug/L	99
122) hexachloroethane	8.45	201	45593	52.99 ug/L	99
123) 2-methylnaphthalene	10.22	142	67920	24.80 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192554.D
Acq On : 18 Nov 2021 2:25 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 01 10:49:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192556.D
Acq On : 18 Nov 2021 2:59 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Nov 27 09:40:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Tue Nov 23 09:12:27 2021
Response via : Initial Calibration

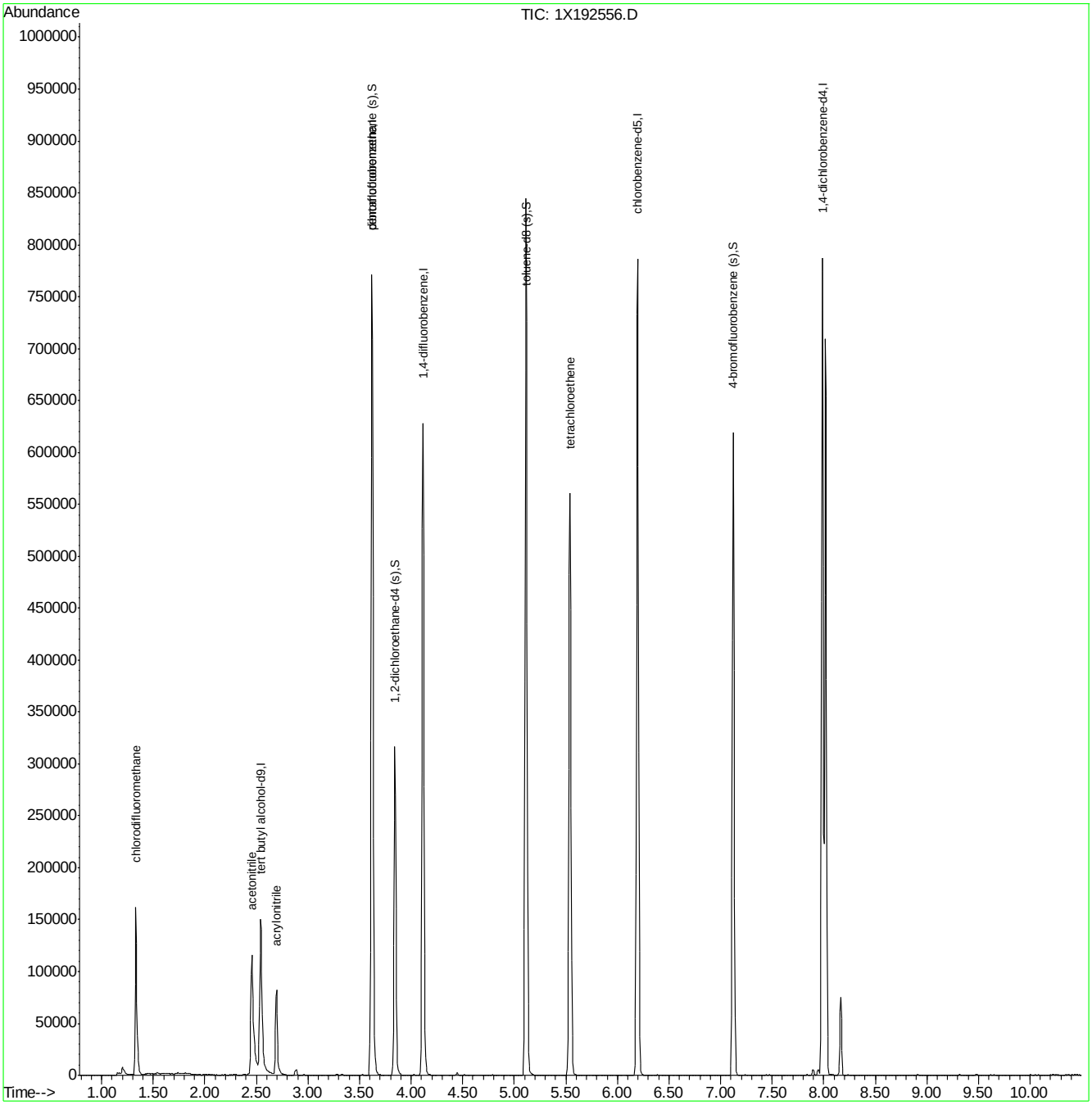
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	2.54	65	130487	500.00	ug/L	0.00
5) pentafluorobenzene	3.62	168	260535	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.12	114	365667	50.00	ug/L	0.00
73) chlorobenzene-d5	6.20	117	351120	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.99	152	159538	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.62	113	126911	48.31	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.62%			
53) 1,2-dichloroethane-d4 (s)	3.84	65	155053	49.56	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.12%			
74) toluene-d8 (s)	5.11	98	425344	49.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.64%			
98) 4-bromofluorobenzene (s)	7.12	95	158476	49.98	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%			
Target Compounds						Qvalue
6) chlorodifluoromethane	1.33	51	126248	61.29	ug/L	96
19) acetonitrile	2.46	41	128332	518.69	ug/L	99
25) acrylonitrile	2.70	53	42402	59.05	ug/L	100
79) tetrachloroethene	5.54	164	102494	74.93	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192556.D
Acq On : 18 Nov 2021 2:59 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Nov 27 09:40:14 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Tue Nov 23 09:12:27 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192568.D
Acq On : 23 Nov 2021 10:46 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Nov 27 09:40:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Tue Nov 23 09:12:27 2021
Response via : Initial Calibration

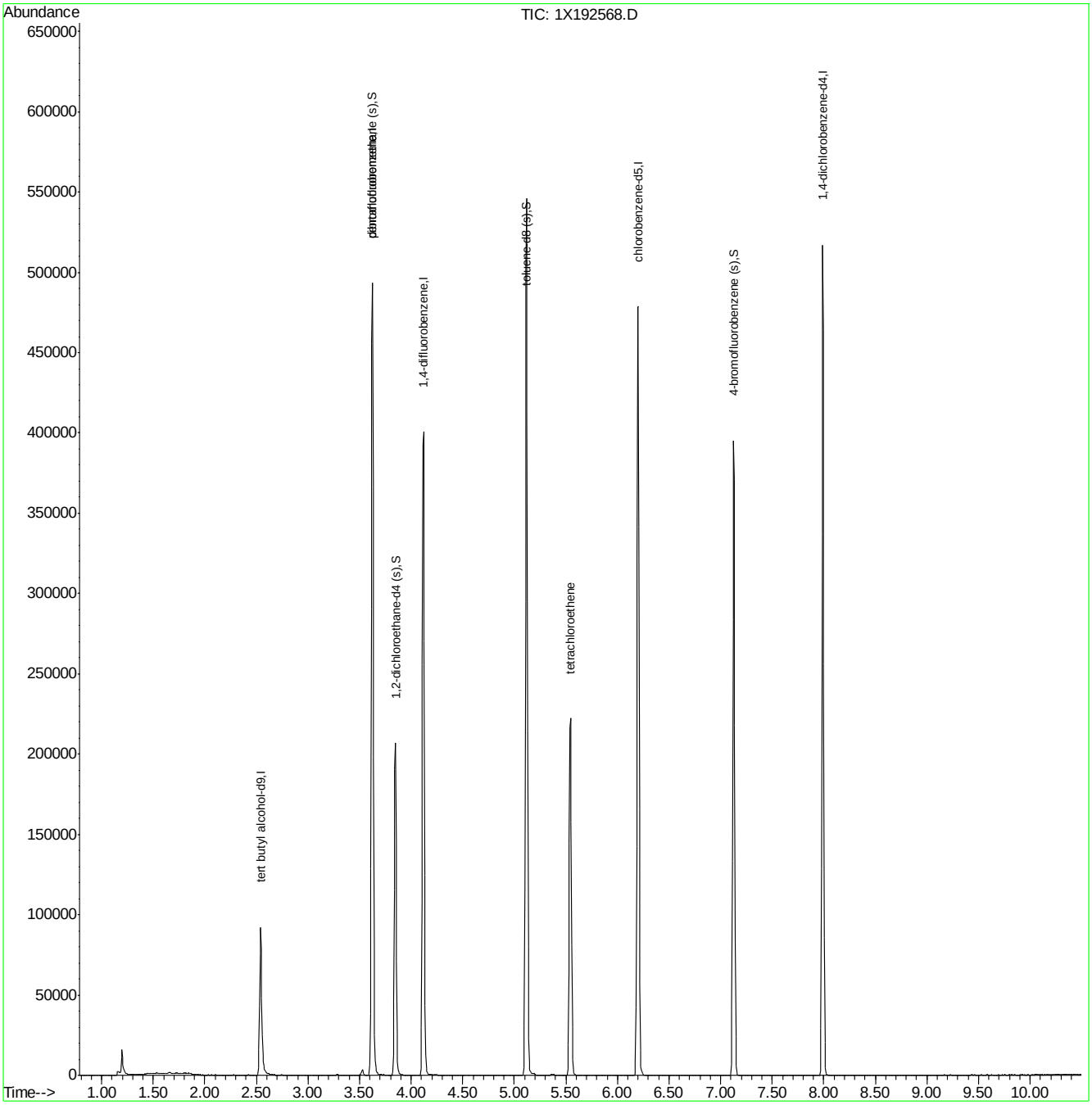
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	2.54	65	75269	500.00	ug/L	0.00
5) pentafluorobenzene	3.62	168	153519	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.12	114	235008	50.00	ug/L	0.00
73) chlorobenzene-d5	6.20	117	216408	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.99	152	97782	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.62	113	82633	53.38	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.76%			
53) 1,2-dichloroethane-d4 (s)	3.85	65	99442	49.46	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.92%			
74) toluene-d8 (s)	5.12	98	267321	50.80	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.60%			
98) 4-bromofluorobenzene (s)	7.13	95	96737	49.77	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.54%			
Target Compounds						Qvalue
79) tetrachloroethene	5.55	164	40517	48.06	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\VX8342\
Data File : 1X192568.D
Acq On : 23 Nov 2021 10:46 am
Operator : benk
Sample : icv8342-50
Misc : MS52750,V1X8342,5,,,,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Nov 27 09:40:51 2021
Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Tue Nov 23 09:12:27 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192690.d
Acq On : 30 Nov 2021 10:36 am
Operator : brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:57 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.536	65	88206	500.00	ug/L	-0.01
5) pentafluorobenzene	3.619	168	169149	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	236689	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	222008	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	99166	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	81948	48.04	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.08%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	101150	49.95	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.90%			
74) toluene-d8 (s)	5.119	98	271627	50.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.64%			
98) 4-bromofluorobenzene (s)	7.125	95	98978	50.22	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.44%			
Target Compounds						Qvalue
2) ethanol	2.029	45	22059	2189.80	ug/L	98
3) tertiary butyl alcohol	2.584	59	13098	103.58	ug/L	88
4) 1,4-dioxane	4.489	88	5622	531.25	ug/L	99
6) chlorodifluoromethane	1.319	51	21236	15.88	ug/L	97
7) dichlorodifluoromethane	1.303	85	29563	23.60	ug/L	99
8) chloromethane	1.431	50	33440	23.21	ug/L	99
9) vinyl chloride	1.511	62	25631	20.03	ug/L	98
10) bromomethane	1.724	96	14866	22.62	ug/L	98
11) chloroethane	1.794	64	13301	22.61	ug/L	99
12) trichlorofluoromethane	1.948	101	39109	22.53	ug/L	97
13) 1,3-butadiene	1.532	54	18311	16.48	ug/L	97
14) ethyl ether	2.114	74	8783	19.88	ug/L	96
15) acrolein	2.199	56	3892	21.09	ug/L	90
16) 1,1-dichloroethene	2.269	96	17077	19.53	ug/L	96
17) freon 113	2.263	101	20476	19.73	ug/L	97
18) acetone	2.279	58	8988	79.16	ug/L	96
19) acetonitrile	2.450	41	31356	195.20	ug/L	98
20) iodomethane	2.370	142	12953	11.66	ug/L	98
21) carbon disulfide	2.418	76	45308	18.63	ug/L	99
22) methylene chloride	2.562	84	16654	19.18	ug/L	99
23) methyl acetate	2.461	43	20071	19.23	ug/L	98
24) methyl tert butyl ether	2.706	73	50771	19.99	ug/L	100
25) acrylonitrile	2.690	53	9120	19.56	ug/L	98
26) trans-1,2-dichloroethene	2.722	96	19022	20.53	ug/L	97
27) hexane	2.882	57	38487	20.09	ug/L	99
28) di-isopropyl ether	2.978	45	65930	20.55	ug/L	97
29) 2-butanone	3.304	72	9971	81.71	ug/L	97
30) 1,1-dichloroethane	2.984	63	35970	20.03	ug/L	100
31) chloroprene	3.027	53	33846	19.66	ug/L	98
32) vinyl acetate	2.962	86	4001	21.09	ug/L #	77
33) ethyl tert-butyl ether	3.197	59	62105	20.67	ug/L	97
34) ethyl acetate	3.315	45	3981	19.48	ug/L	93
35) 2,2-dichloropropane	3.336	77	30941	20.85	ug/L	94
36) cis-1,2-dichloroethene	3.325	96	19712	19.79	ug/L	97
37) methyl acrylate	3.352	55	26443	19.64	ug/L	98
38) propionitrile	3.347	54	35708	195.87	ug/L	96
39) tert-butyl formate	3.539	59	13747	18.05	ug/L	96
40) bromochloromethane	3.475	128	10385	20.98	ug/L	93
41) tetrahydrofuran	3.480	42	7582	18.63	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192690.d
Acq On : 30 Nov 2021 10:36 am
Operator : brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:57 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) chloroform	3.523	83	35925	20.72	ug/L		99
44) methacrylonitrile	3.443	67	8563	20.70	ug/L		95
45) 1,1,1-trichloroethane	3.646	97	34298	20.98	ug/L		99
46) cyclohexane	3.694	84	30956	24.02	ug/L		91
47) tert amyl alcohol	3.827	55	4153	100.91	ug/L		96
48) 1,1-dichloropropene	3.736	75	27196	20.26	ug/L		98
49) isobutyl alcohol	3.928	42	4940	210.84	ug/L	#	86
50) carbon tetrachloride	3.742	117	31196	20.33	ug/L		99
51) isopropyl acetate	3.848	87	4505	21.03	ug/L	#	91
54) iso-octane	3.923	57	76519	21.13	ug/L		100
55) epichlorohydrin	4.841	57	12204	95.97	ug/L		86
56) n-butyl alcohol	4.169	56	25895	1010.78	ug/L		92
57) benzene	3.870	78	69784	21.21	ug/L		98
58) tert-amyl methyl ether	3.923	73	56312	21.55	ug/L		99
59) heptane	4.025	57	14853	22.04	ug/L		96
60) 1,2-dichloroethane	3.891	62	29566	19.65	ug/L		99
61) trichloroethene	4.281	130	23018	20.80	ug/L		97
62) ethyl acrylate	4.302	55	28811	20.42	ug/L		99
63) 2-nitropropane	4.766	41	7242	18.76	ug/L		98
64) 2-chloroethyl vinyl ether	4.793	63	64204	101.85	ug/L		99
65) methyl methacrylate	4.462	100	5448	20.51	ug/L	#	70
66) 1,2-dichloropropane	4.457	76	7898	21.02	ug/L		97
67) dibromomethane	4.516	93	12284	20.51	ug/L		94
68) methylcyclohexane	4.446	83	32935	20.86	ug/L		100
69) bromodichloromethane	4.622	83	24878	20.49	ug/L		98
70) cis-1,3-dichloropropene	4.921	75	28879	20.99	ug/L		98
71) 4-methyl-2-pentanone	5.007	58	33091	81.18	ug/L		100
72) 3-methyl-1-butanol	5.028	70	6974	421.34	ug/L		86
75) toluene	5.167	92	44202	21.87	ug/L		99
76) trans-1,3-dichloropropene	5.316	75	27047	21.34	ug/L		100
77) ethyl methacrylate	5.332	69	22882	20.96	ug/L		98
78) 1,1,2-trichloroethane	5.465	83	14119	21.25	ug/L		98
79) tetrachloroethene	5.546	164	18716	21.64	ug/L		100
80) 1,3-dichloropropane	5.588	76	26781	20.93	ug/L		98
81) 2-hexanone	5.604	58	33920	83.35	ug/L		96
82) butyl acetate	5.679	56	14024	20.04	ug/L		99
83) dibromochloromethane	5.754	129	21575	21.71	ug/L		99
84) 1,2-dibromoethane	5.855	107	19188	21.11	ug/L		99
85) n-butyl ether	6.266	57	76588	20.07	ug/L		99
86) chlorobenzene	6.223	112	50956	21.52	ug/L		99
87) 1,1,1,2-tetrachloroethane	6.287	131	19751	21.20	ug/L		99
88) ethylbenzene	6.287	91	84606	20.68	ug/L		99
89) m,p-xylene	6.389	106	66212	42.31	ug/L		97
90) o-xylene	6.698	91	65319	20.57	ug/L		95
91) styrene	6.709	104	52223	20.76	ug/L		98
92) butyl acrylate	6.629	55	38641	19.68	ug/L		98
93) n-amyl acetate	6.805	70	13067	19.60	ug/L		96
94) bromoform	6.864	173	15442	21.21	ug/L		97
95) isopropylbenzene	6.987	105	83894	20.77	ug/L		99
96) cis-1,4-dichloro-2-butene	7.029	88	9342	20.69	ug/L		97
99) bromobenzene	7.243	156	23179	22.33	ug/L		99
100) 1,1,2,2-tetrachloroethane	7.221	83	22950	22.17	ug/L		94
101) trans-1,4-dichloro-2-b...	7.248	53	8428	21.37	ug/L		98
102) 1,2,3-trichloropropane	7.269	110	6992	21.42	ug/L		95
103) n-propylbenzene	7.307	91	97568	21.50	ug/L		100
104) 2-chlorotoluene	7.381	126	20901	21.12	ug/L		98
105) 4-chlorotoluene	7.478	91	55862	21.10	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192690.d
Acq On : 30 Nov 2021 10:36 am
Operator : brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:57 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

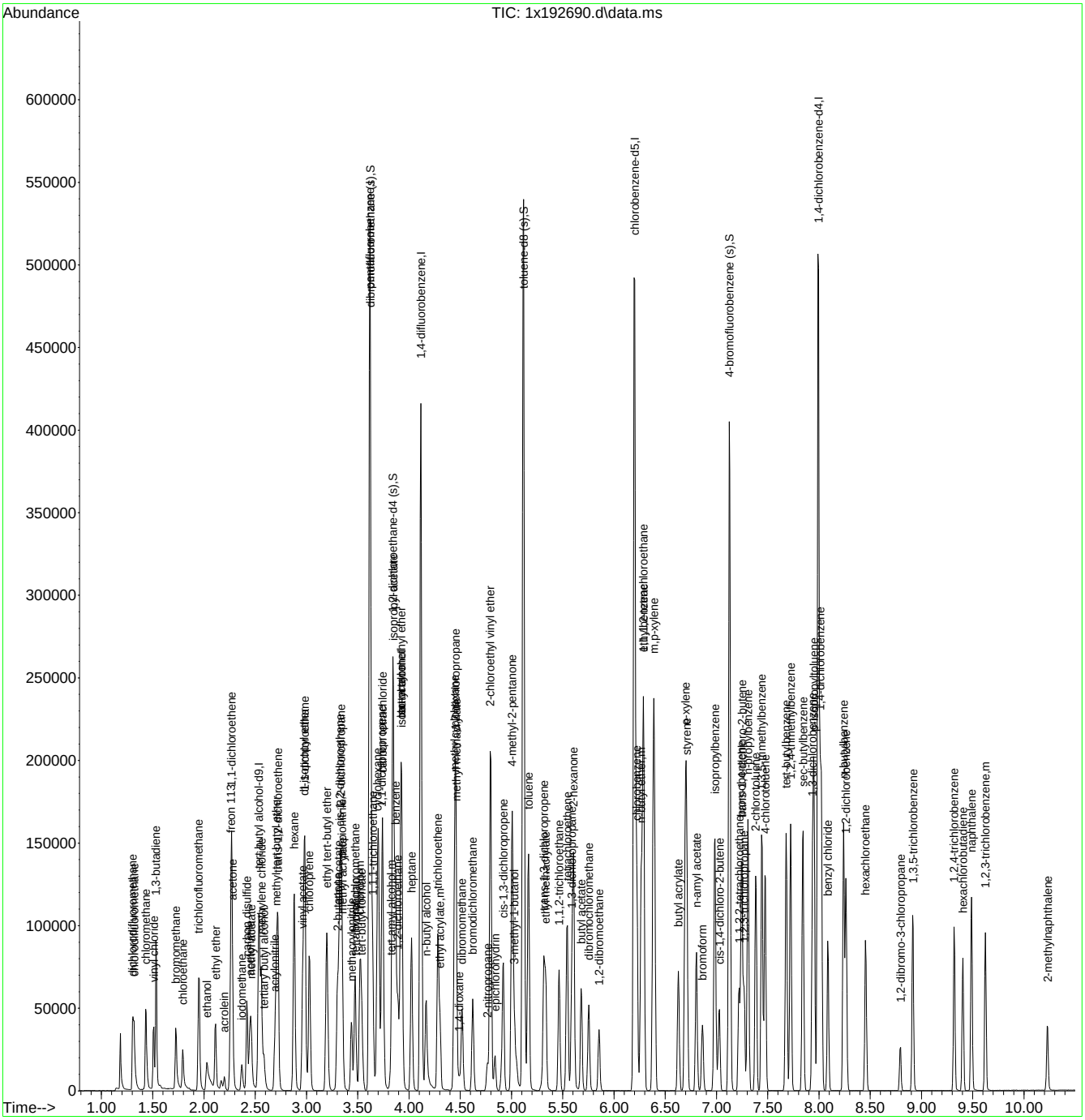
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,3,5-trimethylbenzene	7.440	105	64382	20.91	ug/L	98
107) tert-butylbenzene	7.680	119	60444	20.83	ug/L	99
108) 1,2,4-trimethylbenzene	7.723	105	64828	21.07	ug/L	99
109) sec-butylbenzene	7.846	105	85044	21.14	ug/L	99
110) 1,3-dichlorobenzene	7.936	146	39843	20.63	ug/L	100
111) p-isopropyltoluene	7.952	119	74599	21.10	ug/L	99
112) 1,4-dichlorobenzene	8.011	146	41235	20.64	ug/L	98
113) 1,2-dichlorobenzene	8.262	146	38115	20.76	ug/L	99
114) benzyl chloride	8.086	91	43922	21.04	ug/L	97
115) n-butylbenzene	8.241	92	33226	21.00	ug/L	98
116) 1,2-dibromo-3-chloropr...	8.796	157	5590	20.11	ug/L	92
117) 1,3,5-trichlorobenzene	8.918	180	24881	19.90	ug/L	95
118) hexachlorobutadiene	9.404	225	9287	19.91	ug/L	99
119) naphthalene	9.490	128	66400	19.27	ug/L	99
120) 1,2,4-trichlorobenzene	9.319	180	22113	20.09	ug/L	98
121) 1,2,3-trichlorobenzene	9.623	180	20962	19.63	ug/L	96
122) hexachloroethane	8.454	201	10109	19.69	ug/L	90
123) 2-methylnaphthalene	10.231	142	15312	9.37	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192690.d
Acq On : 30 Nov 2021 10:36 am
Operator : brittank
Sample : cc8342-20 Inst : ACC-VOA-MSX
Misc : MS55128,V1X8346,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:21:57 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192714.d
Acq On : 30 Nov 2021 8:59 pm
Operator : brittank
Sample : ecc8342-50 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:22:21 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	2.541	65	82485	500.00	ug/L	0.00
5) pentafluorobenzene	3.619	168	166043	50.00	ug/L	0.00
52) 1,4-difluorobenzene	4.115	114	229557	50.00	ug/L	0.00
73) chlorobenzene-d5	6.202	117	217001	50.00	ug/L	0.00
97) 1,4-dichlorobenzene-d4	7.995	152	97817	50.00	ug/L	0.01
System Monitoring Compounds						
43) dibromofluoromethane (s)	3.624	113	80727	48.21	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.42%			
53) 1,2-dichloroethane-d4 (s)	3.843	65	95499	48.62	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.24%			
74) toluene-d8 (s)	5.119	98	263247	49.89	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.78%			
98) 4-bromofluorobenzene (s)	7.131	95	95799	49.27	ug/L	0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.54%			
Target Compounds						Qvalue
2) ethanol	2.029	45	46786	4966.58	ug/L	99
3) tertiary butyl alcohol	2.589	59	29264	247.48	ug/L	89
4) 1,4-dioxane	4.500	88	13244	1338.28	ug/L	98
6) chlorodifluoromethane	1.319	51	45411	34.59	ug/L	95
7) dichlorodifluoromethane	1.308	85	61227	49.79	ug/L	99
8) chloromethane	1.436	50	67579	47.79	ug/L	99
9) vinyl chloride	1.511	62	56594	45.06	ug/L	99
10) bromomethane	1.724	96	31181	48.33	ug/L	98
11) chloroethane	1.794	64	29609	51.27	ug/L	97
12) trichlorofluoromethane	1.954	101	89135	52.31	ug/L	98
13) 1,3-butadiene	1.538	54	40149	36.81	ug/L	98
14) ethyl ether	2.114	74	20090	46.33	ug/L	96
15) acrolein	2.199	56	8020	44.28	ug/L	93
16) 1,1-dichloroethene	2.269	96	38847	45.26	ug/L	97
17) freon 113	2.263	101	45157	44.33	ug/L	99
18) acetone	2.279	58	17745	159.20	ug/L	97
19) acetonitrile	2.450	41	65325	414.28	ug/L	98
20) iodomethane	2.370	142	44862	41.13	ug/L	99
21) carbon disulfide	2.418	76	98653	41.33	ug/L	100
22) methylene chloride	2.562	84	37511	44.01	ug/L	95
23) methyl acetate	2.461	43	45218	44.13	ug/L	99
24) methyl tert butyl ether	2.712	73	117526	47.13	ug/L	97
25) acrylonitrile	2.690	53	19754	43.16	ug/L	97
26) trans-1,2-dichloroethene	2.722	96	41801	45.95	ug/L	97
27) hexane	2.882	57	77754	41.34	ug/L	98
28) di-isopropyl ether	2.984	45	147389	46.79	ug/L	96
29) 2-butanone	3.304	72	21346	178.19	ug/L	94
30) 1,1-dichloroethane	2.984	63	80603	45.72	ug/L	99
31) chloroprene	3.032	53	77459	45.84	ug/L	99
32) vinyl acetate	2.968	86	8808	47.29	ug/L #	81
33) ethyl tert-butyl ether	3.197	59	141874	48.10	ug/L	99
34) ethyl acetate	3.315	45	9032	45.02	ug/L	98
35) 2,2-dichloropropane	3.336	77	61012	41.89	ug/L	96
36) cis-1,2-dichloroethene	3.325	96	44797	45.83	ug/L	99
37) methyl acrylate	3.352	55	60979	46.13	ug/L	100
38) propionitrile	3.347	54	79872	446.32	ug/L	95
39) tert-butyl formate	3.539	59	31475	42.11	ug/L	95
40) bromochloromethane	3.475	128	24206	49.81	ug/L	99
41) tetrahydrofuran	3.480	42	16325	40.86	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192714.d
Acq On : 30 Nov 2021 8:59 pm
Operator : brittank
Sample : ecc8342-50 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:22:21 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) chloroform	3.523	83	80779	47.46	ug/L		98
44) methacrylonitrile	3.443	67	19548	48.14	ug/L		99
45) 1,1,1-trichloroethane	3.646	97	78403	48.86	ug/L		98
46) cyclohexane	3.699	84	68054	53.80	ug/L		93
47) tert amyl alcohol	3.827	55	9695	239.97	ug/L		89
48) 1,1-dichloropropene	3.742	75	62571	47.49	ug/L		99
49) isobutyl alcohol	3.929	42	10780	468.70	ug/L	#	96
50) carbon tetrachloride	3.747	117	74631	49.56	ug/L		99
51) isopropyl acetate	3.848	87	10222	48.60	ug/L	#	87
54) iso-octane	3.929	57	159248	45.35	ug/L		99
55) epichlorohydrin	4.841	57	27448	222.55	ug/L		93
56) n-butyl alcohol	4.169	56	62487	2514.88	ug/L		99
57) benzene	3.870	78	159677	50.05	ug/L		100
58) tert-amyl methyl ether	3.929	73	128975	50.90	ug/L		100
59) heptane	4.025	57	29272	44.78	ug/L		97
60) 1,2-dichloroethane	3.897	62	68115	46.67	ug/L		98
61) trichloroethene	4.286	130	53194	49.57	ug/L		98
62) ethyl acrylate	4.302	55	65586	47.93	ug/L		97
63) 2-nitropropane	4.766	41	17863	47.72	ug/L		98
64) 2-chloroethyl vinyl ether	4.798	63	147006	240.44	ug/L		98
65) methyl methacrylate	4.462	100	12483	48.45	ug/L	#	85
66) 1,2-dichloropropane	4.457	76	18620	51.09	ug/L		98
67) dibromomethane	4.521	93	28739	49.48	ug/L		97
68) methylcyclohexane	4.452	83	74182	48.44	ug/L		97
69) bromodichloromethane	4.622	83	58172	49.40	ug/L		98
70) cis-1,3-dichloropropene	4.921	75	65487	49.07	ug/L		98
71) 4-methyl-2-pentanone	5.007	58	74484	188.41	ug/L		100
72) 3-methyl-1-butanol	5.028	70	18686	1164.00	ug/L		91
75) toluene	5.167	92	101264	51.26	ug/L		98
76) trans-1,3-dichloropropene	5.316	75	62087	50.11	ug/L		100
77) ethyl methacrylate	5.337	69	52627	49.32	ug/L		94
78) 1,1,2-trichloroethane	5.466	83	32171	49.54	ug/L		98
79) tetrachloroethene	5.546	164	43320	51.25	ug/L		100
80) 1,3-dichloropropane	5.594	76	61670	49.31	ug/L		98
81) 2-hexanone	5.610	58	70626	177.55	ug/L		98
82) butyl acetate	5.684	56	30883	45.14	ug/L		99
83) dibromochloromethane	5.754	129	51400	52.91	ug/L		99
84) 1,2-dibromoethane	5.855	107	44863	50.49	ug/L		100
85) n-butyl ether	6.266	57	175505	47.05	ug/L		100
86) chlorobenzene	6.223	112	116652	50.41	ug/L		99
87) 1,1,1,2-tetrachloroethane	6.287	131	47158	51.80	ug/L		98
88) ethylbenzene	6.293	91	195181	48.81	ug/L		98
89) m,p-xylene	6.389	106	154533	101.03	ug/L		99
90) o-xylene	6.698	91	151004	48.65	ug/L		99
91) styrene	6.709	104	122168	49.68	ug/L		96
92) butyl acrylate	6.629	55	88164	45.95	ug/L		98
93) n-amyl acetate	6.805	70	30040	46.10	ug/L		97
94) bromoform	6.864	173	37204	52.27	ug/L		98
95) isopropylbenzene	6.987	105	195990	49.65	ug/L		99
96) cis-1,4-dichloro-2-butene	7.029	88	20731	46.96	ug/L		94
99) bromobenzene	7.248	156	52862	51.62	ug/L		94
100) 1,1,2,2-tetrachloroethane	7.221	83	51299	50.23	ug/L		98
101) trans-1,4-dichloro-2-b...	7.248	53	18101	46.52	ug/L		98
102) 1,2,3-trichloropropane	7.269	110	16153	50.16	ug/L		92
103) n-propylbenzene	7.307	91	220892	49.34	ug/L		100
104) 2-chlorotoluene	7.387	126	48411	49.59	ug/L		95
105) 4-chlorotoluene	7.478	91	126856	48.58	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192714.d
Acq On : 30 Nov 2021 8:59 pm
Operator : brittank
Sample : ecc8342-50 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:22:21 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration

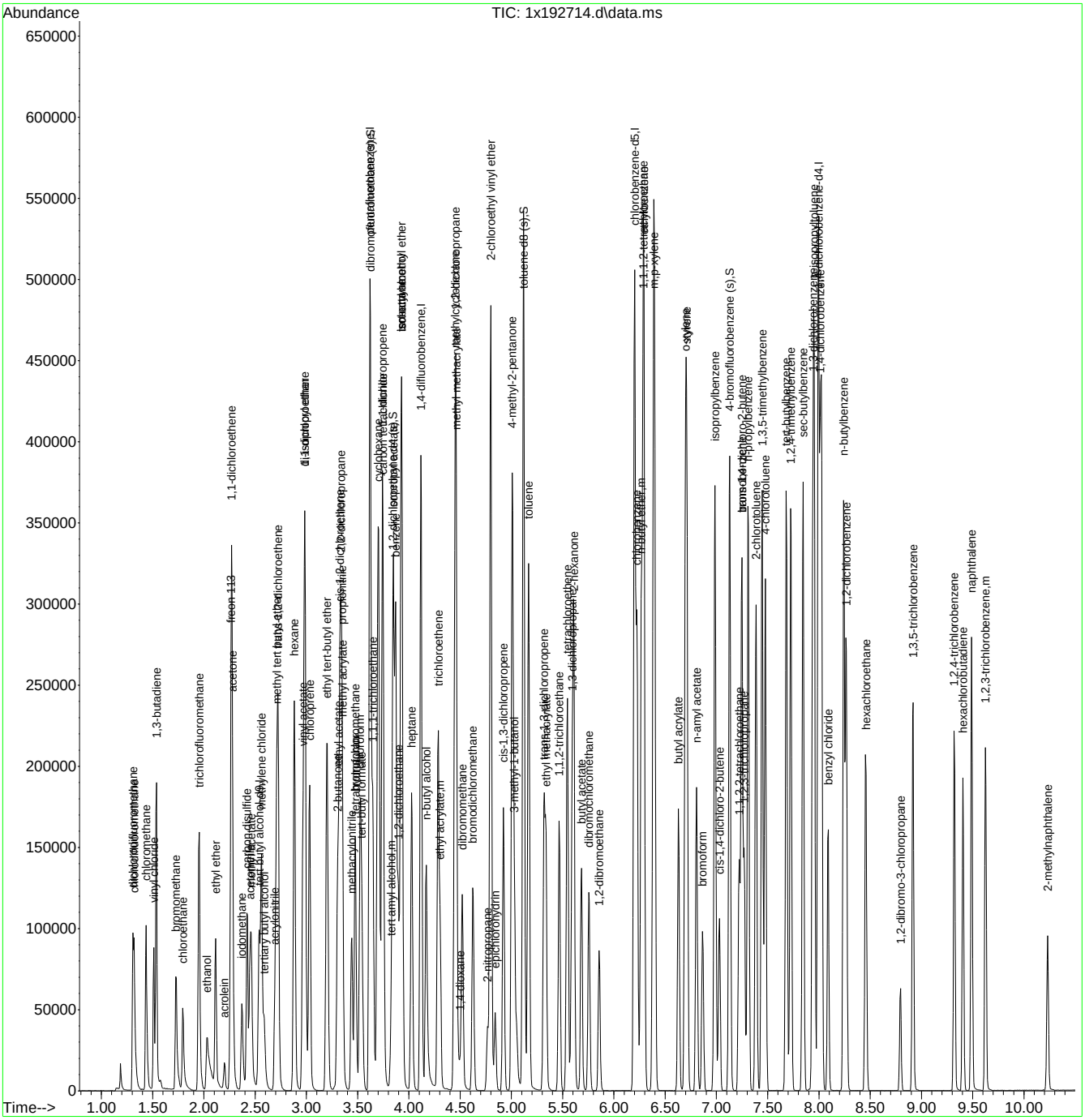
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) 1,3,5-trimethylbenzene	7.446	105	149132	49.10	ug/L	99
107) tert-butylbenzene	7.680	119	141074	49.28	ug/L	98
108) 1,2,4-trimethylbenzene	7.723	105	148999	49.09	ug/L	99
109) sec-butylbenzene	7.846	105	195621	49.30	ug/L	99
110) 1,3-dichlorobenzene	7.942	146	93639	49.15	ug/L	99
111) p-isopropyltoluene	7.953	119	174168	49.94	ug/L	99
112) 1,4-dichlorobenzene	8.011	146	95422	48.42	ug/L	98
113) 1,2-dichlorobenzene	8.267	146	88993	49.14	ug/L	99
114) benzyl chloride	8.091	91	79109	38.43	ug/L	100
115) n-butylbenzene	8.241	92	75886	48.61	ug/L	99
116) 1,2-dibromo-3-chloropr...	8.796	157	13186	48.10	ug/L	92
117) 1,3,5-trichlorobenzene	8.919	180	57370	46.51	ug/L	96
118) hexachlorobutadiene	9.404	225	21005	45.66	ug/L	98
119) naphthalene	9.490	128	153613	45.18	ug/L	99
120) 1,2,4-trichlorobenzene	9.319	180	50867	46.84	ug/L	98
121) 1,2,3-trichlorobenzene	9.623	180	48895	46.43	ug/L	98
122) hexachloroethane	8.460	201	24996	49.36	ug/L	96
123) 2-methylnaphthalene	10.231	142	37548	23.29	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kenrickb\voa\12-02-2021\vx8346\v1x8346\
Data File : 1x192714.d
Acq On : 30 Nov 2021 8:59 pm
Operator : brittank
Sample : ecc8342-50 Inst : ACC-VOA-MSX
Misc : MS55171,V1X8346,5,,,,1
ALS Vial : 26 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M1X8342.M
Quant Results File: M1X8342.RES
Quant Time: Dec 01 17:22:21 2021
Quant Title : Method 8260C/D, Rxi-624 (60m x 0.25mm x 1.4um)
QLast Update : Wed Dec 01 10:49:30 2021
Response via : Initial Calibration



GCMS Volatile Run Log

Standard / Reagents	Lot #					
Standards	ABK: V021-2733-116.30	EC: V021-2733-119.5	AA: V021-2733-108.36	Ext PA: V021-2733-91.2	Column	RXI-624(60mx0.25mmx1.4um)
Concentration	100-10,000ppm	100ppm	100ppm	100-10,000ppm	Method	v8260d
Expiration	12/12/2021	11/25/2021	12/9/2021	12/1/2021	Init Calib Date	9/19/2021
Standards	Ext ABK: V0-21-2733-94.5	Ext EC: V021-2733-114.2	Ext Acrolein: V021-2733-73	Ext Chlorodifluoromethane:		
Concentration	100-10,000ppm	100ppm	100ppm	100ppm	Analysis Date	11/17/2021
Expiration	12/3/2021	11/18/2021	11/21/2021	12/1/2021	Sequence loaded by	Benjamin Kim
Internal Surrogate	V021-2733-102			3rd Source Tetrachloromethane:	Data processed by	Bridget Kelly
Internal Surrogate Concentration	50/500ppm			100ppm	Batch ID	V1X8342
Expiration	12/8/2021			12/8/2021	Matrix	AQ
					Approved By:	KANYAV
pH Paper Lot# (wide range): 223120	Exp. 8/15/2023		Initial Calibration Method	M1X8342	Approved Date:	12/2/2021 6:27:50 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
1X	192524	IB		NA			5			1	ok	
1X	192526	IB		NA			5			2	ok	
1X	192528	BFB		NA			5			3	ok	7:07pm
1X	192530	IC8342-0.2		NA		AQ Initial Calibration	5			4	ok	1ul ABK,EC,AA/500ml H2O
1X	192532	IC8342-0.5		NA		AQ Initial Calibration	5			5	ok	1ul ABK,EC,AA/200ml H2O
1X	192534	IC8342-1		NA		AQ Initial Calibration	5			6	ok	1ul ABK,EC,AA/100ml H2O
1X	192536	IC8342-2		NA		AQ Initial Calibration	5			7	ok	2ul ABK,EC,AA/100ml H2O
1X	192538	IC8342-4		NA		AQ Initial Calibration	5			8	ok	4ul ABK,EC,AA/100ml H2O
1X	192540	IC8342-8		NA		AQ Initial Calibration	5			9	ok	8ul ABK,EC,AA/100ml H2O
1X	192542	IC8342-20		NA		AQ Initial Calibration	5			10	ok	20ul ABK,EC,AA/100ml H2O
1X	192544	ICC8342-50		NA		AQ Initial Calibration	5			11	ok	50ul ABK,EC,AA/100ml H2O

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
1X	192546	IC8342-100		NA		AQ Initial Calibration	5			12	ok	100ul ABK,EC,AA/100ml H2O
1X	192548	IC8342-200		NA		AQ Initial Calibration	5			13	ok	200ul ABK,EC,AA/100ml H2O
1X	192550	IB		NA			5			14	ok	
1X	192552	IB		NA			5			15	ok	
1X	192554	ICV84342-50		NA		AQ Initial Calibration	5			16	ok	50ul Ext ABK,EC,Acrolein/100ml H2O
1X	192556	ICV84342-50		NA		AQ Initial Calibration	5			17	ok	50ul Ext PA,Ext Chlorodifluoromethane/100ml H2O
1X	192558	IB		NA			5			18	ok	
1X	192560	IB		NA			5			19	ok	
1X	192562	IB		NA			5			20	ok	
1X	192564	IB		NA			5			21	ok	
1X	192566	BFB2		NA			5			22	ok	11/23/21, 10:03am
1X	192568	ICV84342-50		NA		AQ Initial Calibration	5			23	ok	50ul 3rd Source Tetrachloromethane/100ml H2O

GCMS Volatile Run Log

Standard / Reagents	Lot #					
Standards	ABK: V021-2733-116.30	EC: V021-2733-134.10	AA: V021-2733-108.36		Column	RXI-624(60mx0.25mmx1.4um)
Concentration	100-10,000ppm	100ppm	100ppm		Method	V8260D
Expiration	12/12/2021	11/30/2021	12/9/2021		Init Calib Date	9/19/2021
Internal/Surrogate	V021-2733-102					
Concentration	50/500ppm				Analysis Date	11/30/2021
Expiration	12/8/2021				Sequence loaded by	Brittany Klimek
					Data processed by	kenrickb
					Batch ID	V1X8346
Rough reviewed by	brittank 12/1				Matrix	AQ
					Approved By:	KANYAV
pH Paper Lot# (wide range): 223120	Exp. 8/15/2023		Initial Calibration Method	M1X8342	Approved Date:	12/2/2021 2:33:39 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
1X	192689	IB		NA			5			1	ok	
1X	192690	BFB/CC8342-20		NA			5			2	ok/ok	20uL ABK, EC, AA/100mL DI H2O. 11/30/2021; 10:36AM.
1X	192691	CC8342-1		NA			5			3	not used	1uL ABK, EC, AA/100mL DI H2O.
1X	192692	BS		NA			5			4	ok	50uL ABK, EC, AA/100mL DI H2O.
1X	192693	IB		NA			5			5	ok	
1X	192694	MB		NA			5			6	ok	
1X	192695	JD35406-1	8	NA	MS55128	V8260SL1	5		1	7	ok	DODQSM51.
1X	192696	JD35406-3	3	NA	MS55128	V8260SL1	5		1	8	ok	DODQSM51.
1X	192697	JD35517-4	2	NA	MS55171	V8260SL	5		1	9	ok	DOD-QSM5.
1X	192698	JD35517-5	2	NA	MS55171	V8260SL	5		1	10	ok	DOD-QSM5.
1X	192699	JD35517-6	1	NA	MS55171	V8260SL	5		1	11	ok	DOD-QSM5.

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
1X	192700	JD35424-1	12	NA	MS55128	V8260SL2	5		1	12	ok	DOD-QSM5.
1X	192701	JD35517-1	2	NA	MS55171	V8260SL	5		1	13	ok/dl	DOD-QSM5. +1X192704.
1X	192702	JD35406-1MS	11	NA	MS55128	V8260SL1	5		1	14	ok	DODQSM51. 20uL ABK, EC, AA/40mL sample.
1X	192703	JD35406-1MSD	10	NA	MS55128	V8260SL1	5		1	15	ok	DODQSM51. 20uL ABK, EC, AA/40mL sample.
1X	192704	JD35517-1	2	10x	MS55171	V8260SL	5/50		1	16	ok	DOD-QSM5. +1X192701.
1X	192705	JD35424-2	2	NA	MS55128	V8260SL2	5		1	17	ok	DOD-QSM5.
1X	192706	JD35517-8	2	NA	MS55171	V8260SL	5		1	18	ok	DOD-QSM5.
1X	192707	JD35517-9	1	NA	MS55171	V8260SL	5		1	19	ok	DOD-QSM5.
1X	192708	JD35406-5	1	NA	MS55128	V8260SL1	5		1	20	ok	DODQSM51.
1X	192709	JD35406-2	3	NA	MS55128	V8260SL1	5		1	21	ok	DODQSM51.
1X	192710	JD35406-4	3	NA	MS55128	V8260SL1	5		1	22	ok	DODQSM51.
1X	192711	JD35517-2	2	NA	MS55171	V8260SL	5		1	23	ok	DOD-QSM5.
1X	192712	JD35517-3	2	NA	MS55171	V8260SL	5		1	24	ok	DOD-QSM5.
1X	192713	JD35517-7	2	NA	MS55171	V8260SL	5		1	25	ok	DOD-QSM5.
1X	192714	ECC8342-50		NA			5			26	ok	50uL ABK, EC, AA/100mL DI H2O. 11/30/2021; 8:59PM.

This page intentionally left blank.