Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

RCRA FACILITY GROUNDWATER, LEACHATE AND GAS REPORTING FORM

This form must be used as a cover sheet for the notices and reports, identified below as required by: (1) a facility's RCRA interim status closure plan; (2) the RCRA interim status regulations; or (3) a facility's RCRA permit. All reports must be submitted to the Illinois EPA's Bureau of Land Permit Section. This form is for use by Hazardous Waste facilities only. Reporting for Solid Waste facilities should be submitted on a separate form. All reports submitted to the Illinois EPA's Bureau of Land Permit Section must contain an original, plus a minimum of two copies.

Note: This form is not to be used with permit or closure plan modification requests. The facility's approved permit or closure plan will state whether the document you are submitting is required as a report or a modification request.

Facility Name: Equilon Enterprises LLC dba Shell Oil Products US

Facility Address: 900 South Central Ave., Roxana, IL 62048

Site ID #: 1191150002 Fed ID #: ILD 080 012 305

Check the appropriate heading. Only one heading may be checked for each corresponding submittal. Check the appropriate sub-heading, where applicable. Attach the original and all copies behind this form.

☐ LPC-160 Forms

Groundwater	Leachate
____ Quarterly - Enter: 1, 2, 3, or 4	____ Quarterly - Enter: 1, 2, 3, or 4
☐ Semi-Annual	☐ Semi-Annual
☐ Annual	☐ Annual
☐ Biennial	☐ Biennial

☑ Groundwater Data (without LPC-160 Forms)

3 Quarterly - Enter: 1, 2, 3, or 4 ☐ Annual ☐ Semi-Annual ☐ Biennial

☐ Well Construction Information

- ☐ Well Construction Forms, Boring Logs and/or Abandonment Forms
- ☐ Well Survey Data (e.g., Stick-up Elevation Data)

☐ Notice of Statistically Significant Evidence of Groundwater Contamination (35 Ill. Adm. Code 724.198)

☐ Notice of Exceedence of Groundwater Concentration Limit (35 Ill. Adm. Code 724.199(h))

☐ Notice of Alternate Source or Error in Sampling Analysis or Evaluation of Groundwater (35 Ill. Adm. Code 724.199(i))

☐ Gas Monitoring Reports

☑ Other (identify)

Copies of this submittal sent separately directly to Amy Butler and Gina Search with IEPA.

AECOM
100 N. Broadway, 20 h Floor
St. Louis, MO 63102
aecom.com

October 13, 2021

Mr. Kenneth E Smith, PE
Manager, Permit Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
Bureau of Land
1021 North Grand Avenue East
Springfield, Illinois 62702

Groundwater Monitoring Report – 3rd Quarter 2021

Roxana, Illinois

1191150002 – Madison County

Equilon Enterprises LLC d/b/a Shell Oil Products US

Log No. B-43R-CA-21

Dear Mr. Smith:

On behalf of Shell Oil Products US (SOPUS), AECOM is submitting the enclosed referenced report and RCRA Facility Groundwater, Leachate and Gas Reporting Form for your review. This sampling was required by Condition 7 of the Agency's letter dated August 5, 2010.

Copies of the referenced report are being submitted separately directly to Mses. Amy Butler and Gina Search with Illinois Environmental Protection Agency (IEPA).

If you have any questions during your review, please contact Leroy (Buddy) Bealer, SOPUS Principal Program Manager, at leroy.bealer@shell.com (484/632-7955), or Wendy Pennington at wendy.pennington@aecom.com (314/452-8929).

Yours sincerely,

AECOM, on behalf of Shell Oil Products US

Melissa Remiger
Environmental Scientist
AECOM
M: 314/449-2913
E: melissa.remiger@aecom.com

Wendy Pennington
Project Manager
AECOM
M: 314/452-8929
E: wendy.pennington@aecom.com

enclosures: 3rd Quarter 2021 Report, Roxana Interim Groundwater Monitoring Program
RCRA Facility Groundwater, Leachate and Gas Reporting Form
(Original plus 1 copy)

cc: Leroy (Buddy) Bealer, SOPUS
Thomas Morgan, Phillips 66
Amy Butler, IEPA, Springfield
Gina Search, IEPA, Collinsville
Michelle Knapp, Atlantic Richfield Company
Erika Reynolds, Greensfelder
Repositories - Roxana Public L brary, website

AECOM

3rd Quarter 2021 Report

Roxana Interim Groundwater Monitoring Program

Prepared for:
Equilon Enterprises LLC dba Shell Oil Products US
Roxana, Illinois

Project number: 60648474

October 2021

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
Melissa Remiger	Brett Howell	Robert B Billman	Wendy Pennington
Melissa Remiger Environmental Scientist	Brett Howell, PG Geologist	Bob Billman, PG, STS Senior Project Manager	Wendy Pennington, PE Project Manager

Revision History

Revision	Revision date	Details	Authorized	Name	Position

Distribution List

# Hard Copies	PDF Required	Association / Company Name
1 – original 1 – copy	No	Mr. Kenneth E Smith, PE IEPA, Springfield
None	Yes	Mr. Thomas Morgan Phillips 66
None	Yes	Ms. Amy Butler IEPA, Springfield
1 – copy	No	Ms. Gina Search IEPA, Collinsville
None	Yes	Ms. Michelle Knapp Atlantic Richfield Company
None	Yes	Ms. Erika Reynolds Greensfelder
None	Yes	Roxana Public Library
None	Yes	website

Prepared for:

Equilon Enterprises LLC dba Shell Oil Products US

Prepared by:

Melissa Remiger
Environmental Scientist
M: 314/449-2913
E: melissa.remiger@aecom.com

AECOM
100 N. Broadway, 20th Floor
St. Louis, MO 63102
aecom.com

Copyright © 2021 by AECOM

All rights reserved. No part of this copyrighted work may be reproduced, distributed, or transmitted in any form or by any means without the prior written permission of AECOM.

Table of Contents

1 Introduction 1
2 Groundwater Sampling and Analytical Procedures 2
2.1 Health & Safety 2
2.2 Additional Activities or Modifications 2
2.3 Groundwater Monitoring Well Gauging and Sampling 2
2.4 Decontamination and Investigation-Derived Waste 3
2.5 Groundwater Sample Handling and Laboratory Testing 3
2.6 Data Quality Review and Data Management 3
3 Groundwater Sampling Results 5
3.1 Groundwater Monitoring Well Gauging Results 5
3.2 Data Quality Review Results 5
3.3 Analytical Results and Discussion 6
4 Summary and Conclusions 8
4.1 Limitations 8
5 References 9

Tables

Table 1 Quarterly Groundwater Monitoring Well Gauging Results
Table 2 Summary of Groundwater Monitoring Well Field Parameters
Table 3 Summary of Groundwater Monitoring Well Analytical Detections and Exceedances

Figures

Figure 1 Investigation Area Location Map
Figure 2 Roxana Interim Groundwater Monitoring Well Locations
Figure 3a Groundwater Contours 3Q21
Figure 3b Groundwater Contours 3Q21-West Fenceline
Figure 4a 3Q21 Thickness of LNAPL-West Fenceline
Figure 4b 3Q21 Thickness of LNAPL
Figure 5 3Q21 Groundwater Monitoring Well Analytical Exceedances
Figure 6 3Q21 Dissolved Phase Benzene Concentrations in Groundwater
Figure 7 3Q21 Cross-Section of Benzene Groundwater Analytical Results-Chaffer Avenue
Figure 8 3Q21 Cross-Section of Benzene Groundwater Analytical Results-Roxana Public Works Yard

Appendices

Appendix A Regulatory History
Appendix B Low Flow Groundwater Sampling Data Sheets
Appendix C Data Review Forms and Laboratory Analytical Reports
Appendix D-1 Charts – Benzene Concentrations Over Time
Appendix D-2 GWSDAT Charts
- 4th Street area – MW-22, ROST-4 PZ(C), P-59, and T-12
- Public Works Yard area – MW-7, MW-8, MW-25, and P-57

1 Introduction

AECOM Technical Services, Inc. (AECOM) is submitting this report on behalf of Equilon Enterprises LLC d/b/a Shell Oil Products US (SOPUS) for the 3rd Quarter 2021 (3Q21) groundwater monitoring well gauging and sampling conducted in the Village of Roxana, Illinois (**Figure 1**). The Interim Groundwater Monitoring Program (Program) was established based on direction from Illinois Environmental Protection Agency (IEPA) dated August 5, 2010 (IEPA, 2010a), The study area within the Village of Roxana (Village) is generally bounded by the alley north of First Street, Illinois Route 111, the West Fenceline of the WRB Refining, LP (WRB) Wood River Refinery (WRR), and the Roxana Public Works Yard. Some groundwater monitoring wells within the WRR were also sampled as part of this event; this was conducted in cooperation with WRB/Phillips 66 (P66). For purposes of presentation in this report only, the combined area is collectively referred to as the "Investigation Area."

The bulleted list below summarizes current regulatory-related correspondence between AECOM, on behalf of SOPUS, and the IEPA during this reporting period (July 2021 through September 2021); prior regulatory-related correspondence which has not yet been addressed by IEPA can be found in **Appendix A**.

- During a July 15, 2021 conference call among representatives of IEPA, SOPUS and AECOM, the October 1, 2020, IEPA issued letter (IEPA, 2020d) was discussed. The October 1, 2020 letter was in response to the following submittals by AECOM, on behalf of SOPUS: TACO Tier 3 Demonstration Report, dated April 27, 2017 (AECOM, 2017a); and TACO Tier 3 Demonstration – Response to Agency comments provided between June 30 and October 6, 2017, dated November 22, 2017 (AECOM, 2017b). Based on a review of the submittals, the IEPA did not approve or deny the submittals but provided several conditions and modifications requests. AECOM and SOPUS are currently responding to these requests.

Groundwater samples were collected and analyzed during 3Q21 to meet the requirements of the Interim Groundwater Monitoring Program, as specified in the guidance presented in **Appendix A**. **Figure 2** shows the groundwater monitoring wells that are part of the interim monitoring well network.

2 Groundwater Sampling and Analytical Procedures

The groundwater monitoring well gauging, sample collection, and analytical procedures are discussed in this section. Gauging and sampling procedures are based on the Interim Groundwater Monitoring Program, as outlined in the IEPA's letter dated August 5, 2010 (IEPA, 2010a) described in **Section 1**, and as modified based on other correspondence described in **Appendix A**. Groundwater samples and gauging data were collected using the most current AECOM standard operating procedures (SOPs) for the project.

2.1 Health & Safety

The quarterly sampling activities were performed in general accordance with the project-specific Health and Safety Plan (HASP), dated February 12, 2021 (AECOM, 2021).

In addition to HASP guidance, quarterly activities were performed in accordance with federal, state, AECOM, and site-specific COVID-19 procedures, following safe working precautions and social distancing recommendations.

2.2 Additional Activities or Modifications

No additional work activities or modifications were conducted during 3Q21.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between July 5 and 7, 2021. The gauging activities were conducted in conjunction with the 3Q21 gauging event for the WRR to evaluate groundwater flow direction and identify possible LNAPL in the Investigation Area. Depth to LNAPL (if present) and depth to water were recorded. Quarterly groundwater monitoring well gauging results can be found in **Table 1**. The groundwater gauging data table also includes well-head PID (photoionization detector) results.

Low-Flow Groundwater Purging and Sampling

Groundwater samples were collected from groundwater monitoring wells between July 8 and 19, 2021; a confirmation sample was collected from well P-66 on August 9, 2021. Groundwater samples were collected using the most current low-flow groundwater purging and sampling related SOPs, which have previously been provided to IEPA. Data are included in this report and discussed in **Section 3**.

Groundwater monitoring wells MW-1 through MW-14; MW-16; MW-22 through MW-28; P-54; P-56; P-57; P-59; P-66; P-74; P-93A, B, and C; P-114R; ROST-3-MW; ROST-4-PZ(C); ROST-4-PZ(G); and T-12 were purged and sampled using a stainless steel submersible pump (pump), low-flow controller, and designated[1] polyethylene tubing.

Groundwater monitoring well P-93D was purged and sampled using a dedicated stainless-steel QED Environmental Systems (QED) Well Wizard® groundwater sampling pump (Well Wizard®) and dedicated bonded polyethylene tubing.

For both sampling methods pumping was performed at a low flow rate (≤ 300 mL/minute) to minimize drawdown of the water level within the groundwater monitoring well. During groundwater purging, water quality parameters (pH, temperature, specific conductivity, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP)) were measured and recorded after every flow-through cell volume. Once stabilization was achieved or a maximum purge

[1] All designated tubing is stored in a sealed bag designated for a particular groundwater monitoring well between sampling events; designated tubing used with stainless steel submersible pumps is replaced annually prior to the first quarter sampling event.

time of two hours was reached, groundwater samples were collected for VOCs and semi-volatile organic compound (SVOC) analysis.

Groundwater monitoring wells located inside the WRR and designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-58, and P-68, contained LNAPL when gauged and, therefore, were not sampled.

Groundwater sampling field parameters can be found in **Table 2**, and low flow groundwater sampling data sheets are included in **Appendix B**.

2.4 Decontamination and Investigation-Derived Waste

Decontamination

Field personnel and equipment underwent decontamination procedures in accordance with project SOPs previously provided to IEPA to ensure the health and safety of those present, to maintain sample integrity, and to minimize cross contamination. Reusable sampling equipment (e.g., groundwater pump) was decontaminated after each sample location using the most current decontamination SOPs.

Investigation-Derived Waste

Investigation-derived waste (IDW), such as purge water and decontamination fluid generated during groundwater sampling activities, was collected, staged, and disposed in accordance with RCRA, Illinois and United States Department of Transportation (DOT) regulations. Expendable materials (e.g., disposable sampling equipment such as gloves and tubing) were decontaminated, if necessary, collected in trash bags, and disposed as municipal waste.

Decontamination fluid and purge water from groundwater monitoring wells MW-4, MW-7, MW-8, and MW-25 are managed as hazardous waste based on prior characterization in conjunction with generator knowledge, and decontamination fluid and purge water from other groundwater monitoring wells in the Village are managed as non-hazardous waste based on prior characterization in conjunction with generator knowledge; both hazardous and non-hazardous waste were disposed at the Heritage facility in Indianapolis, Indiana.

Decontamination fluid and purge water related to, or generated from, work within the WRR was collected and discharged through the WRR's National Pollutant Discharge Elimination System (NPDES)-permitted Wastewater Treatment Plant (WWTP).

2.5 Groundwater Sample Handling and Laboratory Testing

Samples were collected in pre-preserved laboratory-supplied containers and labeled in the field. Sample information was recorded on a chain of custody (COC) form at the time of collection. The sample ID format is "well ID-ROX-date". COCs are included with laboratory analytical reports in **Appendix C**.

Upon collection and labeling, sample containers were immediately placed inside an iced cooler and packed in such a way as to help prevent breakage and maintain sample temperature within 0-6°C without freezing. The samples were then delivered via overnight courier, under the proper COC documentation, to TestAmerica Laboratories, Inc. (TestAmerica) in Pensacola, Florida for analysis.

Samples were analyzed by TestAmerica for VOCs via USEPA Methods 8260B and 8011, for SVOCs via USEPA Method 8270D, and for Polycyclic Aromatic Hydrocarbons (PAHs) via USEPA Method 8270D Low Level (LL). USEPA Method 8011 was used for select VOCs (1,2-dibromoethane and 1,2-dibromo-3-chloropropane) in order to achieve lower reporting limits specified in the most recent version of the Permit. Per direction from IEPA, the Interim Groundwater Monitoring Program concentration limits need to be consistent with those in the Permit.

2.6 Data Quality Review and Data Management

Laboratory data were provided in electronic form and included data qualifiers on the basis of the laboratory's quality control or to indicate sample analysis information. The data were independently reviewed and qualified by AECOM. One hundred percent of the data were subjected to a data quality review. Evaluation of the data followed procedures

outlined in the USEPA National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020). Data qualifiers were also added by AECOM, as appropriate, and are included on **Table 3** and in the laboratory results in **Appendix C**. The results of the data quality review are discussed in **Section 3.2**.

Field data and documentation collected as part of this scope of work became part of the project file. AECOM maintains the files for the site and the database management system.

3 Groundwater Sampling Results

This section presents the results of the 3Q21 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 3Q21 event was conducted between July 5 and 7, 2021. This groundwater monitoring well gauging was conducted in accordance with the Interim Groundwater Monitoring Program, and the results can be found in **Table 1**. Groundwater levels in most wells in the vicinity of the West Fenceline remained similar to, or have risen up to approximately 0.5 feet since, the 2Q21 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have fallen approximately 0.5 feet since the 2Q21 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 3Q21 event. The potentiometric surface observed during the 3Q21 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates an inward gradient with groundwater flow toward the WRR groundwater production wells.

During the 3Q21 quarterly groundwater monitoring well gauging event, LNAPL was detected in three Interim Groundwater Monitoring Program groundwater monitoring wells (P-55R, P-58, and P-68) (**Table 1**). These monitoring wells are located in the WRR. In these wells, LNAPL thicknesses ranged from 0.04 to 0.06 feet. LNAPL was not observed in groundwater monitoring wells located in the Village. **Figures 4a** and **4b** illustrate the measured LNAPL thickness observed along the West Fenceline and inside the refinery, respectively, during the 3Q21 gauging event.

During 3Q21, LNAPL was observed in groundwater monitoring well T-24 located on WRR property at a thickness greater than 0.10 feet and was removed using bailers[2]. The recovered LNAPL was placed in a double-walled lube cube located on the WRR North Property, the contents of which are taken to the WRR oil-water separators for reprocessing.

3.2 Data Quality Review Results

A total of 10 sample delivery groups (SDGs) were prepared and sent to TestAmerica for the 3Q21 event. Fifty-two different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs); additionally, well P-66 was resampled on August 9, 2021 for confirmation (sample ID: P66-ROX-080921). The 52 samples included 41 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 3Q21 are presented in **Appendix C**.

Trip blanks (TBs), equipment blanks (EBs), and laboratory method blanks were analyzed to evaluate for the existence and magnitude of any contamination resulting from field and laboratory activities. Six different EB sets were collected for this quarter. A TB set was included in every cooler that contained samples for VOC analysis. A total of 15 TB sets were analyzed for groundwater VOCs. Laboratory method blanks were analyzed with every analytical batch.

Based on laboratory control sample (LCS), MS/MSD, surrogate, holding time, and field duplicate criteria, the groundwater analytical results reported were accepted for their intended use.

- Due to anomalous bis(2-ethylhexyl) phthalate results, the laboratory re-extracted and re-analyzed for bis(2-ethylhexyl) phthalate in two investigative samples (P57-ROX-071421 and P74-ROX-071421) and laboratory method blanks; bis(2-ethylhexyl) phthalate is a common laboratory and field contaminant. The extraction holding time criteria was exceeded for the re-extracted samples; however, the results from these re-analyses were consistent with historical data (non-detect or below screening value). Based on professional judgement, the results from the re-analyses were used for the purposes of this report.

- Initial and confirmation results in sample P-66 underwent data review and were consistent with each other, although both were elevated compared to historical data. Both initial and confirmation data results are used

[2] LNAPL > 0.10 feet is a project-specific criterion for removal, based on practicality with the removal technique.

for the purposes of this report. Analytical results qualified by AECOM are specified in the data reviews presented in **Appendix C**.

3.3 Analytical Results and Discussion

Table 2 presents cumulative information on groundwater sampling field parameters for Main Sand aquifer wells. These results are consistent with those observed in the 2Q21 sampling event. The laboratory analytical results for the groundwater samples collected during this event are presented in **Table 3**.

Analytical detections were compared to the concentration limits as provided in Condition IV(E)(1) of the Permit for the WRB Refining LP Wood River Refinery[3]. These concentration limits include the Groundwater Quality Standards for Class I: Potable Resource Groundwater (35 IAC 620, Subpart D, Section 410) (Part 620) (IEPA, 2012c), the IEPA Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route (35 IAC 742, Appendix B, Table E) (IEPA, 2007), and the IEPA Toxicity Assessment Unit (Chemicals not in TACO, Tier 1 Tables) (IEPA, 2018). Where screening values were available from multiple sources from the ones mentioned above, screening values from Part 620 were used preferentially over the screening values found in TACO and Chemicals not in TACO sources. All three sources are checked on a quarterly basis to ensure the most current published screening values are being used. The results of this screening comparison are presented in **Table 3**.

Samples from 12 groundwater monitoring wells in the Interim Groundwater Monitoring Program (six in the Village, five in the WRR along the West Fenceline, one in the WRR on Main Property) exhibited exceedances of the groundwater screening criteria for one or more of the following constituents:

- Benzene
- Naphthalene
- 1,2,4-Trimethylbenzene
- Phenol
- Methyl tert-Butyl Ether (MTBE)
- Toluene
- 2-Methylnaphthalene

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 3Q21. These findings are generally consistent with the results from previous sampling events, with the exception of several analytes outside historical range in P-66; P-66 was re-sampled for confirmation.

WRB/P66 notified the Illinois Emergency Management Agency (IEMA) on November 22, 2020 of a release of gasoline from a Buckeye Partners (Wood River Pipeline, LLC) pipeline located to the south of well P-58 along the WRR West Fenceline, and to the north of well P-66 on WRR Main Property as indicated on **Figures 2, 3b, 4a,** and **5**. The release is associated with IEPA Violation Notice L-2021-00084, LPC #1190905036 – Madison County. Wells P-58 and P-66 will be gauged and sampled during the 4th Quarter 2021 (4Q21) Roxana Interim Groundwater Monitoring program.

Figure 6 presents a plan view depiction of benzene analytical results in groundwater across the site. **Figure 7** presents a cross-section along Chaffer Avenue with a vertical distribution of the benzene concentrations in groundwater superimposed. **Figure 8** presents a cross-section across the Roxana Public Works Yard with a vertical distribution of the benzene analytical results in groundwater superimposed.

Appendix D-1 contains benzene concentration trend plots for selected monitoring wells[4] to represent groundwater conditions in the 4th Street area and Public Works Yard area, respectively:

- 4th Street area – MW-22, ROST-4 PZ(C), P-59, and T-12
- Public Works Yard area – MW-7, MW-8, MW-25, and P-57

[3] IEPA requested that the Interim Groundwater Monitoring Program be consistent with the RCRA Part B Permit.
[4] In a meeting with IEPA on April 5, 2018, the AECOM presentation included benzene concentration trend plots pertinent to GMZ discussion. IEPA verbally requested that benzene concentration trend plots for selected monitoring wells be incorporated into Roxana Program quarterly reports.

Beginning in 2Q21, a Mann-Kendall analysis of the analytical benzene results from the eight sampled groundwater wells in the 4th Street and Public Works Yard areas was conducted. The Mann-Kendall analysis was performed using GWSDAT (GroundWater Spatio-Temporal Data Analysis Tool). As of 3Q21, statistically significant downward trends were displayed for six wells, no wells displayed statistically significant increasing trends, and the remaining two wells displayed trends that were not statistically significant[5]. Results from the Mann-Kendall analysis conducted via GWSDAT are presented in **Appendix D-2**.

[5] Results are significant if p value is equal to or below 0.05.

4 Summary and Conclusions

AECOM conducted the 3Q21 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 3Q21, groundwater level data indicate groundwater flow from the Investigation Area is moving toward groundwater production wells at the WRR. Groundwater levels in most wells in the vicinity of the West Fenceline remained similar to, or have risen up to approximately 0.5 feet since, the 2Q21 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have fallen approximately 0.5 feet since the previous quarter.

- The analytical results from 3Q21 are generally similar to those from previous quarters, with the exception of several analytes outside historical range in P-66; P-66 was re-sampled for confirmation. WRB/P66 notified IEMA on November 22, 2020 of a release of gasoline from a Buckeye Partners (Wood River Pipeline, LLC) pipeline located to the south of well P-58 along the WRR West Fenceline, and to the north of well P-66 on WRR Main Property. Wells P-58 and P-66 will be gauged and sampled during the 4Q21 Roxana Interim Groundwater Monitoring program.

- Benzene concentration plots presented in **Appendix D-1** continue to show stable or decreasing trends.

- GWSDAT charts presented in **Appendix D-2** show statistically significant downward trends displayed for six wells, no wells displayed statistically significant increasing trends, and the remaining two wells displayed trends that are not statistically significant.

- The data and observations presented in this groundwater monitoring report provide further support for the conclusions and requested course of action presented in the proposed Groundwater Management Zone (GMZ) (AECOM 2016b).

4.1 Limitations

SOPUS shall have the right to make and retain copies of and use all Work Product provided. However, such use shall be limited to the particular Site and project for which the Work Product is provided. SOPUS and its agents may release the Work Product to third parties at its sole risk and discretion. This report is based on data, site conditions, and other information that is generally applicable as of the date of this report, and the conclusions and recommendations herein are therefore applicable only to that time frame and to the report in its entirety.

Data may have been provided to AECOM by SOPUS or a third party and used in preparing this report. AECOM has relied on this information as furnished, and is neither responsible for, nor has confirmed the accuracy of this information.

5 References

AECOM, 2015 (AECOM, 2015); *Demonstration to Verify the Extent of Groundwater Contamination Has Been Delineated Roxana, Illinois*. Prepared for Shell Oil Products US (SOPUS), dated April 16, 2015.

AECOM, 2016 (AECOM, 2016a); *Additional Information – Groundwater Management Zone*. Prepared for Shell Oil Products US (SOPUS), dated January 29, 2016.

AECOM, 2016 (AECOM, 2016b); *Proposed Groundwater Management Zone*. Prepared for Shell Oil Products US (SOPUS), dated May 19, 2016.

AECOM, 2016 (AECOM, 2016c); *Response to IEPA Letter dated July 27, 2016 – Groundwater Conditions near East 3rd and Chaffer Streets*. Prepared for Shell Oil Products US (SOPUS), dated October 14, 2016.

AECOM, 2017 (AECOM, 2017a); *TACO Tier 3 Demonstration Report*. Prepared for Shell Oil Products US (SOPUS), dated April 27, 2017.

AECOM, 2017 (AECOM, 2017b); *TACO Tier 3 Demonstration – Response to Agency comments provided between June 30 and October 6, 2017*. Prepared for Shell Oil Products US (SOPUS), dated November 22, 2017.

AECOM, 2018 (AECOM, 2018a); *Response to IEPA Emails dated October 4-23, 2017 – GMZ Response to Comments*. Prepared for Shell Oil Products US (SOPUS), dated January 2, 2018.

AECOM, 2018 (AECOM, 2018b); *Groundwater Management Zone – Additional Information*. Prepared for Shell Oil Products US (SOPUS), dated September 26, 2018.

AECOM, 2020 (AECOM, 2020a); *Response to IEPA Notice of Permit Renewal Application Incompleteness*. Prepared for Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated September 4, 2020.

AECOM, 2020 (AECOM, 2020b); *Class 1* Permit Modification – Response to Condition 4.b. in Attachment A and Condition V.D.3. of the 12/20/2019 IEPA Letter with Modified Permit*. Prepared for SOPUS, dated October 12, 2020.

AECOM, 2021 (AECOM, 2021); *Shell HAZWOPER Health and Safety Plan: Rand Avenue, Roxana / Route 111, and WRR Investigation and Remediation*. Prepared for Shell Oil Products US (SOPUS), dated February 4, 2021.

Illinois Environmental Protection Agency, 2007 (IEPA, 2007); 35 Illinois Administrative Code 742, Tiered Approach to Corrective Action Objectives. Appendix B. *Table E – Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route*. Effective February 23, 2007; accessed on September 1, 2021.

Illinois Environmental Protection Agency, 2010 (IEPA, 2010a); *Letter providing approval with comments the SOPUS 2010 Delineation Report*. Issued to Shell Oil Products US (SOPUS), dated August 5, 2010.

Illinois Environmental Protection Agency, 2010 (IEPA, 2010b); *Hazardous Waste Management RCRA Post-Closure Permit.* Issued to Shell Oil Products US (SOPUS) at the WRB Refining LP Wood River Refinery (WRB WRR), issued September 23, 2010; effective October 28, 2010; modified April 2, 2013; modified June 13, 2014; modified November 25, 2014; modified July 29, 2015; modified December 20, 2019.

Illinois Environmental Protection Agency, 2011 (IEPA, 2011a); *Corrective Action Letter for the West Fenceline*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated June 16, 2011.

Illinois Environmental Protection Agency, 2011 (IEPA, 2011b); *RCRA Response to Groundwater for Second Quarter 2011*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated August 31, 2011.

Illinois Environmental Protection Agency, 2012 (IEPA, 2012a); *Letter (CA-24) in response to ROST-4-PZ Delineation and Sampling Report.* Issued to Shell Oil Products US (SOPUS), dated March 14, 2012.

Illinois Environmental Protection Agency, 2012 (IEPA, 2012b); *Letter (CA-25) in Response to Agency Comments Provided in June 16, 2011 Letter.* Issued to Shell Oil Products US (SOPUS), dated March 14, 2012.

Illinois Environmental Protection Agency, 2012 (IEPA, 2012c); 35 Illinois Administrative Code 620, Subpart D, Section 410. *Groundwater Quality Standards for Class 1: Potable Resource Groundwater (Part 620)*. Effective October 5, 2012; accessed on September 1, 2021.

Illinois Environmental Protection Agency, 2013 (IEPA, 2013a); *Approval with Conditions for the Roxana 4Q10 and 2Q12 Groundwater Monitoring Program Reports*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated April 8, 2013.

Illinois Environmental Protection Agency, 2013 (IEPA, 2013b); *Response to Submittals received February 8, 2012; November 14, 2012; January 25, 2013; and March 14, 2013*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated July 18, 2013.

Illinois Environmental Protection Agency, 2014 (IEPA, 2014a); *Response to Class I* Permit Modification Requests.* Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated June 13, 2014.

Illinois Environmental Protection Agency, 2014 (IEPA, 2014b); *Response to Groundwater Monitoring Well Installation Plan Location on BP Property.* Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated October 9, 2014.

Illinois Environmental Protection Agency, 2014 (IEPA, 2014c); *Response to the Groundwater Portions of the Two Subject Submittals (Proposed Plan for Groundwater Corrective Action and Request for a 60-day Extension for Submittal of the Plan).* Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated November 25, 2014.

Illinois Environmental Protection Agency, 2015 (IEPA, 2015); *Approval of an April 3, 2013, Submittal Made on Behalf of Equilon Enterprises LLC and WRB Refining LP by Robert Billman, URS Corporation.* Issued to Shell Oil Products (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated May 22, 2015.

Illinois Environmental Protection Agency, 2016 (IEPA, 2016a); *IEPA Approval of Perched Groundwater Monitoring Location Abandonments*. Issued to Shell Oil Products (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated July 27, 2016.

Illinois Environmental Protection Agency, 2016 (IEPA, 2016b); *IEPA Approval Conditions and Modifications for the Response to IEPA Letter Dated April 8, 2013, for Groundwater Conditions Near East 3rd and Chaffer Streets (which was dated July 29, 2013*. Issued to Shell Oil Products (SOPUS) and WRB Refining LP (WRB Wood River Refinery (WRR), dated July 27, 2016.

Illinois Environmental Protection Agency, 2016 (IEPA, 2016c); *Response to Two Subject Submittals Submitted on Behalf of Shell Oil Products US (SOPUS) by URS Corporation (URS), in Regards to the WRB Refining, LLC Wood River Refinery (WRR) in Roxana, IL*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated February 23, 2016.

Illinois Environmental Protection Agency, 2017 (IEPA, 2017); *IEPA Approval to Reduce Gauging – Roxana Groundwater Monitoring Program*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated August 2, 2017.

Illinois Environmental Protection Agency Toxicity Assessment Unit; *Chemicals Not in TACO, Tier 1 Tables*, 2018 (IEPA, 2018). http://www.epa.state.il.us/land/taco/chemicals-not-in-taco-tier-1-tables.html. Accessed on September 1, 2021.

Illinois Environmental Protection Agency, 2019 (IEPA, 2019); *Groundwater Ordinances Reviewed for Use As Environmental Institutional Controls*. http://epadata.epa.state.il.us/land/gwordinance/municipality.asp?Municipality=Roxana. Emailed to Shell Oil Products US (SOPUS), dated November 7, 2019.

Illinois Environmental Protection Agency, 2020 (IEPA, 2020a); *Notice of Permit Renewal Application Incompleteness*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated June 30, 2020.

Illinois Environmental Protection Agency, 2020 (IEPA, 2020b); *Notice of Permit Completeness*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated October 30, 2020.

Illinois Environmental Protection Agency, 2020 (IEPA, 2020c); *RCRA Groundwater O&M Inspection*. Issued to Shell Oil Products US (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated October 6, 2020.

Illinois Environmental Protection Agency, 2020 (IEPA, 2020d); *Conditions and Modifications to Four Submittals (4/6/17, 4/27/17, 7/14/2017, and 11/22/2017) Regarding RCRA Corrective Action Activities.* Issued to SOPUS and WRB WRR, dated October 1, 2020.

URS Corporation, 2013 (URS, 2013a); *Roxana Perched Groundwater Monitoring Locations*; Prepared for Shell Oil Products US (SOPUS); dated August 16, 2013.

URS Corporation, 2013 (URS, 2013b); *Response to IEPA Letter April 8, 2013 – Groundwater Conditions near East 3rd and Chaffer Streets, Roxana, Illinois*; Prepared for Shell Oil Products US (SOPUS); dated July 29, 2013.

URS Corporation, 2013 (URS, 2013c); *Proposed Plan for Groundwater Corrective Action, Roxana, Illinois*; Prepared for Shell Oil Products US (SOPUS); dated November 14, 2013.

URS Corporation, 2014 (URS, 2014a); *Perched Groundwater Monitoring Locations*; Prepared for Shell Oil Products US (SOPUS); dated January 14, 2014.

URS Corporation, 2014 (URS, 2014b); *Perched Groundwater Monitoring Request for Abandonment*; Prepared for Shell Oil Products US (SOPUS); dated January 14, 2014.

URS Corporation, 2014 (URS, 2014c); *Request to Reduce Gauging – Roxana Groundwater Monitoring Program, Roxana IL*; Prepared for Shell Oil Products US (SOPUS); dated December 5, 2014.

U.S. Environmental Protection Agency, November 2020 (USEPA, 2020); *National Functional Guidelines for Organic Superfund Methods Data Review.*

Tables

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 01											
4Q20	442.83	10/6/2020	NE	36.03	NA	NA	NA	406.80	394.03 - 384.03 (48.80 - 58.80)	0.1	*
1Q21		1/5/2021	NE	37.23	NA	NA	NA	405.60		0.0	*
2Q21		4/5/2021	NE	37.66	NA	NA	NA	405.17		0.0	*
3Q21		7/7/2021	NE	37.27	NA	NA	NA	405.56		0.0	*
MW 02											
4Q20	443.93	10/5/2020	NE	37.45	NA	NA	NA	406.48	394.06 - 384.06 (49.87 - 59.87)	68.7	*
1Q21		1/4/2021	NE	38.51	NA	NA	NA	405.42		42.0	*
2Q21		4/5/2021	NE	38.94	NA	NA	NA	404.99		65.2	*
3Q21		7/6/2021	NE	38.66	NA	NA	NA	405.27		40.3	*
MW 03											
4Q20	430.23	10/6/2020	NE	23.31	NA	NA	NA	406.92	395.56 - 385.56 (34.67 - 44.67)	0.0	*
1Q21		1/5/2021	NE	24.59	NA	NA	NA	405.64		0.0	*
2Q21		4/5/2021	NE	24.90	NA	NA	NA	405.33		0.0	*
3Q21		7/7/2021	NE	24.30	NA	NA	NA	405.93		0.0	*
MW 04											
4Q20	441.31	10/6/2020	NE	34.52	NA	NA	NA	406.79	396.25 - 386.25 (45.06 - 55.06)	0.0	*
1Q21		1/5/2021	NE	35.73	NA	NA	NA	405.58		0.0	*
2Q21		4/5/2021	NE	36.08	NA	NA	NA	405.23		0.0	*
3Q21		7/7/2021	NE	35.64	NA	NA	NA	405.67		0.0	*
MW 05											
4Q20	429.98	10/6/2020	NE	23.01	NA	NA	NA	406.97	396.01 - 386.01 (33.97 - 43.97)	0.1	*
1Q21		1/5/2021	NE	24.25	NA	NA	NA	405.73		0.0	*
2Q21		4/6/2021	NE	24.60	NA	NA	NA	405.38		0.0	*
3Q21		7/7/2021	NE	24.02	NA	NA	NA	405.96		0.0	*
MW 06A											
4Q20	432.33	10/6/2020	NE	25.16	NA	NA	NA	407.17	398.48 - 388.48 (33.85 - 43.85)	0.0	*
1Q21		1/4/2021	NE	26.33	NA	NA	NA	406.00		0.0	*
2Q21		4/6/2021	NE	26.61	NA	NA	NA	405.72		0.0	*
3Q21		7/7/2021	NE	26.06	NA	NA	NA	406.27		0.0	*
MW 06B											
4Q20	432.37	10/6/2020	NE	25.19	NA	NA	NA	407.18	368.32 - 363.32 (64.05 - 69.05)	0.0	*
1Q21		1/4/2021	NE	26.38	NA	NA	NA	405.99		0.0	*
2Q21		4/6/2021	NE	26.65	NA	NA	NA	405.72		0.0	*
3Q21		7/7/2021	NE	26.12	NA	NA	NA	406.25		0.0	*
MW 06C											
4Q20	432.18	10/6/2020	NE	24.99	NA	NA	NA	407.19	347.23 - 342.23 (84.95 - 89.95)	0.0	*
1Q21		1/4/2021	NE	26.16	NA	NA	NA	406.02		0.0	*
2Q21		4/6/2021	NE	26.44	NA	NA	NA	405.74		0.0	*
3Q21		7/7/2021	NE	25.94	NA	NA	NA	406.24		0.0	*
MW 06D											
4Q20	432.06	10/6/2020	NE	24.85	NA	NA	NA	407.21	327.34 - 322.34 (104.72 - 109.72)	0.0	*
1Q21		1/5/2021	NE	26.03	NA	NA	NA	406.03		0.0	*
2Q21		4/6/2021	NE	26.30	NA	NA	NA	405.76		0.0	*
3Q21		7/7/2021	NE	25.76	NA	NA	NA	406.30		0.0	*
MW 07											
4Q20	443.31	10/5/2020	NE	36.64	NA	NA	NA	406.67	400.39 - 390.39 (42.92 - 52.92)	6064	*
1Q21		1/4/2021	NE	37.75	NA	NA	NA	405.56		1026	*
2Q21		4/5/2021	NE	38.11	NA	NA	NA	405.20		393	*
3Q21		7/6/2021	NE	37.74	NA	NA	NA	405.57		1005	*
MW 08											
4Q20	434.43	10/6/2020	NE	27.49	NA	NA	NA	406.94	400.83 - 390.83 (33.60 - 43.60)	0.1	*
1Q21		1/4/2021	NE	28.73	NA	NA	NA	405.70		0.0	*
2Q21		4/6/2021	NE	29.03	NA	NA	NA	405.40		3.6	*
3Q21		7/7/2021	NE	28.51	NA	NA	NA	405.92		27.3	*
MW 09											
4Q20	445.28	10/5/2020	NE	37.48	NA	NA	NA	407.80	399.24 - 389.24 (46.04 - 56.04)	0.0	*
1Q21		1/4/2021	NE	38.57	NA	NA	NA	406.71		0.0	*
2Q21		4/5/2021	NE	39.31	NA	NA	NA	405.97		0.0	*
3Q21		7/6/2021	NE	38.86	NA	NA	NA	406.42		0.0	*

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 10											
4Q20	445.06	10/5/2020	NE	37.33	NA	NA	NA	407.73	400.63 - 390.63 (44.43 - 54.43)	0.0	*
1Q21		1/4/2021	NE	38.38	NA	NA	NA	406.68		0.0	*
2Q21		4/5/2021	NE	39.07	NA	NA	NA	405.99		0.0	*
3Q21		7/6/2021	NE	38.78	NA	NA	NA	406.28		0.0	*
MW 11											
4Q20	442.38	10/5/2020	NE	35.12	NA	NA	NA	407.26	400.72 - 390.72 (41.66 - 51.66)	0.0	*
1Q21		1/4/2021	NE	36.35	NA	NA	NA	406.03		0.0	*
2Q21		4/5/2021	NE	36.93	NA	NA	NA	405.45		0.0	*
3Q21		7/6/2021	NE	36.53	NA	NA	NA	405.85		0.0	*
MW 12											
4Q20	442.64	10/6/2020	NE	35.68	NA	NA	NA	406.96	400.72 - 390.72 (41.92 - 51.92)	0.0	*
1Q21		1/4/2021	NE	36.92	NA	NA	NA	405.72		0.0	*
2Q21		4/5/2021	NE	37.43	NA	NA	NA	405.21		0.0	*
3Q21		7/7/2021	NE	36.95	NA	NA	NA	405.69		0.0	*
MW 13											
4Q20	430.30	10/6/2020	NE	22.96	NA	NA	NA	407.34	405.50 - 395.50 (24.80 - 34.80)	0.0	*
1Q21		1/5/2021	NE	24.41	NA	NA	NA	405.89		0.0	*
2Q21		4/6/2021	NE	24.52	NA	NA	NA	405.78		0.0	*
3Q21		7/7/2021	NE	23.75	NA	NA	NA	406.55		0.0	*
MW 14											
4Q20	434.61	10/7/2020	NE	27.29	NA	NA	NA	407.32	401.19 - 391.19 (33.42 - 43.42)	53.4	*
1Q21		1/5/2021	NE	28.32	NA	NA	NA	406.29		33.2	*
2Q21		4/7/2021	NE	28.55	NA	NA	NA	406.06		43.3	*
3Q21		7/7/2021	NE	28.15	NA	NA	NA	406.46		94.3	*
MW 16											
4Q20	443.60	10/6/2020	NE	36.78	NA	NA	NA	406.82	406.10 - 396.10 (37.50 - 47.50)	0.0	*
1Q21		1/4/2021	NE	37.97	NA	NA	NA	405.63		0.0	
2Q21		4/5/2021	NE	38.45	NA	NA	NA	405.15		0.0	
3Q21		7/7/2021	NE	38.18	NA	NA	NA	405.42		0.0	
MW 17											
4Q20	441.78	10/5/2020	NE	35.04	NA	NA	NA	406.74	407.49 - 392.49 (34.29 - 49.29)	79.4	
1Q21		1/4/2021	NE	36.09	NA	NA	NA	405.69		5.7	
2Q21		4/5/2021	NE	36.61	NA	NA	NA	405.17		1.0	
3Q21		7/6/2021	NE	36.63	NA	NA	NA	405.15		18.0	
MW 18											
4Q20	442.24	10/5/2020	NE	35.80	NA	NA	NA	406.44	407.32 - 392.32 (34.92 - 49.92)	0.0	
1Q21		1/4/2021	NE	36.80	NA	NA	NA	405.44		0.0	
2Q21		4/5/2021	NE	37.20	NA	NA	NA	405.04		0.0	
3Q21		7/6/2021	NE	37.26	NA	NA	NA	404.98		0.0	
MW 19											
4Q20	442.98	10/5/2020	NE	36.41	NA	NA	NA	406.57	406.64 - 391.64 (36.34 - 51.34)	88.8	
1Q21		1/4/2021	NE	37.52	NA	NA	NA	405.46		0.0	
2Q21		4/5/2021	NE	37.93	NA	NA	NA	405.05		0.0	
3Q21		7/6/2021	NE	37.88	NA	NA	NA	405.10		0.0	
MW 20											
4Q20	443.86	10/5/2020	NE	37.31	NA	NA	NA	406.55	407.98 - 392.98 (35.88 - 50.88)	228	
1Q21		1/4/2021	NE	38.44	NA	NA	NA	405.42		0.0	
2Q21		4/5/2021	NE	38.87	NA	NA	NA	404.99		0.0	
3Q21		7/6/2021	NE	38.70	NA	NA	NA	405.16		0.0	
MW 21											
4Q20	444.01	10/5/2020	NE	37.47	NA	NA	NA	406.54	409.00 - 394.00 (35.01 - 50.01)	1.1	
1Q21		1/4/2021	NE	38.56	NA	NA	NA	405.45		0.0	
2Q21		4/5/2021	NE	38.95	NA	NA	NA	405.06		0.0	
3Q21		7/6/2021	NE	38.87	NA	NA	NA	405.14		0.0	
MW 22											
4Q20	442.38	10/6/2020	NE	35.39	NA	NA	NA	406.99	403.95 - 393.95 (38.43 - 48.43)	0.0	*
1Q21		1/4/2021	NE	36.57	NA	NA	NA	405.81		0.0	*
2Q21		4/5/2021	NE	37.10	NA	NA	NA	405.28		0.6	*
3Q21		7/7/2021	NE	36.84	NA	NA	NA	405.54		0.0	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 23											
4Q20	431.57	10/6/2020	NE	24.46	NA	NA	NA	407.11	402.55 - 392.55 (29.02 - 39.02)	0.2	*
1Q21		1/5/2021	NE	25.82	NA	NA	NA	405.75		0.0	*
2Q21		4/5/2021	NE	26.03	NA	NA	NA	405.54		0.0	*
3Q21		7/7/2021	NE	25.31	NA	NA	NA	406.26		0.0	*
MW 24											
4Q20	443.65	10/6/2020	NE	36.46	NA	NA	NA	407.19	404.04 - 394.04 (39.61 - 49.61)	0.0	*
1Q21		1/4/2021	NE	37.68	NA	NA	NA	405.97		0.0	*
2Q21		4/5/2021	NE	38.28	NA	NA	NA	405.37		0.0	*
3Q21		7/7/2021	NE	37.81	NA	NA	NA	405.84		0.0	*
MW 25											
4Q20	438.53	10/6/2020	NE	31.68	NA	NA	NA	406.85	402.94 - 392.94 (35.59 - 45.59)	81.5	*
1Q21		1/5/2021	NE	32.87	NA	NA	NA	405.66		6.6	*
2Q21		4/6/2021	NE	33.24	NA	NA	NA	405.29		44.8	*
3Q21		7/6/2021	NE	32.81	NA	NA	NA	405.72		65.9	*
MW 26											
4Q20	441.23	10/6/2020	NE	34.40	NA	NA	NA	406.83	403.08 - 393.08 (38.15 - 48.15)	0.0	*
1Q21		1/5/2021	NE	35.62	NA	NA	NA	405.61		0.0	*
2Q21		4/9/2021	NE	35.92	NA	NA	NA	405.31		0.0	*
3Q21		7/7/2021	NE	35.63	NA	NA	NA	405.60		0.0	*
MW 27											
4Q20	443.60	10/5/2020	NE	35.45	NA	NA	NA	408.15	403.81 - 393.81 (39.79 - 49.79)	0.0	*
1Q21		1/4/2021	NE	36.79	NA	NA	NA	406.81		0.0	*
2Q21		4/6/2021	NE	37.68	NA	NA	NA	405.92		0.0	*
3Q21		7/6/2021	NE	37.06	NA	NA	NA	406.54		0.0	*
MW 28											
4Q20	443.55	10/5/2020	NE	34.96	NA	NA	NA	408.59	409.94 - 399.94 (33.61 - 43.61)	2.1	
1Q21		1/4/2021	NE	35.90	NA	NA	NA	407.65		0.0	
2Q21		4/5/2021	NE	36.69	NA	NA	NA	406.86		0.0	
3Q21		7/6/2021	NE	36.33	NA	NA	NA	407.22		0.0	
P 01											
4Q20	442.98	10/7/2020	NE	26.62	NA	NA	NA	416.36	380.76 - 375.76 (62.22 - 67.22)	0.1	*
1Q21		1/6/2021	NE	27.91	NA	NA	NA	415.07		0.0	*
2Q21		4/6/2021	NE	27.39	NA	NA	NA	415.59		0.0	*
3Q21		7/7/2021	NE	27.98	NA	NA	NA	415.00		0.0	*
P 4U											
4Q20	442.74	10/7/2020	NE	27.62	NA	NA	NA	415.12	361.59 - 359.59 (81.15 - 83.15)	0.0	*
1Q21		1/6/2021	NE	29.03	NA	NA	NA	413.71		0.0	*
2Q21		4/7/2021	NE	28.80	NA	NA	NA	413.94		0.0	*
3Q21		7/7/2021	NE	29.36	NA	NA	NA	413.38		0.0	*
P 5L											
4Q20	444.01	10/7/2020	NE	27.73	NA	NA	NA	416.28	303.61 - 301.61 (140.40 - 142.40)	0.0	*
1Q21		1/6/2021	NE	29.23	NA	NA	NA	414.78		0.0	*
2Q21		4/7/2021	NE	28.14	NA	NA	NA	415.87		0.0	*
3Q21		7/7/2021	NE	29.02	NA	NA	NA	414.99		0.0	*
P 5U											
4Q20	444.42	10/7/2020	NE	28.93	NA	NA	NA	415.49	313.79 - 311.79 (130.63 - 132.63)	0.0	*
1Q21		1/6/2021	NE	30.20	NA	NA	NA	414.22		0.0	*
2Q21		4/7/2021	NE	29.79	NA	NA	NA	414.63		0.0	*
3Q21		7/7/2021	NE	30.42	NA	NA	NA	414.00		0.0	*
P 6U											
4Q20	443.63	10/7/2020	NE	28.38	NA	NA	NA	415.25	363.13 - 361.13 (80.50 - 82.50)	0.0	*
1Q21		1/6/2021	NE	29.88	NA	NA	NA	413.75		0.0	*
2Q21		4/7/2021	NE	29.26	NA	NA	NA	414.37		0.0	*
3Q21		7/7/2021	NE	29.97	NA	NA	NA	413.66		0.0	*
P 7U											
4Q20	444.08	10/7/2020	NE	28.73	NA	NA	NA	415.35	383.00 - 381.00 (61.08 - 63.08)	0.1	*
1Q21		1/6/2021	NE	30.19	NA	NA	NA	413.89		0.0	*
2Q21		4/7/2021	NE	29.34	NA	NA	NA	414.74		0.0	*
3Q21		7/7/2021	NE	30.12	NA	NA	NA	413.96		0.0	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 8U											
4Q20	442.07	10/7/2020	NE	28.54	NA	NA	NA	413.53	382.72 - 380.72 (59.35 - 61.35)	0.0	*
1Q21		1/5/2021	NE	29.88	NA	NA	NA	412.19		0.0	*
2Q21		4/7/2021	NE	30.01	NA	NA	NA	412.06		28.0	*
3Q21		7/7/2021	NE	30.50	NA	NA	NA	411.57		0.0	*
P 9U											
4Q20	445.20	10/6/2020	NE	33.13	NA	NA	NA	412.07	344.61 - 342.61 (100.59 - 102.59)	0.0	*
1Q21		1/5/2021	NE	34.35	NA	NA	NA	410.85		0.0	*
2Q21		4/6/2021	NE	34.81	NA	NA	NA	410.39		0.0	*
3Q21		7/7/2021	NE	35.25	NA	NA	NA	409.95		0.0	*
P 11L											
4Q20	442.76	10/7/2020	NE	29.32	NA	NA	NA	413.44	332.55 - 330.55 (110.21 - 112.21)	0.0	*
1Q21		1/5/2021	NE	30.56	NA	NA	NA	412.20		0.0	*
2Q21		4/7/2021	NE	30.99	NA	NA	NA	411.77		0.0	*
3Q21		7/7/2021	NE	31.44	NA	NA	NA	411.32		0.0	*
P 11U											
4Q20	443.38	10/7/2020	NE	29.89	NA	NA	NA	413.49	343.46 - 341.46 (99.92 - 101.92)	0.0	*
1Q21		1/5/2021	NE	31.18	NA	NA	NA	412.20		0.0	*
2Q21		4/7/2021	NE	31.80	NA	NA	NA	411.58		0.0	*
3Q21		7/7/2021	NE	32.03	NA	NA	NA	411.35		0.0	*
P 14											
4Q20	443.01	10/7/2020	NE	26.70	NA	NA	NA	416.31	395.54 - 385.54 (47.47 - 57.47)	0.0	*
1Q21		1/6/2021	NE	27.98	NA	NA	NA	415.03		0.0	*
2Q21		4/6/2021	NE	27.50	NA	NA	NA	415.51		0.0	*
3Q21		7/7/2021	NE	28.06	NA	NA	NA	414.95		0.0	*
P 15											
4Q20	443.88	10/7/2020	NE	28.30	NA	NA	NA	415.58	398.43 - 388.43 (45.45 - 55.45)	0.1	*
1Q21		1/6/2021	NE	29.71	NA	NA	NA	414.17		0.0	*
2Q21		4/7/2021	NE	29.50	NA	NA	NA	414.38		0.0	*
3Q21		7/7/2021	NE	30.01	NA	NA	NA	413.87		0.0	*
P 16											
4Q20	442.84	10/7/2020	NE	27.32	NA	NA	NA	415.52	397.10 - 387.10 (45.74 - 55.74)	0.0	*
1Q21		1/6/2021	NE	28.81	NA	NA	NA	414.03		0.0	*
2Q21		4/7/2021	NE	28.20	NA	NA	NA	414.64		0.0	*
3Q21		7/7/2021	NE	28.86	NA	NA	NA	413.98		0.0	*
P 43											
4Q20	444.62	10/7/2020	NE	30.72	NA	NA	NA	413.90	381.06 - 371.06 (63.56 - 73.56)	0.0	*
1Q21		1/5/2021	NE	32.06	NA	NA	NA	412.56		0.0	*
2Q21		4/7/2021	NE	32.44	NA	NA	NA	412.18		0.0	*
3Q21		7/7/2021	NE	32.87	NA	NA	NA	411.75		0.0	*
P 53											
4Q20	446.57	10/6/2020	NE	36.79	NA	NA	NA	409.78	406.26 - 381.26 (40.31 - 65.31)	0.0	*
1Q21		1/5/2021	NE	37.82	NA	NA	NA	408.75		0.0	*
2Q21		4/6/2021	NE	38.57	NA	NA	NA	408.00		0.0	*
3Q21		7/7/2021	NE	38.21	NA	NA	NA	408.36		0.0	*
P 54											
4Q20	442.52	10/6/2020	NE	35.20	NA	NA	NA	407.32	404.52 - 379.52 (38.00 - 63.00)	0.0	*
1Q21		1/4/2021	NE	36.47	NA	NA	NA	406.05		0.0	*
2Q21		4/5/2021	NE	37.06	NA	NA	NA	405.46		0.0	*
3Q21		7/6/2021	NE	36.52	NA	NA	NA	406.00		0.0	*
P 55R											
4Q20	444.01	10/5/2020	35.25	35.27	408.74	408.76	0.02	408.76	403.58 - 393.58 (40.43 - 50.43)	210	*
1Q21		1/4/2021	36.40	36.41	407.60	407.61	0.01	407.61		185	*
2Q21		4/5/2021	37.11	37.17	406.84	406.90	0.06	406.89		125	*
3Q21		7/6/2021	37.04	37.10	406.91	406.97	0.06	406.96		115	*
P 56											
4Q20	446.32	10/5/2020	NE	39.74	NA	NA	NA	406.58	405.50 - 380.50 (40.82 - 65.82)	126	*
1Q21		1/8/2021	NE	41.06	NA	NA	NA	405.26		86.4	
2Q21		4/5/2021	NE	41.38	NA	NA	NA	404.94		20.2	
3Q21		7/6/2021	NE	41.22	NA	NA	NA	405.10		115	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 57											
4Q20	447.15	10/5/2020	NE	40.59	NA	NA	NA	406.56	402.96 - 392.96 (44.19 - 54.19)	13.7	*
1Q21		1/4/2021	NE	41.74	NA	NA	NA	405.41		169	*
2Q21		4/5/2021	NE	42.15	NA	NA	NA	405.00		47.1	*
3Q21		7/6/2021	NE	41.87	NA	NA	NA	405.28		159	*
P 58											
4Q20	445.16	10/5/2020	38.58	38.61	406.55	406.58	0.03	406.57	404.95 - 379.95 (40.21 - 65.21)	134	*
1Q21		1/4/2021	39.82	39.85	405.31	405.34	0.03	405.33		178	*
2Q21		4/5/2021	NE	39.98	NA	NA	NA	405.18		0.0	*
3Q21		7/6/2021	39.65	39.69	405.47	405.51	0.04	405.50		33.7	*
P 59											
4Q20	447.07	10/5/2020	NE	40.49	NA	NA	NA	406.58	399.16 - 374.16 (47.91 - 72.91)	231	*
1Q21		1/4/2021	NE	41.66	NA	NA	NA	405.41		186	*
2Q21		4/5/2021	NE	42.14	NA	NA	NA	404.93		156	*
3Q21		7/6/2021	NE	42.08	NA	NA	NA	404.99		14.9	*
P 60											
4Q20	446.88	10/5/2020	NE	39.83	NA	NA	NA	407.05	402.23 - 382.23 (44.65 - 64.65)	41.2	*
1Q21		1/4/2021	NE	41.02	NA	NA	NA	405.86		74.6	*
2Q21		4/5/2021	NE	41.55	NA	NA	NA	405.33		0.0	*
3Q21		7/6/2021	NE	41.48	NA	NA	NA	405.40		7.3	*
P 61											
4Q20	444.66	10/5/2020	38.44	38.45	406.21	406.22	0.01	406.22	398.98 - 373.98 (45.68 - 70.68)	18.4	*
1Q21		1/5/2021	39.68	39.70	404.96	404.98	0.02	404.98		102	*
2Q21		4/5/2021	39.70	39.71	404.95	404.96	0.01	404.96		88.1	*
3Q21		7/6/2021	40.02	40.07	404.59	404.64	0.05	404.63		152	*
P 62											
4Q20	442.60	10/5/2020	35.81	36.01	406.59	406.79	0.20	406.75	401.13 - 376.13 (41.47 - 66.47)	10.4	*
1Q21		1/5/2021	37.02	37.05	405.55	405.58	0.03	405.57		104	*
2Q21		4/5/2021	37.36	37.37	405.23	405.24	0.01	405.24		160	*
3Q21		7/6/2021	37.51	37.54	405.06	405.09	0.03	405.08		185	*
P 63											
4Q20	446.06	10/6/2020	39.20	39.21	406.85	406.86	0.01	406.86	398.77 - 373.77 (47.29 - 72.29)	54.2	*
1Q21		1/5/2021	40.35	40.36	405.70	405.71	0.01	405.71		18.3	*
2Q21		4/6/2021	40.97	40.98	405.08	405.09	0.01	405.09		34.0	*
3Q21		7/6/2021	41.13	41.17	404.89	404.93	0.04	404.92		40.1	*
P 64											
4Q20	446.78	10/6/2020	40.30	40.34	406.44	406.48	0.04	406.47	399.55 - 374.55 (47.23 - 72.23)	115	*
1Q21		1/5/2021	41.45	41.51	405.27	405.33	0.06	405.32		81.2	*
2Q21		4/6/2021	42.17	42.19	404.59	404.61	0.02	404.61		164	*
3Q21		7/6/2021	42.41	42.42	404.36	404.37	0.01	404.37		192	*
P 65											
4Q20	444.77	10/6/2020	NE	37.82	NA	NA	NA	406.95	397.75 - 372.75 (47.02 - 72.02)	25.6	*
1Q21		1/5/2021	NE	39.03	NA	NA	NA	405.74		10.6	*
2Q21		4/6/2021	NE	39.76	NA	NA	NA	405.01		1.6	*
3Q21		7/6/2021	NE	39.82	NA	NA	NA	404.95		0.8	*
P 66											
4Q20	437.00	10/7/2020	NE	30.10	NA	NA	NA	406.90	402.28 - 377.28 (34.72 - 59.72)	51.2	*
1Q21		1/5/2021	NE	31.32	NA	NA	NA	405.68		31.1	*
2Q21		4/7/2021	NE	31.42	NA	NA	NA	405.58		49.1	*
3Q21		7/7/2021	NE	31.05	NA	NA	NA	405.95		69.8	*
P 67											
4Q20	444.30	10/7/2020	36.24	36.26	408.04	408.06	0.02	408.06	402.32 - 377.32 (41.98 - 66.98)	3.3	*
1Q21		1/5/2021	37.39	37.45	406.85	406.91	0.06	406.90		9.6	*
2Q21		4/7/2021	37.52	37.53	406.77	406.78	0.01	406.78		0.2	*
3Q21		7/7/2021	37.25	37.29	407.01	407.05	0.04	407.04		1.1	*
P 68											
4Q20	445.38	10/5/2020	38.44	38.47	406.91	406.94	0.03	406.93	401.62 - 376.62 (43.76 - 68.76)	112	*
1Q21		1/5/2021	39.73	39.77	405.61	405.65	0.04	405.64		43.3	*
2Q21		4/5/2021	40.04	40.06	405.32	405.34	0.02	405.34		157	*
3Q21		7/6/2021	40.10	40.14	405.24	405.28	0.04	405.27		60.1	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 69											
4Q20	443.77	10/5/2020	NE	37.18	NA	NA	NA	406.59	402.95 - 377.95 (40.82 - 65.82)	71.5	*
1Q21		1/5/2021	NE	38.51	NA	NA	NA	405.26		91.1	*
2Q21		4/5/2021	NE	38.75	NA	NA	NA	405.02		59.2	*
3Q21		7/6/2021	NE	38.93	NA	NA	NA	404.84		21.7	*
P 70											
4Q20	443.11	10/5/2020	NE	36.58	NA	NA	NA	406.53	398.44 - 373.44 (44.67 - 69.67)	242	*
1Q21		1/5/2021	37.79	37.80	405.31	405.32	0.01	405.32		58.1	*
2Q21		4/5/2021	NE	38.01	NA	NA	NA	405.10		218	*
3Q21		7/6/2021	NE	38.21	NA	NA	NA	404.90		262	*
P 71											
4Q20	445.09	10/6/2020	NE	38.06	NA	NA	NA	407.03	402.48 - 377.48 (42.61 - 67.61)	101	*
1Q21		1/5/2021	NE	38.96	NA	NA	NA	406.13		35.6	*
2Q21		4/6/2021	NE	39.62	NA	NA	NA	405.47		5.0	*
3Q21		7/6/2021	NE	39.42	NA	NA	NA	405.67		46.0	*
P 72											
4Q20	444.70	10/6/2020	NE	37.54	NA	NA	NA	407.16	398.93 - 373.93 (45.77 - 70.77)	49.4	*
1Q21		1/5/2021	NE	38.65	NA	NA	NA	406.05		30.1	*
2Q21		4/6/2021	NE	39.06	NA	NA	NA	405.64		4.2	*
3Q21		7/6/2021	NE	38.99	NA	NA	NA	405.71		9.2	*
P 73											
4Q20	444.02	10/6/2020	NE	38.01	NA	NA	NA	406.01	402.42 - 377.42 (41.59 - 66.59)	202	*
1Q21		1/8/2021	NE	39.22	NA	NA	NA	404.80		54.5	*
2Q21		4/5/2021	NE	39.36	NA	NA	NA	404.66		62.9	*
3Q21		7/6/2021	NE	39.35	NA	NA	NA	404.67		76.8	*
P 74											
4Q20	442.93	10/5/2020	NE	36.46	NA	NA	NA	406.47	399.10 - 374.10 (43.83 - 68.83)	0.1	*
1Q21		1/5/2021	NE	37.77	NA	NA	NA	405.16		0.0	*
2Q21		4/5/2021	NE	37.98	NA	NA	NA	404.95		0.0	*
3Q21		7/6/2021	NE	38.12	NA	NA	NA	404.81		10.7	*
P 75											
4Q20	446.68	10/7/2020	NE	40.01	NA	NA	NA	406.67	403.55 - 378.55 (43.13 - 68.13)	43.8	*
1Q21		1/5/2021	NE	41.13	NA	NA	NA	405.55		48.2	*
2Q21		4/7/2021	NE	41.16	NA	NA	NA	405.52		72.1	*
3Q21		7/7/2021	NE	40.96	NA	NA	NA	405.72		27.4	*
P 82A											
4Q20	434.94	10/7/2020	NE	24.11	NA	NA	NA	410.83	401.73 - 386.73 (33.21 - 48.21)	0.0	*
1Q21		1/5/2021	NE	25.28	NA	NA	NA	409.66		0.0	*
2Q21		4/6/2021	NE	25.15	NA	NA	NA	409.79		0.0	*
3Q21		7/8/2021	NE	24.74	NA	NA	NA	410.20		0.0	*
P 82B											
4Q20	434.68	10/7/2020	NE	23.82	NA	NA	NA	410.86	371.88 - 369.88 (62.80 - 64.80)	0.0	*
1Q21		1/5/2021	NE	25.01	NA	NA	NA	409.67		0.0	*
2Q21		4/6/2021	NE	24.87	NA	NA	NA	409.81		0.0	*
3Q21		7/8/2021	NE	24.44	NA	NA	NA	410.24		0.0	*
P 82C											
4Q20	434.41	10/7/2020	NE	23.53	NA	NA	NA	410.88	351.64 - 349.64 (82.77 - 84.77)	0.0	*
1Q21		1/5/2021	NE	24.73	NA	NA	NA	409.68		0.1	*
2Q21		4/6/2021	NE	24.58	NA	NA	NA	409.83		0.0	*
3Q21		7/8/2021	NE	24.16	NA	NA	NA	410.25		0.0	*
P 82D											
4Q20	435.09	10/7/2020	NE	24.30	NA	NA	NA	410.79	323.55 - 321.55 (111.54 - 113.54)	0.0	*
1Q21		1/5/2021	NE	25.47	NA	NA	NA	409.62		0.1	*
2Q21		4/6/2021	NE	25.36	NA	NA	NA	409.73		0.0	*
3Q21		7/8/2021	NE	24.94	NA	NA	NA	410.15		0.0	*
P 83A											
4Q20	445.54	10/6/2020	NE	36.71	NA	NA	NA	408.83	398.14 - 383.14 (47.40 - 62.40)	0.0	*
1Q21		1/4/2021	NE	38.82	NA	NA	NA	406.72		0.0	*
2Q21		4/6/2021	NE	38.12	NA	NA	NA	407.42		0.0	*
3Q21		7/6/2021	NE	38.54	NA	NA	NA	407.00		0.0	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 83B											
4Q20	445.77	10/6/2020	NE	36.96	NA	NA	NA	408.81	371.97 - 369.97 (73.80 - 75.80)	0.1	*
1Q21		1/4/2021	NE	37.87	NA	NA	NA	407.90		0.0	*
2Q21		4/6/2021	NE	38.38	NA	NA	NA	407.39		0.0	*
3Q21		7/6/2021	NE	38.80	NA	NA	NA	406.97		0.0	*
P 83C											
4Q20	445.95	10/6/2020	NE	37.11	NA	NA	NA	408.84	353.56 - 351.56 (92.39 - 94.39)	0.0	*
1Q21		1/4/2021	NE	38.03	NA	NA	NA	407.92		0.0	*
2Q21		4/6/2021	NE	38.53	NA	NA	NA	407.42		0.0	*
3Q21		7/6/2021	NE	38.96	NA	NA	NA	406.99		0.0	*
P 83D											
4Q20	445.86	10/6/2020	NE	37.08	NA	NA	NA	408.78	312.06 - 310.06 (133.80 - 135.80)	0.0	*
1Q21		1/4/2021	NE	37.99	NA	NA	NA	407.87		0.0	*
2Q21		4/6/2021	NE	38.51	NA	NA	NA	407.35		0.0	*
3Q21		7/6/2021	NE	38.94	NA	NA	NA	406.92		0.0	*
P 84A											
4Q20	446.63	10/6/2020	NE	37.65	NA	NA	NA	408.98	397.71 - 382.71 (48.92 - 63.92)	0.0	*
1Q21		1/5/2021	NE	38.64	NA	NA	NA	407.99		0.0	*
2Q21		4/6/2021	NE	39.20	NA	NA	NA	407.43		0.0	*
3Q21		7/7/2021	NE	39.10	NA	NA	NA	407.53		0.0	*
P 84B											
4Q20	446.35	10/6/2020	NE	37.39	NA	NA	NA	408.96	372.85 - 370.85 (73.50 - 75.50)	0.0	*
1Q21		1/5/2021	NE	38.37	NA	NA	NA	407.98		0.0	*
2Q21		4/6/2021	NE	38.95	NA	NA	NA	407.40		0.0	*
3Q21		7/7/2021	NE	38.82	NA	NA	NA	407.53		0.0	*
P 84C											
4Q20	446.37	10/6/2020	NE	37.41	NA	NA	NA	408.96	352.32 - 350.32 (94.05 - 96.05)	0.0	*
1Q21		1/5/2021	NE	38.38	NA	NA	NA	407.99		0.0	*
2Q21		4/6/2021	NE	38.96	NA	NA	NA	407.41		0.0	*
3Q21		7/7/2021	NE	38.83	NA	NA	NA	407.54		0.0	*
P 84D											
4Q20	446.38	10/6/2020	NE	37.40	NA	NA	NA	408.98	325.55 - 323.55 (120.83 - 122.83)	0.0	*
1Q21		1/5/2021	NE	38.39	NA	NA	NA	407.99		0.0	*
2Q21		4/6/2021	NE	38.96	NA	NA	NA	407.42		0.0	*
3Q21		7/7/2021	NE	38.83	NA	NA	NA	407.55		0.0	*
P 88A											
4Q20	443.27	10/7/2020	NE	29.24	NA	NA	NA	414.03	404.87 - 389.87 (38.40 - 53.40)	0.0	*
1Q21		1/5/2021	NE	30.40	NA	NA	NA	412.87		0.1	*
2Q21		4/7/2021	NE	30.92	NA	NA	NA	412.35		0.0	*
3Q21		7/7/2021	NE	30.58	NA	NA	NA	412.69		0.0	*
P 88B											
4Q20	443.35	10/7/2020	NE	29.30	NA	NA	NA	414.05	371.70 - 369.70 (71.65 - 73.65)	0.0	*
1Q21		1/5/2021	NE	30.46	NA	NA	NA	412.89		0.1	*
2Q21		4/7/2021	NE	31.00	NA	NA	NA	412.35		0.0	*
3Q21		7/7/2021	NE	30.64	NA	NA	NA	412.71		0.0	*
P 88C											
4Q20	443.31	10/7/2020	NE	29.25	NA	NA	NA	414.06	351.01 - 349.01 (92.30 - 94.30)	0.0	*
1Q21		1/5/2021	NE	30.40	NA	NA	NA	412.91		0.1	*
2Q21		4/7/2021	NE	30.91	NA	NA	NA	412.40		0.0	*
3Q21		7/7/2021	NE	30.78	NA	NA	NA	412.53		0.0	*
P 88D											
4Q20	443.38	10/7/2020	NE	29.43	NA	NA	NA	413.95	331.21 - 329.21 (112.17 - 114.17)	0.0	*
1Q21		1/5/2021	NE	30.60	NA	NA	NA	412.78		0.1	*
2Q21		4/7/2021	NE	31.06	NA	NA	NA	412.32		0.0	*
3Q21		7/7/2021	NE	30.72	NA	NA	NA	412.66		0.0	*
P 89B											
4Q20	447.64	10/6/2020	NE	35.79	NA	NA	NA	411.85	370.28 - 368.28 (77.36 - 79.36)	0.0	*
1Q21		1/5/2021	NE	36.98	NA	NA	NA	410.66		0.0	*
2Q21		4/6/2021	NE	37.78	NA	NA	NA	409.86		0.0	*
3Q21		7/7/2021	NE	38.34	NA	NA	NA	409.30		0.0	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 89C											
4Q20	447.96	10/6/2020	NE	36.13	NA	NA	NA	411.83	351.56 - 349.56 (96.40 - 98.40)	0.0	*
1Q21		1/5/2021	NE	37.34	NA	NA	NA	410.62		0.0	*
2Q21		4/6/2021	NE	38.13	NA	NA	NA	409.83		0.0	*
3Q21		7/7/2021	NE	38.68	NA	NA	NA	409.28		0.0	*
P 89D											
4Q20	447.83	10/6/2020	NE	36.15	NA	NA	NA	411.68	309.33 - 307.33 (138.50 - 140.50)	0.0	*
1Q21		1/5/2021	NE	37.35	NA	NA	NA	410.48		0.0	*
2Q21		4/6/2021	NE	38.13	NA	NA	NA	409.70		0.0	*
3Q21		7/7/2021	NE	38.72	NA	NA	NA	409.11		0.0	*
P 91A											
4Q20	447.43	10/6/2020	NE	41.66	NA	NA	NA	405.77	395.92 - 380.92 (51.51 - 66.51)	33.5	*
1Q21		1/5/2021	42.73	42.74	404.69	404.70	0.01	404.70		72.4	*
2Q21		4/5/2021	NE	43.52	NA	NA	NA	403.91		2.0	*
3Q21		7/6/2021	43.99	44.00	403.43	403.44	0.01	403.44		37.6	*
P 91B											
4Q20	447.47	10/6/2020	NE	41.79	NA	NA	NA	405.68	372.78 - 370.78 (74.69 - 76.69)	11.3	*
1Q21		1/5/2021	NE	42.83	NA	NA	NA	404.64		7.5	*
2Q21		4/5/2021	NE	43.67	NA	NA	NA	403.80		1.5	*
3Q21		7/6/2021	NE	44.12	NA	NA	NA	403.35		14.5	*
P 91C											
4Q20	447.27	10/6/2020	NE	41.55	NA	NA	NA	405.72	352.54 - 350.54 (94.73 - 96.73)	0.0	*
1Q21		1/5/2021	NE	42.60	NA	NA	NA	404.67		0.0	*
2Q21		4/5/2021	NE	43.41	NA	NA	NA	403.86		0.0	*
3Q21		7/6/2021	NE	43.87	NA	NA	NA	403.40		1.3	*
P 91D											
4Q20	447.26	10/6/2020	NE	41.54	NA	NA	NA	405.72	278.94 - 276.94 (168.32 - 170.32)	0.0	*
1Q21		1/5/2021	NE	42.59	NA	NA	NA	404.67		0.0	*
2Q21		4/5/2021	NE	43.41	NA	NA	NA	403.85		0.0	*
3Q21		7/6/2021	NE	43.88	NA	NA	NA	403.38		1.5	*
P 92A											
4Q20	446.39	10/6/2020	39.67	39.68	406.71	406.72	0.01	406.72	398.82 - 383.82 (47.57 - 62.57)	84.4	*
1Q21		1/5/2021	40.89	40.90	405.49	405.50	0.01	405.50		54.0	*
2Q21		4/6/2021	41.68	41.73	404.66	404.71	0.05	404.70		31.3	*
3Q21		7/6/2021	NE	41.85	NA	NA	NA	404.54		4.2	*
P 92B											
4Q20	446.33	10/6/2020	NE	39.63	NA	NA	NA	406.70	371.92 - 369.92 (74.41 - 76.41)	0.3	*
1Q21		1/5/2021	NE	40.85	NA	NA	NA	405.48		0.0	*
2Q21		4/6/2021	NE	41.64	NA	NA	NA	404.69		0.0	*
3Q21		7/6/2021	NE	41.79	NA	NA	NA	404.54		0.0	*
P 92C											
4Q20	446.34	10/6/2020	NE	39.60	NA	NA	NA	406.74	353.38 - 348.38 (92.96 - 97.96)	1.3	*
1Q21		1/5/2021	NE	40.83	NA	NA	NA	405.51		1.6	*
2Q21		4/6/2021	NE	41.64	NA	NA	NA	404.70		9.2	*
3Q21		7/6/2021	NE	41.78	NA	NA	NA	404.56		1.1	*
P 92D											
4Q20	446.15	10/6/2020	NE	39.46	NA	NA	NA	406.69	305.15 - 303.15 (141.00 - 143.00)	0.0	*
1Q21		1/5/2021	NE	40.70	NA	NA	NA	405.45		0.0	*
2Q21		4/6/2021	NE	41.49	NA	NA	NA	404.66		0.0	*
3Q21		7/6/2021	NE	41.65	NA	NA	NA	404.50		0.0	*
P 93A											
4Q20	445.37	10/5/2020	NE	38.80	NA	NA	NA	406.57	402.30 - 392.30 (43.07 - 53.07)	36.4	*
1Q21		1/4/2021	NE	39.93	NA	NA	NA	405.44		0.6	*
2Q21		4/5/2021	NE	40.33	NA	NA	NA	405.04		0.0	*
3Q21		7/6/2021	NE	40.03	NA	NA	NA	405.34		0.4	*
P 93B											
4Q20	446.70	10/5/2020	NE	40.21	NA	NA	NA	406.49	371.92 - 369.92 (74.78 - 76.78)	3.1	*
1Q21		1/4/2021	NE	41.28	NA	NA	NA	405.42		0.0	*
2Q21		4/5/2021	NE	41.67	NA	NA	NA	405.03		0.0	*
3Q21		7/6/2021	NE	41.37	NA	NA	NA	405.33		0.1	*

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 93C											
4Q20	446.55	10/5/2020	NE	40.05	NA	NA	NA	406.50	353.67 - 348.67 (92.88 - 97.88)	0.1	*
1Q21		1/4/2021	NE	41.11	NA	NA	NA	405.44		0.0	*
2Q21		4/5/2021	NE	41.51	NA	NA	NA	405.04		0.0	*
3Q21		7/6/2021	NE	41.21	NA	NA	NA	405.34		0.0	*
P 93D											
4Q20	446.97	10/5/2020	NE	40.45	NA	NA	NA	406.52	321.31 - 319.31 (125.66 - 127.66)	0.6	*
1Q21		1/4/2021	NE	41.47	NA	NA	NA	405.50		0.0	*
2Q21		4/5/2021	NE	41.89	NA	NA	NA	405.08		0.0	*
3Q21		7/6/2021	NE	41.47	NA	NA	NA	405.50		0.0	*
P 94											
4Q20	445.04	10/6/2020	NE	32.28	NA	NA	NA	412.76	398.80 - 383.80 (46.24 - 61.24)	0.0	*
1Q21		1/4/2021	NE	33.52	NA	NA	NA	411.52		0.0	*
2Q21		4/6/2021	NE	33.81	NA	NA	NA	411.23		0.0	*
3Q21		7/6/2021	NE	34.18	NA	NA	NA	410.86		0.2	*
P 95											
4Q20	443.95	10/7/2020	NE	27.09	NA	NA	NA	416.86	407.43 - 392.43 (36.52 - 51.52)	0.0	*
1Q21		1/5/2021	NE	28.31	NA	NA	NA	415.64		0.0	*
2Q21		4/6/2021	NE	28.84	NA	NA	NA	415.11		0.0	*
3Q21		7/7/2021	NE	28.61	NA	NA	NA	415.34		0.0	*
P 102											
4Q20	445.14	10/7/2020	NE	30.15	NA	NA	NA	414.99	402.39 - 382.39 (42.75 - 62.75)	22.6	*
1Q21		1/5/2021	NE	31.26	NA	NA	NA	413.88		9.7	*
2Q21		4/7/2021	NE	31.89	NA	NA	NA	413.25		19.1	*
3Q21		7/7/2021	NE	31.95	NA	NA	NA	413.19		20.3	*
P 114R											
4Q20	429.48	10/6/2020	NE	22.11	NA	NA	NA	407.37	406.47 - 396.47 (23.01 - 33.01)	0.0	*
1Q21		1/5/2021	NE	23.72	NA	NA	NA	405.76		0.2	
2Q21		4/6/2021	NE	23.60	NA	NA	NA	405.88		0.0	
3Q21		7/7/2021	NE	22.46	NA	NA	NA	407.02		0.0	*
P 115											
4Q20	433.54	10/6/2020	NE	26.13	NA	NA	NA	407.41	401.24 - 381.24 (32.30 - 52.30)	0.0	*
1Q21		1/5/2021	NE	27.77	NA	NA	NA	405.77		0.0	*
2Q21		4/6/2021	NE	27.54	NA	NA	NA	406.00		0.0	*
3Q21		7/7/2021	NE	26.52	NA	NA	NA	407.02		0.0	*
P 116											
4Q20	436.79	10/6/2020	NE	29.81	NA	NA	NA	406.98	399.35 - 379.35 (37.44 - 57.44)	0.0	*
1Q21		1/5/2021	NE	31.29	NA	NA	NA	405.50		0.0	*
2Q21		4/6/2021	NE	30.98	NA	NA	NA	405.81		0.0	*
3Q21		7/7/2021	NE	29.89	NA	NA	NA	406.90		0.0	*
P 117											
4Q20	432.87	10/6/2020	NE	25.82	NA	NA	NA	407.05	399.94 - 379.94 (32.93 - 52.93)	0.0	*
1Q21		1/5/2021	NE	27.55	NA	NA	NA	405.32		0.0	*
2Q21		4/6/2021	NE	27.19	NA	NA	NA	405.68		0.0	*
3Q21		7/8/2021	NE	26.15	NA	NA	NA	406.72		0.0	*
P 118											
4Q20	431.48	10/6/2020	NE	24.89	NA	NA	NA	406.59	400.36 - 384.43 (31.12 - 47.05)	0.0	*
1Q21		1/5/2021	NE	26.69	NA	NA	NA	404.79		0.0	*
2Q21		4/6/2021	NE	25.98	NA	NA	NA	405.50		0.0	*
3Q21		7/7/2021	NE	24.81	NA	NA	NA	406.67		0.0	*
P 119											
4Q20	432.11	10/6/2020	NE	24.36	NA	NA	NA	407.75	401.44 - 385.51 (30.67 - 46.60)	0.0	*
1Q21		1/5/2021	NE	25.78	NA	NA	NA	406.33		0.0	*
2Q21		4/6/2021	NE	25.77	NA	NA	NA	406.34		0.0	*
3Q21		7/7/2021	NE	25.09	NA	NA	NA	407.02		0.0	*
P 120											
4Q20	433.00	10/6/2020	NE	24.75	NA	NA	NA	408.25	401.62 - 385.69 (31.38 - 47.31)	0.0	*
1Q21		1/5/2021	NE	26.23	NA	NA	NA	406.77		0.0	*
2Q21		4/6/2021	NE	25.94	NA	NA	NA	407.06		0.0	*
3Q21		7/7/2021	NE	25.21	NA	NA	NA	407.79		0.0	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 129											
4Q20	432.66	10/6/2020	NE	27.53	NA	NA	NA	405.13	400.69 - 384.76 (31.97 - 47.90)	0.0	*
1Q21		1/5/2021	NE	29.47	NA	NA	NA	403.19		0.0	*
2Q21		4/6/2021	NE	27.68	NA	NA	NA	404.98		0.0	*
3Q21		7/7/2021	NE	26.50	NA	NA	NA	406.16		0.0	*
ROST 3 MW											
4Q20	442.52	10/5/2020	NE	35.15	NA	NA	NA	407.37	404.71 - 394.71 (37.81 - 47.81)	0.5	*
1Q21		1/4/2021	NE	36.29	NA	NA	NA	406.23		0.2	*
2Q21		4/5/2021	NE	36.97	NA	NA	NA	405.55		36.1	*
3Q21		7/6/2021	NE	36.61	NA	NA	NA	405.91		66.0	*
ROST 4 PZ											
4Q20	442.15	10/5/2020	NE	34.49	NA	NA	NA	407.66	407.22 - 397.22 (34.93 - 44.93)	83.9	*
1Q21		1/4/2021	NE	35.47	NA	NA	NA	406.68		201	
2Q21		4/5/2021	NE	36.43	NA	NA	NA	405.72		119	
3Q21		7/6/2021	NE	36.04	NA	NA	NA	406.11		0.6	
ROST 4 PZ(A)											
4Q20	442.15	10/5/2020	NE	33.66	NA	NA	NA	408.49	407.38 - 397.38 (34.77 - 44.77)	0.2	*
1Q21		1/4/2021	NE	34.76	NA	NA	NA	407.39		11.1	*
2Q21		4/5/2021	NE	35.87	NA	NA	NA	406.28		0.6	
3Q21		7/6/2021	NE	35.30	NA	NA	NA	406.85		40.4	
ROST 4 PZ(B)											
4Q20	442.40	10/5/2020	NE	34.39	NA	NA	NA	408.01	407.35 - 397.35 (35.05 - 45.05)	0.0	*
1Q21		1/4/2021	NE	35.44	NA	NA	NA	406.96		0.3	
2Q21		4/5/2021	NE	36.50	NA	NA	NA	405.90		0.0	
3Q21		7/6/2021	NE	35.98	NA	NA	NA	406.42		0.0	
ROST 4 PZ(C)											
4Q20	442.97	10/5/2020	NE	35.37	NA	NA	NA	407.60	408.02 - 398.02 (34.95 - 44.95)	120	
1Q21		1/4/2021	NE	36.24	NA	NA	NA	406.73		0.0	
2Q21		4/5/2021	NE	37.30	NA	NA	NA	405.67		0.0	
3Q21		7/6/2021	NE	36.91	NA	NA	NA	406.06		0.0	
ROST 4 PZ(D)											
4Q20	442.92	10/5/2020	NE	35.20	NA	NA	NA	407.72	407.95 - 397.95 (34.97 - 44.97)	77.3	
1Q21		1/4/2021	NE	36.27	NA	NA	NA	406.65		75.2	
2Q21		4/5/2021	NE	37.16	NA	NA	NA	405.76		0.0	
3Q21		7/6/2021	NE	36.83	NA	NA	NA	406.09		0.0	
ROST 4 PZ(E)											
4Q20	441.98	10/5/2020	NE	34.50	NA	NA	NA	407.48	407.23 - 397.23 (34.75 - 44.75)	87.1	*
1Q21		1/4/2021	NE	35.49	NA	NA	NA	406.49		189	
2Q21		4/5/2021	NE	36.33	NA	NA	NA	405.65		0.0	
3Q21		7/6/2021	NE	36.05	NA	NA	NA	405.93		0.0	
ROST 4 PZ(F)											
4Q20	442.12	10/5/2020	NE	34.71	NA	NA	NA	407.41	407.59 - 397.59 (34.53 - 44.53)	79.3	
1Q21		1/4/2021	NE	35.76	NA	NA	NA	406.36		23.3	
2Q21		4/5/2021	NE	36.58	NA	NA	NA	405.54		0.0	
3Q21		7/6/2021	NE	36.31	NA	NA	NA	405.81		0.0	
ROST 4 PZ(G)											
4Q20	442.20	10/5/2020	NE	35.25	NA	NA	NA	406.95	407.92 - 397.92 (34.28 - 44.28)	71.9	
1Q21		1/4/2021	NE	36.28	NA	NA	NA	405.92		0.6	
2Q21		4/5/2021	NE	36.84	NA	NA	NA	405.36		0.6	
3Q21		7/6/2021	NE	36.69	NA	NA	NA	405.51		89.5	
S 1											
4Q20	444.06	10/6/2020	37.26	37.28	406.78	406.80	0.02	406.80	Unknown	175	
1Q21		1/5/2021	38.50	38.51	405.55	405.56	0.01	405.56		61.8	
2Q21		4/6/2021	38.97	38.98	405.08	405.09	0.01	405.09		24.4	
3Q21		7/6/2021	38.95	38.97	405.09	405.11	0.02	405.11		87.9	
T 1											
4Q20	445.61	10/5/2020	NE	37.56	NA	NA	NA	408.05	398.61 - 388.61 (47.00 - 57.00)	0.5	*
1Q21		1/4/2021	NE	38.68	NA	NA	NA	406.93		0.0	*
2Q21		4/5/2021	NE	39.36	NA	NA	NA	406.25		0.0	*
3Q21		7/6/2021	NE	39.12	NA	NA	NA	406.49		0.2	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T 2											
4Q20	443.40	10/6/2020	NE	35.55	NA	NA	NA	407.85	392.90 - 372.76 (50.49 - 70.64)	0.0	*
1Q21		1/4/2021	NE	36.60	NA	NA	NA	406.80		0.0	*
2Q21		4/5/2021	NE	37.27	NA	NA	NA	406.13		0.0	*
3Q21		7/6/2021	NE	37.32	NA	NA	NA	406.08		0.0	*
T 3											
4Q20	449.21	10/6/2020	NE	42.48	NA	NA	NA	406.73	403.99 - 388.99 (45.22 - 60.22)	0.2	*
1Q21		1/4/2021	NE	43.37	NA	NA	NA	405.84		1.2	*
2Q21		4/5/2021	NE	44.11	NA	NA	NA	405.10		0.0	*
3Q21		7/6/2021	NE	44.38	NA	NA	NA	404.83		0.0	*
T 4											
4Q20	446.82	10/6/2020	NE	40.07	NA	NA	NA	406.75	396.80 - 381.80 (50.02 - 65.02)	0.1	*
1Q21		1/5/2021	NE	41.49	NA	NA	NA	405.33		0.1	*
2Q21		4/6/2021	NE	42.40	NA	NA	NA	404.42		0.0	*
3Q21		7/6/2021	NE	43.02	NA	NA	NA	403.80		0.2	*
T 5											
4Q20	443.66	10/6/2020	NE	36.04	NA	NA	NA	407.62	395.33 - 378.78 (48.33 - 64.88)	28.5	*
1Q21		1/5/2021	NE	37.23	NA	NA	NA	406.43		2.0	*
2Q21		4/6/2021	NE	37.87	NA	NA	NA	405.79		3.8	*
3Q21		7/6/2021	NE	37.86	NA	NA	NA	405.80		1.7	*
T 6											
4Q20	446.78	10/5/2020	NE	40.28	NA	NA	NA	406.50	394.27 - 380.02 (52.51 - 66.76)	2.4	*
1Q21		1/4/2021	NE	41.41	NA	NA	NA	405.37		31.1	*
2Q21		4/5/2021	NE	41.83	NA	NA	NA	404.95		0.0	*
3Q21		7/6/2021	NE	41.57	NA	NA	NA	405.21		0.7	*
T 7											
4Q20	444.26	10/7/2020	NE	36.20	NA	NA	NA	408.06	395.54 - 380.54 (48.72 - 63.72)	1.1	*
1Q21		1/5/2021	NE	37.39	NA	NA	NA	406.87		1.1	*
2Q21		4/7/2021	NE	37.48	NA	NA	NA	406.78		0.1	*
3Q21		7/7/2021	NE	37.18	NA	NA	NA	407.08		1.0	*
T 12											
4Q20	444.99	10/5/2020	NE	38.26	NA	NA	NA	406.73	398.16 - 372.16 (46.83 - 72.83)	1.5	*
1Q21		1/4/2021	NE	39.45	NA	NA	NA	405.54		51.2	*
2Q21		4/5/2021	NE	39.90	NA	NA	NA	405.09		0.0	*
3Q21		7/6/2021	NE	39.93	NA	NA	NA	405.06		50.1	*
T 13											
4Q20	443.76	10/5/2020	NE	35.52	NA	NA	NA	408.24	399.95 - 373.95 (43.81 - 69.81)	0.0	*
1Q21		1/4/2021	NE	36.48	NA	NA	NA	407.28		0.0	*
2Q21		4/5/2021	NE	37.16	NA	NA	NA	406.60		0.0	*
3Q21		7/6/2021	NE	36.87	NA	NA	NA	406.89		0.0	*
T 15											
4Q20	445.35	10/6/2020	NE	37.28	NA	NA	NA	408.07	396.95 - 370.95 (48.40 - 74.40)	0.0	*
1Q21		1/4/2021	NE	38.29	NA	NA	NA	407.06		0.0	*
2Q21		4/5/2021	NE	38.86	NA	NA	NA	406.49		0.0	*
3Q21		7/6/2021	NE	39.06	NA	NA	NA	406.29		0.0	*
T 17											
4Q20	446.19	10/6/2020	NE	35.45	NA	NA	NA	410.74	401.72 - 375.72 (44.47 - 70.47)	0.3	*
1Q21		1/4/2021	NE	36.59	NA	NA	NA	409.60		2.9	*
2Q21		4/6/2021	NE	37.18	NA	NA	NA	409.01		0.0	*
3Q21		7/6/2021	NE	37.54	NA	NA	NA	408.65		0.0	*
T 19											
4Q20	446.99	10/6/2020	NE	40.10	NA	NA	NA	406.89	396.22 - 370.22 (50.77 - 76.77)	19.2	*
1Q21		1/5/2021	NE	41.59	NA	NA	NA	405.40		47.5	*
2Q21		4/6/2021	NE	42.48	NA	NA	NA	404.51		4.5	*
3Q21		7/6/2021	NE	43.01	NA	NA	NA	403.98		30.8	*
T 21											
4Q20	444.22	10/7/2020	NE	27.30	NA	NA	NA	416.92	412.26 - 386.26 (31.96 - 57.96)	0.0	*
1Q21		1/5/2021	NE	28.49	NA	NA	NA	415.73		0.0	*
2Q21		4/6/2021	NE	28.96	NA	NA	NA	415.26		0.0	*
3Q21		7/7/2021	NE	28.81	NA	NA	NA	415.41		0.0	*

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T 22											
4Q20	442.37	10/7/2020	NE	29.47	NA	NA	NA	412.90	410.82 - 385.12 (31.55 - 57.25)	0.0	*
1Q21		1/5/2021	NE	30.63	NA	NA	NA	411.74		0.1	*
2Q21		4/7/2021	NE	30.88	NA	NA	NA	411.49		0.0	*
3Q21		7/7/2021	NE	30.46	NA	NA	NA	411.91		0.0	*
T 23											
4Q20	432.90	10/6/2020	NE	22.47	NA	NA	NA	410.43	405.67 - 379.67 (27.23 - 53.23)	0.0	*
1Q21		1/5/2021	NE	23.75	NA	NA	NA	409.15		0.0	*
2Q21		4/7/2021	NE	23.57	NA	NA	NA	409.33		0.0	*
3Q21		7/8/2021	NE	23.18	NA	NA	NA	409.72		0.0	*
T 24											
4Q20	444.00	10/5/2020	37.06	37.11	406.89	406.94	0.05	406.93	402.50 - 376.85 (41.50 - 67.15)	11.7	*
1Q21		1/5/2021	38.33	38.37	405.63	405.67	0.04	405.66		5.3	*
2Q21		4/5/2021	38.72	38.74	405.26	405.28	0.02	405.28		0.0	*
3Q21		7/6/2021	38.80	38.93	405.07	405.20	0.13	405.17		1.1	*
T 28											
4Q20	444.56	10/6/2020	NE	35.52	NA	NA	NA	409.04	Unknown	0.0	
1Q21		1/4/2021	NE	36.48	NA	NA	NA	408.08		0.1	
2Q21		4/6/2021	NE	37.07	NA	NA	NA	407.49		0.0	
3Q21		7/6/2021	NE	37.47	NA	NA	NA	407.09		0.0	
T 37											
4Q20	447.44	10/6/2020	NE	35.60	NA	NA	NA	411.84	398.58 - 378.58 (48.85 - 68.85)	0.0	*
1Q21		1/5/2021	NE	36.85	NA	NA	NA	410.59		0.0	*
2Q21		4/6/2021	NE	37.63	NA	NA	NA	409.81		0.0	*
3Q21		7/7/2021	NE	38.18	NA	NA	NA	409.26		0.0	*
T 38											
4Q20	445.89	10/6/2020	NE	32.56	NA	NA	NA	413.33	396.75 - 376.75 (49.14 - 69.14)	0.0	*
1Q21		1/5/2021	NE	33.86	NA	NA	NA	412.03		0.0	*
2Q21		4/6/2021	NE	34.55	NA	NA	NA	411.34		0.0	*
3Q21		7/7/2021	NE	34.89	NA	NA	NA	411.00		0.0	*
T 62											
4Q20	432.16	10/6/2020	NE	24.37	NA	NA	NA	407.79	412.45 - 382.45 (19.71 - 49.71)	0.0	
1Q21		1/5/2021	NE	25.61	NA	NA	NA	406.55		0.0	
2Q21		4/6/2021	NE	25.47	NA	NA	NA	406.69		0.0	
3Q21		7/7/2021	NE	24.90	NA	NA	NA	407.26		0.0	
T 63											
4Q20	431.55	10/6/2020	NE	24.00	NA	NA	NA	407.55	411.57 - 381.57 (19.98 - 49.98)	0.1	
1Q21		1/5/2021	NE	25.40	NA	NA	NA	406.15		0.0	
2Q21		4/6/2021	NE	25.10	NA	NA	NA	406.45		0.0	
3Q21		7/7/2021	NE	24.36	NA	NA	NA	407.19		0.0	
T 64											
4Q20	429.10	10/6/2020	NE	22.07	NA	NA	NA	407.03	409.29 - 379.29 (19.81 - 49.81)	0.0	
1Q21		1/5/2021	NE	23.69	NA	NA	NA	405.41		0.0	
2Q21		4/6/2021	NE	22.91	NA	NA	NA	406.19		85.6	
3Q21		7/7/2021	NE	22.08	NA	NA	NA	407.02		67.8	

NOTES:

1) Elevations presented in this table are relative to the 1988 NAVD datum.

2) The corrected water level elevations presented in this table were corrected by a specific gravity of 0.80 for the we ls in which LNAPL was identified.

3) PID values measured with a 10.6 electron volt (eV) lamp photoionization detector.

4) btoc Below Top of Casing; ppm parts per mil ion; NA Not Applicable; NE Not Encountered; NM Not Measured

5) * Indicates that the LNAPL and/or water level is above the top of the screened zone of the well.

6) Table includes comprehensive groundwater monitoring well gauging data for the last 4 quarters from the combined Village of Roxana Interim Groundwater Monitoring Program and the WRB Refining LP Wood River Refinery Program.

7) The screened interval for certain monitoring wells was adjusted based on an evaluation of the results of annual bottom depth gauging conducted in the first quarter of each year.

8) Top of casing and screened interval for the groundwater monitoring wells in the Roxana Interim Groundwater Monitoring Program and the WRR Program were adjusted based on surveying conducted in 2Q19, in accordance with Permit Condition IV.J.9, which requires wells be surveyed every five (5) years.

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-01							
4Q20	6.90	18.40	1.262	27 83	0 69	129.1	
1Q21	7.06	16.70	1.006	34 34	0 28	72.7	
2Q21	7.12	18.00	1.041	34 61	0 64	3.1	
3Q21	6.81	20.00	1.133	8.95	1 86	26.7	
MW-02							
4Q20	7.12	18.80	1.463	10 87	0 53	-260.6	
1Q21	7.02	17.30	1.255	9.90	0 01	-58 3	
2Q21	7.10	18.10	1.463	6.00	0 50	-265.8	
3Q21	7.20	20.50	1.093	3.17	1 61	-218.9	
MW-03							
4Q20	6.75	18.00	1.624	19 09	0 60	-137.9	
1Q21	6.59	16.90	1.746	9.71	0 00	-60 2	
2Q21	6.68	17.00	1.349	6.68	0 63	-126.7	
3Q21	6.85	20.40	1.109	1.12	1.49	-140.2	
MW-04							
4Q20	6.84	19.10	1.156	39.15	0 56	-125.2	
1Q21	6.76	14.00	1.014	26 03	0 93	248.9	
2Q21	6.75	18.00	1.084	38 86	0 65	-88.7	
3Q21	6.62	19.70	1.147	1.17	1 22	96.7	
MW-05							
4Q20	6.83	18.30	1.373	15 97	0 64	-152.8	
1Q21	6.71	16.40	1.161	4.80	0 00	-38 8	
2Q21	6.52	17.30	1.484	12 62	0 67	-106.5	
3Q21	6.38	19.50	0.976	5.89	2 02	-92.7	
MW-06A							
4Q20	6.88	20.90	1.102	33 33	0.40	-138.0	
1Q21	6.75	18.20	1.100	49 80	0 59	-51 0	
2Q21	6.55	19.40	1.005	85.15	0.43	-76 9	
3Q21	6.98	22.10	1.130	49 88	0 81	-88 9	
MW-06B							
4Q20	7.27	20.30	0.760	17 31	0 50	-131.4	
1Q21	7.54	18.30	0.718	15.70	0 63	-97.4	
2Q21	7.11	18.60	0.789	17 29	0.72	-98 2	
3Q21	7.37	21.10	-58.900	15 28	0 92	-58 9	
MW-06C							
4Q20	7.37	20.00	0.661	5.83	0 53	-143.7	
1Q21	7.68	17.10	0.602	15 60	0.70	-107.4	
2Q21	7.18	18.60	0.708	6.60	0 64	-120.9	
3Q21	7.40	20.10	0.666	0.06	0 89	-14 3	
MW-06D							
4Q20	7.23	20.10	0.993	37.79	0.44	-152.3	
1Q21	7.48	17.80	0.952	49.70	0 52	-118.7	
2Q21	7.19	18.40	0.947	43 01	0 60	-133.5	
3Q21	7.02	20.70	0.992	30 23	1 04	-41.4	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-07							
4Q20	6.77	19.20	1.469	48.71	0.49	-71 8	
1Q21	6.89	15.00	1.258	49 89	0.74	33.4	
2Q21	6.95	19.40	1.367	9.32	0 66	-84 2	
3Q21	6.80	20.60	1.275	0.00	1.15	65 5	
MW-08							
4Q20	6.87	18.60	1.567	22 22	0 50	-154.8	
1Q21	6.85	16.30	1.078	2.54	0 53	-20.1	
2Q21	6.86	19.40	1.362	17.72	0.75	-123.3	
3Q21	6.78	19.40	1.435	0.00	1 08	1.4	
MW-09							
4Q20	6.82	18.60	2.041	26 52	0 57	-89 5	
1Q21	6.80	16.50	1.317	21 50	0 04	51 2	
2Q21	6.81	17.10	1.747	36 25	1.49	-89.7	
3Q21	7.70	21.40	1.578	15.74	0 88	-15 2	
MW-10							
4Q20	7.15	18.80	1.364	46.11	0 52	-155.4	
1Q21	6.74	16.70	2.192	40 20	0 02	78 6	
2Q21	7.07	17.30	0.920	31 88	1 25	-107.1	
3Q21	7.92	23.00	1.060	36 30	0 85	-81 0	
MW-11							
4Q20	6.76	17.50	1.787	8.02	0 60	-98 2	
1Q21	6.58	16.20	1.350	29 90	0 08	197.0	
2Q21	6.74	17.10	1.593	47 62	0 67	-76 8	
3Q21	6.54	19.00	1.462	10.16	2 01	-69.1	
MW-12							
4Q20	6.95	17.50	1.186	9.15	0 63	55 8	
1Q21	6.63	16.60	0.959	17 90	1 37	174.0	
2Q21	7.01	18.10	1.058	12.10	0 60	34.4	
3Q21	6.96	20.80	0.893	1.56	1.71	130.1	
MW-13							
4Q20	6.65	19.90	1.566	8.06	0 53	-144.8	
1Q21	7.00	18.20	1.361	47.47	0 63	-81.1	
2Q21	6.52	19.90	1.316	45 80	0 63	-107.8	
3Q21	6.82	23.20	1.029	49 53	0 83	-168.4	
MW-14							
4Q20	6.72	18.60	1.022	6.65	0 68	-117.9	
1Q21	6.74	17.20	1.155	1.56	0.48	-36.4	
2Q21	6.84	19.90	1.176	47.70	0 56	-111.3	
3Q21	6.84	20.40	1.264	10.71	0 93	-43.4	
MW-16							
4Q20	6.80	19.00	1.544	21 24	0 65	38 5	
1Q21	6.90	17.10	0.916	33 90	0.19	65 3	
2Q21	6.82	17.30	1.156	9.35	1 69	-13 3	
3Q21	6.45	20.00	0.913	12 51	1 94	21 2	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-22							
4Q20	7.00	18.40	1.414	2.69	0.47	-52 8	
1Q21	7.00	17.90	1.116	11.17	0 03	-51.4	
2Q21	6.95	19.00	1.252	22 96	0 62	-138.5	
3Q21	7.00	21.60	1.254	11 53	1 57	-68 0	
MW-23							
4Q20	6.67	19.00	1.242	39 51	0 56	-117.8	
1Q21	6.42	16.90	1.059	50 80	1 28	-119.5	
2Q21	6.52	18.10	1.094	45 02	0 69	-110.0	
3Q21	6.20	19.40	0.990	70 02	1 88	-63 2	
MW-24							
4Q20	6.97	18.30	1.011	7.68	0.79	194.2	
1Q21	7.14	16.50	1.181	5.73	0 34	59 2	
2Q21	6.84	17.40	1.354	37 66	0.77	8.7	
3Q21	6.90	20.00	1.204	0.00	1 95	144.0	
MW-25							
4Q20	6.97	20.20	1.257	17.73	0 56	-151.4	
1Q21	7.03	16.40	1.119	27 04	0 81	149.0	
2Q21	6.88	18.30	1.250	14 61	0.74	-108.3	
3Q21	6.85	21.20	1.139	23.78	1.14	62 9	
MW-26							
4Q20	6.77	18.50	1.496	10.70	0 81	201.5	
1Q21	7.01	16.00	1.598	20 31	0.44	36.4	
2Q21	6.26	18.00	1.616	18 82	0.77	140.3	
3Q21	6.81	20.60	1.382	5.43	1.78	136.5	
MW-27							
4Q20	6.92	17.80	1.104	5.27	3 36	53 3	
1Q21	7.39	15.90	0.847	9.80	2 27	35.1	
2Q21	6.89	16.60	0.971	7.04	2.77	123.0	
3Q21	6.71	19.00	0.927	7.66	3 00	66 8	
MW-28							
4Q20	6.83	17.60	1.442	12 26	0 65	-53.7	
1Q21	6.88	17.30	1.140	4.85	0 05	11.1	
2Q21	6.43	17.50	1.640	26.49	0.71	-40.4	
3Q21	6.42	19.90	1.345	20 96	1 80	-33.1	
P-54							
4Q20	6.82	17.40	1.307	14 08	4 28	177.1	
1Q21	6.98	15.10	1.184	5.37	1 24	44 0	
2Q21	6.95	17.60	1.332	27 92	3 58	38.1	
3Q21	6.71	21.00	0.892	0.00	2 00	115.8	
P-55R							
4Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-56							
4Q20	7.08	17.80	1.133	4.10	0 26	-144.0	
1Q21	6.82	16.60	0.933	7.23	0 54	-59.4	
2Q21	6.96	20.00	1.073	12.19	0 51	-170.1	
3Q21	7.13	23.30	1.259	9.93	0 83	-92 5	
P-57							
4Q20	6.93	19.90	0.994	5.34	0 60	-137.4	
1Q21	7.00	17.60	0.943	3.58	0 68	-52 8	
2Q21	6.87	21.00	1.093	8.84	0 60	-138.5	
3Q21	6.92	24.40	1.067	0.88	0 95	-129.5	
P-58							
4Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q21	6.80	19.90	1.494	16 65	0 62	-126.0	
3Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-59							
4Q20	6.72	20.70	1.036	3.70	0 61	-131.2	
1Q21	6.58	19.70	1.068	7.79	0 51	-41 8	
2Q21	6.73	22.20	1.170	6.80	0 63	-132.9	
3Q21	6.62	24.80	1.185	0.00	0 90	-48 8	
P-66							
4Q20	6.78	19.60	1.701	6.32	0 64	-139.0	
1Q21	6.97	15.90	1.304	8.99	0 64	-66.4	
2Q21	6.82	22.40	1.110	10.45	0 58	-139.9	
3Q21	6.76	23.40	1.243	7.86	0 91	-142.7	Initial sample.
	6.76	22.90	1.313	1.60	0 31	-120.5	Confirmation sample.
P-68							
4Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-74							
4Q20	6.48	19.30	0.354	3.77	0.71	-60 9	
1Q21	7.21	14.80	0.197	7.33	0 80	20.7	
2Q21	7.65	18.50	0.178	19 91	8.71	103.3	
3Q21	7.04	25.50	0.292	1.84	6 82	93 2	
P-93A							
4Q20	7.17	23.10	0.874	0.90	0.77	-46.7	
1Q21	6.69	18.90	1.183	1.89	0.70	156.7	
2Q21	6.74	21.30	1.210	1.26	0.73	-57 5	
3Q21	6.54	22.10	1.152	0.00	1.11	102.9	
P-93B							
4Q20	6.69	19.50	1.359	4.51	0 61	-120.7	
1Q21	6.72	16.50	1.257	44 03	0 59	-25 8	
2Q21	6.75	18.20	1.307	16.18	0 67	-105.7	
3Q21	6.55	19.40	1.337	0.00	1.15	85 2	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-93C							
4Q20	7.03	18.70	0.915	8.50	0 27	-101.3	
1Q21	7.26	16.10	0.946	2.78	0.78	-34 5	
2Q21	7.05	19.50	1.100	10 39	0 63	-120.8	
3Q21	7.04	20.20	1.017	1.14	0 88	-54 3	
P-93D							
4Q20	6.91	18.20	1.167	0.20	1.16	-103.0	
1Q21	7.13	17.20	1.091	30 00	1 55	-54 9	
2Q21	7.08	18.20	1.209	7.71	0 87	-98 6	
3Q21	7.04	19.30	1.180	0.00	1 22	56 2	
P-114R							
4Q20	6.79	22.20	1.315	48 87	0.43	-163.7	
1Q21	6.69	19.70	0.952	28.18	0 58	-70.7	
2Q21	7.37	21.40	0.712	18 91	0.45	-132.4	
3Q21	6.88	24.00	0.915	49 97	0.76	-189.8	
ROST-3-MW							
4Q20	6.61	16.70	1.274	15.10	0 62	-92 3	
1Q21	6.79	15.30	1.394	35 90	0 09	-14.4	
2Q21	6.86	16.70	1.569	10 26	0.70	-94 0	
3Q21	6.48	18.80	1.220	4.65	1 88	-74 0	
ROST-4-PZ(C)							
4Q20	7.16	16.90	1.519	34 92	0 64	-144.4	
1Q21	7.12	16.90	1.142	29.47	0 03	-71 6	
2Q21	6.87	17.70	1.525	27.18	0 59	-148.0	
3Q21	6.85	19.70	1.151	24.47	1 59	-111.9	
ROST-4-PZ(E)							
4Q20	7.06	18.20	1.983	10 26	0 66	-147.3	
1Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q21	6.92	18.60	1.597	13 01	0 68	-120.2	
3Q21	6.90	21.70	1.595	8.43	1.46	-108.1	
ROST-4-PZ(G)							
4Q20	6.77	18.40	1.615	30 99	0 61	-135.7	
1Q21	6.69	18.00	1.356	5.15	0 00	-52 8	
2Q21	6.51	17.70	1.501	5.20	0 66	-81 0	
3Q21	6.49	20.20	1.147	4.46	1.77	-97 0	
T-12							
4Q20	6.96	18.30	1.667	5.20	0 31	-122.8	
1Q21	6.87	17.30	1.362	5.33	0 53	-93 8	
2Q21	6.97	20.10	1.722	5.69	0 66	-158.7	
3Q21	6.80	23.70	1.690	4.18	0 95	-27 9	

NOTES:

1) Field parameters were collected using a YSI ProDSS.

2) NM = Not Measured

3) * = Equipment malfunction. Results are suspect.

4) Negative parameter readings for Turbidity and DO are recorded as zero.

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [1]		0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																			
MW-01	MW1-ROX-100920	10/9/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	0.0014	0.0021	<0.001	0.0036 J	0.0017 J	0.0053 J
	MW1-ROX-011221	1/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW1-ROX-041321	4/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW1-ROX-071221	7/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0 00076 J	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-02	MW2-ROX-101620	10/16/2020	<0.025	0.0035	<0.025	0 0094	0.013	0.0013	<0 001	<0.001	0.011	0.11	0.074	<0.001	0.017	0.14	0.0085	0 016	0.035	0.047	0.0061	0 053
	MW2-ROX-011421	1/14/2021	<0.025	0.0028	0.0084 J	0 0066	0.0087	0.00094 J	<0 001	<0.001	0.0059	0.12 F1 J	0 066 F1 J	<0.001	0.02	0.12 F1 J	0.0083	0 018	0.048	0.057 F1 J	0.0062	0 063
	MW2-ROX-041521	4/15/2021	<0.05	0 0012 J	<0.05	<0.002	0.0023	<0.002	<0 002	<0.002	0.002	0.095	0 023	<0.002	0.0099	0 033	0.0031	0 011	0.0076	0.045	0.0047 J	0 049
	MW2-ROX-041521-DUP	4/15/2021	<0.05	<0 002	<0.05	<0.002	0.0022	<0.002	<0 002	<0.002	0.0021	0.09	0 022	<0.002	0.009	0 031	0.0033	0 011	0.0074	0.041	0.0048 J	0 046
	MW2-ROX-071421	7/14/2021	<0.13	0 0024 J	<0.13	<0.005	0.0071	<0.005	<0 005	<0.005	0.0059	0.31	0 063	<0.005	0.031	0 096	0.0055	0 046	0.022	0.17	0 015 J	0.18
MW-03	MW3-ROX-101520	10/15/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0 00098 J	<0.001	<0.005	<0.005	<0.01
	MW3-ROX-010821	1/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW3-ROX-041321	4/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	0 00063 J	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW3-ROX-071221	7/12/2021	<0.025	0.00065 J	<0.025	<0.001	0.00078 J	0.00066 J	<0 001	<0.001	<0 001	<0.001	0 013	0 00079 J	<0.001	0 023	0.0096	<0.001	<0.001	0.03	0.0038 J	0 034
MW-04	MW4-ROX-101220	10/12/2020	<0.025	0.00041 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0019	<0.001	<0 001	0.00047 J	<0.001	<0.001	<0.005	0.00067 J	0.0021 J
	MW4-ROX-011821	1/18/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW4-ROX-041921	4/19/2021	<0.025	0.00059 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0021	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW4-ROX-071921	7/19/2021	<0.025	0.00059 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0015	<0.001	<0 001	0.00047 J	<0.001	<0.001	<0.005	<0.005	<0.01
MW-05	MW5-ROX-101420	10/14/2020	<0.025	<0 001	<0.025	<0.001	<0 001	0 0018	<0 001	<0.001	<0 001	<0.001	<0.001	0.0019	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW5-ROX-011121	1/11/2021	<0.025	<0 001	<0.025	<0.001	<0 001	0 0025	<0 001	<0.001	<0 001	<0.001	<0.001	0 002	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW5-ROX-041421	4/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	0 0013	<0 001	<0.001	<0 001	<0.001	<0.001	0 002	<0.001	<0 001	0.00065 J	<0.001	<0.001	<0.005	<0.005	<0.01
	MW5-ROX-071421	7/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	0.00097 J	<0 001	<0.001	<0 001	<0.001	<0.001	0.0042	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-06A	MW6A-ROX-100820	10/8/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 00072 J	<0.001	0 00092 J	<0.001	<0 001	0.0009 J	0.0021	<0.001	0.0026 J	0.0012 J	0.0038 J
	MW6A-ROX-010721	1/7/2021	<0.025	0.00038 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6A-ROX-041421	4/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6A-ROX-070921	7/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-06B	MW6B-ROX-100820	10/8/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 0015	<0.001	<0.001	<0.001	<0 001	0.002	0.0026	0.00064 J	0.0047 J	0.0022 J	0.0069 J
	MW6B-ROX-010721	1/7/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6B-ROX-041421	4/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	0.00042 J	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6B-ROX-070921	7/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-06C	MW6C-ROX-100820	10/8/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 0014	<0.001	<0.001	<0.001	<0 001	0.002	0.0022	<0.001	0.0044 J	0 002 J	0.0063 J
	MW6C-ROX-010721	1/7/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6C-ROX-041421	4/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6C-ROX-070921	7/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-06D	MW6D-ROX-100820	10/8/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 0012	<0.001	<0.001	<0.001	<0 001	0.0017	0.0025	0.00063 J	0.0039 J	0 002 J	0.0059 J
	MW6D-ROX-010721	1/7/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6D-ROX-041421	4/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW6D-ROX-071221	7/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-07	MW7-ROX-101220	10/12/2020	<25 UJ	1400	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<5 UJ	<5 UJ	<10 UJ
	MW7-ROX-101220-DUP	10/12/2020	<25 UJ	1400	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<5 UJ	<5 UJ	<10 UJ
	MW7-ROX-011821	1/18/2021	<250	2000	<250	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100
	MW7-ROX-011821-DUP	1/18/2021	<250	2200	<250	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<50	<50	<100
	MW7-ROX-041921	4/19/2021	<25 UJ	640	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<5 UJ	<5 UJ	<10 UJ
	MW7-ROX-041921-DUP	4/19/2021	<25 UJ	530	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<5 UJ	<5 UJ	<10 UJ
	MW7-ROX-071921	7/19/2021	<130	890	<130	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [1]		0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																			
MW-08	MW8-ROX-101220	10/12/2020	<13	130	<13	<0 5	<0.5	<0 5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5
	MW8-ROX-011821	1/18/2021	<2 5	29	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.056 J	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1
	MW8-ROX-041921	4/19/2021	<25 UJ	290	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<5 UJ	<5 UJ	<10 UJ
	MW8-ROX-071921	7/19/2021	<50	270	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<20
	MW8-ROX-071921-DUP	7/19/2021	<50	270	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10	<10	<20
MW-09	MW9-ROX-100920	10/9/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	0.0006 J	0.0011	<0.001	<0.005	0.00075 J	0.0022 J
	MW9-ROX-011221	1/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW9-ROX-040821	4/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW9-ROX-070821	7/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-10	MW10-ROX-100920	10/9/2020	0.012 J	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	0.00051 J	0.0011	<0.001	<0.005	0.0007 J	0.0022 J
	MW10-ROX-011221	1/12/2021	<0.025	<0 001	<0.025	<0 001 UJ	<0.001 UJ	<0.001 UJ	<0 001	<0.001	<0.001 UJ	<0 001 UJ	<0 001 UJ	<0.001	<0.001	<0.001 UJ	<0.001	<0 001 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ
	MW10-ROX-040821	4/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW10-ROX-070821	7/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-11	MW11-ROX-100920	10/9/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 00082 J	<0.001	<0.001	<0.001	<0 001	0.00093 J	0.0022	0.00058 J	0.0029 J	0.0014 J	0.0043 J
	MW11-ROX-011321	1/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW11-ROX-041221	4/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW11-ROX-071221	7/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-12	MW12-ROX-101520	10/15/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0013	<0.001	<0.005	<0.005	<0.01
	MW12-ROX-010721	1/7/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW12-ROX-041221	4/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW12-ROX-070921	7/9/2021	<0.025	0 0005 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-13	MW13-ROX-101420	10/14/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	0 001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW13-ROX-010821	1/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	0 00084 J	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW13-ROX-041221	4/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	0.0015	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW13-ROX-071221	7/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-14	MW14-ROX-101620	10/16/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0015	<0.001	<0.005	<0.005	0.0016 J
	MW14-ROX-011121	1/11/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW14-ROX-040921	4/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW14-ROX-071321	7/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-16	MW16-ROX-101420	10/14/2020	<0.025	0.00058 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0013	<0.001	<0.005	0.00073 J	0.0019 J
	MW16-ROX-011321	1/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW16-ROX-040821	4/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW16-ROX-071221	7/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-22	MW22-ROX-101520	10/15/2020	<0.025	0.00042 J	<0.025	<0.001	0.00073 J	0.00068 J	<0 001	<0.001	<0 001	0.015	0.0041	<0.001	0.0069	0.0076	0.00062 J	0 042	0.011	0.019	0.0016 J	0.02
	MW22-ROX-011321	1/13/2021	<0.025	0.0073	<0.025	0 0021	0.0018	0 0024	<0 001	<0.001	0.0017	0.21	0.02	<0.001	0.049	0 034	0.0068	0.23	0.039	0 21	0.012	0.22
	MW22-ROX-041521	4/15/2021	<0.13	0 066	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0.53	0 032	<0.005	0.07	0 053	0.045	0.33	0.055	0.8	0.053	0.86
	MW22-ROX-071521	7/15/2021	<0.025	0.00071 J	<0.025	<0.001	<0 001	0.00095 J	<0 001	<0.001	0.00081 J	0.01	0.0043	<0.001	0.0075	0.0064	0.00082 J	0 043	0.0067	0.013	0.0016 J	0 015
	MW22-ROX-071521-DUP	7/15/2021	<0.025	<0 001	<0.025	<0.001	0.00081 J	0.00066 J	<0 001	<0.001	0.001	0.011	0 005	<0.001	0.0091	0.0081	0.00085 J	0 051	0.0085	0.016	0.0019 J	0 018
MW-23	MW23-ROX-101320	10/13/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0012	<0.001	<0.005	<0.005	<0.01
	MW23-ROX-010721	1/7/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW23-ROX-040921	4/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW23-ROX-071321	7/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [1]		0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																		
MW-24	MW24-ROX-101320	10/13/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0014	<0.001	<0.005	0.0008 J	0.0023 J
	MW24-ROX-011121	1/11/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW24-ROX-041321	4/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW24-ROX-070921	7/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-25	MW25-ROX-101220	10/12/2020	<0.025	0 045	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0033	<0.001	<0 001	0.00056 J	0 00089 J	<0.001	<0.005	0.00083 J	0.0022 J
	MW25-ROX-011821	1/18/2021	<0.025	0 044	0.005 J	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0 004	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW25-ROX-011821-DUP	1/18/2021	<0.025	0 035	0.0026 J	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0037	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW25-ROX-041921	4/19/2021	<0.025	0 032	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW25-ROX-071921	7/19/2021	<0.025	0 043	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0026	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-26	MW26-ROX-101520	10/15/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0013	<0.001	<0.005	<0.005	<0.01
	MW26-ROX-010821	1/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW26-ROX-040921	4/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW26-ROX-070921	7/9/2021	<0.025	0.00043 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-27	MW27-ROX-101320	10/13/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0012	<0.001	<0.005	0.00061 J	0.0018 J
	MW27-ROX-010821	1/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW27-ROX-040821	4/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW27-ROX-071321	7/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
MW-28	MW28-ROX-101920	10/19/2020	<0.025	0.0052	<0.025	<0.001	0.0022	0.00071 J	<0 001	<0.001	<0 001	<0.001	<0.001	0 045	0.001	<0 001	<0.001	0.0014	<0.001	<0.005	0.0007 J	<0.01
	MW28-ROX-011421	1/14/2021	<0.025	0 034	<0.025	<0.001	0.0013	<0.001	<0 001	<0.001	<0 001	<0.001	0 00054 J	0 027	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW28-ROX-041621	4/16/2021	<0.025	0 004	<0.025	<0.001	0.0022	<0.001	<0 001	<0.001	<0 001	<0.001	0.0025	0 069	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW28-ROX-041621-DUP	4/16/2021	<0.025	0 004	<0.025	<0.001	0.0013	<0.001	<0 001	<0.001	<0 001	<0.001	0.0014	0 074	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	MW28-ROX-071521	7/15/2021	<0.025	0.0066	<0.025	<0.001	0.0023	<0.001	<0 001	<0.001	<0 001	<0.001	0 001	0 073	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
P-54	P54-ROX-101320	10/13/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	0.0016	<0.001	<0.005	0.00061 J	0.0018 J
	P54-ROX-011121	1/11/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P54-ROX-041321	4/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P54-ROX-070921	7/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
P-56	P56-ROX-102120	10/21/2020	<0.025	0.00069 J	0.0043 J	<0.001	0.0016	<0.001	<0 001	<0.001	<0 001	0 0043	0.0099	<0.001	0.0033	0 012	0.0011	0.01	0.0028	0.016	0.00088 J	0 017
	P56-ROX-011221	1/12/2021	<0.025	0.00042 J	0.0068 J	<0.001	0.0015	<0.001	<0 001	<0.001	<0 001	0.0007 J	0.012	<0.001	<0.001	0 013	0.00048 J	<0.001	<0.001	0.0027 J	<0.005	0.0029 J
	P56-ROX-040921	4/9/2021	0.17	<0 001	0.012 J	<0.001	0.00089 J	<0.001	<0 001	<0.001	<0 001	0.001	0.0085	<0.001	0.0016	0.0079	0.0006 J	0.0017	0.00074 J	0.0081	<0.005	0.0085 J
	P56-ROX-071421	7/14/2021	<0.13	<0 005	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0 0052	0 016	<0.005	0.0092	0 019	<0.005	0 023	0.0063	0.055	<0.025	0 057
P-57	P57-ROX-102020	10/20/2020	<0.05	0.48 J	<0.05	0 0041	0.0062	0.0068	<0 002	<0.002	<0 002	0 0031	0 023	<0.002	0 078 J	0 035	0.0094	<0.002	<0.002	0.0039 J	<0 01	0.0045 J
	P57-ROX-102020-DUP	10/20/2020	<0.25	2 J	<0.25	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	0.0085 J	0 018	<0.01	0 056 J	0 025	0.0081 J	<0.01	<0 01	<0 05	<0 05	<0.1
	P57-ROX-011321	1/13/2021	<0.025	0.11 J	0.003 J	0.003 H J	0.0053	0.0061	<0 001	<0.001	0.00074 J *+ J	0 0015	0 023	<0.001	0.055	0 025	0.0062	<0.001	<0.001	0.0022 J	<0.005	0.0025 J
	P57-ROX-011321-DUP	1/13/2021	<0.025	0.27 J	0.0031 J	0.003 H J	0.0051	0.0059	<0 001	<0.001	0.00078 J *+ J	0 0022	0 023	<0.001	0.062	0 026	0.0062	<0.001	<0.001	0.0023 J	<0.005	0.0025 J
	P57-ROX-041221	4/12/2021	<0.13	0.79	<0.13	<0.005	0 0049 J	0.0051	0.0032 J	<0.005	<0 005	0.0025 J	0 022	<0.005	0.046	0 025	0.005	<0.005	<0.005	<0.025	<0.025	<0.05
	P57-ROX-041221-DUP	4/12/2021	<0.13	0.81	<0.13	<0.005	0.0052	0.005	0.0047 J	<0.005	<0 005	0.0029 J	0 023	<0.005	0.049	0 027	0.0056	<0.005	<0.005	<0.025	<0.025	<0.05
	P57-ROX-071421	7/14/2021	<0.025	0.18	0.0095 J *+ J	0 0036	0.0059	0.0061	<0 001	<0.001	0.0012	0 0022	0.027	<0.001	0.044	0.03	0.0062	<0.001	<0.001	0.0023 J	<0.005	0.0025 J
P-58	P58-ROX-041421	4/14/2021	<13	110	<13	<0 5	<0.5	<0 5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5
P-59	P59-ROX-102020	10/20/2020	<0.25	1.6	<0.25	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	0.15	0 029	<0.01	0.099	0 047	0.11	0.12	0.046	0.22	0 011 J	0.23
	P59-ROX-011321	1/13/2021	<0.25	2.1	<0.25	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	0.14	0 019	<0.01	0.1	0 031	0.094	0 091	0 03	0.14	0 007 J	0.15
	P59-ROX-041321	4/13/2021	<0 5	2.5	<0.5	<0.02	<0.02	<0.02	<0.02	<0 02	<0.02	0.25	0 041	<0.02	0.17	0 066	0.15	0.14	0.065	0.3	0 012 J	0.31
	P59-ROX-071521	7/15/2021	<0 5	3.4	<0.5	<0.02	<0.02	<0.02	<0.02	<0 02	<0.02	0.3	0 048	<0.02	0.15	0.07	0.15	0.14	0.053	0.29	0 013 J	0.31

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [1]		0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																			
P-66	P66-ROX-101620	10/16/2020	<0.025	0.00086 J	<0.025	0 0067	0.017	0.0092	<0 001	0.00066 J	<0 001	0 0013	0.11	<0.001	0.094	0.21	0.00097 J	0.0022	<0.001	0.0016 J	0 002 J	0.0036 J
	P66-ROX-101620-DUP	10/16/2020	<0.025	0.00082 J	<0.025	0 0059	0.018	0.01	<0 001	<0.001	<0 001	0 0016	0.12	<0.001	0.099	0.22	0.00095 J	0.0023	0.00058 J	0.0016 J	0.0019 J	0.0036 J
	P66-ROX-011121	1/11/2021	<0.025	0.00081 J	<0.025	0 0056	0.012	0.0057	0 001	0.00051 J	<0 001	0 00069 J	0.07	<0.001	0.02	0.11	0.0005 J	<0.001	<0.001	<0.005	0 001 J	<0.01
	P66-ROX-040921	4/9/2021	<0.13	0.18	<0.13	0.0046 J	0.0084	0.0042 J	<0 005	<0.005	<0 005	0.013	0 059	<0.005	0.011	0 093	0.61	<0.005	<0.005	0.038	0 024 J	0 062
	P66-ROX-071321	7/13/2021	<0.05	1.2	<0.05	0 0059	0.0096	0.005	<0 002	<0.002	<0 002	0.16	0 055	<0.002	0.014	0 091	3 9	0 038	0.0086	0.49	0.27	0.76
	P66-ROX-080921	8/9/2021	<0.13	0.82	<0.13	<0.005	0 0047 J	<0.005	<0 005	<0.005	<0 005	0.11	0 039	<0.005	0.016	0 069	2 3	0 024	0.0076	0.41	0 2	0.61
P-74	P74-ROX-102020	10/20/2020	<0.025	0.3	0.0071 J	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 0025	<0.001	0.0049	<0.001	<0 001	0.0046	0.0036	0.00088 J	0.0062	0 001 J	0.0072 J
	P74-ROX-011221	1/12/2021	<0.025	0 051	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0011	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P74-ROX-041221	4/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P74-ROX-071421	7/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
P-93A	P93A-ROX-102220	10/22/2020	<0.63	5.8	<0.63	<0.025	<0 025	<0.025	<0 025	<0.025	<0 025	<0.025	<0.025	<0.025	<0.025	<0 025	<0.025	<0.025	<0.025	<0.13	<0.13	<0.25
	P93A-ROX-102220-DUP	10/22/2020	<0.63	7	<0.63	<0.025	<0 025	<0.025	<0 025	<0.025	<0 025	<0.025	<0.025	<0.025	<0.025	<0 025	<0.025	<0.025	<0.025	<0.13	<0.13	<0.25
	P93A-ROX-011421	1/14/2021	<0.025	0.36	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P93A-ROX-041221	4/12/2021	0.064 J	0.84	<0.13	<0.005	<0 005	<0.005	0.003 J	<0.005	<0 005	<0.005	<0.005	<0.005	<0.005	<0 005	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05
	P93A-ROX-071521	7/15/2021	<0.025 UJ	<0.001 UJ	<0 025 UJ	<0 001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0 001 UJ	<0 001 UJ	<0 001 UJ	<0.001	<0.001 UJ	<0.001 UJ	<0 001 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ
	P93A-ROX-071521-DUP	7/15/2021	<0.025	0 057	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
P-93B	P93B-ROX-102220	10/22/2020	<63	580	<63	<2 5	<2.5	<2 5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25
	P93B-ROX-011421	1/14/2021	<130	1200	<130	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50
	P93B-ROX-011421-DUP	1/14/2021	<130	1100	<130	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50
	P93B-ROX-041421	4/14/2021	<130	1300	<130	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25	<25	<50
	P93B-ROX-071621	7/16/2021	<50 UJ	1100	<50 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<10 UJ	<10 UJ	<20 UJ
	P93B-ROX-071621-DUP	7/16/2021	<50 UJ	990	<50 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<10 UJ	<10 UJ	<20 UJ
P-93C	P93C-ROX-102120	10/21/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0 00077 J	<0.001	<0 001	<0.001	0.0014	<0.001	<0.005	<0.005	<0.01
	P93C-ROX-011121	1/11/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0011	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P93C-ROX-040921	4/9/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0029	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P93C-ROX-071221	7/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0024	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
P-93D	P93D-ROX-102220	10/22/2020	<0.025	<0 001	<0.025	<0 001 UJ	<0.001 UJ	<0.001 UJ	<0 001	<0.001 UJ	<0.001 UJ	<0 001 UJ	<0 001 UJ	0 00095 J	<0.001	<0.001 UJ	<0.001 UJ	<0 001 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ
	P93D-ROX-011321	1/13/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0012	<0.001 H UJ	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P93D-ROX-041421	4/14/2021	<0.025	0.0018	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0014	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P93D-ROX-071621	7/16/2021	<0.025	0.0027	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0014	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
P-114R	P114R-ROX-101420	10/14/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0018	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P114R-ROX-010821	1/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0019	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P114R-ROX-041221	4/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	P114R-ROX-071221	7/12/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	0.0021	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
ROST-3-MW	ROST3MW-ROX-101920	10/19/2020	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 00067 J	<0.001	<0.001	<0.001	<0 001	<0.001	0 00087 J	<0.001	<0.005	<0.005	<0.01
	ROST3MW-ROX-010821	1/8/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	ROST3MW-ROX-041321	4/13/2021	<0.025	0.00099 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	0 00063 J	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	0.0016 J
	ROST3MW-ROX-071421	7/14/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
ROST-4-PZ(C)	ROST4PZC-ROX-101920	10/19/2020	<0.025	0.0039	<0.025	<0.001	0.00081 J	<0.001	<0 001	<0.001	0.00093 J	0.022	0.0075	<0.001	0.055	0 012	0.0091	0 028	0.0064	0.083	0.00092 J	0 084
	ROST4PZC-ROX-011421	1/14/2021	<0.025	0.0048	<0.025	0.001	0.00072 J	<0.001	0 00067 J	<0.001	0.0011	0.016	0.0071	<0.001	0.089	0 012	0.011	0 027	0.0091	0.13	0.0016 J	0.13
	ROST4PZC-ROX-041521	4/15/2021	<0.05	0 0017 J	<0.05	<0.002	<0 002	<0.002	<0 002	<0.002	<0 002	0.0014 J	0.0023	<0.002	0.018	0.0037	0.0025	0.0052	0.0012 J	0.022	<0 01	0 022
	ROST4PZC-ROX-071421	7/14/2021	<0.13	0 0028 J	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0.014	0.0084	<0.005	0.079	0 013	0.0064	0.02	0.0089	0.095	<0.025	0 096
	ROST4PZC-ROX-071421-DUP	7/14/2021	<0.13	0 0024 J	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0.011	0.0069	<0.005	0.067	0 013	0.0064	0 018	0.0078	0.081	<0.025	0 082

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [1]		0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	1.0 [1]	0.07 [3]	0.07 [3]	10 [1]		10 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																			
ROST-4-PZ(E)	ROST4PZE-ROX-101920	10/19/2020	<0.13	0 097	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0.41	0 015	<0.005	0.15	0 027	0.042	0.16	0.031	0.45	0.071	0.52
	ROST4PZE-ROX-041621	4/16/2021	<0.13	0 058	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0.43	0 017	<0.005	0.13	0 028	0.038	0.2	0.039	0.51	0.068	0.57
	ROST4PZE-ROX-071521	7/15/2021	<0.05	0.06	<0.05	<0.002	0 0017 J	<0.002	<0 002	<0.002	<0 002	0.38	0 015	<0.002	0.13	0 027	0.033	0.15	0.029	0.42	0.055	0.47
ROST-4-PZ(G)	ROST4PZG-ROX-101620	10/16/2020	<0.025	0.0018	<0.025	<0.001	0.00078 J	<0.001	<0 001	<0.001	<0 001	0 0056	0.0051	<0.001	<0.001	0.0079	0.0024	0.0022	0.0016	0.0089	0 001 J	0.01
	ROST4PZG-ROX-011321	1/13/2021	<0.025	0.00038 J	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	ROST4PZG-ROX-041521	4/15/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	ROST4PZG-ROX-041521-DUP	4/15/2021	<0.025	<0 001	<0.025	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01
	ROST4PZG-ROX-071321	7/13/2021	<0.025	0.00046 J	<0 025 UJ	<0.001	<0 001	<0.001	<0 001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	0 00075 J	0.00084 J	<0.001	<0.001	<0.005	<0.005	<0.01
T-12	T12-ROX-102120	10/21/2020	<0.13	1.4	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0 0078	0.0033 J	0.0071	0.019	0.0041 J	0.029	0.0069	0.0052	0.037	0.0032 J	0.04 J
	T12-ROX-102120-DUP	10/21/2020	<0.13	1.5	<0.13	<0.005	<0 005	<0.005	<0 005	<0.005	<0 005	0 0083	0.003 J	0.0071	0.018	0.0042 J	0.031	0.0071	0.0056	0.036	0.0032 J	0.04 J
	T12-ROX-011221	1/12/2021	<0.25	1.6	<0.25	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	0.0074 J	<0.01	<0.01	0.02	<0.01	0.027	<0.01	0.0059 J	0 033 J	<0 05	0.036 J
	T12-ROX-011221-DUP	1/12/2021	<0.25	1.6	<0.25	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	0.0072 J	<0.01	<0.01	0.02	<0.01	0.025	<0.01	<0 01	0 031 J	<0 05	0.034 J
	T12-ROX-041321	4/13/2021	<0.25	1.4	<0.25	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	0.011	0.0065 J	<0.01	0.018	0.01	0.028	0.0082 J	0.0078 J	0 049 J	<0 05	0.052 J
	T12-ROX-071521	7/15/2021	<0 5	2.2	<0.5	<0.02	<0.02	<0.02	<0.02	<0 02	<0.02	0.028	<0.02	<0.02	0.031	<0.02	0.064	0.02	0 014 J	0.17	<0.1	0.18 J

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	Dibenzofuran
Screening Values (mg/L)			0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.006 [1]	1.4 [2]	0.028 [2]	0.012 [1]		0.0003 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																
MW-01	MW1-ROX-100920	10/9/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095 U	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW1-ROX-011221	1/12/2021	<0 00021	<0.00021	<0.00021	0.000061 J	<0.00021	<0.00021	<0.00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW1-ROX-041321	4/13/2021	<0.0002	<0.0002	<0 0002	<0.0002 UJ	<0.0002	<0.0002 UJ	<0.0002	<0.0002 UJ	<0.029	<0 0098	<0.0098	<0.0098	<0 0098	<0.0002 UJ	<0.0098	<0 0002	<0.0098
	MW1-ROX-071221	7/12/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
MW-02	MW2-ROX-101620	10/16/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	0 0049 J	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW2-ROX-011421	1/14/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 032	<0.011	<0 01 H UJ	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	MW2-ROX-041521	4/15/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0.029 UJ	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW2-ROX-041521-DUP	4/15/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0.029 UJ	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW2-ROX-071421	7/14/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0 0099	<0.0099	<0.0099	0.0059 J	<0.0002	<0.0099	<0 0002	<0.0099
MW-03	MW3-ROX-101520	10/15/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW3-ROX-010821	1/8/2021	<0 00021	<0.00021	<0.00021	<0.00021 U	<0.00021 U	<0.00021 U	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW3-ROX-041321	4/13/2021	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.00019 H UJ	<0.0095	<0.00019 H UJ	<0.0095
	MW3-ROX-071221	7/12/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0095 UJ	<0.0096	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
MW-04	MW4-ROX-101220	10/12/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW4-ROX-011821	1/18/2021	<0 00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0 00076	<0.00076	<0 028	<0 0095	<0.0095	<0.0095	<0 0095	<0.00076	<0.0095	<0.00076	<0.0095
	MW4-ROX-041921	4/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW4-ROX-071921	7/19/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	0.024 J	0.0031 J	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
MW-05	MW5-ROX-101420	10/14/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW5-ROX-011121	1/11/2021	<0 00021	<0.00021	<0.00021	0.000089 J	0.00007 J	0.000044 J	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW5-ROX-041421	4/14/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0097	<0.0097	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	<0.0097
	MW5-ROX-071421	7/14/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	0.032	<0 0096	0 0052 J	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
MW-06A	MW6A-ROX-100820	10/8/2020	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	MW6A-ROX-010721	1/7/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW6A-ROX-041421	4/14/2021	<0 00019	<0.00019	0.000031 J	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW6A-ROX-070921	7/9/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
MW-06B	MW6B-ROX-100820	10/8/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW6B-ROX-010721	1/7/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	MW6B-ROX-041421	4/14/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW6B-ROX-070921	7/9/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
MW-06C	MW6C-ROX-100820	10/8/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW6C-ROX-010721	1/7/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0097 UJ	<0.0097	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	<0.0097
	MW6C-ROX-041421	4/14/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.029	<0.0098 UJ	<0.0098	<0.0098	<0 0098	<0.0002	<0.0098	<0 0002	<0.0098
	MW6C-ROX-070921	7/9/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
MW-06D	MW6D-ROX-100820	10/8/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW6D-ROX-010721	1/7/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0097 UJ	<0.0097	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	<0.0097
	MW6D-ROX-041421	4/14/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.028 H UJ	<0 0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0002	<0.0095 H UJ	0.000074 J	<0.0095 H UJ
	MW6D-ROX-071221	7/12/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 032	<0 011 UJ	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
MW-07	MW7-ROX-101220	10/12/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	0.032	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW7-ROX-101220-DUP	10/12/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	0.032	<0.0094 UJ	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW7-ROX-011821	1/18/2021	<0 00076	<0.00076	<0.00076	<0.00076	<0.00076	<0.00076	<0 00076	<0.00076	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00076	<0.0095	<0.00076	<0.0095
	MW7-ROX-011821-DUP	1/18/2021	<0 00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0 00075	<0.00075	<0 028	<0 0093	<0.0094 H UJ	<0.0093	<0 0093	<0.00075	<0.0093	<0.00075	<0.0093
	MW7-ROX-041921	4/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW7-ROX-041921-DUP	4/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0.031 UJ	<0.01 UJ	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW7-ROX-071921	7/19/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	0.041 *1	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	Dibenzofuran
Screening Values (mg/L)			0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.006 [1]	1.4 [2]	0.028 [2]	0.012 [1]		0.0003 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																
MW-08	MW8-ROX-101220	10/12/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0093 UJ	<0.0093	<0.0093	<0 0093	<0.00019	<0.0093	<0.00019	<0.0093
	MW8-ROX-011821	1/18/2021	<0 00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0.00075	<0 028	<0 0094	<0.0095 H UJ	<0.0094	<0 0094	<0.00075	<0.0094	<0.00075	<0.0094
	MW8-ROX-041921	4/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 032	<0.011	<0 011	<0.011	<0 011	<0.00021	<0.011	<0.00021	<0 011
	MW8-ROX-071921	7/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW8-ROX-071921-DUP	7/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
MW-09	MW9-ROX-100920	10/9/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0096	<0.0096 U	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW9-ROX-011221	1/12/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	MW9-ROX-040821	4/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW9-ROX-070821	7/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
MW-10	MW10-ROX-100920	10/9/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0095 U	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-011221	1/12/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	MW10-ROX-040821	4/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-070821	7/8/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0 0098	<0.0098	<0.0098	<0 0098	<0.0002	<0.0098	<0 0002	<0.0098
MW-11	MW11-ROX-100920	10/9/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094 U	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW11-ROX-011321	1/13/2021	<0.0002	<0.0002	<0 0002 U	<0 0002 U	<0.0002 U	<0.0002 U	<0.0002	<0 0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	MW11-ROX-041221	4/12/2021	<0 00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0 00019 UJ	<0 00019	<0.00019 UJ	<0 029	<0 0096	0 0058 J	<0.0096	<0 0096	<0 00019 UJ	<0.0096	<0.00019	<0.0096
	MW11-ROX-071221	7/12/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
MW-12	MW12-ROX-101520	10/15/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW12-ROX-010721	1/7/2021	<0 00021	<0.00021	<0.00021	<0.00021 U	0.00013 J	<0.00021 U	<0 00021	<0.00021	<0 032	<0.011	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	MW12-ROX-041221	4/12/2021	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.00019 H UJ	<0.0096	<0.00019 H UJ	<0.0096
	MW12-ROX-070921	7/9/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
MW-13	MW13-ROX-101420	10/14/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW13-ROX-010821	1/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0096	0 0052 J	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW13-ROX-041221	4/12/2021	<0 00019	0.00046	<0.00019	<0.00019 UJ	<0.00019	<0 00019 UJ	<0 00019	<0.00019 UJ	<0 029	<0 0096	<0.0096	<0.0096	<0 0096	<0 00019 UJ	<0.0096	<0.00019	<0.0096
	MW13-ROX-071221	7/12/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01 UJ	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
MW-14	MW14-ROX-101620	10/16/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW14-ROX-011121	1/11/2021	<0 00019	<0.00019	<0.00019	0.000051 J	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW14-ROX-040921	4/9/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 032	<0.011	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	MW14-ROX-071321	7/13/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	0.023 J	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
MW-16	MW16-ROX-101420	10/14/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0093 UJ	<0.0093	<0.0093	<0 0093	<0.00019	<0.0093	<0.00019	<0.0093
	MW16-ROX-011321	1/13/2021	<0 00021	<0.00021	<0.00021	<0.00021 U	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW16-ROX-040821	4/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0.029 H UJ	<0 0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.00019	<0.0095 H UJ	<0.00019	<0.0095 H UJ
	MW16-ROX-071221	7/12/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
MW-22	MW22-ROX-101520	10/15/2020	<0 00019	<0.00019	<0.00019	<0.00019	0.00014 J	0.000082 J	<0 00019	0 00016 J	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	0 00018 J	<0.0095
	MW22-ROX-011321	1/13/2021	<0.0002	<0.0002	<0 0002	<0 0002 U	<0.0002 U	<0.0002 U	<0.0002	<0 0002	<0.03	<0 0099	<0.0099	<0.0099	<0 0099	<0.0002	<0.0099	<0 0002	<0.0099
	MW22-ROX-041521	4/15/2021	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.029 H UJ	<0 0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.00019 H UJ	<0.0096 H UJ
	MW22-ROX-071521	7/15/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW22-ROX-071521-DUP	7/15/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
MW-23	MW23-ROX-101320	10/13/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW23-ROX-010721	1/7/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.031	<0.01 UJ	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	MW23-ROX-040921	4/9/2021	<0 00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0 00019 UJ	<0 00019	<0.00019 UJ	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0 00019 UJ	<0.0094	<0.00019	<0.0094
	MW23-ROX-071321	7/13/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0097	<0.0097	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	<0.0097

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	Dibenzofuran
Screening Values (mg/L)			0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.006 [1]	1.4 [2]	0.028 [2]	0.012 [1]		0.0003 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																
MW-24	MW24-ROX-101320	10/13/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW24-ROX-011121	1/11/2021	<0 00021	<0.00021	<0.00021	0.000066 J	0.000052 J	<0.00021	<0.00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW24-ROX-041321	4/13/2021	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.029 UJ	<0.0095 UJ	<0.0095 UJ	<0 0095 UJ	<0.0095 UJ	<0.00019 H UJ	<0 0095 UJ	<0.00019 H UJ	<0.0095 UJ
	MW24-ROX-070921	7/9/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
MW-25	MW25-ROX-101220	10/12/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW25-ROX-011821	1/18/2021	<0 00078	<0.00078	<0.00078	<0.00078	<0.00078	<0.00078	<0 00078	<0.00078	<0 029	<0 0097	<0.0097	<0.0097	<0 0097	<0.00078	<0.0097	<0.00078	<0.0097
	MW25-ROX-011821-DUP	1/18/2021	<0 00077	<0.00077	<0.00077	<0.00077	<0.00077	<0.00077	<0 00077	<0.00077	<0 029	<0 0096	<0.0095 H UJ	<0.0096	<0 0096	<0.00077	<0.0096	<0.00077	<0.0096
	MW25-ROX-041921	4/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW25-ROX-071921	7/19/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	0.023 J	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
MW-26	MW26-ROX-101520	10/15/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW26-ROX-010821	1/8/2021	<0 00021	<0.00021	<0.00021	<0.00021 U	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW26-ROX-040921	4/9/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0.029 UJ	<0.0096 UJ	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW26-ROX-070921	7/9/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
MW-27	MW27-ROX-101320	10/13/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-010821	1/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-040821	4/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-071321	7/13/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	0.023 J	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
MW-28	MW28-ROX-101920	10/19/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	0.0055 J H J	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	MW28-ROX-011421	1/14/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0 01 H UJ	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	MW28-ROX-041621	4/16/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	0.000047 J	<0 00019	<0.00019	<0 029	<0 0097	<0.0097	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	<0.0097
	MW28-ROX-041621-DUP	4/16/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0096	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	MW28-ROX-071521	7/15/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	0.024 J	<0.01	<0.01	0.00055 J	<0.01	<0.0002	0.0025 J	<0 0002	<0.01
P-54	P54-ROX-101320	10/13/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P54-ROX-011121	1/11/2021	<0 00021	<0.00021	<0.00021	0.000093 J	0.000057 J	0.000036 J	<0 00021	<0.00021	<0 032	<0.011	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	P54-ROX-041321	4/13/2021	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.00019 H UJ	<0.0094	<0.00019 H UJ	<0.0094
	P54-ROX-070921	7/9/2021	0.00012 J	0 000078 J	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0096	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
P-56	P56-ROX-102120	10/21/2020	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	P56-ROX-011221	1/12/2021	0.00052	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	P56-ROX-040921	4/9/2021	<0 00021	<0.00021	0 00009 J	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01 H UJ	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	P56-ROX-071421	7/14/2021	0.00044	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
P-57	P57-ROX-102020	10/20/2020	0.00036	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 029	<0 0096	<0.0095 H UJ	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	P57-ROX-102020-DUP	10/20/2020	0.00035	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 029	<0 0096	<0.0095 H UJ	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	0.00047 J
	P57-ROX-011321	1/13/2021	0.00023	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0096	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	0.00039 J
	P57-ROX-011321-DUP	1/13/2021	0.00025	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0094 H UJ	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	0.00039 J
	P57-ROX-041221	4/12/2021	0.00024	<0.00021	<0.00021	<0.00021 UJ	<0.00021	<0 00021 UJ	<0 00021	<0.00021 UJ	<0 032	<0.011	<0 011	<0.011	<0.011	<0 00021 UJ	<0.011	<0.00021	0.00019 J
	P57-ROX-041221-DUP	4/12/2021	0.0002	<0.0002	<0 0002	<0.0002 UJ	<0.0002	<0.0002 UJ	<0.0002	<0.0002 UJ	<0 03 UJ	<0.01 UJ	<0 01 H UJ	<0.01	<0.01	<0.0002 UJ	<0.01	<0 0002	0.00017 J
	P57-ROX-071421	7/14/2021	0.00029	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.011 H UJ	<0.01	<0.01	<0.00021	<0.01	<0.00021	0.00052 J
P-58	P58-ROX-041421	4/14/2021	0.00094	0.00032	<0.00021	0.00033	0.0003	0.00017 J	<0 00021	<0.00021	<0 031	<0.01 UJ	<0.01	<0.01	<0.01	0.00054	<0.01	0.000089 J	0 0024 J
P-59	P59-ROX-102020	10/20/2020	0.00041	<0.00019	<0.00019	0.00016 J	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P59-ROX-011321	1/13/2021	0.0002	<0.00019	0.00026 B	<0.00019 U	<0.00019 U	<0.00019 U	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	0.00012 J	<0.0094	0.00021	<0.0094
	P59-ROX-041321	4/13/2021	0.0003	<0.00021	<0.00021	<0.00021 U	<0.00021	0.000051 J	<0 00021	<0.00021	<0 032	<0.011	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	P59-ROX-071521	7/15/2021	<0 00021	<0.00021	<0.00021	0.00012 J	<0.00021	<0.00021	<0 00021	<0.00021	0.047	<0.01	<0.01	<0.01	<0.01	0 0001 J	<0.01	<0.00021	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	Dibenzofuran
Screening Values (mg/L)			0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.006 [1]	1.4 [2]	0.028 [2]	0.012 [1]		0.0003 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																
P-66	P66-ROX-101620	10/16/2020	0 0014	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	0.00079 J
	P66-ROX-101620-DUP	10/16/2020	0.00094	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 028	<0.0094 UJ	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	P66-ROX-011121	1/11/2021	0.001	0.00014 J	0.00022	0.00013 J	0 0001 J	0.000071 J	<0 00019	<0.00019	<0.029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	0 00017 J	<0.0095
	P66-ROX-040921	4/9/2021	0 0012	0.00026	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	0 0015 J
	P66-ROX-071321	7/13/2021	0 0013	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	0.11	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	0 0011 J
	P66-ROX-080921	8/9/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	0.061 J	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
P-74	P74-ROX-102020	10/20/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	P74-ROX-011221	1/12/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P74-ROX-041221	4/12/2021	<0.0002	<0.0002	<0 0002	<0.0002 UJ	<0.0002	<0.0002 UJ	<0.0002	<0.0002 UJ	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002 UJ	<0.01	<0 0002	<0.01
	P74-ROX-071421	7/14/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0 01 H UJ	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
P-93A	P93A-ROX-102220	10/22/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P93A-ROX-102220-DUP	10/22/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P93A-ROX-011421	1/14/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094 H UJ	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	P93A-ROX-041221	4/12/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	0.0035 J	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	P93A-ROX-071521	7/15/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	P93A-ROX-071521-DUP	7/15/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
P-93B	P93B-ROX-102220	10/22/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P93B-ROX-011421	1/14/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0097 H UJ	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P93B-ROX-011421-DUP	1/14/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0097	<0.0094 H UJ	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	<0.0097
	P93B-ROX-041421	4/14/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	0.000063 J	<0 00021	<0.00021	<0 032	<0 011 UJ	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	P93B-ROX-071621	7/16/2021	<0 00021	0 000074 J	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01 UJ	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	P93B-ROX-071621-DUP	7/16/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
P-93C	P93C-ROX-102120	10/21/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P93C-ROX-011121	1/11/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P93C-ROX-040921	4/9/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0096	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	P93C-ROX-071221	7/12/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
P-93D	P93D-ROX-102220	10/22/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019 UJ	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	P93D-ROX-011321	1/13/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0095	<0.0093 H UJ	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	P93D-ROX-041421	4/14/2021	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.031	<0.01 UJ	0 0075 J	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	P93D-ROX-071621	7/16/2021	<0 00022 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0 00022 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0.032 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0 011 H UJ	<0.00022 H UJ	<0.011 H UJ	<0.00022 H UJ	<0 011 H UJ
P-114R	P114R-ROX-101420	10/14/2020	<0 00021	<0.00021	<0.00021	<0.00021	<0 00021 UJ	<0.00021	<0 00021	<0.00021	<0.029 H UJ	<0.01	<0.01	<0.01	<0.0095 H UJ	<0.00021	<0.0095 H UJ	<0.00021	<0.01
	P114R-ROX-010821	1/8/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	P114R-ROX-041221	4/12/2021	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.00019 H UJ	<0.0096	<0.00019 H UJ	<0.0096
	P114R-ROX-071221	7/12/2021	<0 00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0 00022	<0.00022	0.021 J	<0 011 UJ	0 0059 J	<0.011	<0.011	<0.00022	0.0043 J	<0.00022	<0 011
ROST-3-MW	ROST3MW-ROX-101920	10/19/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	0.0047 J H J	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	ROST3MW-ROX-010821	1/8/2021	<0 00021	<0.00021	<0.00021	<0.00021 U	<0.00021 U	<0.00021	<0 00021	<0.00021	<0 032	<0.011	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	ROST3MW-ROX-041321	4/13/2021	0 000065 J	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0 00019 UJ	<0 00019	<0.00019 UJ	<0.029 H UJ	<0 0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0 00019 UJ	<0.0096 H UJ	<0.00019	<0.0096 H UJ
	ROST3MW-ROX-071421	7/14/2021	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	0.023 J	<0.011	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
ROST-4-PZ(C)	ROST4PZC-ROX-101920	10/19/2020	0 0019	<0.00019	0 001	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	0.006 J H J	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	0.00071 J
	ROST4PZC-ROX-011421	1/14/2021	0 0014	<0.00021	<0.00021	<0.00021 U	<0.00021	<0.00021	<0 00021	<0.00021	<0 032	<0.011	<0 01 H UJ	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011
	ROST4PZC-ROX-041521	4/15/2021	0 0012	0.00018 J	0.00032	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0096	<0.0096	<0.0096	<0 0096	<0.00019	<0.0096	<0.00019	<0.0096
	ROST4PZC-ROX-071421	7/14/2021	0 0018	<0.0002	0.00042	<0.0002	<0.0002	<0.0002	<0.0002	<0 0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	0 0016 J
	ROST4PZC-ROX-071421-DUP	7/14/2021	0 0018	<0.00019	0.00052	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	0.024 J	<0 0095	0 0051 J	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	0 0016 J

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																
			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	Dibenzofuran
Screening Values (mg/L)			0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]	0.7 [3]	0.006 [1]	1.4 [2]	0.028 [2]	0.012 [1]		0.0003 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																
ROST-4-PZ(E)	ROST4PZE-ROX-101920	10/19/2020	0 0013	<0.00019	0.00037	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0094 UJ	<0.0094 H UJ	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	0 0012 J
	ROST4PZE-ROX-041621	4/16/2021	0 0027	0.00036	0.0014	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	0 0015 J
	ROST4PZE-ROX-071521	7/15/2021	0 0017	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0097	<0.0097	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	0.002 J
ROST-4-PZ(G)	ROST4PZG-ROX-101620	10/16/2020	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	ROST4PZG-ROX-011321	1/13/2021	<0 00021	<0.00021	<0.00021	<0.00021 U	<0.00021	<0.00021 U	<0 00021	0 00011 J	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.01	<0.00021	<0.01
	ROST4PZG-ROX-041521	4/15/2021	<0 00019	<0.00019	<0.00019	0.000049 J	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0097	<0.0097	<0.0097	<0 0097	<0.00019	<0.0097	<0.00019	<0.0097
	ROST4PZG-ROX-041521-DUP	4/15/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	<0.00019	<0.0095	<0.00019	<0.0095
	ROST4PZG-ROX-071321	7/13/2021	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
T-12	T12-ROX-102120	10/21/2020	<0.0002	0 000081 J	<0 0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0 0002	<0.03	<0 0099	<0.0099	<0.0099	<0 0099	<0.0002	<0.0099	<0 0002	<0.0099
	T12-ROX-102120-DUP	10/21/2020	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0 0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.01	<0 0002	<0.01
	T12-ROX-011221	1/12/2021	0.00036	<0.00019	0 00015 J	0.000077 J	<0.00019	<0.00019	<0 00019	<0.00019	<0 028	<0 0094	<0.0094	<0.0094	<0 0094	<0.00019	<0.0094	<0.00019	<0.0094
	T12-ROX-011221-DUP	1/12/2021	0.00031	<0.00019	0.0001 J	0.00019	0.00019	0 00022	0.00024	0.00023	<0 029	<0 0095	<0.0095	<0.0095	<0 0095	0.00015 J	<0.0095	0.00039	<0.0095
	T12-ROX-041321	4/13/2021	<0 00022	<0.00022	<0.00022	<0.00022 U	<0.00022	<0.00022	<0 00022	<0.00022	<0 032	<0.011	0 0054 J	<0.011	<0.011	<0.00022	<0.011	<0.00022	<0 011
	T12-ROX-071521	7/15/2021	0.00015 J	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.00021	<0.032	<0.011	<0 011	<0.011	<0.011	<0.00021	<0.011	<0.00021	<0 011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																
			Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																
MW-01	MW1-ROX-100920	10/9/2020	0 00089 J	<0 0095	0 0034 J	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	0.000075 J	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW1-ROX-011221	1/12/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0.00018 J	0.00026	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW1-ROX-041321	4/13/2021	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0 0002	<0.0098	<0.0002	0.00008 J	0 00016 J	<0.0096 H UJ	<0.019 H UJ	<0.0098	<0.02	<0.0002	<0.0098	<0 0002	<0.0098
	MW1-ROX-071221	7/12/2021	0.00039 J	<0 0096	0 0028 J	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
MW-02	MW2-ROX-101620	10/16/2020	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	0 0066	0.0052	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094 UJ
	MW2-ROX-011421	1/14/2021	<0 011	<0.011	<0 011	<0.011	<0.00021	<0.00021	<0.011	<0 00021	0 0068	0 009	<0 011	<0.021	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0 011
	MW2-ROX-041521	4/15/2021	<0.0095	<0.0095 UJ	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	0.0078 J	0.007 J	<0.0095 UJ	<0 019 UJ	<0.0095	<0 019 UJ	<0.00019	<0 0095 UJ	<0.00019	<0.0095
	MW2-ROX-041521-DUP	4/15/2021	<0.0096	<0.0096 UJ	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	0.0042 J	0.0037 J	<0.0096 UJ	<0 019 UJ	<0.0096	<0 019 UJ	<0.00019	<0 0096 UJ	<0.00019	<0.0096
	MW2-ROX-071421	7/14/2021	<0.0099	<0 0099	<0.0099	<0.0099	<0 0002	<0 0002	<0.0099	<0.0002	0 0077	0.0069	<0.0099	<0.02	<0.0099	<0.02	<0.0002	<0.0099	<0 0002	<0.0099
MW-03	MW3-ROX-101520	10/15/2020	<0 0094 U	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094 UJ
	MW3-ROX-010821	1/8/2021	<0.01	<0.01	<0.01	<0.01	0.000091 J	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	0.000052 J	<0.01
	MW3-ROX-041321	4/13/2021	0.00048 J	<0 0095	<0.0095	<0.0095	<0.00019 H UJ	<0.00019 H UJ	<0.0095	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.0095	<0.019	<0.00019 H UJ	<0.0095	<0.00019 H UJ	<0.0095
	MW3-ROX-071221	7/12/2021	0.0006 J	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
MW-04	MW4-ROX-101220	10/12/2020	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094 UJ
	MW4-ROX-011821	1/18/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00076	<0.00076	<0.0095	<0 00076	<0.00076	<0.00076	<0.0095	<0.019	<0.0095	<0.019	<0.00076	<0.0095	<0.00076	<0.0095
	MW4-ROX-041921	4/19/2021	0.00061 J	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0.00014 J	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0 00021 U	<0.01
	MW4-ROX-071921	7/19/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
MW-05	MW5-ROX-101420	10/14/2020	<0 0095 U	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW5-ROX-011121	1/11/2021	<0.01	<0.01	<0.01	<0.01	0.000086 J	<0.00021	<0 01	0 000044 J	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	0.000041 J	<0.01
	MW5-ROX-041421	4/14/2021	<0.0097	<0 0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	0 0039 J	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW5-ROX-071421	7/14/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
MW-06A	MW6A-ROX-100820	10/8/2020	<0.01 U	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
	MW6A-ROX-010721	1/7/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW6A-ROX-041421	4/14/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	0.00008 J	<0 0096 UJ	0.000065 J	<0.0096
	MW6A-ROX-070921	7/9/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
MW-06B	MW6B-ROX-100820	10/8/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	0.0001 J	0.000086 J	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW6B-ROX-010721	1/7/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002 U	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
	MW6B-ROX-041421	4/14/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0 0096 UJ	<0.00019	<0.0096
	MW6B-ROX-070921	7/9/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
MW-06C	MW6C-ROX-100820	10/8/2020	0.00041 J	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	0.000073 J	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW6C-ROX-010721	1/7/2021	<0.0097	<0 0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW6C-ROX-041421	4/14/2021	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0 0002	<0.0098	<0.0002	<0.0002	<0 0002	<0.0098	<0.02	<0.0098	<0.02	<0.0002	<0 0098 UJ	0.000039 J	<0.0098
	MW6C-ROX-070921	7/9/2021	0.00094 J	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
MW-06D	MW6D-ROX-100820	10/8/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	0.0001 J	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW6D-ROX-010721	1/7/2021	0.00023 J	<0 0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW6D-ROX-041421	4/14/2021	<0.0095 H UJ	<0 0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	0.000067 J	<0.0002	<0.0095 H UJ	0 000072 J	<0.0002	<0 0002	<0.0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0.019 H UJ	0.000057 J	<0.0095 H UJ	0.000054 J	<0.0095 H UJ
	MW6D-ROX-071221	7/12/2021	0.001 J	<0.011	<0 011	<0.011	<0.00021	<0.00021	<0.011	<0 00021	0 0016	0.000078 J	<0 011	<0.021	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0 011
MW-07	MW7-ROX-101220	10/12/2020	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019 UJ	0.0025	0 0021 J	0.0023 J	<0.0096	<0.019	<0.00019	0.063	<0.00019	<0.0096 UJ
	MW7-ROX-101220-DUP	10/12/2020	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	0.0018 J	0.0025	0 0021 J	0.0024 J	<0.0094	<0.019	<0.00019	0.073	<0.00019	<0.0094 UJ
	MW7-ROX-011821	1/18/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00076	<0.00076	<0.0095	<0 00076	0.001	0.0015	<0.0095	0.00065 J	<0.0095	<0.019	<0.00076	0.084	<0.00076	<0.0095
	MW7-ROX-011821-DUP	1/18/2021	<0.0093	<0 0093	<0.0093	<0.0093	<0.00075	<0.00075	<0.0093	<0 00075	0 0012	0.0018	<0.0093	0.00073 J	<0.0093	<0.019	<0.00075	0.07	<0.00075	<0.0093
	MW7-ROX-041921	4/19/2021	0.0013 J	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0 0016	0.0024	<0.01	0.002 J	<0 01	<0.021	<0.00021	0.11 J	<0.00021	<0.01
	MW7-ROX-041921-DUP	4/19/2021	<0.01	<0.01 UJ	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0 0016	0.0023	<0 01 UJ	0 0009 J J	<0 01	<0 021 UJ	<0.00021	0 019 J	<0.00021	<0.01
	MW7-ROX-071921	7/19/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	0 0018	0.0025	<0.01	0.00073 J	<0 01	<0.02	<0.0002	0.038	<0 0002	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
MW-08	MW8-ROX-101220	10/12/2020	<0.0093	<0 0093	<0.0093	<0.0093	<0.00019	<0.00019	0 0014 J	<0 00019	0 0082	0.0016	<0.0093	<0.019	<0.0093	<0.019	<0.00019	0.26	<0.00019	<0.0093 UJ
	MW8-ROX-011821	1/18/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00075	<0.00075	<0.0094	<0 00075	0 0051	0 00041 J	<0.0094	<0.019	<0.0094	<0.019	<0.00075	0.12	<0.00075	<0.0094
	MW8-ROX-041921	4/19/2021	<0 011	<0.011	<0 011	<0.011	<0.00021	<0.00021	<0.011	<0 00021	0 0084	0.0027	<0 011	0.00074 J	<0.011	<0.021	<0.00021	0.29	<0.00021	<0 011
	MW8-ROX-071921	7/19/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0.01	0.0022	<0.01	0.00069 J	<0 01	<0.021	<0.00021	0 3	<0.00021	<0.01
	MW8-ROX-071921-DUP	7/19/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0 0086	0.0022	<0.01	0.00077 J	<0 01	<0.021	<0.00021	0.33	<0.00021	<0.01
MW-09	MW9-ROX-100920	10/9/2020	0 00062 J	<0 0096	0 0032 J	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	0 000077 J	0.0001 J	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW9-ROX-011221	1/12/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0 0002	<0 01	<0.0002	<0.0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
	MW9-ROX-040821	4/8/2021	<0.0095	<0 0095	<0.0095	<0 0095 UJ	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW9-ROX-070821	7/8/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094
MW-10	MW10-ROX-100920	10/9/2020	0 00024 J	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-011221	1/12/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
	MW10-ROX-040821	4/8/2021	<0.0095	<0 0095	<0.0095	<0 0095 UJ	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-070821	7/8/2021	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0.0002	<0.0098	<0.0002	<0.0002	<0 0002	<0.0098	<0.02	<0.0098	<0.02	<0.0002	<0.0098	<0 0002	<0.0098
MW-11	MW11-ROX-100920	10/9/2020	<0.0094	<0 0094	0 0028 J	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	0 000078 J	0 00014 J	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094
	MW11-ROX-011321	1/13/2021	<0.01	<0.01	<0.01	<0.01	<0.0002 U	<0.0002	<0 01	0 000049 J	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0.0002 U	<0.01 U
	MW11-ROX-041221	4/12/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096 UJ	<0 019 UJ	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW11-ROX-071221	7/12/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
MW-12	MW12-ROX-101520	10/15/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW12-ROX-010721	1/7/2021	<0 011	<0.011	<0 011	<0.011	0.000085 J	<0.00021	<0.011	<0.00021 U	<0.00021	<0.00021	<0 011	<0.021	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0 011
	MW12-ROX-041221	4/12/2021	<0.0096	<0 0096	<0.0096 UJ	<0.0096	<0.00019 H UJ	<0.00019 H UJ	<0.0096	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.0096	<0.019	<0.00019 H UJ	<0.0096	<0.00019 H UJ	<0.0096
	MW12-ROX-070921	7/9/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	0 00013 J	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	0 0031 J
MW-13	MW13-ROX-101420	10/14/2020	<0 0096 U	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096 UJ
	MW13-ROX-010821	1/8/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	0.014 J	<0.00019	<0.0096	<0.00019	<0.0096
	MW13-ROX-041221	4/12/2021	0.00056 J	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	0 00012 J	<0.0096 H UJ	<0.019 H UJ	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW13-ROX-071221	7/12/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
MW-14	MW14-ROX-101620	10/16/2020	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0 0096 UJ	<0.00019	<0.0096 UJ
	MW14-ROX-011121	1/11/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW14-ROX-040921	4/9/2021	<0 011	<0.011	<0 011	<0.011 UJ	<0.00021	<0.00021	<0.011	<0 00021	<0.00021	<0.00021	<0 011	<0.021	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0 011
	MW14-ROX-071321	7/13/2021	0.00071 J	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
MW-16	MW16-ROX-101420	10/14/2020	<0.0093	<0 0093	<0.0093	<0.0093	<0.00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0.00019	<0.0093	<0.00019	<0.0093 UJ
	MW16-ROX-011321	1/13/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01 U
	MW16-ROX-040821	4/8/2021	<0.0095 H UJ	<0 0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.00019	<0.00019	<0.0095 H UJ	<0 00019	<0.00019	<0.00019	<0.0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.00019	<0.0095 H UJ	<0.00019	<0.0095 H UJ
	MW16-ROX-071221	7/12/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
MW-22	MW22-ROX-101520	10/15/2020	<0 0095 U	<0 0095	<0.0095	0.00037 J	<0.00019	<0.00019	<0.0095	0.00017 J	0.00051	0.00041	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW22-ROX-011321	1/13/2021	<0.0099	<0 0099	<0.0099	<0.0099	<0 0002	<0.0002	<0.0099	0 000069 J	0 0032	0.0038	<0.0099	<0.02	<0.0099	<0.02	<0.0002	<0.0099	<0 0002	<0 0099 U
	MW22-ROX-041521	4/15/2021	0.00061 J H J	0.011 H J	<0.0096 H UJ	<0.0096 H UJ	<0.00019 H UJ	<0.00019 H UJ	0.0016 J H J	<0 00019 H UJ	0.0043 H J	0.0046 H J	<0.0096 H UJ	<0.019 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.00019 H UJ	<0.0096 H UJ
	MW22-ROX-071521	7/15/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	0 0015	0.0011	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW22-ROX-071521-DUP	7/15/2021	0.00058 J	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	0 0015	0.0012	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
MW-23	MW23-ROX-101320	10/13/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW23-ROX-010721	1/7/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
	MW23-ROX-040921	4/9/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094 H UJ	<0.019 H UJ	<0.0094	<0.019	0.000041 J	<0.0094	0.000055 J	<0.0094
	MW23-ROX-071321	7/13/2021	0.0009 J	<0 0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0 00019	<0.00019	0.000084 J	<0.0097	<0.019	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
MW-24	MW24-ROX-101320	10/13/2020	<0.0094	<0 0094	<0.0094	<0.0094	0 00007 J	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094
	MW24-ROX-011121	1/11/2021	<0.01	<0.01	<0.01	<0.01	0.000075 J	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW24-ROX-041321	4/13/2021	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0 0095 UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0095 UJ	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.0095 UJ	<0 019 UJ	<0.00019 H UJ	<0 0095 UJ	<0.00019 H UJ	<0.0095 UJ
	MW24-ROX-070921	7/9/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0 00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
MW-25	MW25-ROX-101220	10/12/2020	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	0.00017 J	0.0002	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094 UJ
	MW25-ROX-011821	1/18/2021	<0.0097	<0 0097	<0.0097	<0.0097	<0.00078	<0.00078	<0.0097	<0 00078	<0 00078	<0.00078	<0.0097	<0.019	<0.0097	<0.019	<0.00078	<0.0097	<0.00078	<0.0097
	MW25-ROX-011821-DUP	1/18/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00077	<0.00077	<0.0096	<0 00077	<0 00077	<0.00077	<0.0096	<0.019	<0.0096	<0.019	<0.00077	<0.0096	<0.00077	<0.0096
	MW25-ROX-041921	4/19/2021	0 00054 J	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW25-ROX-071921	7/19/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0 000095 J	0.000093 J	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
MW-26	MW26-ROX-101520	10/15/2020	<0 0095 U	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0 00019	0.000059 J	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW26-ROX-010821	1/8/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW26-ROX-040921	4/9/2021	<0.0096	<0.0096 UJ	<0.0096	<0 0096 UJ	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096 UJ	<0 019 UJ	<0.0096	<0 019 UJ	<0.00019	<0 0096 UJ	<0.00019	<0.0096
	MW26-ROX-070921	7/9/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
MW-27	MW27-ROX-101320	10/13/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-010821	1/8/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 U	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-040821	4/8/2021	0 00023 J	<0 0095	<0.0095	<0 0095 UJ	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-071321	7/13/2021	0 00089 J	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
MW-28	MW28-ROX-101920	10/19/2020	<0.0094	<0 0094	0 0027 J	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094 UJ
	MW28-ROX-011421	1/14/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW28-ROX-041621	4/16/2021	<0.0097	<0 0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	<0.00019	<0.0097	0.000054 J	<0.0097
	MW28-ROX-041621-DUP	4/16/2021	0 00066 J	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW28-ROX-071521	7/15/2021	<0.01	<0.01	<0.01	0.0025 J	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01	<0 0002	<0.01
P-54	P54-ROX-101320	10/13/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095 UJ	<0 00019	<0.00019	0.000085 J	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P54-ROX-011121	1/11/2021	<0 011	<0.011	<0 011	<0.011	0.000074 J	<0.00021	<0.011	<0 00021	<0.00021	<0.00021	<0 011	<0.021	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0 011
	P54-ROX-041321	4/13/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019 H UJ	<0.00019 H UJ	<0.0094	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.0094	<0.019	<0.00019 H UJ	<0.0094	<0.00019 H UJ	<0.0094
	P54-ROX-070921	7/9/2021	0.0007 J	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0 00019	0.00021	0.00027	<0.0096	<0.019	<0.0096	<0.019	0.000054 J	<0.0096	<0.00019	<0.0096
P-56	P56-ROX-102120	10/21/2020	<0.01	<0.01	<0.01	<0.01	<0 0002	0.00027	<0 01	<0.0002	0.009	0.0056	<0.01	<0.02	<0 01	<0.02	0.00035	<0.01	<0 0002	<0.01
	P56-ROX-011221	1/12/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	0.00027	<0.0094	<0 00019	0.012	0.0087	<0.0094	<0.019	<0.0094	<0.019	0.00055	<0.0094	<0.00019	<0.0094
	P56-ROX-040921	4/9/2021	0.00051 J	<0.01	<0.01	<0.01 UJ	<0.00021	0.00042	<0 01	<0 00021	0.014	0 013	<0.01	<0.021	<0 01	<0.021	0.00086	<0.01	<0.00021	<0.01
	P56-ROX-071421	7/14/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	0.011	0 011	<0.01	<0.02	<0 01	<0.02	0.00074	<0.01	<0 0002	<0.01
P-57	P57-ROX-102020	10/20/2020	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.00019 UJ	<0.0096	<0 00019	0.017	0 018	<0.0096	<0.019	<0.0096	<0.019	0.00018 J	0.012	<0.00019	<0.0096
	P57-ROX-102020-DUP	10/20/2020	0.0012 J	<0 0096	<0.0096	<0.0096	<0.00019	0.0006 J	<0.0096	<0 00019	0.019	0 019	<0.0096	<0.019	<0.0096	<0.019	0.00016 J	0.017	<0.00019	<0.0096
	P57-ROX-011321	1/13/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	0.0004	<0.0096	<0 00019	0.013	0 014	<0.0096	<0.019	<0.0096	<0.019	0.00022	0 025 J	<0.00019	<0 0096 U
	P57-ROX-011321-DUP	1/13/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	0.00045	<0.0095	<0 00019	0.014	0 016	<0.0095	<0.019	<0.0095	<0.019	0.00021	0 047 J	<0.00019	<0 0095 U
	P57-ROX-041221	4/12/2021	<0 011	<0.011	<0 011	<0.011	<0.00021	0.00054	<0.011	<0 00021	0.015	0 017	<0.011 H UJ	<0.021 H UJ	<0.011	<0.021	0.00029	0 038 J	0.000045 J	<0 011
	P57-ROX-041221-DUP	4/12/2021	<0.01	<0.01 UJ	<0.01	<0.01	<0 0002	0.00038	<0 01	<0.0002	0.014	0 016	<0 01 H UJ	<0.02 H UJ	<0 01	<0.02 UJ	0.00023	<0.01 UJ	0.000042 J	<0.01
	P57-ROX-071421	7/14/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	0.0004	<0 01	<0 00021	0.014	0 018	<0.01	<0.021	<0 01	<0.021	0.00024	0.017	<0.00021	<0.01
P-58	P58-ROX-041421	4/14/2021	<0.01	<0.01	<0.01	<0.01	0.0003	0.0022	<0 01	0 000065 J	0.049	0 015	<0.01	<0.021	<0 01	<0.021	0.0017	0.7	0.0012	<0.01
P-59	P59-ROX-102020	10/20/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	0 017	<0.0095	<0.019	<0.0095	<0.019	0.00075	0.037	0.00024	<0.0095
	P59-ROX-011321	1/13/2021	<0.0094	0.0051 J	<0.0094	<0.0094	<0 00019 U	0.00051	<0.0094	0 000089 J	0.01	0 014	<0.0094	<0.019	<0.0094	<0.019	0.00056	0.034	0.00037 B	<0 0094 U
	P59-ROX-041321	4/13/2021	<0 011	<0.011	<0 011	<0.011	0 00017 J	0.00071	<0.011	<0 00021	0.01	0 015	<0.011	<0.021	<0.011	<0.021	0.00085	0.03	0.00027	<0 011
	P59-ROX-071521	7/15/2021	<0.01	0.0043 J	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0.013	0 019	<0.01	0.0018 J	<0 01	<0.021	0.00082	0.069	0.0003	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
P-66	P66-ROX-101620	10/16/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	0.00094	<0.0095	<0 00019	0.046	0 012	<0.0095	<0.019	<0.0095	<0.019	0.00024	<0 0095 UJ	<0.00019	<0.0095 UJ
	P66-ROX-101620-DUP	10/16/2020	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	0.0008	<0.0094	<0 00019	0.04	0.01	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0 0094 UJ	<0.00019	<0.0094 UJ
	P66-ROX-011121	1/11/2021	<0.0095	<0 0095	<0.0095	<0.0095	0 00012 J	0.0011	<0.0095	0 000064 J	0.058	0 024	<0.0095	<0.019	<0.0095	<0.019	0.0004	<0.0095	0.00019	<0.0095
	P66-ROX-040921	4/9/2021	<0.01	<0.01	<0.01	<0.01 UJ	<0 0002	0.0013	<0 01	<0.0002	0.074	0 031	<0.01	0.0072 J	<0 01	<0.02	0.00036	0.0028 J	0 00016 J	<0.01
	P66-ROX-071321	7/13/2021	<0.01	<0.01	<0.01	<0.01	0 00015 J	<0.0002	<0 01	<0.0002	0.041	0 019	0.025	0.026	<0 01	<0.02	<0.0002	0.029	0.00039	<0.01
	P66-ROX-080921	8/9/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0 0002	<0 01	<0.0002	0.04	0 014	0.011	0.022	<0.01 UJ	<0.02	<0.0002	0.015	0.0002	<0.01
P-74	P74-ROX-102020	10/20/2020	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	0.00046	0.00056	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094
	P74-ROX-011221	1/12/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	0 0035 J J	<0.00019	<0.0095
	P74-ROX-041221	4/12/2021	0 00052 J	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0 01 H UJ	<0.02 H UJ	<0 01	<0.02	0.00004 J	<0.01	0.000049 J	<0.01
	P74-ROX-071421	7/14/2021	<0.01 U	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
P-93A	P93A-ROX-102220	10/22/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	0.00052	0.0003	<0.0095	<0.019	<0.0095	<0.019	<0.00019	0.012	<0.00019	<0.0095
	P93A-ROX-102220-DUP	10/22/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	0.00038	0.00041	<0.0095	<0.019	<0.0095	<0.019	<0.00019	0.0083 J *1	<0.00019	<0.0095
	P93A-ROX-011421	1/14/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	0.00011 J	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094
	P93A-ROX-041221	4/12/2021	<0.01	<0.01	<0.01	<0.01 UJ	<0.00021	<0.00021	<0 01	<0 00021	0.00019 J	0 00013 J	<0.01	<0.021	<0 01	<0.021	<0.00021	0.0029 J	<0.00021	<0.01
	P93A-ROX-071521	7/15/2021	0.001 J	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0.00015 J	0 00011 J	<0.01	<0.021	<0 01	<0.021	<0.00021	0.0035 J	0.000046 J	<0.01
	P93A-ROX-071521-DUP	7/15/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	0.00018 J	0.000083 J	<0.01	<0.021	<0 01	<0.021	0.000043 J	<0.01	<0.00021	<0.01
P-93B	P93B-ROX-102220	10/22/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	0.0004	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P93B-ROX-011421	1/14/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	0.0024 J	<0.0095	<0.019	<0.00019	0.29 J	<0.00019	<0.0095
	P93B-ROX-011421-DUP	1/14/2021	<0.0097	<0 0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	0.00095 J	<0.0097	<0.019	<0.00019	0.16 J	<0.00019	<0.0097
	P93B-ROX-041421	4/14/2021	<0 011	<0.011	<0 011	<0.011	0 00011 J	<0.00021	<0.011	<0 00021	0.00028	0.0002 J	<0 011	0.002 J	<0.011	<0.021	<0.00021	0.39	0.000086 J	<0 011
	P93B-ROX-071621	7/16/2021	0.0014 J	<0.01 UJ	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	0 00016 J	<0 01 UJ	<0 021 UJ	<0 01	<0 021 UJ	<0.00021	0 0039 J J	<0.00021	<0.01
	P93B-ROX-071621-DUP	7/16/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	0.000079 J	<0.01	0.0019 J	<0 01	<0.021	<0.00021	0.19 J	<0.00021	<0.01
P-93C	P93C-ROX-102120	10/21/2020	0.001 J	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	0.00028	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P93C-ROX-011121	1/11/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P93C-ROX-040921	4/9/2021	<0 0096 U	<0 0096	<0.0096	<0 0096 UJ	<0.00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P93C-ROX-071221	7/12/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01
P-93D	P93D-ROX-102220	10/22/2020	<0.0094	0.0033 J	0 0046 J	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	0.0035 J	<0.0094	<0.019	<0.00019	0.73	<0.00019	<0.0094
	P93D-ROX-011321	1/13/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P93D-ROX-041421	4/14/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	<0.0002	<0 01	<0.0002	<0 0002	<0 0002	<0.01	<0.02	<0 01	<0.02	<0.0002	<0.01 UJ	<0 0002	<0.01
	P93D-ROX-071621	7/16/2021	<0 011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0.011 H UJ	<0 00022 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0.011 H UJ	<0.022 H UJ	<0.011 H UJ	<0.022 H UJ	<0.00022 H UJ	<0.011 H UJ	<0.00022 H UJ	<0.011 H UJ
P-114R	P114R-ROX-101420	10/14/2020	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.0095 H UJ	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.0095 H UJ
	P114R-ROX-010821	1/8/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094
	P114R-ROX-041221	4/12/2021	0 0003 J	<0 0096	<0.0096	<0.0096	<0.00019 H UJ	<0.00019 H UJ	<0.0096	<0 00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0094 H UJ	<0.019 H UJ	<0.0096	<0.019	<0.00019 H UJ	<0.0096	<0.00019 H UJ	<0.0096
	P114R-ROX-071221	7/12/2021	<0 011	<0.011	<0 011	<0.011	<0.00022	<0.00022	<0.011	<0 00022	<0.00022	<0.00022	<0 011	<0.022	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0 011
ROST-3-MW	ROST3MW-ROX-101920	10/19/2020	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094 UJ
	ROST3MW-ROX-010821	1/8/2021	<0 011	<0.011	<0 011	<0.011	0 00008 J	<0.00021	<0.011	<0 00021	0.00018 J	<0.00021	<0 011	<0.021	<0.011	<0.021	<0.00021	<0.011	0.000046 J	<0 011
	ROST3MW-ROX-041321	4/13/2021	<0.0096 H UJ	<0 0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.00019	<0.00019	<0.0096 H UJ	<0 00019	0 000093 J	<0.00019	<0.0096 H UJ	<0.019 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.00019	<0.0096 H UJ	<0.00019	<0.0096 H UJ
	ROST3MW-ROX-071421	7/14/2021	<0 011	<0.011	<0 011	<0.011	<0.00021	<0.00021	<0.011	<0 00021	<0.00021	<0.00021	<0 011	<0.021	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0 011
ROST-4-PZ(C)	ROST4PZC-ROX-101920	10/19/2020	<0 0094 U	<0 0094	0 0025 J	<0.0094	0.00019	0.0017	<0.0094	<0 00019	0.049	0 057	<0.0094	<0.019	<0.0094	<0.019	0.0072	<0.0094	0.0005	<0.0094 UJ
	ROST4PZC-ROX-011421	1/14/2021	<0 011	<0.011	<0 011	<0.011	<0 00021 U	0 001	<0.011	<0 00021	0.037	0 029	<0.011	<0.021	<0.011	<0.021	0.0031	<0.011	<0 00021 U	<0 011
	ROST4PZC-ROX-041521	4/15/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	0.0011	<0.0096	<0 00019	0.022	0 013	<0.0096	<0.019	<0.0096	<0.019	0.0027	<0.0096	<0 00019 U	<0.0096
	ROST4PZC-ROX-071421	7/14/2021	<0.01	<0.01	<0.01	<0.01	<0 0002	0.0015	<0 01	<0.0002	0.052	0 046	<0.01	<0.02	<0 01	<0.02	0.0043	<0.01	0.000078 J	<0.01
	ROST4PZC-ROX-071421-DUP	7/14/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	0.0013	<0.0095	<0 00019	0.051	0 045	<0.0095	<0.019	<0.0095	<0.019	0.004	<0.0095	0.000049 J	<0.0095

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																	
			Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
ROST-4-PZ(E)	ROST4PZE-ROX-101920	10/19/2020	<0.0094	<0 0094	0 0027 J	<0.0094	0.000089 J	0 001	0 0057 J	<0 00019	0.031	0 018	<0.0094	0.0045 J	<0.0094	<0.019	0.0031	<0.0094	0.000097 J	<0.0094 UJ
	ROST4PZE-ROX-041621	4/16/2021	0 00081 J	0.0087 J	<0.0095	<0.0095	0.00021	0.0026	0 0033 J	<0 00019	0.064	0.07	<0.0095	0.0024 J	<0.0095	<0.019	0.0063	<0.0095	0.00048	<0.0095
	ROST4PZE-ROX-071521	7/15/2021	<0.0097	0.0044 J	<0.0097	<0.0097	0.000074 J	0.0016	<0.0097	<0 00019	0.055	0 069	<0.0097	<0.019	<0.0097	<0.019	0.0056	<0.0097	0 00017 J	<0.0097
ROST-4-PZ(G)	ROST4PZG-ROX-101620	10/16/2020	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	0.034	<0.0095	<0.019	<0.00019	<0 0095 UJ	<0.00019	<0.0095 UJ
	ROST4PZG-ROX-011321	1/13/2021	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0 01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0 01	<0.021	<0.00021	<0.01	<0.00021	<0.01 U
	ROST4PZG-ROX-041521	4/15/2021	0 00028 J	<0 0097	<0.0097	<0.0097	<0 00019 U	<0.00019	<0.0097	<0 00019	<0 00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	0.00007 J	<0.0097	<0 00019 U	<0.0097
	ROST4PZG-ROX-041521-DUP	4/15/2021	0 00058 J	<0 0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0 00019	<0 00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	ROST4PZG-ROX-071321	7/13/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0 00019	<0 00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0.00019	<0.0094	<0.00019	<0.0094
T-12	T12-ROX-102120	10/21/2020	<0.0099	<0 0099	<0.0099	<0.0099	<0 0002	0.00031	<0.0099	<0.0002	0.017	0 022	<0.0099	<0.02	<0.0099	<0.02	0.00047	0.13	<0 0002	<0.0099
	T12-ROX-102120-DUP	10/21/2020	<0.01	<0.01	<0.01	<0.01	<0 0002	0.00038	0 0012 J	<0.0002	0.02	0 028	<0.01	<0.02	<0 01	<0.02	0.00059	0.13	<0 0002	<0.01
	T12-ROX-011221	1/12/2021	<0.0094	<0 0094	<0.0094	<0.0094	0.000079 J	0.00035	<0.0094	<0 00019	0.018	0 025	<0.0094	<0.019	<0.0094	<0.019	0.00062	0.091	0.000076 J	<0.0094
	T12-ROX-011221-DUP	1/12/2021	<0.0095	<0 0095	<0.0095	<0.0095	0.0001 J	0.00036	<0.0095	0 00025	0.019	0 027	<0.0095	<0.019	<0.0095	<0.019	0.00057	0.11	0 00012 J	<0.0095
	T12-ROX-041321	4/13/2021	<0.011	<0.011	<0 011	<0.011	0.000076 J	<0.00022	<0.011	<0 00022	<0 00022	<0.00022	<0 011	<0.022	<0.011	<0.022	<0.00022	0.09	0.000094 J	<0 011
	T12-ROX-071521	7/15/2021	<0.011	0.0075 J	<0 011	<0.011	<0.00021	<0.00021	0 0035 J	<0 00021	0 0017	0.00026	<0 011	0.0018 J	<0.011	<0.021	<0.00021	0.23	<0.00021	<0 011

Notes

1 Denotes screening critieria source from 35 I.A.C. 620, Subpart D.

2 Denotes screening critieria source from 35 I.A.C. 742 (TACO), Appendix B, Table E.

3 Denotes screening criteria source from IL EPA Toxicity Assessment Unit (Chemicals not in TACO, Tier 1 Tables).

Groundwater monitoring wells designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-58, and P-68, contained LNAPL; therefore, these wells were not sampled.

The screened interval for certain monitoring wells was adjusted based on an evaluation of the results of annual bottom depth gauging conducted in the first quarter of each year.

	Indicates a historical exceedance of screening criteria.
	Indicates a current exceedance of screening criteria.
	Empty shaded cell without a value indicates previous quarter analyte result was rejected or the analyte was not analyzed.
	Empty cell without a value indicates current quarter analyte result was rejected or the analyte was not analyzed.

LABORATORY QUALIFIERS

B = Target analyte was identified in the method blank, indicating possible lab contamination.

J = The analyte was detected below the reporting limit. Result is estimated.

H = Analyzed or extracted out of holding time criteria.

F1 = Indicates MS and/or MSD recovery is outside acceptance limit.

*+ = Indicates LCS and/or LCSD is outside acceptance limit, high biased

*1 = LCS/LCSD RPD is outside contol limit

<#.## Indicates the analyte was not detected above the given reporting limit.

AECOM QUALIFIERS

J = The result is estimated.

UJ = Estimated non-detect.

U = Result is non-detect.

Figures

The following MVS Descriptions and Assumptions apply to **Figure 6**. C Tech Development Corporation's Mining Visualization System, Version 9.94 (MVS 9.94) was used to model the estimated distribution of benzene in the groundwater.

MVS Descriptions and Assumptions:

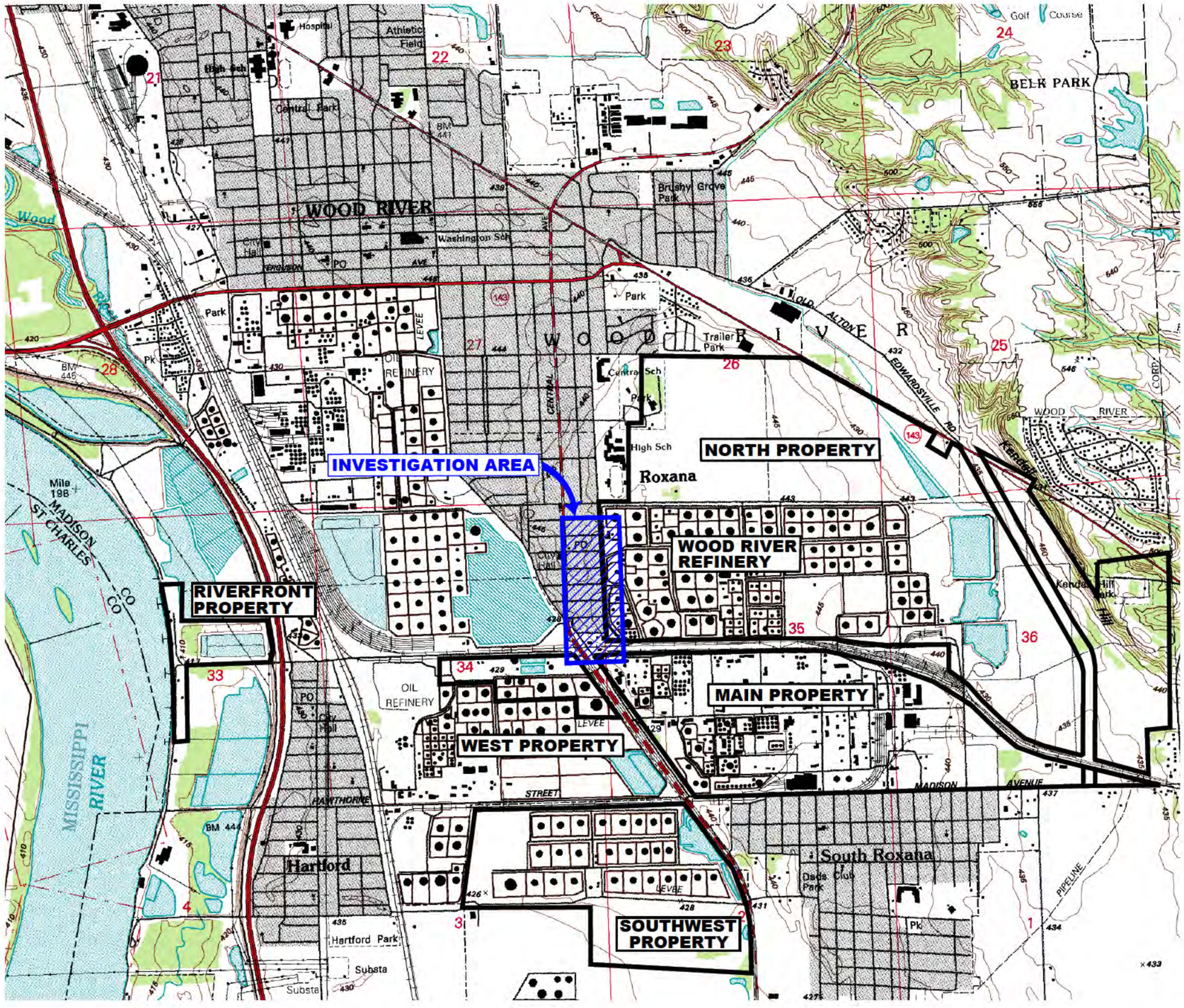
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

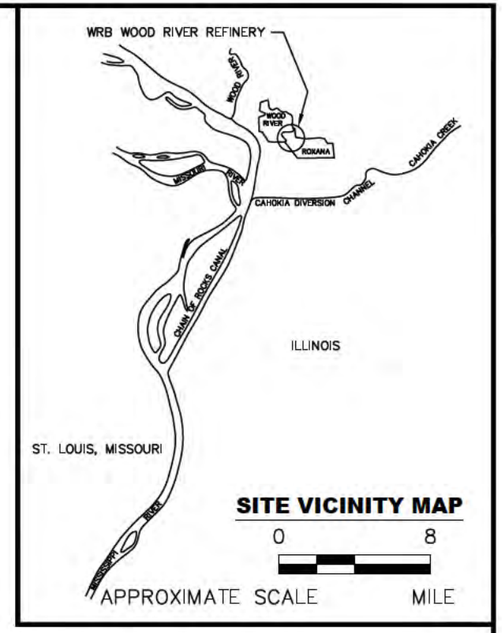
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

More simplified, if each sampling location were represented by a tack pushed into the model's surface and a rubber band stretched around them, the model would be represented by the space inside the rubber band.

Duplicate Samples – In locations and depths where duplication samples were collected, the higher concentration was used.

Detection Limits – In cases where the lab reported a non-detect, half the value of the lab reporting limit was used in the model. This conservative method is based on the assumption that the sample is likely not free of benzene, but the quantity contained is lower than detectable at the analyzed dilution.





LEGEND

WOOD RIVER REFINERY PROPERTY BOUNDARY

INVESTIGATION AREA

SOURCE: ELECTRONIC USGS DIGITAL RASTER GRAPHIC 7.5 MINUTE TOPOGRAPHIC MAP OF WOOD RIVER, IL–MO REVISED 1994.

0 2000

APPROXIMATE SCALE FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60648474

AECOM

DRN. BY:gds October 2021
DSGN. BY: mar
CHKD. BY: wmp

Investigation Area Location Map

FIG. NO. 1

File: C:\USERS\LIBRARIEDATA\DESKTOP\WORK IN PROGRESS\WOOD RIVER\DIRECTORY\GDS JOB SERVICES - GIS CAD PROJECTS\GIS AMERICAS\SHELL\ILLINOIS\GIS\60648474_WRB_CENTRAL_AVE_ROXANA_IL\ROXANA_2021_SW_INVESTIGATION_AREA_LOCATION_MAP.DWG Last edited: 09/03/21 @ 2:25 PM @ WDC-STLOUIS

File: C:\USERS\CRACKINS\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q21 GW RPT\2021.09.16\WORK\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Sep. 16, 21 @ 12:48 PM by: crackins

LEGEND

- ROXANA INTERIM GROUNDWATER MONITORING WELL LOCATION
- GROUNDWATER MONITORING WELL LOCATION (NOT INCLUDED IN THE ROXANA INTERIM GROUNDWATER MONITORING PROGRAM)
- GROUNDWATER PIEZOMETER LOCATION
- GROUNDWATER PIEZOMETER LOCATION (NOT INCLUDED IN THE ROXANA INTERIM GROUNDWATER MONITORING PROGRAM)
- * ROXANA INTERIM GROUNDWATER MONITORING WELL SAMPLING LOCATION

FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
RAND AVENUE
VILLAGE OF ROXANA
NORTH PROPERTY
WEST PROPERTY
MAIN PROPERTY
BP
1986 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

PZ-1(101)
PZ-1(85)
MW-10 *
MW-9 *
MW-28 *
MW-27 *
P-55R *
ROST-4-PZ(A)
ROST-4-PZ(B)
ROST-4-PZ(C) *
ROST-4-PZ
P-60-11
ROST-3-MW *
ROST-4-PZ(D)
P-60-S
P-60-12
ROST-4-PZ(E) *
ROST-4-PZ(F)
P-60
P-68 *
P-60-13
ROST-4-PZ(G) *
MW-11 *
P-54 *
MW-17
T-12 *
MW-24 *
MW-22 *
MW-18
P-69
P-70
P-74 *
MW-19
P-59 *
P-61
MW-16 *
GP-9-PZ
PZ-2(84)
PZ-2(70.5)
MW-12 *
MW-20
P-56 *
MW-2 *
MW-1 *
T-6
MW-26 *
MW-21
P-57 *
MW-4 *
P-93A *
P-93B *
P-93C *
P-93D *
P-73
MW-3 *
MW-25 *
MW-23 *
MW-5 *
MW-7 *
MW-8 *
P-58 *
P-66 *
P-75
MW-13 *
MW-6A
MW-6B *
MW-6C *
MW-6D *
MW-14 *
P-114R *
T-1
T-24
A-28
A-27

0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60648474

AECOM

DRN. BY:gds October 2021
DSGN. BY:mr
CHKD. BY:wmp

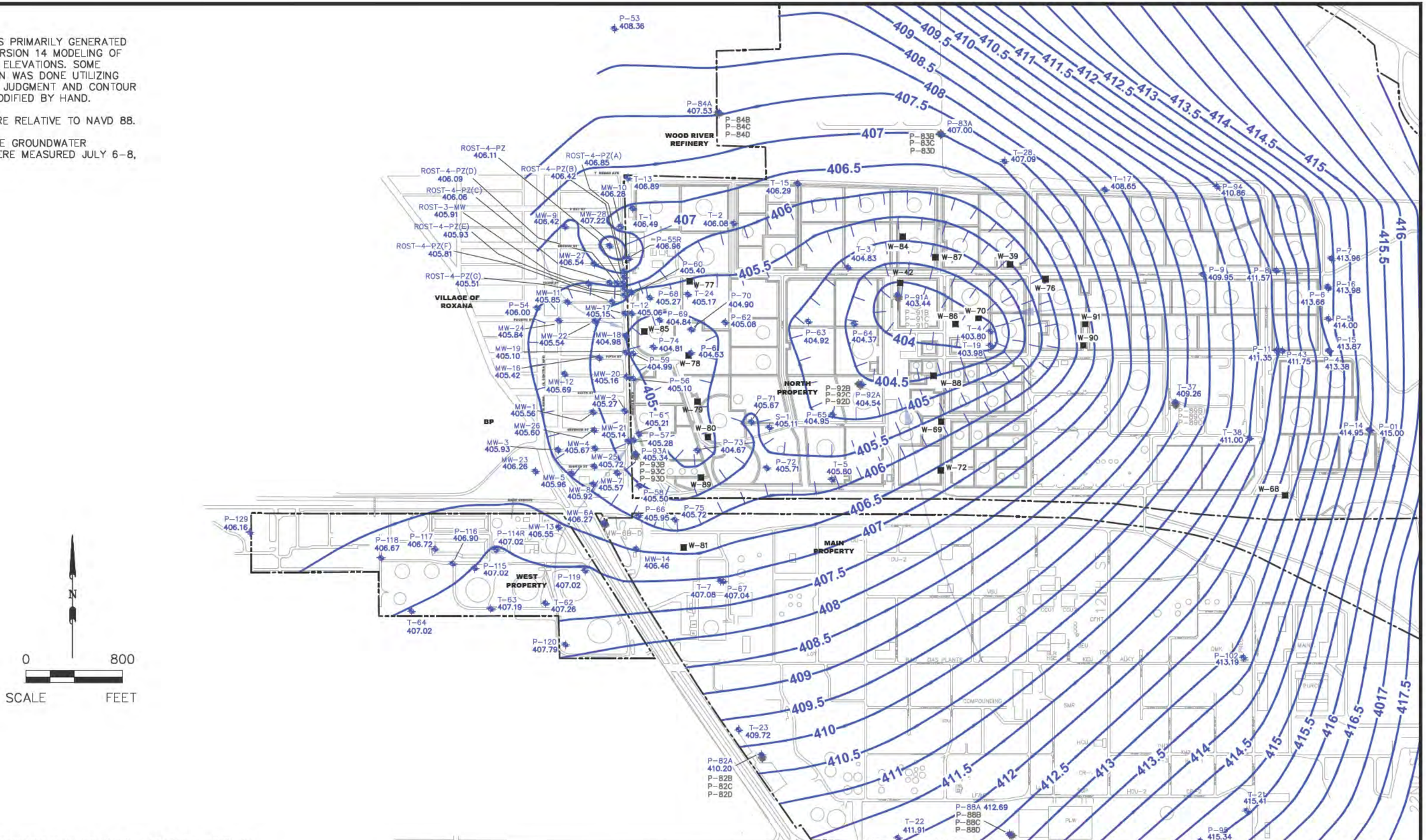
Roxana Interim Groundwater Monitoring Well Locations

FIG. NO. 2

NOTES:
1. CONTOUR LINES PRIMARILY GENERATED BY SURFER VERSION 14 MODELING OF GROUNDWATER ELEVATIONS. SOME INTERPRETATION WAS DONE UTILIZING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.

2. ELEVATIONS ARE RELATIVE TO NAVD 88.

3. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED JULY 6-8, 2021.



N

0 800

SCALE FEET

LEGEND

- GROUNDWATER MONITORING WELL LOCATION USED TO GENERATE GROUNDWATER CONTOURS
- GROUNDWATER MONITORING WELL LOCATION NOT USED TO GENERATE GROUNDWATER CONTOURS
- WRR GROUNDWATER PRODUCTION WELL
- —407— GROUNDWATER SURFACE CONTOUR NAVD 88 (CONTOUR INTERVAL 0.5 FT.)
- GROUNDWATER GRADIENT

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60648474

AECOM

DRN. BY:gds October 2021
DSGN. BY:gds
CHKD. BY:mr/bh

Groundwater Contours 3Q21

FIG. NO. 3a

File: C:\USERS\CRACIUNS\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q21 GW RPT\2021.09.16\WORK\FIGURE 3A ROX 3Q21 CONTOUR MAP (800 SCALE).DWG Last edited: Sep. 16, 21 @ 1:33 PM by: craciuns

File: C:\USERS\CRACIUNS\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q21 GW RPT\2021.09.16\WORK\FIGURE 3B GW CONTOURS 3Q21 WF.DWG Last edited: Sep. 16, 21 @ 3:27 PM by: craciuns

LEGEND

- GROUNDWATER MONITORING WELL LOCATION USED TO GENERATE GROUNDWATER CONTOURS
- GROUNDWATER MONITORING WELL LOCATION NOT USED TO GENERATE GROUNDWATER CONTOURS
- WRR GROUNDWATER PRODUCTION WELL
- 407 GROUNDWATER SURFACE CONTOUR (CONTOUR INTERVAL 0.5 FT)
- GROUNDWATER GRADIENT

NOTES:
1. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED JULY 6-8, 2021.
2. CONTOUR LINES PRIMARILY GENERATED BY SURFER VERSION 14 MODELING OF GROUNDWATER ELEVATIONS. SOME INTERPRETATION WAS DONE UTILIZING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
3. ELEVATIONS ARE RELATIVE TO NAVD 88.

TYDEMAN AVE
FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
VILLAGE OF ROXANA
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
RAND AVENUE
NORTH PROPERTY
WOOD RIVER REFINERY
MAIN PROPERTY
WEST PROPERTY
PUBLIC WORKS YARD
BP
1995 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

T-13 406.89
T-1 406.49
T-2 406.08
MW-9 406.42
MW-10 406.28
MW-28 407.22
ROST-4-PZ(A) 406.85
ROST-4-PZ(B) 406.42
P-55R 406.96
MW-27 406.54
ROST-4-PZ(D) 406.09
ROST-4-PZ 406.11
ROST-4-PZ(C) 406.06
ROST-3-MW 405.91
W-77
ROST-4-PZ(E) 405.93
P-60 405.40
P-68 405.27
T-24 405.17
P-54 406.00
MW-11 405.85
ROST-4-PZ(G) 405.51
ROST-4-PZ(F) 405.81
T-12 405.06
MW-17 405.15
P-69 404.84
P-62 405.08
MW-24 405.84
MW-22 405.54
W-85
P-70 404.90
MW-18 404.98
P-74 404.81
P-61 404.63
MW-19 405.10
P-59 404.99
W-78
FIFTH ST
MW-16 405.42
MW-20 405.16
MW-12 405.69
P-56 405.10
W-79
MW-2 405.27
MW-1 405.56
P-71 405.67
S-1 405.11
T-6 405.21
W-80
MW-26 405.60
MW-21 405.14
P-57 405.28
MW-3 405.93
MW-4 405.67
P-93A 405.34
P-93B
P-93C
P-93D
P-73 404.67
MW-25 405.72
P-72 405.71
MW-23 406.26
MW-5 405.96
MW-7 405.57
MW-8 405.92
P-58 405.50
W-89
P-66 405.95
P-75 405.72
MW-13 406.55
MW-6B
MW-6C
MW-6D
MW-6A 406.27
MW-14 406.46
W-81
P-117 406.72
P-116 406.90
P-114R 407.02
P-115 407.02
P-119 407.02
T-7 407.08
P-67 407.04
T-62 407.26
T-63 407.19
T-64 407.02
A-147

407.5
407
406.5
406
405.5
405
407.5
406
406.5
407
407.5
408

0 300
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60648474
AECOM	
DRN. BY: gds October 2021 DSGN. BY: gds CHKD. BY: mr/bh	Groundwater Contours 3Q21 – West Fenceline
	FIG. NO. 3b

File: C:\USERS\CRACIUNS\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q21 GW RPT\2021.09.16\WORK\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE).DWG Last edited: Sep. 16, 21 @ 2:01 PM by: crociuna

LEGEND

- GROUNDWATER MONITORING WELL LOCATION GAUGED, LNAPL THICKNESS IN FEET
- GROUNDWATER MONITORING WELL LOCATION (NO LNAPL OBSERVED UNLESS OTHERWISE NOTED)
- GROUNDWATER PIEZOMETER LOCATION (NO LNAPL OBSERVED UNLESS OTHERWISE NOTED)
- OIL RECOVERY WELL
- WATER PRODUCTION WELL
- LNAPL THICKNESS (FEET)
- * INDICATES THAT THE LNAPL AND/OR WATER LEVEL IS ABOVE THE TOP OF WELL SCREEN

NOTE:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WEST FENCELINE AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 6-8, 2021.

TYDEMAN AVE
FIRST ST
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFEE AVE
RAND AVENUE
VILLAGE OF ROXANA
NORTH PROPERTY
MAIN PROPERTY
WEST PROPERTY
WOOD RIVER REFINERY
PUBLIC WORKS YARD
BP
1986 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

P-84A P-84B P-84C P-84D
T-13 T-1 T-2
MW-9 MW-10
ROST-4-PZ(A) MW-28 ROST-4-PZ(B) ROST-4-PZ(D) MW-27 ROST-4-PZ(C) ROST-3-MW ROST-4-PZ ROST-4-PZ(E) ROST-4-PZ(F) ROST-4-PZ(G)
0.01 P-55R 0.06*
P-54 MW-11 MW-24 MW-22 MW-17 MW-18 MW-19 MW-16 MW-12 MW-20 MW-2 MW-1 MW-26 MW-21 MW-3 MW-4 MW-25 MW-23 MW-5 MW-8 MW-7 MW-13 MW-6 MW-14
P-60 T-12 P-69 W-85 P-74 P-59 P-56 P-57 T-6 P-93A P-93B P-93C P-93D P-58 0.04* P-66 P-75
R-77 W-77 0.10 T-24 0.13* A-33 0.01 P-68 0.04* A-29 A-27
0.01 P-62 0.03* P-70
0.01 P-61 0.05* R-78 W-78
R-79 W-79 P-71 0.01 S-1 0.02
R-80 W-80 P-73 P-72
R-89 W-89
R-81 W-81
P-117 P-114R P-116 P-115 P-119
0.01 T-7 P-67 0.04*

0 300
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60648474

AECOM

DRN. BY:gds October 2021
DSGN. BY:mr
CHKD. BY:bh

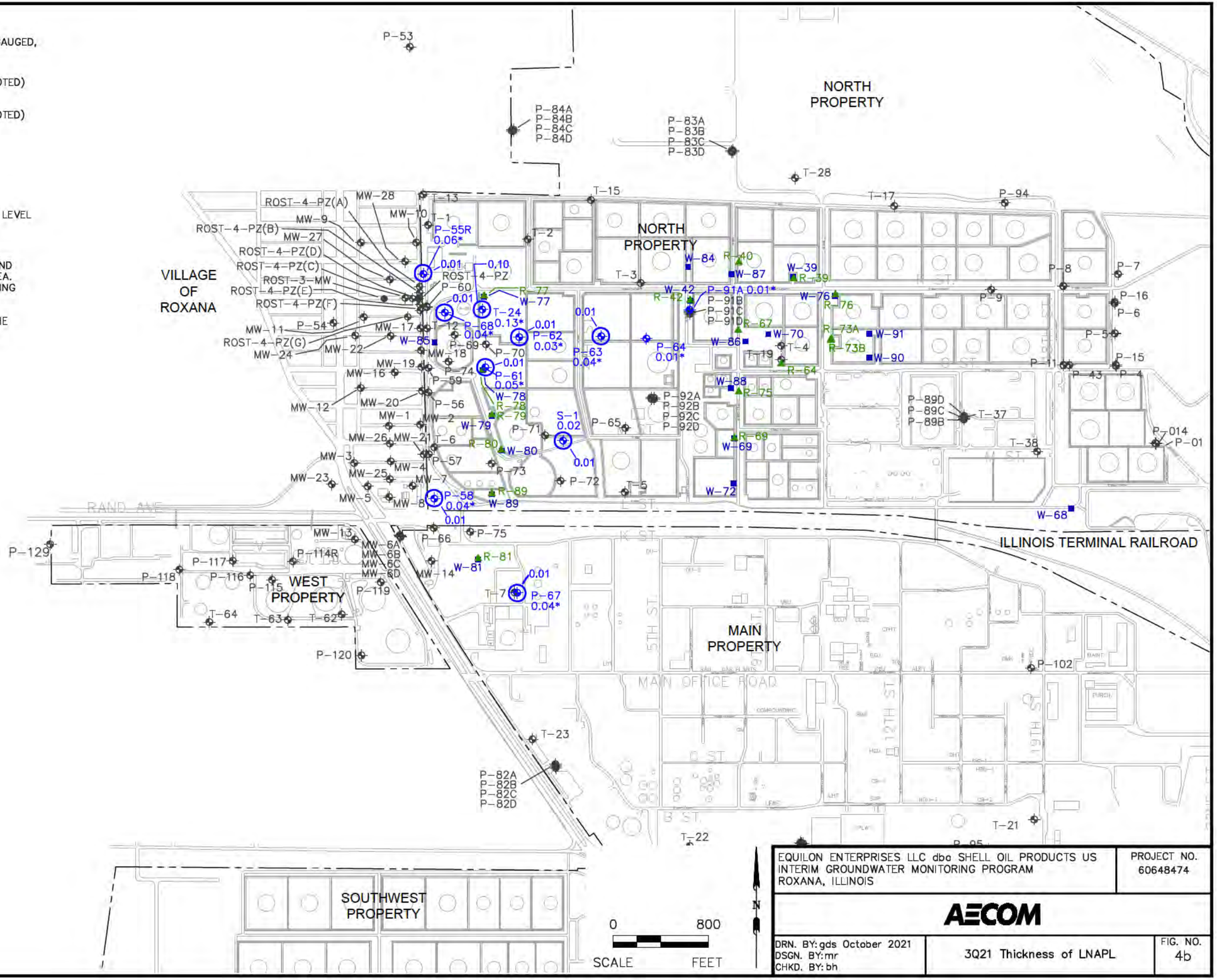
3Q21 Thickness of LNAPL – West Fenceline

FIG. NO. 4a

LEGEND

- GROUNDWATER MONITORING WELL LOCATION GAUGED, LNAPL THICKNESS IN FEET
- GROUNDWATER MONITORING WELL LOCATION (NO LNAPL OBSERVED UNLESS OTHERWISE NOTED)
- GROUNDWATER PIEZOMETER LOCATION (NO LNAPL OBSERVED UNLESS OTHERWISE NOTED)
- OIL RECOVERY WELL
- WATER PRODUCTION WELL
- LNAPL THICKNESS (FEET)
- * INDICATES THAT THE LNAPL AND/OR WATER LEVEL IS ABOVE THE TOP OF WELL SCREEN

NOTES:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WRR AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JULY 6–8, 2021.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60648474
AECOM	
DRN. BY: gds October 2021 DSGN. BY: mr CHKD. BY: bh	3Q21 Thickness of LNAPL — FIG. NO. 4b

File: C:\USERS\LILIANA.GEORGETA.CRO\AECOM DIRECTORY\GIS SERVICES – GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666 – 800 – S. CENTRAL_AVE – ROXANA – ILL\ROXANA_3Q21 GW RPT\2021.09.03\WORK\FIGURE 4B THICKNESS OF LNAPL (REFINERY).DWG Last edited: Sep. 03, 21 @ 3:45 PM by: lilianageorgeta.cro

File: C:\USERS\CRACIUNS\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q21 GW RPT\2021.09.16\WORK\FIGURE 5 1Q21 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Sep. 16, 21 @ 3:27 PM by: craciuns

LEGEND

- GROUNDWATER MONITORING WELL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION NOT SAMPLED
- GROUNDWATER PIEZOMETER LOCATION NOT SAMPLED

NOTES:

1. PER DIRECTION FROM IEPA, ANALYTICAL RESULTS ARE SCREENED AGAINST CRITERIA OUTLINED IN THE WRR RCRA PART B PERMIT.
2. GROUNDWATER SCREENING CRITERIA.

Analyte	Screening Criteria (mg/L)
Benzene	0.005
Methyl tert-Butyl Ether (MTBE)	0.07
Naphthalene	0.14
Toluene	1
1,2,4-Trimethylbenzene	0.07
2-Methylnaphthalene	0.028
Phenol	0.1

J = THE RESULT IS ESTIMATED.
UJ = ESTIMATED NON-DETECT.

3. MULTIPLE RESULTS (e.g., 1100 / 990) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
4. WELLS IDENTIFIED IN BLUE WITH NO DATA BOX INDICATE THE RESULTS DID NOT EXCEED SCREENING CRITERIA.
5. WELLS P-55R, P-58, AND P-68 WERE NOT SAMPLED DURING 3Q21 DUE TO THE PRESENCE OF LNAPL.
6. DATA FROM THE BIS (2-ETHYLHEXYL) PHTHALATE CONFIRMATION RE-ANALYSIS WAS USED FOR WELLS P-57 AND P-74.

Sample Location	ROST-4-PZ(C)
Sampled 7/14/2021	Result (mg/L)
2-Methylnaphthalene	0.046 / 0.045

Sample Location	MW-28
Sampled 7/15/2021	Result (mg/L)
Benzene	0.0066
Methyl tert-Butyl Ether (MTBE)	0.073

Sample Location	ROST-4-PZ(E)
Sampled 7/15/2021	Result (mg/L)
Benzene	0.06
1,2,4-Trimethylbenzene	0.15
2-Methylnaphthalene	0.069

Sample Location	T-12
Sampled 7/15/2021	Result (mg/L)
Benzene	2.2
Phenol	0.23

Sample Location	P-59
Sampled 7/15/2021	Result (mg/L)
Benzene	3.4
Naphthalene	0.15
1,2,4-Trimethylbenzene	0.14

Sample Location	P-57
Sampled 7/14/2021	Result (mg/L)
Benzene	0.18

Sample Location	P-93A	P-93B
Sampled 7/15, 7/16/2021	Result (mg/L)	Result (mg/L)
Benzene	<0.001 UJ / **0.057**	1100 / 990
Phenol		0.0039 J J / **0.19 J**

BP

Sample Location	MW-25
Sampled 7/19/2021	Result (mg/L)
Benzene	0.043

Sample Location	MW-7
Sampled 7/19/2021	Result (mg/L)
Benzene	890

Sample Location	MW-8
Sampled 7/19/2021	Result (mg/L)
Benzene	270 / 270
Phenol	0.3 / 0.33

Sample Location	P-66
Sampled 7/13, 8/9/2021	Result (mg/L)
Benzene	1.2 / 0.82
Toluene	3.9 / 2.3

MW-9, MW-10, SECOND ST, MW-28, NORTH PROPERTY, A-34, P-55R, MW-27, ROST-4-PZ(A), ROST-4-PZ(B), ROST-4-PZ(C), THIRD ST, ROST-3-MW, ROST-4-PZ(D), ROST-4-PZ, ROST-4-PZ(E), ROST-4-PZ(F), P-60, P-68, A-28, T-24, MW-11, ROST-4-PZ(G), P-54, T-12, MW-17, MW-24, FOURTH ST, MW-22, P-69, WOOD RIVER REFINERY, HIGHWAY 111 (S. CENTRAL AVE), MW-18, A-27, P-70, MW-19, P-74, P-61, P-59, FIFTH ST, MW-16, MW-12, VILLAGE OF ROXANA, MW-20, P-56, CHAFFER AVE, SIXTH ST, MW-1, MW-2, MW-26, SEVENTH ST, T-6, MW-21, P-57, MW-4, P-93A, P-93B, P-93C, P-93D, F-78, A-22, P-73, MW-3, MW-25, EIGHTH ST, MW-5, MW-7, MW-23, MW-8, P-58, F-73, F-74, F-75, 1986 APPROXIMATE BENZENE RELEASE SITE, RAND AVENUE, 2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE, P-66, P-75, MW-13, MW-6A, MW-6B, MW-6C, MW-6D, MAIN PROPERTY, WEST PROPERTY, MW-14, P-114R

SCALE 0 200 FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60648474

AECOM

DRN. BY:gds October 2021
DSGN. BY:mr
CHKD. BY:bh

3Q21 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

File: C:\USERS\CRACIUNS\AECOM\GDS GIS SERVICES – DCS AMERICAS\SHELL\ILLINOIS\USF00656–900_S_CENTRAL_AVE–ROXANA–IL\ROXANA 3Q21 GW RPT\2021.09.16\WORK\FIGURE 6 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Sep. 16, 21 @ 7:11 PM by: craciuns

LEGEND

- GROUNDWATER MONITORING WELL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION NOT SAMPLED
- GROUNDWATER MONITORING WELL, LNAPL THICKNESS IN FEET
- GROUNDWATER PIEZOMETER LOCATION NOT SAMPLED
- GROUNDWATER PIEZOMETER, LNAPL THICKNESS IN FEET
- OIL RECOVERY WELL
- WATER PRODUCTION WELL
- LNAPL THICKNESS (FEET)
- * INDICATES THAT THE LNAPL AND/OR WATER LEVEL IS ABOVE THE TOP OF WELL SCREEN
- EXTENT OF MVS MODEL DATA SET
- 50.0 GROUNDWATER CONCENTRATION BENZENE (mg/L)

NOTES:

1. IMAGES GENERATED UTILIZING CTECH MINING VISUALIZATION SYSTEM MODELING SOFTWARE. CONCENTRATIONS BETWEEN KNOWN DATA POINTS (E.G. GROUNDWATER MONITORING WELLS) ARE INTERPOLATIONS AND EXTRAPOLATIONS OF THE MEASURED DATA. SOME INTERPRETATION WAS COMPLETED UTILIZING PROFESSIONAL JUDGEMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
2. ALL RESULTS SHOWN IN mg/L.
3. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON–DETECT RESULTS (e.g., <0.001 mg/L).
4. NON–DETECT VALUES ARE MODELED AT HALF THE REPORTING LIMIT.
5. MULTIPLE RESULTS (e.g. 1100 / 990) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P–55R AND P–58 ADJUSTED BASED ON AVAILABLE 3Q21 AND HISTORICAL ANALYTICAL DATA FROM WELLS IN THE AREA.
7. J = THE RESULT IS ESTIMATED.
8. UJ = ESTIMATED NON–DETECT.
9. AT WELL CLUSTER LOCATIONS, THE HIGHEST VALUE WAS USED FOR CONTOURING PURPOSES.

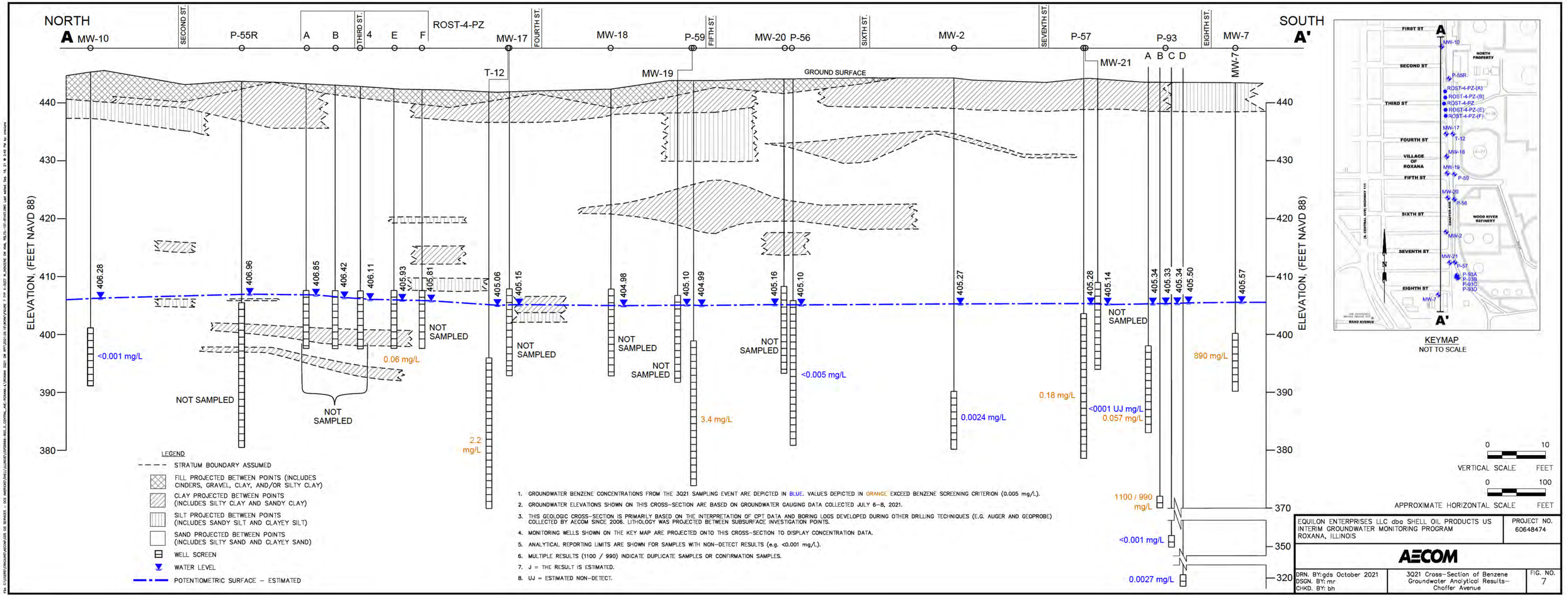
SECOND ST
THIRD ST
FOURTH ST
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
RAND AVENUE
2ND STREET
VILLAGE OF ROXANA
BP
NORTH PROPERTY
MAIN PROPERTY
WEST PROPERTY
PUBLIC WORKS YARD
WOOD RIVER REFINERY

MW–9 <0.001
PZ–1(101)
PZ–1(85)
MW–10 <0.001
MW–28 0.0066
MW–27 <0.001
ROST–4–PZ(A)
ROST–4–PZ(B)
ROST–4–PZ(C) 0.0028 J / 0.0024 J
ROST–3–MW <0.001
ROST–4–PZ(D)
ROST–4–PZ(E) 0.06
ROST–4–PZ(F)
ROST–4–PZ(G) 0.00046 J
MW–11 <0.001
MW–17
P–54 <0.001
MW–24 <0.001
MW–22 0.00071 J / <0.001
MW–18
MW–16 <0.001
MW–19
PZ–2(84)
PZ–2(70.5)
MW–12 0.0005 J
MW–20
P–56 <0.005
MW–01 <0.001
MW–2 0.0024 J
MW–26 0.00043 J
MW–3 0.00065 J
MW–4 0.00059 J
MW–25 0.043
MW–5 <0.001
MW–23 <0.001
MW–7 890
MW–8 270 / 270
MW–13 <0.001
MW–6A <0.001
MW–6B <0.001
MW–6C <0.001
MW–6D <0.001
MW–14 <0.001
P–114R <0.001
P–115
MW–21
P–57 0.18
T–12 2.2
T–6
W–85
P–59 3.4
P–74 <0.001
P–55R 0.06*
P–60–11
P–60–S
P–60
P–60–12
P–60–13
P–68 0.04*
T–24 0.13*
P–61 0.05*
P–58 0.04*
P–66 1.2 / 0.82
P–93A <0.001 UJ / 0.057
P–93B 1100 / 990
P–93C <0.001
P–93D 0.0027
P–69
P–70
P–73
P–75
A–27
A–28
A–22
F–76
F–77
F–78
F–73
F–74
F–75
R–77 W–77
R–78 W–78
R–79 W–79
R–80 W–80
R–81 W–81
R–89 W–89
0.01
0.10
0.005
0.05
0.5
5
50
500

0 200 SCALE FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60648474
AECOM		
DRN. BY:gds October 2021 DSGN. BY:mr CHKD. BY:bh	3Q21 Dissolved Phase Benzene Concentrations in Groundwater	FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 3Q21 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JULY 6–8, 2021.
3. THIS GEOLOGIC CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA AND BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) COLLECTED BY AECOM SINCE 2006. LITHOLOGY WAS PROJECTED BETWEEN SUBSURFACE INVESTIGATION POINTS.
4. MONITORING WELLS SHOWN ON THE KEY MAP ARE PROJECTED ONTO THIS CROSS-SECTION TO DISPLAY CONCENTRATION DATA.
5. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (e.g. <0.001 mg/L).
6. MULTIPLE RESULTS (1100 / 990) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.
8. UJ = ESTIMATED NON-DETECT.

KEYMAP
NOT TO SCALE

0 10
VERTICAL SCALE FEET

0 100
APPROXIMATE HORIZONTAL SCALE FEET

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US
INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60648474

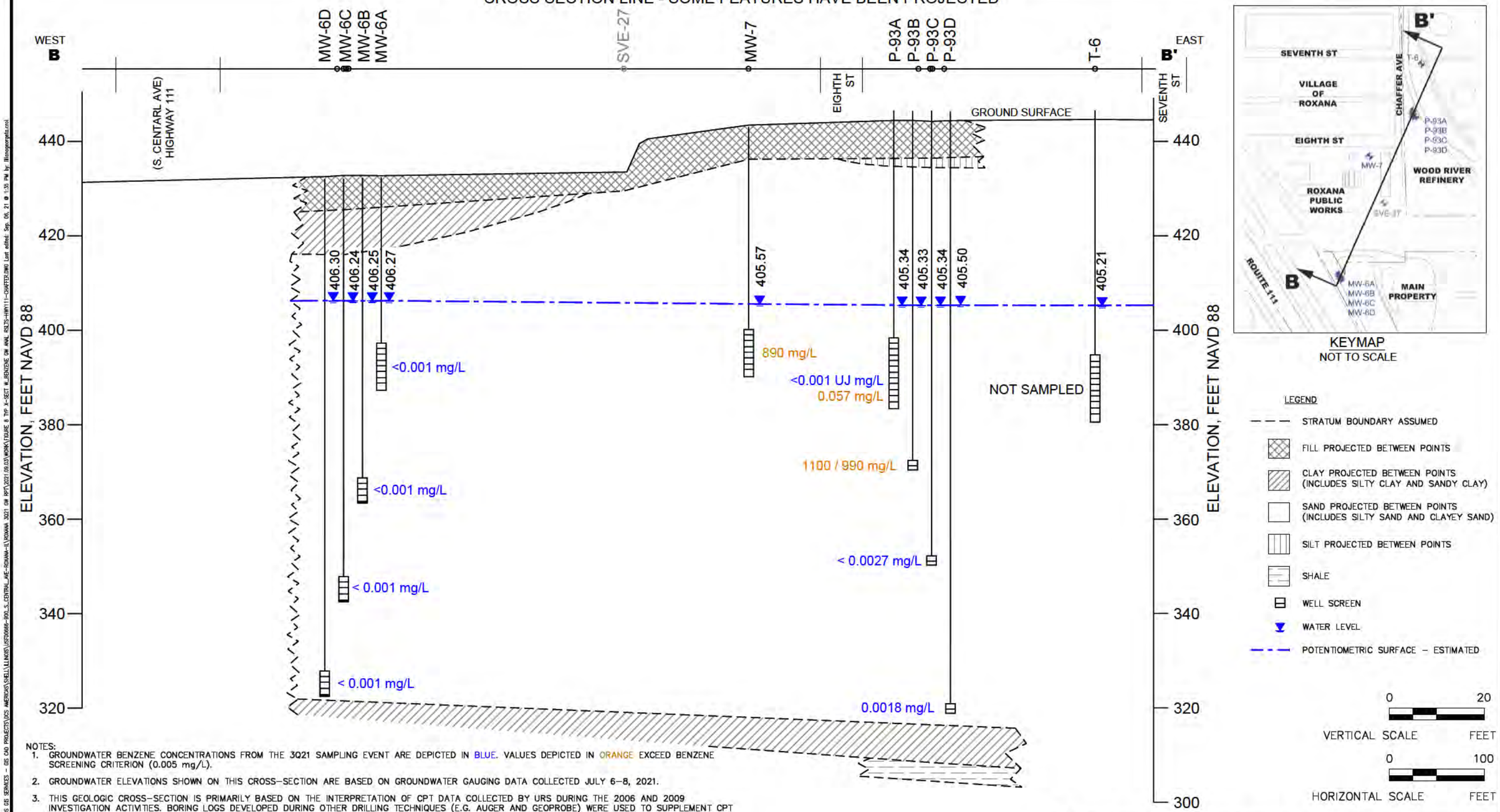
AECOM

DRN. BY: gds October 2021
DSGN. BY: mr
CHKD. BY: bh

3Q21 Cross-Section of Benzene Groundwater Analytical Results–Chaffee Avenue

FIG. NO. 7

CROSS SECTION LINE - SOME FEATURES HAVE BEEN PROJECTED



KEYMAP
NOT TO SCALE

LEGEND

- STRATUM BOUNDARY ASSUMED
- FILL PROJECTED BETWEEN POINTS
- CLAY PROJECTED BETWEEN POINTS (INCLUDES SILTY CLAY AND SANDY CLAY)
- SAND PROJECTED BETWEEN POINTS (INCLUDES SILTY SAND AND CLAYEY SAND)
- SILT PROJECTED BETWEEN POINTS
- SHALE
- WELL SCREEN
- WATER LEVEL
- POTENTIOMETRIC SURFACE – ESTIMATED

0 20
VERTICAL SCALE FEET

0 100
HORIZONTAL SCALE FEET

NOTES:
1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 3Q21 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JULY 6-8, 2021.
3. THIS GEOLOGIC CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA COLLECTED BY URS DURING THE 2006 AND 2009 INVESTIGATION ACTIVITIES. BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) WERE USED TO SUPPLEMENT CPT DATA.
4. THE DEPTH AND THICKNESS OF INDIVIDUAL STRATA DEPICTED MAY BE BASED ON CPT LOGS GENERATED AT NEARBY LOCATIONS. THEREFORE, WELL SCREENS MAY APPEAR TO BE PARTIALLY WITHIN CLAY LAYERS OR SHALLOWER/DEEPER WITHIN A PERMEABLE STRATUM THAN ACTUAL CONDITIONS DUE TO MAP PROJECTIONS.
5. LITHOLOGICAL INFORMATION FROM SVE-27 WAS OBTAINED FROM BORING LOG TO SUPPLEMENT SITE GEOLOGY ONLY.
6. HISTORIC BORING LOG IS NOT AVAILABLE FOR T-6.
7. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (e.g. <0.001 mg/L).
8. MULTIPLE RESULTS (1100 / 990) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
9. UJ = ESTIMATED NON-DETECT.

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60648474
AECOM	
DRN. BY:gds October 2021 DSGN. BY:mr CHKD. BY:bh	3Q21 Cross-Section of Benzene Groundwater Analytical Results-Roxana Public Works Yard
	FIG. NO. 8

File: C:\USERS\ULANA\DESKTOP\AECOM DIRECTORY\GIS GIS SERVICES - GIS CAD PROJECTS\GIS AMERICAS\SHELL\ILLINOIS\VISTA666-RPO_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q21 GW RPT\2021 GW RPT\2021 09 03\WORK\FIGURE 8 THY X-SECT #_JEGNDSHE GW ANAL RSLTS-HWY111-CHAPTER3.DWG Last edited: Sep. 06, 21 @ 1:35 PM by: Illinoisgeographic.nad

Appendix A

Regulatory History

Appendix A

Regulatory History

The Interim Groundwater Monitoring Program (Program) began in the 4th Quarter 2010 (4Q10), and the first report was submitted on January 14, 2011. On March 3, 2011, a conference call was held among representatives of Equilon Enterprises LLC d/b/a Shell Oil Products US (SOPUS), Illinois Environmental Protection Agency (IEPA), and URS Corporation (URS) to discuss the Program and IEPA's general comments on the 4Q10 report. Subsequent report modifications were incorporated during 1st Quarter 2011 (1Q11) and 2nd Quarter 2011 (2Q11). Additional items and comments regarding the Program were presented by IEPA on June 16, 2011 (IEPA, 2011a) and August 31, 2011 (IEPA, 2011b) letters. These items and comments were addressed in the 3rd Quarter 2011 (3Q11) and 4th Quarter 2011 (4Q11) reports.

In a March 14, 2012 letter (CA-24) from IEPA to SOPUS (IEPA, 2012a), IEPA requested groundwater piezometer ROST-3-PZ and groundwater monitoring well ROST-4-PZ(C) be added to the Program. These monitoring locations were added to the Program in 2nd Quarter 2012 (2Q12).

In a second letter (CA-25) dated March 14, 2012 from IEPA to SOPUS (IEPA, 2012b), IEPA requested that perched groundwater be evaluated at groundwater monitoring piezometers P-60-12S, P-60-13S, ROST-5-PZ, ROST-7-PZ, ROST-10-PZ, and ROST-21-PZ. These perched groundwater monitoring piezometers were incorporated into the Program beginning in 2Q12. In a letter dated August 16, 2013 (URS, 2013a), URS, on behalf of SOPUS, informed the IEPA of the determination that the perched groundwater monitoring piezometers are either dry, based on the criteria given in IEPA's March 14, 2012 letter, or not able to be sampled per the groundwater sampling standard operating procedure (SOP) due to slow recharge. The IEPA, during phone conversations, requested that certain piezometers remain in the Program. In response to this request, a letter dated January 14, 2014 was submitted to IEPA (URS, 2014a), stating that these piezometers will remain in the Program. A separate letter dated January 14, 2014 was submitted to the IEPA (URS, 2014b), requesting removal of ROST-5-PZ and ROST-10-PZ based on Condition 8(a) of the March 14, 2012 IEPA letter (CA-25), which states that ROST-5-PZ and ROST-10-PZ must remain within the Program for one year before the determination is made that these wells are dry. IEPA responded to the August 16, 2013 and both January 14, 2014 letters in a correspondence dated July 27, 2016 (IEPA, 2016a). In the July 27, 2016 letter, IEPA approved the request to abandon perched wells P-60-12S, P-60-13S, ROST-5-PZ, ROST-7-PZ, ROST-10-PZ, and ROST-21-PZ and remove them from the Program. Abandonment activities were conducted on September 15, 2016.

In the March 14, 2012 letter (CA-25), IEPA also requested the installation of groundwater monitoring wells in the Village of Roxana (Village) to evaluate potential light non-aqueous phase liquid (LNAPL). These groundwater monitoring wells (MW-16 through MW-22 and MW-24) were installed during 4th Quarter 2012 (4Q12) and incorporated into the Program beginning in 1st Quarter 2013 (1Q13).

On May 31, 2012, IEPA verbally requested the following be incorporated into the 2Q12 report:

- The ROST-4 series of groundwater monitoring wells and piezometers in the groundwater elevation contour maps;
- A groundwater contour map focusing on the West Fenceline area in the Village; and
- A Roxana site and WRR LNAPL map.

In an April 8, 2013 letter from IEPA to SOPUS (IEPA, 2013a), IEPA requested a discussion of irregular potentiometric contours in the ROST-4-PZ area and P-60 area wells. This response was submitted to the IEPA in a letter dated July 29, 2013 (URS, 2013b). In a letter dated July 27, 2016 (IEPA, 2016b), IEPA approved the July 29, 2013 letter with the following conditions and modifications:

- Address the potentiometric high in the northern portion of the Study Area, by submitting a proposal within 120 days, which at a minimum will include:
    - A proposal to install nested wells that will track the area of the low-permeability zone.
    - The nested wells must be adequate to verify groundwater quality, flow direction, and hydraulic gradient, and these wells should show that pumping overcomes potential radial flow.
- A text section must be added to the Program quarterly reports to provide a detailed discussion of the potentiometric surface in this area.

AECOM responded to the July 27, 2016 letter in a letter dated October 14, 2016 (AECOM, 2016c). A response to this letter is pending as of the date of this report.

In a July 18, 2013 letter from IEPA to SOPUS (IEPA, 2013b), IEPA approved a change in gauging frequencies for wells in the Program. The list of wells to be gauged on a weekly basis was reduced and a new list of wells to be gauged on a monthly basis was initiated. This letter also requested that any free-phase hydrocarbon (FPH) and photoionization detector (PID) data collected at the well heads be included in the quarterly groundwater monitoring reports. The modified gauging frequencies for wells began the week of July 22, 2013. The list of wells gauged during each routine event is reviewed on a regular basis and modified to meet the conditions requested by the IEPA. The additional reporting requirements were first incorporated in the 3rd Quarter 2013 (3Q13) report.

In a June 13, 2014 letter from IEPA to SOPUS (IEPA, 2014a), IEPA requested the installation of four groundwater monitoring wells in the Village to monitor the extent and effectiveness of corrective action efforts within the residential area. The access agreement with the Village was signed on August 12, 2014, and well installation began in September 2014 and was completed in October 2014. These groundwater monitoring wells (MW-25 through MW-28) were added to the Program in 4th Quarter 2014 (4Q14).

In an October 9, 2014 letter from IEPA to SOPUS (IEPA, 2014b), IEPA approved the installation plan for a groundwater monitoring well located on BP property with certain conditions and modifications. Well MW-23 was installed during January 2015 and was added to the Program in 1st Quarter 2015 (1Q15).

In a letter dated November 25, 2014 (IEPA, 2014c), IEPA approved the proposed plan for groundwater corrective action (submitted to IEPA on November 14, 2013 (URS, 2013c)), with the following conditions:

- The 1Q15 groundwater samples obtained from: (1) the current monitoring well network; (2) the four new wells required by the modified Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Post-Closure Permit (Permit) at the WRR, issued September 23, 2010 (modified December 20, 2019) (IEPA, 2010b); and (3) the new well required by the October 9, 2014, letter must be used in a demonstration to verify the extent of groundwater contamination has been delineated; or

- If SOPUS cannot define the extent of contamination, a proposal for additional investigation must be submitted.

On April 16, 2015, AECOM, on behalf of SOPUS, submitted a demonstration to verify the extent of groundwater contamination has been delineated (AECOM, 2015). The demonstration is based on monitoring data from wells in the Roxana Program. Additional information was submitted to IEPA in a letter dated January 29, 2016 (AECOM, 2016a). In a letter dated February 23, 2016 (IEPA, 2016c), IEPA agreed with this determination and required a Groundwater Management Zone (GMZ) proposal be submitted within 90 days. The GMZ proposal was submitted by AECOM, on behalf of SOPUS, on May 19, 2016 (AECOM, 2016b). IEPA provided comments via email in October 2017; AECOM responded to IEPA comments on January 2, 2018 (AECOM, 2018a). Meetings with SOPUS, AECOM and IEPA representatives were held on April 5, 2018 and July 19, 2018 in order to provide additional information regarding the proposed GMZ. On September 26, 2018, AECOM, on behalf of SOPUS, submitted *Groundwater Management Zone – Additional Information* to present information requested via email dated September 5, 2018 (AECOM, 2018b).

On December 5, 2014, a letter was submitted to IEPA by URS (URS, 2014c), on behalf of SOPUS, requesting a reduction in the routine gauging performed as part of the Program. In a letter dated August 2, 2017 (IEPA, 2017), IEPA approved the December 5, 2014 request to reduce the frequency of routine gauging from weekly /monthly to quarterly with the following condition:

- Groundwater monitoring wells ROST-4-PZ(E) and ROST-4-PZ(G) must be added to the list of wells sampled quarterly for groundwater quality. These monitoring wells were added to the sampling portion of the Program in 4th Quarter 2017.

In a letter dated May 22, 2015, IEPA provided approval for the April 3, 2013, Groundwater Monitoring Well and Vapor Monitoring Point Installation Report (IEPA, 2015).

In a meeting on April 5, 2018, IEPA verbally requested that benzene concentration trend plots for selected monitoring wells be incorporated into Roxana Program quarterly reports. This information is discussed in **Section 3** of the Program quarterly report. These trend plots were first included with the 2nd Quarter 2018 (2Q18) monitoring report.

On October 25, 2019, IEPA approved the Roxana Groundwater Ordinance for use as an institutional control in accordance with Title 35 of the Illinois Administrative Code Part 742 (35 IAC 742) to restrict access to groundwater (IEPA, 2019).

SOPUS's current Resource Conservation and Recovery Act (RCRA) Permit at the WRR was issued by IEPA on September 23, 2010 and expired October 28, 2020 (IEPA, 2010b). A Permit renewal application was submitted to IEPA on April 29, 2020 in accordance with Condition VI(B)(6) of the Permit and a letter from IEPA dated November 6, 2019. A timely filing of the renewal application was made and, therefore the conditions of the Permit are stayed. On June 30, 2020, IEPA issued a Notice of Incompleteness letter after conducting a completeness review of the Permit renewal application (IEPA, 2020a); AECOM submitted the Permit Application Completeness Response to IEPA on September 4, 2020 (AECOM, 2020a). IEPA issued a letter on October 30, 2020 indicating they have determined the application to be complete (IEPA, 2020b).

On October 12, 2020, AECOM, on behalf of SOPUS, requested a Class 1* Permit Modification (AECOM, 2020b) in response to an IEPA issued letter dated December 20, 2019. The December 20, 2019 letter issued approval and comments related to several Hazardous Waste Management Post-Closure Permit (Permit) Modifications requests and included a modified Permit. The letter included a condition requesting the installation of a new B-level groundwater monitoring well to be added to the Roxana Interim Groundwater Monitoring Program to intercept potential groundwater contamination observed at P-93B. The October 12th AECOM response indicated the B-level impact observed in P-93B has been delineated to the west and, therefore the installation of a new groundwater monitoring well does not appear to be necessary at this time and as such is not proposed.

A conference call was held on June 24, 2021 and included representatives of IEPA, SOPUS and AECOM. The primary purpose of the call was to introduce new team members and have a high-level discussion of the Program.

Appendix B

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/12/21 WEATHER: Sunny 85°

MONITORING WELL ID: MW-1 SAMPLE ID: ~~MW1-ROX-071221~~ AO MW1-ROX-07122

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 53.80 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 59.13 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.30 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NF ft		
Depth to Top of Screen (btoc): 48.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 21.83 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1013	37.32	clear	Slight	20.0	5.77	0.975 mS/cm uS/cm	7.67	48.0	15.08
2,700	1022	37.33	↓	↓	19.9	2.18	1.080 mS/cm uS/cm	6.83	40.8	11.93
3,000	1023	↓			19.9	2.10	1.098 mS/cm uS/cm	6.82	38.0	10.38
3,300	1024				19.9	2.03	1.106 mS/cm uS/cm	6.82	35.6	10.56
3,600	1025				20.1	1.96	1.114 mS/cm uS/cm	6.81	32.9	9.10
3,900	1026				20.0	1.91	1.134 mS/cm uS/cm	6.81	29.8	9.57
4,200	1027				20.0	1.86	1.139 mS/cm uS/cm	6.81	26.7	8.95
~~4,500~~ No							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							~~mS/cm uS/cm~~			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1013 Elapsed Time (min): 4 AO 14 Water Quality Meter ID & SN: YSI ProDSS - 438511458893

Stop Time: 1027 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 Sample Time: 1030 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: None

VOA Vials, No Headspace ☒ Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/14/21 WEATHER: Sunny 80°

MONITORING WELL ID: MW-2 SAMPLE ID: MW2-ROX-071421

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 54.87 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 60.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.75 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): N/E ft		
Depth to Top of Screen (btoc): 49.87 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 113.3 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1025	38.78	Clear	Slight	20.9	4.90	0.995 mS/cm uS/cm	7.63	-49.8	7.30
2,700	1034	38.80			20.6	2.04	1.051 mS/cm uS/cm	7.20	-195.7	6.94
3,000	1035	38.80			20.6	1.95	1.055 mS/cm uS/cm	7.20	-200.4	6.33
3,300	1036				20.7	1.87	1.063 mS/cm uS/cm	7.20	-205.2	6.60
3,600	1037				20.6	1.80	1.069 mS/cm uS/cm	7.20	-208.9	5.11
3,900	1038				20.8	1.73	1.079 mS/cm uS/cm	7.20	-212.8	4.60
4,200	1039				20.6	1.68	1.085 mS/cm uS/cm	7.20	-215.8	3.96
4,500	1040				20.5	1.61	1.093 mS/cm uS/cm	7.20	-218.9	3.17
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1025 Elapsed Time (min): ~~1045~~ 10 15 Water Quality Meter ID & SN: YSI ProDSS - 45851/45893

Stop Time: 1040 Average Purge Rate (mL/min): 300 Date Calibrated: 7/14/21

SAMPLING DATA

Sample Date: 7/14/21 Sample Time: 1045 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: EB

VOA Vials, No Headspace? Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver; T. Jones

DATE: ~~AO~~ 7/12/21 WEATHER: Sunny 85°

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX-071221

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 39.67 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 45.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 24.38 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NF ft		
Depth to Top of Screen (btoc): 34.67 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.3 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 20.62 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1206	24.35	Clear	Slight	20.1	3.76	1.117 mS/cm uS/cm	7.80	-98.7	11.26
~~4,200~~ 3,600 ~~AO~~	1218	24.33			20.4	1.65	1.109 mS/cm uS/cm	6.84	-136.4	0.0
~~4,500~~ 3,900 ~~AO~~	1219				20.4	1.57	1.109 mS/cm uS/cm	6.84	-138.2	0.0
~~4,800~~ 4,200 ~~AO~~	1220				20.4	1.53	1.109 mS/cm uS/cm	6.84	-139.3	0.8
~~5,100~~ 4,500 ~~AO~~	1221				20.4	1.49	1.109 mS/cm uS/cm	6.85	-140.2	1.12
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1206 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS -4385 / 4389

Stop Time: 1221 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 Sample Time: 1225 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: None

VOA Vials, No Headspace ☒ Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'ANGELO JMAYER

DATE: 7/19/21 WEATHER: Clear 77°

MONITORING WELL ID: MW-4 SAMPLE ID: MW4-ROX-071921

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 50.06 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 55.39 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 35.76 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 45.06 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 19.63 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0927	35.76	clear	moderate HC	19.2	1.34	1.151 mS/cm uS/cm	6.61	104.9	2.02
300	0928	35.76	↓	↓	19.2	1.29	1.147 mS/cm uS/cm	6.61	102.9	0.92
600	0929	35.76			19.5	1.26	1.147 mS/cm uS/cm	6.60	101.2	1.11
900	0930	↓			19.6	1.24	1.149 mS/cm uS/cm	6.61	99.7	1.64
1200	0931				19.7	1.22	1.147 mS/cm uS/cm	6.62	96.7	1.17
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 7/19/21

Start Time: 0927 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 16854/16306

Stop Time: 0931 Average Purge Rate (mL/min): 300 Date Calibrated: 7/19/21

SAMPLING DATA

Sample Date: 7/19/21 Sample Time: 0935 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: EB

VOA Vials, No Headspace [X] Initials: MDJM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver ; T. Jones

DATE: 7/14/21 WEATHER: Sunny 75

MONITORING WELL ID: MW-5 SAMPLE ID: MW5-Rox-071421

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.97 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 44.30 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 24.35 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 33.97 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 19.95 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0830	24.15	Clear	Slight	19.0	6.31	0.936 mS/cm uS/cm	6.17	99.4	16.46
3000	0840	24.16			19.4	2.31	0.978 mS/cm uS/cm	6.27	-75.6	9.33
3,300	0841	24.16			19.4	2.22	0.978 mS/cm uS/cm	6.30	-80.6	7.60
3,600	0842	24.17			19.4	2.15	0.977 mS/cm uS/cm	6.33	-84.5	7.69
3,900	0843	24.17			19.4	2.08	0.977 mS/cm uS/cm	6.35	-88.6	7.01
4,200	0844	24.17			19.5	2.02	0.976 mS/cm uS/cm	6.38	-92.7	5.89
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 0830 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS - 43851 / 43893

Stop Time: 0844 Average Purge Rate (mL/min): 300 Date Calibrated: 7/14/21

SAMPLING DATA

Sample Date: 7/14/21 Sample Time: 0850 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: None

VOA Vials, No Headspace ☒ Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MDiAngelo JMayer

DATE: 7/9/21 WEATHER: partly cloudy 81°

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A-ROX-070921

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.85 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 44.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 26.13 ft		Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 33.85 ft		
Screen Length: 10 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
Water Column Height (not including NAPL): 18.05 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1145	26.15	cloudy brown	slight HC	21.5	1.12	1.061 ~~mS/cm~~ uS/cm	7.18	5.5	438.41
1100 ~~5100~~ NO	1212	26.11	↓	↓	22.4	1.06	1.115 ~~mS/cm~~ uS/cm	6.98	-52.5	77.57
1400 ~~8400~~ NO	1223	26.11	↓	↓	22.4	1.00	1.117 ~~mS/cm~~ uS/cm	6.96	-76.3	76.23
1700 ~~11700~~ NO	1224	26.11	↓	↓	22.5	0.93	1.120 ~~mS/cm~~ uS/cm	6.94	-79.8	73.30
2000 ~~14000~~ NO	1225	↓	clear	↓	22.6	0.86	1.122 ~~mS/cm~~ uS/cm	6.94	-83.1	66.33
2300 ~~17300~~ NO	1226	↓	↓	↓	22.3	0.82	1.130 ~~mS/cm~~ uS/cm	6.98	-86.7	56.87
2600 ~~20600~~ NO	1227	↓	↓	↓	22.1	0.81	1.130 ~~mS/cm~~ uS/cm	6.98	-88.9	49.88
							mS/cm uS/cm			
							~~mS/cm~~ ~~uS/cm~~			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDiA JMayer 7/9/21

Start Time: 1145 Elapsed Time (min): 42 Water Quality Meter ID & SN: YSI ProDSS 14854 / 16306

Stop Time: 1227 Average Purge Rate (mL/min): 300 Date Calibrated: 7/9/21

SAMPLING DATA

Sample Date: 7/9/21 Sample Time: 1230 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NA

VOA Vials, No Headspace ☑ Initials: MDiAM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 12600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD ANGELO JMayer

DATE: 7/9/21 WEATHER: partly cloudy 79°

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B-TOX-070921

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 66.55 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 69.38 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 26.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 64.05 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 43.20 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	1108	26.18	clear	none	21.0	1.04	0.754 mS/cm uS/cm	7.38	-28.8	27.47
300	1109	26.18			20.8	1.00	0.755 mS/cm uS/cm	7.37	-30.9	23.27
600	1110	26.18			20.9	0.97	0.754 mS/cm uS/cm	7.37	-39.8	18.87
900	1111				20.9	0.95	0.755 mS/cm uS/cm	7.37	-46.8	18.52
1200	1112				21.0	0.93	0.755 mS/cm uS/cm	7.37	-52.3	15.46
1500	1113				21.1	0.92	0.756 mS/cm uS/cm	7.37	-58.9	15.28
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD Angelo 7/9/21

Start Time: 1108 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 16854/16306

Stop Time: 1113 Average Purge Rate (mL/min): 300 Date Calibrated: 7/9/21

SAMPLING DATA

Sample Date: 7/9/21 Sample Time: 1115 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NA

VOA Vials, No Headspace ☒ Initials: MDJM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo JMayer

DATE: 7/9/21 WEATHER: clear 75°

MONITORING WELL ID: MW-6C SAMPLE ID: MW6C-ROX-070921

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 87.45 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 90.28 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 25.98 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 84.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 64.30 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
			STABLE: (over 4 readings)		Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm		+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	1026	26.00	clear	none	20.3	1.14	0.664	mS/cm uS/cm	7.42	126.1	5.96
300	1027	26.00			20.2	1.08	0.664	mS/cm uS/cm	7.40	113.8	5.40
600	1028	26.00			20.2	1.05	0.664	mS/cm uS/cm	7.37	93.6	4.20
900	1029				20.1	1.02	0.664	mS/cm uS/cm	7.35	88.2	4.03
1200	1030				20.2	0.99	0.664	mS/cm uS/cm	7.34	96.1	3.09
1500	1031				20.1	0.97	0.665	mS/cm uS/cm	7.35	39.8	2.25
1800	1032				20.2	0.95	0.665	mS/cm uS/cm	7.35	31.3	1.30
2100	1033				20.2	0.93	0.665	mS/cm uS/cm	7.35	9.9	1.04
2400	1034				20.2	0.91	0.665	mS/cm uS/cm	7.35	5.0	1.15
2700	1035				20.1	0.91	0.665	mS/cm uS/cm	7.37	-4.3	0.74
3000	1036				20.1	0.90	0.665	mS/cm uS/cm	7.39	-9.5	0.44
3300	1037				20.1	0.89	0.666	mS/cm uS/cm	7.40	-14.3	0.06
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

MDA Lopetu 7/9/21

Start Time: 1026 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS - 16854/16306

Stop Time: 1037 Average Purge Rate (mL/min): 300 Date Calibrated: 7/9/21

SAMPLING DATA

Sample Date: 7/9/21 Sample Time: 1040 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: EB

VOA Vials, No Headspace ☒ Initials: MDM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: ~~300~~ mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: Mary D'Angelo JMayer

DATE: 7/12/21 WEATHER: Mostly cloudy 72°

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-071221

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 107.22 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 110.05 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 25.87 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 84.18 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0850	25.87	clear	slight HC	20.3	1.30	0.968 mS/cm uS/cm	6.80	80.5	62.13
300	0851	25.87			20.4	1.28	0.970 mS/cm uS/cm	6.82	73.7	56.09
600	0852	25.87			20.5	1.24	0.974 mS/cm uS/cm	6.85	63.7	53.09
900	0853				20.6	1.23	0.977 mS/cm uS/cm	6.89	53.9	50.92
1200	0854				20.6	1.21	0.981 mS/cm uS/cm	6.91	43.5	46.08
1500	0855				20.7	1.19	0.983 mS/cm uS/cm	6.93	23.8	42.68
1800	0856				20.7	1.16	0.986 mS/cm uS/cm	6.95	15.6	41.68
2100	0857				20.8	1.14	0.987 mS/cm uS/cm	6.97	5.7	39.30
2400	0858				20.7	1.12	0.989 mS/cm uS/cm	6.98	-2.1	38.87
2700	0859				20.6	1.18	0.991 mS/cm uS/cm	7.00	-11.2	39.24
3000	0900				20.6	1.07	0.993 mS/cm uS/cm	7.01	-26.5	33.89
3300	0901				20.6	1.01	0.993 mS/cm uS/cm	7.01	-31.2	32.58
3600	0902				20.6	1.05	0.993 mS/cm uS/cm	7.02	-36.3	31.35
3900	0903				20.7	1.04	0.992 mS/cm uS/cm	7.02	-41.4	30.23
							mS/cm uS/cm			
							mS/cm uS/cm			

MDJM 7/12/21

Start Time: 0850 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS -- 16854/16306

Stop Time: 0903 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 Sample Time: 0905 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NA

VOA Vials, No Headspace [X] Initials: MDJM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo Mayer

DATE: 7/19/21 WEATHER: partly cloudy 84°

MONITORING WELL ID: MW-7 SAMPLE ID: MW7-ROX-071921

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 47.92 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 52.92 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.89 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): N/A ft		
Depth to Top of Screen (btoc): 42.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 131.3 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.03 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1320	37.90	clear	slight HC	20.9	1.37	1.300 ~~mS/cm~~ uS/cm	6.94	81.1	0.0
300	1321	37.90	↓	↓	20.9	1.27	1.286 ~~mS/cm~~ uS/cm	6.85	76.6	0.0
600	1322	37.90			20.9	1.22	1.280 ~~mS/cm~~ uS/cm	6.81	72.9	0.0
900	1323	↓			20.8	1.18	1.275 ~~mS/cm~~ uS/cm	6.80	69.1	0.0
1200	1324				20.6	1.15	1.275 ~~mS/cm~~ uS/cm	6.80	68.5	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 7/19/21

Start Time: 1320 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 46854/46306

Stop Time: 1324 Average Purge Rate (mL/min): 300 Date Calibrated: 7/19/21

SAMPLING DATA

Sample Date: 7/19/21 Sample Time: 1330 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: NA

VOA Vials, No Headspace [X] Initials: MD'm

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: NDiANGELO JMayer

DATE: 7/19/21 WEATHER: partly cloudy 82°

MONITORING WELL ID: MW-8 SAMPLE ID: MW8-ROX-071921

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.60 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 43.60 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 28.63 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.60 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.97 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1152	28.65	clear	Strong H2S	20.0	1.27	1.443 mS/cm uS/cm	6.84	-1.3	4.94
300	1153	28.65	↓	↓	19.8	1.15	1.444 mS/cm uS/cm	6.80	-8.6	2.40
600	1154	28.65	↓	↓	19.6	1.12	1.447 mS/cm uS/cm	6.78	-14.8	2.11
900	1155	↓	↓	↓	19.4	1.10	1.440 mS/cm uS/cm	6.78	-20.4	0.0
1200	1156				19.4	1.08	1.435 mS/cm uS/cm	6.78	-25.5	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

NDiANGELO JMayer 7/19/21

Start Time: 1152 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 4854/16306

Stop Time: 1156 Average Purge Rate (mL/min): 300 Date Calibrated: 4/19/21

SAMPLING DATA

Sample Date: 7/19/21 Sample Time: 1200 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: DUP

VOA Vials, No Headspace [X] Initials: NDiANGELO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'ANGELO JMAYEK

DATE: 7/8/21 WEATHER: Mostly cloudy 82°

MONITORING WELL ID: MW-9 SAMPLE ID: MW9-ROX-070821

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 51.04 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 56.37 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 46.04 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 17.54 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1245	38.85	Clear	none	21.1	1.33	1.441 mS/cm uS/cm	7.64	197.4	11.67
300	1246	38.85			21.2	1.22	1.442 mS/cm uS/cm	7.47	165.0	11.02
600	1246 Tub	38.85			21.1	1.17	1.491 mS/cm uS/cm	7.35	137.6	12.23
900	1248				20.9	1.08	1.504 mS/cm uS/cm	7.33	114.7	12.90
1200	1248 Tub				20.9	1.05	1.519 mS/cm uS/cm	7.34	89.9	16.22
1500	1250				20.9	1.00	1.533 mS/cm uS/cm	7.11	63.8	11.60
1800	1256 Tub				20.7	0.98	1.546 mS/cm uS/cm	7.14	44.5	19.98
2100	1252				20.6	0.95	1.547 mS/cm uS/cm	7.14	28.6	21.77
2400	1252 3 Tub				20.6	0.94	1.549 mS/cm uS/cm	7.15	19.9	24.91
2700	1254				20.8	0.92	1.548 mS/cm uS/cm	7.11	17.4	26.18
3000	1255				21.0	0.91	1.554 mS/cm uS/cm	7.08	0.0	29.34
3300	1256				21.2	0.89	1.560 mS/cm uS/cm	7.69	-2.7	14.96
3600	1256				21.2	0.88	1.566 mS/cm uS/cm	7.69	-8.5	14.39
3900	1258				21.4	0.88	1.578 mS/cm uS/cm	7.70	-15.2	15.74
	1258 Tub 7/8						mS/cm uS/cm			
							mS/cm uS/cm			

Added Oxygen 7/8/21 13

Start Time: 1245 Elapsed Time (min): Water Quality Meter ID & SN: YSI ProDSS - 46854/46386

Stop Time: 1258 Average Purge Rate (mL/min): 300 Date Calibrated: 7/8/21

SAMPLING DATA

Sample Date: 7/8/21 Sample Time: 1300 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: EB

VOA Vials, No Headspace: Y Initials: MDJM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo JMayer

DATE: 7/8/21 WEATHER: Mostly cloudy 82°

MONITORING WELL ID: MW-10 SAMPLE ID: MW10 - ROX-070821

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 49.43 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 54.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.75 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NS ft		
Depth to Top of Screen (btoc): 44.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 16.01 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	1350	38.77	cloudy brown	none	21.7	1.06	1.051	mS/cm uS/cm	8.08	-18.9	65.90
200	1351	38.77			21.8	1.01	1.048	mS/cm uS/cm	8.05	-30.8	61.09
600	1352	38.77			22.0	0.98	1.047	mS/cm uS/cm	8.03	-49.2	59.20
900	1353				22.2	0.92	1.044	mS/cm uS/cm	7.97	-56.0	68.07
1200	1354				22.3	0.91	1.045	mS/cm uS/cm	7.96	-60.9	60.15
1500	1355				22.0	0.89	1.049	mS/cm uS/cm	8.00	-62.5	57.55
1800	1356				21.8	0.89	1.051	mS/cm uS/cm	8.01	-69.9	57.06
2100	1357				21.6	0.89	1.052	mS/cm uS/cm	8.02	-71.8	56.33
2400	1358				22.0	0.87	1.048	mS/cm uS/cm	7.97	-74.3	58.20
2700	1359				22.3	0.85	1.047	mS/cm uS/cm	7.95	-76.0	60.44
3000	1400				22.5	0.85	1.049	mS/cm uS/cm	7.94	-77.9	62.23
3300	1401				23.0	0.85	1.060	mS/cm uS/cm	7.92	-81.0	36.30
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

MD'A JM 7/8/21

Start Time: 1350 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS - 4685A/16306

Stop Time: 1401 Average Purge Rate (mL/min): 300 Date Calibrated: 7/8/21

SAMPLING DATA

Sample Date: 7/8/21 Sample Time: 1405 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NA

VOA Vials, No Headspace [X] Initials: MD'M

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver

DATE: 7/12/21 WEATHER: Overcast 80°

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-Rox-071221

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 46.66 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 51.99 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.50 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 41.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.49 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	0925	36.52	Clear	Slight	19.2	4.46	1.428	mS/cm uS/cm	6.68	-1.8	22.37
2,400	0933	↓	↓	↓	18.7	2.20	1.456	mS/cm uS/cm	6.53	-62.1	13.58
2,700	0934				18.9	2.15	1.460	mS/cm uS/cm	6.53	-64.9	13.19
3,000	0935				18.8	2.07	1.460	mS/cm uS/cm	6.54	-66.9	11.91
3,300	0936				19.0	2.01	1.462	mS/cm uS/cm	6.54	-69.1	10.46
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

AO

Start Time: 0925 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -458511458893

Stop Time: 0936 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 Sample Time: 0940 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: None

VOA Vials, No Headspace: X Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3,300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver ; T. Jones

DATE: 7/9/21 WEATHER: Sunny 90°

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-Rox-070921

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 46.92 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 52.25 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.96 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 41.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.24 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1320	36.98	Clear	Slight	23.4	4.71	0.911 mS/cm uS/cm	7.71	130.6	5.25
2,400	1328	36.98	↓	↓	20.5	2.08	0.895 mS/cm uS/cm	6.99	131.3	3.89
2,700	1329	↓	↓	↓	20.6	1.97	0.892 mS/cm uS/cm	6.97	131.2	3.24
3,000	1330	↓	↓	↓	20.8	1.88	0.894 mS/cm uS/cm	6.96	131.0	2.18
3,300	1331	↓	↓	↓	20.7	1.83	0.894 mS/cm uS/cm	6.97	130.8	1.91
3,600	1332	↓	↓	↓	20.8	1.76	0.893 mS/cm uS/cm	6.96	130.5	1.93
3,900	1333	↓	↓	↓	20.8	1.71	0.893 mS/cm uS/cm	6.96	130.1	1.56
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
					AD		mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1320 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS -- 4385114589

Stop Time: 1333 Average Purge Rate (mL/min): 300 Date Calibrated: 7/9/21

SAMPLING DATA

Sample Date: 7/9/21 Sample Time: 1340 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: None

VOA Vials, No Headspace [X] Initials: AD

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3,900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW | PROJECT NUMBER: 60648474 - 3.2.3 | FIELD PERSONNEL: MD Angelo Mayer

DATE: 7/12/21 | WEATHER: partly cloudy 81°

MONITORING WELL ID: MW-13 | SAMPLE ID: MW13-ROX-071221

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 29.80 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 35.05 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 23.79 ft		Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 24.80 ft		
Screen Length: 10 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
Water Column Height (not including NAPL): 11.26 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1323	23.79	cloudy	none	23.3	1.54	0.984 mS/cm uS/cm	7.84	-53.0	367.55
4500	1348	23.79			23.4	0.81	1.031 mS/cm uS/cm	6.78	-159.6	71.90
9800	1349	23.79			23.2	0.81	1.031 mS/cm uS/cm	6.79	-162.4	93.50
8100	1350				23.3	0.80	1.031 mS/cm uS/cm	6.79	-163.9	94.07
7/12/21							mS/cm uS/cm			
7/12/21							mS/cm uS/cm			
9000	1353				23.1	1.33	1.030 mS/cm uS/cm	6.96	-156.0	76.44
9300	1354				23.4	1.08	1.029 mS/cm uS/cm	6.87	-158.8	77.00
9600	1355				23.4	0.96	1.030 mS/cm uS/cm	6.84	-161.5	73.93
9900	1356		clear		23.4	0.89	1.030 mS/cm uS/cm	6.82	-163.7	72.43
10200	1357				23.3	0.87	1.031 mS/cm uS/cm	6.83	-166.0	65.57
10500	1358				23.2	0.83	1.029 mS/cm uS/cm	6.82	-168.4	49.53
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD Angelo 7/12/21

Start Time: 1323 | Elapsed Time (min): 35 | Water Quality Meter ID & SN: YSI ProDSS -- 46854 / 46306

Stop Time: 1358 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 | Sample Time: 1400 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QCSamples: NA

VOA Vials, No Headspace ☑ | Initials: MDZM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 10500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'ANGELO JMOYER

DATE: 7/13/21 WEATHER: overcast 77°

MONITORING WELL ID: MW-14 SAMPLE ID: MW14-ROX-071321

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.42 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 44.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 28.36 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.42 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 42.8 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.64 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1114	28.37	clear	slight HC	20.3	0.97	1.264 mS/cm uS/cm	6.85	-14.8	17.27
300	1115	28.37	↓	↓	20.3	0.96	1.264 mS/cm uS/cm	6.85	-25.5	14.24
600	1116	28.37			20.3	0.95	1.263 mS/cm uS/cm	6.85	-28.8	13.85
900	1117	↓			20.3	0.94	1.263 mS/cm uS/cm	6.85	-36.8	11.57
1200	1118				20.4	0.93	1.264 mS/cm uS/cm	6.84	-43.4	10.71
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 7/13/21

Start Time: 1114 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 46854/46306

Stop Time: 1118 Average Purge Rate (mL/min): 300 Date Calibrated: 7/13/21

SAMPLING DATA

Sample Date: 7/13/21 Sample Time: 1120 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: NA

VOA Vials, No Headspace (Y) Initials: MDJM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW | PROJECT NUMBER: 60648474 - 3.2.3 | FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/12/21 | WEATHER: Overcast 80°

MONITORING WELL ID: MW-16 | SAMPLE ID: MW16-ROX-07121

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 47.75 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.99 ft btoc
Depth to Water (btoc): 38.18 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 37.50 ft (37.75)	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 9.57 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0830	38.18	Clear	Slight	19.0	4.44	0.917 mS/cm uS/cm	6.21	141.1	55.21
2,400	0838				19.6	2.39	0.911 mS/cm uS/cm	6.35	70.9	33.97
2,700	0839				19.5	2.30	0.911 mS/cm uS/cm	6.37	61.7	29.18
3,000	0840				19.7	2.23	0.911 mS/cm uS/cm	6.39	55.4	25.04
3,300	0841				19.6	2.17	0.911 mS/cm uS/cm	6.40	48.5	23.25
3,600	0842				19.7	2.114	0.911 mS/cm uS/cm	6.42	41.4	20.12
3,900	0843				19.8	2.04	0.911 mS/cm uS/cm	6.43	30.9	16.99
4,200	0845				19.9	1.98	0.913 mS/cm uS/cm	6.44	23.5	13.69
4,500	0846				20.0	1.94	0.913 mS/cm uS/cm	6.45	21.2	12.51
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 0830 | Elapsed Time (min): 16 | Water Quality Meter ID & SN: YSI ProDSS -- 43857 / 43893

Stop Time: 0846 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 | Sample Time: 0850 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QCSamples: None

VOA Vials, No Headspace [X] | Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: T. Jones; A. Olive

DATE: 7/15/21 WEATHER: Sunny 88°

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-Rox-071521

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 43.68 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NFE		
Depth to Top of Screen (btoc): 38.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.6 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): — ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1111	36.85	Clear	Slight	22.5	3.68	1.337 mS/cm uS/cm	4.88	-6.3	36.58
2,700	1120	36.84			21.8	1.75	1.268 mS/cm uS/cm	5.03	-61.4	12.61
3,000	1121				21.7	1.69	1.265 mS/cm uS/cm	7.02	-63.7	11.77
3,300	1122				21.5	1.64	1.259 mS/cm uS/cm	7.03	-65.6	11.66
3,600	1123				21.6	1.57	1.254 mS/cm uS/cm	7.00	-68.0	11.53
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1111 Elapsed Time (min): ~~14~~ AO 12 Water Quality Meter ID & SN: YSI ProDSS - 43851/43893

Stop Time: 1123 Average Purge Rate (mL/min): 300 Date Calibrated: 7/15/21

SAMPLING DATA

Sample Date: 7/15/21 Sample Time: 1130 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: Dup

VOA Vials, No Headspace ☒ Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3,600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: B. Havell A. Oliver

DATE: 7/13/21 WEATHER: Cloudy 80°F

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX-071321

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 34.82 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 39.27 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 25.43 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 29.02 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.85 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

	STABLE: (over 4 readings)	Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0903	25.43	Cloudy	Slight	19.1	4.74	1.040 mS/cm uS/cm	5.99	70.9	93.44
3,300	0914	↓	↓	↓	19.4	2.08	1.000 mS/cm uS/cm	6.16	-53.2	74.86
3,600	0915				19.3	2.03	0.997 mS/cm uS/cm	6.17	-55.7	72.53
3,900	0916				19.4	1.93	0.995 mS/cm uS/cm	6.18	-58.4	72.23
4,200	0917				19.4	1.88	0.990 mS/cm uS/cm	6.20	-63.2	70.02
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0903 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS – 43851/43893

Stop Time: 0917 Average Purge Rate (mL/min): 300 Date Calibrated: 7/13/21

SAMPLING DATA

Sample Date: 7/13/21 Sample Time: 0920 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NA

VOA Vials, No Headspace ☑ Initials: BH AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/9/21 WEATHER: Sunny 90°

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-Rox-07092|

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 44.61 ft btoc
Total Well Depth (btoc): 49.86 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 37.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 39.61 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 12.04 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.1 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1138	37.85	Clear	Slight	~~20.3~~ 20.2	3.77	1.194 mS/cm uS/cm	7.68	146.4	0.56
300	1139				~~19.8~~ 19.8	2.96	1.198 mS/cm uS/cm	7.18	147.0	0.0
600	1140				~~19.9~~ 19.9	2.67	1.199 mS/cm uS/cm	7.09	146.9	0.0
900	1141				~~19.9~~ 19.9	2.53	1.200 mS/cm uS/cm	7.04	146.7	0.0
1,200	1142				~~19.6~~ 19.8	2.39	1.201 mS/cm uS/cm	7.00	146.4	0.0
1,500	1143				~~19.7~~ 19.7	2.25	1.201 mS/cm uS/cm	6.97	146.1	0.0
1,800	1144				~~19.8~~ 19.6	3.15	1.201 mS/cm uS/cm	6.95	145.6	0.8
2,100	1145				19.7	3.06	1.202 mS/cm uS/cm	6.93	145.1	0.8
2,400	1146				19.8	1.98	1.203 mS/cm uS/cm	6.91	144.5	0.0
2,700	1147				20.0	1.95	1.204 mS/cm uS/cm	6.90	144.0	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1138 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS – 43851 / 43893

Stop Time: 1147 Average Purge Rate (mL/min): 300 Date Calibrated: 7/9/21

SAMPLING DATA

Sample Date: 7/9/21 Sample Time: 1150 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: None

VOA Vials, No Headspace [X] Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 2,700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'ANGELO JMayer

DATE: 7/19/21 WEATHER: clear 87°

MONITORING WELL ID: MW-25 SAMPLE ID: MW25-rox-071921

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 40.59 ft btoc
Total Well Depth (btoc): 45.84 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 32.88 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 35.59 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 12.96 ft	

Volume of Flow Through Cell : 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 86.1 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1050	32.89	clear	strong HC	20.5	1.26	1.106 mS/cm uS/cm	6.88	82.2	26.74
300	1051	32.89	↓	↓	20.5	1.21	1.116 mS/cm uS/cm	6.86	78.8	24.82
600	1052	32.89			21.1	1.17	1.120 mS/cm uS/cm	6.84	72.9	27.48
900	1053	↓			21.9	1.15	1.131 mS/cm uS/cm	6.84	68.1	27.27
1200	1054				21.2	1.14	1.139 mS/cm uS/cm	6.85	62.9	23.78
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'ANGELO 7/19/21

Start Time: 1050 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 16854/16306

Stop Time: 1054 Average Purge Rate (mL/min): 300 Date Calibrated: 7/19/21

SAMPLING DATA

Sample Date: 7/19/21 Sample Time: 1100 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NA

VOA Vials, No Headspace ☒ Initials: MD JM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver ; T. Jones

DATE: 7/9/21 WEATHER: Sunny 90°

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-Rox-070921

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 43.15 ft btoc
Total Well Depth (btoc): 48.40 ft	
Depth to Water (btoc): 35.62 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 38.15 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 12.78 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1230	35.63	clear	Slight	20.0	3.37	1.368 mS/cm uS/cm	7.20	141.9	14.3
300	1231	35.64			20.0	2.78	1.366 mS/cm uS/cm	6.98	141.0	12.47
600	1233				20.1	2.64	1.368 mS/cm uS/cm	6.91	140.4	11.35
900	1233				20.3	2.41	1.371 mS/cm uS/cm	6.86	139.6	9.45
1,200	1234				20.3	2.29	1.373 mS/cm uS/cm	6.85	139.2	9.17
1,500	1235				20.1	2.17	1.373 mS/cm uS/cm	6.84	138.7	8.38
1,800	1236				20.2	2.07	1.374 mS/cm uS/cm	6.83	138.2	7.85
2,100	1237				20.3	1.98	1.376 mS/cm uS/cm	6.82	137.8	6.82
2,400	1238				20.4	1.88	1.378 mS/cm uS/cm	6.81	137.2	6.56
2,700	1239				20.5	1.79	1.381 mS/cm uS/cm	6.81	136.8	6.1
3,000	1240				20.6	1.78	1.382 mS/cm uS/cm	6.81	136.5	5.43
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1230 Elapsed Time (min): 10 Water Quality Meter ID & SN: YSI ProDSS - 43851/143893

Stop Time: 1240 Average Purge Rate (mL/min): 300 Date Calibrated:

SAMPLING DATA

Sample Date: 7/9/21 Sample Time: 1245 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: None

VOA Vials, No Headspace ☒ Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3,000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW | PROJECT NUMBER: 60648474 - 3.2.3 | FIELD PERSONNEL: MD'ANGELO Mayer

DATE: 7/13/21 | WEATHER: overcast 72°

MONITORING WELL ID: MW-27 | SAMPLE ID: MW27-ROX-071321

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 44.79 ft btoc
Total Well Depth (btoc): 50.04 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 37.11 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 39.79 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 12.93 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
00	0927	37.23	clear	none	18.9	2.51	0.944 mS/cm uS/cm	6.79	62.9	20.31
300	0928	37.24			18.9	3.43	0.941 mS/cm uS/cm	6.75	63.8	18.95
600	0929	37.24			18.9	3.36	0.937 mS/cm uS/cm	6.74	64.3	18.20
900	0930	37.24			18.9	3.26	0.932 mS/cm uS/cm	6.73	64.9	14.78
1200	0931				19.0	3.18	0.928 mS/cm uS/cm	6.73	65.5	12.31
1500	0932				19.0	3.13	0.928 mS/cm uS/cm	6.72	65.9	10.89
1800	0933				19.0	3.04	0.927 mS/cm uS/cm	6.72	66.4	9.55
2100	0934				19.0	3.00	0.927 mS/cm uS/cm	6.71	66.8	7.66
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 7/13/21

Start Time: 0927 | Elapsed Time (min): 7 | Water Quality Meter ID & SN: YSI ProDSS – 46854 | 46306

Stop Time: 0934 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/13/21

SAMPLING DATA

Sample Date: 7/13/21 | Sample Time: 0940 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QC Samples: NA

VOA Vials, No Headspace [X] Initials: MDam

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/15/21 WEATHER: Sunny 80°

MONITORING WELL ID: MW-28 SAMPLE ID: MW28-ROX-071521

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 43.86 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.09 ft btoc
Depth to Water (btoc): 36.32 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 33.61 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 7.54 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

	STABLE: (over 4 readings)	Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0853	36.37	Clear	Moderate	19.6	4.75	1.430 mS/cm uS/cm	6.54	102.5	65.87
3,000	0903	36.38	↓	↓	19.7	1.99	1.346 mS/cm uS/cm	6.39	-18.6	22.55
3,300	0904	↓	↓	↓	19.8	1.94	1.344 mS/cm uS/cm	6.40	-23.4	21.29
3,600	0905	↓	↓	↓	19.9	1.87	1.344 mS/cm uS/cm	6.40	-28.1	19.55
3,900	0906	↓	↓	↓	19.9	1.80	1.345 mS/cm uS/cm	6.42	-33.1	20.96
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 0853 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS - 43851 / 43893

Stop Time: 0906 Average Purge Rate (mL/min): 300 Date Calibrated: 7/15/21

SAMPLING DATA

Sample Date: 7/15/21 Sample Time: 0910 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: None

VOA Vials, No Headspace: X Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3,900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: A. Oliver ; T. Jones

DATE: 7/9/21 WEATHER: Sunny 80°

MONITORING WELL ID: P-54 SAMPLE ID: P54-ROX-070921

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~~50.5~~ AO ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 63.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.57 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 38.00 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 43.00 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 26.43 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

	STABLE: (over 4 readings)	Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	1027	36.58	Clear	None	19.9	3.49	0.87	mS/cm uS/cm	6.43	131.4	1.25
300	1028	36.58			20.9	3.09	0.885	mS/cm uS/cm	6.48	128.7	1.78
600	1029				21.0	2.80	0.893	mS/cm uS/cm	6.55	126.4	0.0
900	1030				21.0	2.64	0.894	mS/cm uS/cm	6.58	124.6	0.0
1,200	1031				21.0	2.46	0.896	mS/cm uS/cm	6.62	123.0	0.0
1,500	1032				21.0	2.35	0.894	mS/cm uS/cm	6.63	122.0	0.0
1,800	1033				21.2	2.26	0.893	mS/cm uS/cm	6.65	120.8	0.0
2,100	1034				21.1	2.16	0.895	mS/cm uS/cm	6.67	119.6	0.0
2,400	1035				21.2	2.05	0.895	mS/cm uS/cm	6.69	118.3	0.0
2,700	1036				21.1	2.03	0.892	mS/cm uS/cm	6.70	116.6	0.0
3,000	1037				21.0	2.00	0.892	mS/cm uS/cm	6.71	115.8	0.0
								mS/cm uS/cm			
								mS/cm uS/cm			
							AO	mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1027 Elapsed Time (min): 10 Water Quality Meter ID & SN: YSI ProDSS - 43851/43893

Stop Time: 1037 Average Purge Rate (mL/min): 300 Date Calibrated: 7/9/21

SAMPLING DATA

Sample Date: 7/9/21 Sample Time: 1040 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: MS/MSD

VOA Vials, No Headspace: X Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3,000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MS'Angela JMayer

DATE: 9/16/21 WEATHER: overcast 73°

MONITORING WELL ID: P-55R SAMPLE ID: —

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 50.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.97 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 37.01 ft		
Depth to Top of Screen (btoc): 40.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 49.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.1087 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MS'Angela JMayer 9/16/21

Start Time: — Elapsed Time (min): — Water Quality Meter ID & SN: YSI ProDSS --

Stop Time: — Average Purge Rate (mL/min): — Date Calibrated: —

SAMPLING DATA

Sample Date: — Sample Time: — Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): — QA/QCSamples: —

VOA Vials, No Headspace ☐ Initials: —

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

NOT SAMPLED due to presence of LNAPL

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo Imayer

DATE: 7/14/21 WEATHER: partly cloudy 83°

MONITORING WELL ID: P56 SAMPLE ID: P56-ROX-071421

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~~ ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 65.82 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.26 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~~ ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 40.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 46.26 ft btoc	Wellbore PID/FID Reading: 139.5 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 24.56 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~~ ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ~~ ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	1135	41.29	clear w/black particles	Moderate HC	24.4	0.90	1.270	mS/cm uS/cm	7.15	-45.5	13.36
300	1136	41.29	↓	↓	24.2	0.88	1.266	mS/cm uS/cm	7.13	-54.5	13.63
600	1137	41.29			24.3	0.86	1.265	mS/cm uS/cm	7.12	-67.2	11.55
900	1138	↓			24.1	0.85	1.267	mS/cm uS/cm	7.13	-75.1	14.36
1200	1139				23.7	0.85	1.265	mS/cm uS/cm	7.14	-82.2	15.10
1500	1140				23.5	0.84	1.260	mS/cm uS/cm	7.13	-87.6	11.80
1800	1141				23.3	0.83	1.259	mS/cm uS/cm	7.13	-92.5	9.93
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

MD'Angelo 7/14/21

Start Time: 1135 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 16854/16306

Stop Time: 1141 Average Purge Rate (mL/min): 300 Date Calibrated: 7/14/21

SAMPLING DATA

Sample Date: 7/14/21 Sample Time: 1145 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: NA

VOA Vials, No Headspace ☒ Initials: MDIm

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW | PROJECT NUMBER: 60648474 - 3.2.3 | FIELD PERSONNEL: MD Angelo Imayer

DATE: 7/14/21 | WEATHER: partly cloudy 84°

MONITORING WELL ID: P-57 | SAMPLE ID: P57-ROX-071421

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 49.19 ft btoc
Total Well Depth (btoc): 54.19 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 42.02 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 44.19 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 12.17 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 34.3 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
STABLE: (over 4 readings)					Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	1224	42.33	clear	slight HC	24.1	1.09	1.068 mS/cm uS/cm	6.94	-98.7	1.74
300	1225	42.30	↓	↓	24.1	1.01	1.061 mS/cm uS/cm	6.93	-112.6	2.14
600	1226	42.30			24.3	0.97	1.065 mS/cm uS/cm	6.92	-120.0	1.56
900	1227	42.30			24.4	0.96	1.068 mS/cm uS/cm	6.93	-126.3	0.90
1200	1228	↓			24.4	0.95	1.067 mS/cm uS/cm	6.92	-129.5	0.88
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD Angelo 7/14/21

Start Time: 1224 | Elapsed Time (min): 4 | Water Quality Meter ID & SN: YSI ProDSS – 16854 / 16306

Stop Time: 1228 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/14/21

SAMPLING DATA

Sample Date: | Sample Time: 1230 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QCSamples: NA

VOA Vials, No Headspace ☒ Initials: 7/14/21 MDIM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo JMeyer

DATE: 7/15/21 WEATHER: partly cloudy 88°

MONITORING WELL ID: P-58 SAMPLE ID:

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 65.21 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 39.83 ft		Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 39.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 65.6 ppm
Depth to Top of Screen (btoc): 40.21 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
Screen Length: 25 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	
Water Column Height (not including NAPL): 25.38 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 7/15/21

Start Time: Elapsed Time (min): Water Quality Meter ID & SN: YSI ProDSS --

Stop Time: Average Purge Rate (mL/min): Date Calibrated:

SAMPLING DATA

Sample Date: Sample Time: Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): QA/QCSamples:

VOA Vials, No Headspace ☐ Initials:

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Not sampled due to presence of LNAPL

Estimated Total Purge Volume: mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MDAngelo JMeyer

DATE: 7/15/21 WEATHER: partly cloudy 88°

MONITORING WELL ID: P-59 SAMPLE ID: P59-ROX-071521

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 72.91 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 42.04 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 47.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 52.91 ft btoc	Wellbore PID/FID Reading: 169.7 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 30.87 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1136	42.05	clear	slight HC	25.0	1.00	1.217 mS/cm uS/cm	6.63	-17.0	0.0
300	1137	42.05			24.8	0.97	1.210 mS/cm uS/cm	6.63	-28.4	0.0
600	1138	42.05			24.9	0.95	1.200 mS/cm uS/cm	6.62	-31.5	0.0
900	1139				24.8	0.93	1.193 mS/cm uS/cm	6.62	-38.3	0.0
1200	1140				24.9	0.91	1.187 mS/cm uS/cm	6.62	-42.9	0.0
1500	1141				24.8	0.90	1.185 mS/cm uS/cm	6.62	-48.8	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/15/21

Start Time: 1136 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 46854/16306

Stop Time: 1141 Average Purge Rate (mL/min): 300 Date Calibrated: 7/15/21

SAMPLING DATA

Sample Date: 7/15/21 Sample Time: 1145 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: NA

VOA Vials, No Headspace ☒ Initials: MDM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo Mayer

DATE: 7/13/21 WEATHER: overcast 97°

MONITORING WELL ID: P-66 SAMPLE ID: P66-ROX-071321

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ~ ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 59.72 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 31.37 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~ ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 39.72 ft btoc	Wellbore PID/FID Reading: 18.3 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 28.33 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~ ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ~ ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1204	31.37	clear	moderate HC	23.7	0.97	1.246 mS/cm uS/cm	6.76	-114.3	5.56
300	1205	31.37	↓	↓	23.7	0.95	1.246 mS/cm uS/cm	6.76	-125.3	5.90
600	1206	31.37	↓	↓	23.6	0.94	1.246 mS/cm uS/cm	6.77	-131.7	6.30
900	1207	↓	↓	↓	23.5	0.92	1.243 mS/cm uS/cm	6.77	-138.5	7.32
1200	1208	↓	↓	↓	23.4	0.91	1.243 mS/cm uS/cm	6.76	-142.7	7.86
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo Mayer 7/13/21

Start Time: 1204 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 16854/16306

Stop Time: 1208 Average Purge Rate (mL/min): 300 Date Calibrated: 7/13/21

SAMPLING DATA

Sample Date: 7/13/21 Sample Time: 1215 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: NA

VOA Vials, No Headspace [X] Initials: MD'AM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW Resample PROJECT NUMBER: 60648474 - 3.2.3 O/F/AFS FIELD PERSONNEL: MD'Angelo Imayer

DATE: 8/9/21 WEATHER: overcast 74°

MONITORING WELL ID: P-66 SAMPLE ID: P66-ROX-080921

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 59.72 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 30.98 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 39.72 ft btoc	Wellbore PID/FID Reading: 113.1 LEL-OVR ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 28.74 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color (STABLE: over 4 readings)	Odor	Temp (°C) (Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0953	30.99	clear	strong HC	22.1	0.30	1.311 mS/cm uS/cm	6.75	-96.84	1.69
300	0954	30.99			22.5	0.29	1.308 mS/cm uS/cm	6.75	-106.42	1.53
600	0955	30.99			22.8	0.31	1.311 mS/cm uS/cm	6.75	-113.91	1.40
900	0956	↓	↓	↓	22.9	0.31	1.312 mS/cm uS/cm	6.75	-116.95	1.49
1200	0957				22.9	0.31	1.313 mS/cm uS/cm	6.76	-120.51	1.60
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 8/9/21

Start Time: 0953 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 05063150636

Stop Time: 0957 Average Purge Rate (mL/min): 300 Date Calibrated: 8/9/21

SAMPLING DATA

Sample Date: 8/9/21 Sample Time: 1000 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: ~~DUP~~ EB

VOA Vials, No Headspace ☒ Initials: MDJm

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD Angelo Mayer

DATE: 7/16/21 WEATHER: Overcast 73°

MONITORING WELL ID: P-68 SAMPLE ID: —

INITIAL DATA

Well Diameter: 4 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 68.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.04 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 40.04 ft		
Depth to Top of Screen (btoc): 43.76 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 13.6 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 25.72 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: — Elapsed Time (min): — Water Quality Meter ID & SN: YSI ProDSS --

Stop Time: — Average Purge Rate (mL/min): — Date Calibrated: —

SAMPLING DATA

Sample Date: — Sample Time: — Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): — QA/QCSamples: —

VOA Vials, No Headspace ☐ Initials: —

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

NOT SAMPLED due to presence of LNAPL

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo Mayer

DATE: 7/14/21 WEATHER: clear 81°

MONITORING WELL ID: P-74 SAMPLE ID: P74-ROX-071421

INITIAL DATA

Well Diameter: 4 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ___ ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 68.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ___ ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 37.70 ft		Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 48.83 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 43.83 ft		
Screen Length: 25 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ___ ft btoc	
Water Column Height (not including NAPL): 31.13 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ___ ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1020	38.20	clear	none	25.5	6.83	0.292 mS/cm uS/cm	7.01	97.7	1.87
300	1021	38.20			25.6	6.83	0.292 mS/cm uS/cm	7.02	94.3	1.78
600	1022	38.20			25.5	6.82	0.292 mS/cm uS/cm	7.03	93.8	1.69
900	1023	↓	↓	↓	25.4	6.82	0.292 mS/cm uS/cm	7.04	93.5	1.67
1200	1024				25.5	6.82	0.292 mS/cm uS/cm	7.04	93.2	1.84
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 7/14/21

Start Time: 1020 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS – 46854 / 46306

Stop Time: 1024 Average Purge Rate (mL/min): 300 Date Calibrated: 7/14/21

SAMPLING DATA

Sample Date: 7/14/21 Sample Time: 1020 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: EB

VOA Vials, No Headspace ☒ Initials: MDM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

DO readings very high like last quarter - discussed w/ Melissa R

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Andrea JMayer

DATE: 7/15/21 WEATHER: clear 84°

MONITORING WELL ID: P-93A SAMPLE ID: P93A-rox-071521

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 48.07 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 53.07 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 43.07 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.89 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0933	40.25	clear	none	22.4	1.57	1.154 mS/cm uS/cm	6.68	105.5	0.0
300	0934	40.26			22.2	1.41	1.154 mS/cm uS/cm	6.59	105.3	0.0
600	0935	40.27			22.1	1.30	1.154 mS/cm uS/cm	6.57	104.9	0.0
900	0936	40.27			22.1	1.22	1.152 mS/cm uS/cm	6.55	104.4	0.0
1200	0937	40.27			22.1	1.16	1.154 mS/cm uS/cm	6.54	103.7	0.0
1500	0938	↓	↓	↓	22.1	1.11	1.152 mS/cm uS/cm	6.54	102.9	0.0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Andrea 7/15/21

Start Time: 0933 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 16854/16306

Stop Time: 0938 Average Purge Rate (mL/min): 300 Date Calibrated: 7/15/21

SAMPLING DATA

Sample Date: 7/15/21 Sample Time: 0940 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: Dup

VOA Vials, No Headspace [X] Initials: MDJM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: ND'Angelo JMayer

DATE: 7/16/21 WEATHER: overcast 72°

MONITORING WELL ID: P-93B SAMPLE ID: P93B -ROX- 071621

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 76.78 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.50 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NS ft		
Depth to Top of Screen (btoc): 74.78 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 ft		
Water Column Height (not including NAPL): 35.28 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): 75.78 ft btoc	

PURGE DATA

Pump Type: ~~Dedicated Well Wizard~~ SS Submersible Monsoon

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	0952	41.52	clear	moderate HC	19.4	1.42	1.334	mS/cm uS/cm	6.54	95.9	0.0
300	0953	41.52	↓	↓	19.4	1.31	1.335	mS/cm uS/cm	6.54	93.1	0.0
600	0954	41.52			19.4	1.23	1.335	mS/cm uS/cm	6.54	90.6	0.0
900	0955	↓			19.4	1.19	1.336	mS/cm uS/cm	6.54	88.1	0.0
1200	0956				19.4	1.15	1.337	mS/cm uS/cm	6.55	85.2	0.0
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

ND'Angelo 7/16/21

Start Time: 0952 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 16854/16306

Stop Time: 0956 Average Purge Rate (mL/min): 300 Date Calibrated: 7/16/21

SAMPLING DATA

Sample Date: 7/16/21 Sample Time: 1000 Lab Analysis: VOC, SVOC, PAH

Sample Method: ~~Bladder Pump~~ / Low Flow / SS Submersible Monsoon Sample Flow Rate (mL/min): 300 QA/QC Samples: Dup

VOA Vials, No Headspace [X] Initials: Moom

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'ANGELO JMayer

DATE: 7/12/21 WEATHER: Mostly cloudy 75°

MONITORING WELL ID: P-93C SAMPLE ID: P93C-ROX-071221

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 97.88 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 41.31 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 92.88 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): 73.88 ft btoc
Screen Length: 2 ft	
Water Column Height (not including NAPL): 56.57 ft	

Volume of Flow Through Cell : 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	1040	41.33	clear	none	20.6	1.53	1.008	mS/cm uS/cm	7.47	59.3	8.57
300	1041	41.33			20.4	1.32	1.009	mS/cm uS/cm	7.38	54.4	7.80
600	1042	41.33			20.2	1.19	1.011	mS/cm uS/cm	7.29	48.0	6.87
900	1043				20.2	1.13	1.011	mS/cm uS/cm	7.21	37.7	6.47
1200	1044				20.3	1.06	1.012	mS/cm uS/cm	7.16	30.9	5.38
1500	1045				20.3	1.03	1.014	mS/cm uS/cm	7.12	20.8	4.64
1800	1046				20.5	1.00	1.016	mS/cm uS/cm	7.10	12.8	3.66
2100	1047				20.5	0.98	1.018	mS/cm uS/cm	7.09	5.6	3.91
2400	1048				20.3	0.97	1.019	mS/cm uS/cm	7.10	-3.2	2.63
2700	1049				20.4	0.95	1.017	mS/cm uS/cm	7.09	-12.3	2.23
3000	1050				20.3	0.94	1.018	mS/cm uS/cm	7.09	-18.9	2.22
3300	1051				20.3	0.92	1.017	mS/cm uS/cm	7.07	-25.8	2.00
3600	1052				20.2	0.91	1.019	mS/cm uS/cm	7.05	-36.3	1.70
3900	1053				20.3	0.89	1.017	mS/cm uS/cm	7.05	-42.9	1.39
4200	1054				20.2	0.89	1.017	mS/cm uS/cm	7.05	-48.9	1.18
4500	1055				20.2	0.88	1.017	mS/cm uS/cm	7.04	-54.3	1.14
~~4500~~	~~1056~~										

Start Time: 1040 MD

Stop Time: 10565 MD

Elapsed Time (min): 165

Average Purge Rate (mL/min): 300

Water Quality Meter ID & SN: YSI ProDSS - 16854/16306

Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 Sample Time: 1100 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QC Samples: NA

VOA Vials, No Headspace ☒ Initials: MD JM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MDAngelo JMayer

DATE: 7/16/21 WEATHER: overcast 73°

MONITORING WELL ID: P-93D SAMPLE ID: P93D - ~~WIND~~ 7/16 ROX - 071621

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 127.91 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 125.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 ft		
Water Column Height (not including NAPL): 86.23 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Dedicated Well Wizard

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
		STABLE: (over 4 readings)			Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm		+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	1040	41.68	clear	slight HC	19.4	1.88	1.190	mS/cm uS/cm	7.16	70.6	1.67
300	1041				19.4	1.70	1.187	mS/cm uS/cm	7.14	69.7	1.46
600	1042				19.3	1.55	1.183	mS/cm uS/cm	7.11	68.2	0.98
900	1043				19.3	1.41	1.180	mS/cm uS/cm	7.08	65.8	0.66
1200	1044				19.3	1.33	1.179	mS/cm uS/cm	7.07	63.4	0.0
1500	1045				19.2	1.28	1.179	mS/cm uS/cm	7.05	61.1	0.0
1800	1046				19.3	1.25	1.180	mS/cm uS/cm	7.05	58.5	0.0
2100	1047				19.3	1.22	1.180	mS/cm uS/cm	7.04	56.2	0.0
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

MDAngelo 7/16/21

Start Time: 1040 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS 16854/ 16306

Stop Time: 1047 Average Purge Rate (mL/min): 300 Date Calibrated: 7/16/21

SAMPLING DATA

Sample Date: 7/16/21 Sample Time: 1050 Lab Analysis: VOC, SVOC, PAH

Sample Method: Bladder Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: NA

VOA Vials, No Headspace [X] Initials: MDOM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MD'Angelo Imayer

DATE: 7/12/21 WEATHER: partly cloudy 79°

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX-071221

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 28.01 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 33.31 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 22.65 ft		Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 23.01 ft		
Screen Length: 10 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
Water Column Height (not including NAPL): 9.66 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1212	22.68	cloudy	slight HC	23.5	1.02	0.917 mS/cm uS/cm	7.29	-72.1	269.09
5400	1230	22.67	clear		23.9	0.80	0.919 mS/cm uS/cm	6.92	-179.9	63.09
5700	1231	22.67			24.1	0.77	0.915 mS/cm uS/cm	6.90	-184.1	59.15
6000	1232	22.67			23.9	0.77	0.915 mS/cm uS/cm	6.88	-186.1	52.75
6300	1233	↓	↓	↓	24.0	0.776	0.915 mS/cm uS/cm	6.88	-189.8	49.97
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 7/12/21

Start Time: 1212 Elapsed Time (min): 21 Water Quality Meter ID & SN: YSI ProDSS -- 16854/16306

Stop Time: 1233 Average Purge Rate (mL/min): 300 Date Calibrated: 7/12/21

SAMPLING DATA

Sample Date: 7/12/21 Sample Time: 1235 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: MS/MSD

VOA Vials, No Headspace [X] Initials: MDJM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW | PROJECT NUMBER: 60648474 - 3.2.3 | FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/14/21 | WEATHER: Sunny 75°

MONITORING WELL ID: ROST-3-MW | SAMPLE ID: ROST3MW-ROX-071421

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 42.81 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.06 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.65 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 37.81 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 2.6 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.41 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	0920	36.71	Clear	Slight	29.2	6.16	1.314	mS/cm uS/cm	5.93	12.500	18.86
3,000	0930	36.73	↓	↓	18.8	2.17	1.229	mS/cm uS/cm	6.46	-65.7	5.66
3,300	0931				18.8	2.08	1.226	mS/cm uS/cm	6.46	-68.2	4.65
3,600	0932				18.8	2.02	1.225	mS/cm uS/cm	6.47	-69.8	3.40
3,900	0933				18.8	1.93	1.222	mS/cm uS/cm	6.47	-73.1	2.74
4,200	0934				18.8	1.88	1.220	mS/cm uS/cm	6.48	-74.0	4.65
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 0920 | Elapsed Time (min): 14 | Water Quality Meter ID & SN: YSI ProDSS 438514/43893

Stop Time: 0934 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/14/21

SAMPLING DATA

Sample Date: | Sample Time: 0940 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QCSamples: None

VOA Vials, No Headspace ☒ Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW | PROJECT NUMBER: 60648474 - 3.2.3 | FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/14/21 | WEATHER: Sunny 85°

MONITORING WELL ID: ROST-4-PZ(C) | SAMPLE ID: ROST4PZC-ROX-071421

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 45.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 36.97 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.07 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 8.23 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1140	37.06	Clear	Slight	19.8	4.66	1.103 mS/cm uS/cm	8.11	-37.1	33.62
4,500	1155	37.05	↓	↓	19.9	1.76	1.133 mS/cm uS/cm	6.89	-110.2	21.99
4,800	1156	↓			19.9	1.66	1.143 mS/cm uS/cm	6.87	-110.9	22.49
5,100	1157				19.8	1.63	1.150 mS/cm uS/cm	6.86	-111.3	22.4
5,400	1158				19.7	1.59	1.151 mS/cm uS/cm	6.85	-111.9	24.47
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1140 | Elapsed Time (min): 18 | Water Quality Meter ID & SN: YSI ProDSS – 43851/43893

Stop Time: 1158 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/14/21

SAMPLING DATA

Sample Date: 7/14/21 | Sample Time: 1205 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QC Samples: Dup

VOA Vials, No Headspace ☒ Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 5,400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW | PROJECT NUMBER: 60648474 - 3.2.3 | FIELD PERSONNEL: A. Oliver; T. Jones

DATE: 7/15/21 | WEATHER: Sunny 85°

MONITORING WELL ID: ROST-4-PZ(E) | SAMPLE ID: ROST4PZE-ROX-071521

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 45.00 ft	
Depth to Water (btoc): 36.90 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 48.7 ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 34.75 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 8.6 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0958	36.12	clear	slight	21.3	2.78	1.585 mS/cm uS/cm	6.90	-68.4	8.44
2,400	1006	36.11			21.9	1.59	1.597 mS/cm uS/cm	6.78	-103.8	5.87
2,700	1007				21.8	1.55	1.603 mS/cm uS/cm	6.79	-105.5	6.63
3,000	1008				21.5	1.51	1.596 mS/cm uS/cm	6.81	-106.8	7.97
3,300	1009				21.7	1.46	1.595 mS/cm uS/cm	6.90	-108.1	8.43
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 0958 | Elapsed Time (min): 11 | Water Quality Meter ID & SN: YSI ProDSS - 43851/45893

Stop Time: 1009 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7/15/21

SAMPLING DATA

Sample Date: 7/15/21 | Sample Time: 1015 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QC Samples: None

VOA Vials, No Headspace [X] Initials: AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 3,300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: B.Howell A. Oliver

DATE: 7/13/21 WEATHER: Cloudy 80°F

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZ(G)-ROX-071321

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 44.53 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~~AO 38.41~~ 40.65 ft btoc
Depth to Water (btoc): 36.77 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 34.28 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 7.76 ft	

Volume of Flow Through Cell : 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 158.3 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1012	36.81	~~19.9~~ Clear	~~3.81~~ slight	19.9	3.81	1.153 mS/cm uS/cm	6.59	-35.9	4.95
300	1013	↓	~~19.8~~	~~3.41~~	19.8	3.41	1.146 mS/cm uS/cm	6.53	-48.3	4.81
3,300	1023		~~AO 20.3~~	~~1.93~~	20.3	1.93	1.147 mS/cm uS/cm	6.47	-93.5	3.55
3,600	1024		~~20.2~~	~~1.88~~	20.2	1.88	1.147 mS/cm uS/cm	6.48	-93.9	3.79
3,900	1025		~~20.2~~	~~1.82~~	20.2	1.82	1.150 mS/cm uS/cm	6.49	-95.5	4.17
4,200	1026		~~20.2~~	~~1.77~~	20.2	1.77	1.147 mS/cm uS/cm	6.49	-97.0	4.46
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

AO

Start Time: 1012 Elapsed Time (min): 14 Water Quality Meter ID & SN: YSI ProDSS -- 43851/43893

Stop Time: 1026 Average Purge Rate (mL/min): 300 Date Calibrated: 7/13/21

SAMPLING DATA

Sample Date: 7/13/21 Sample Time: 1030 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: MS/MSD

VOA Vials, No Headspace ☑ Initials: BH AO

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 4,200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q21 GW PROJECT NUMBER: 60648474 - 3.2.3 FIELD PERSONNEL: MDAngelo JMeyer

DATE: 7/15/21 WEATHER: partly cloudy 86°

MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-071521

INITIAL DATA

Well Diameter: 6 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 72.83 ft	
Depth to Water (btoc): 39.85 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 46.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 51.83 ft btoc
Screen Length: 26 ft	
Water Column Height (not including NAPL): 32.98 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc

Volume of Flow Through Cell: 320* mL

Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL

Ambient PID/FID Reading: 0.0 ppm

Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 4 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1035	39.90	clear	slight HC	23.5	1.11	1,689 mS/cm uS/cm	6.81	23.4	4.60
300	1036	39.90			23.6	1.06	1,690 mS/cm uS/cm	6.80	10.3	4.20
600	1037	39.90			23.7	1.03	1,691 mS/cm uS/cm	6.80	0.0	4.32
900	1038				23.5	1.00	1,691 mS/cm uS/cm	6.80	-8.3	3.86
1200	1039				23.6	0.98	1,690 mS/cm uS/cm	6.80	-16.1	4.15
1500	1040				23.7	0.96	1,691 mS/cm uS/cm	6.80	-21.9	4.10
1800	1041				23.7	0.95	1,690 mS/cm uS/cm	6.80	-27.9	4.18
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDAngelo 7/15/21

Start Time: 1035 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 16854/16336

Stop Time: 1041 Average Purge Rate (mL/min): 300 Date Calibrated: 7/15/21

SAMPLING DATA

Sample Date: 7/15/21 Sample Time: 1045 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: NA

VOA Vials, No Headspace ☒ Initials: MDSM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL

Estimated Total Purge Volume: 1800 mL

Appendix C

Data Review Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-205745-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/18/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-070821-8011	TB-ROX-070821-8260
MW9-ROX-070821-EB	MW9-ROX-070821
MW10-ROX-070821	

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, although not indicated in the laboratory case narrative, 2-butanone (methyl ethyl ketone) was detected in the equipment blank. The LCS recovery for 3,3'-dichlorobenzidine was outside evaluation criteria. Several PAH/SVOC surrogates were outside criteria in several investigative and quality control samples. The continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW9-ROX-070821-EB	VOCs	2-Butanone (MEK)	5.3 µg/L

Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. No qualification of

data was required.

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS Recovery	LCS Criteria
LCS 400-538958/2-A	SVOCs	3,3'-Dichlorobenzidine	**136**	36-132

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. No qualification of data was required.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW9-ROX-070821-EB	PAHs	2-Fluorobiphenyl	**123**	15-122
MW9-ROX-070821-EB	PAHs	Terphenyl-d_{14}	**185**	33-138
MW9-ROX-070821-EB	SVOCs	2-Fluorophenol	**4**	13-113
MW9-ROX-070821	PAHs	Terphenyl-d_{14}	**181**	33-138
MW10-ROX-070821	PAHs	2-Fluorobiphenyl	**124**	15-122
MW10-ROX-070821	PAHs	Terphenyl-d_{14}	**172**	33-138
MB 400-538958/1-A	PAHs	2-Fluorobiphenyl	**141**	15-122
MB 400-538958/1-A	PAHs	Terphenyl-d_{14}	**229**	33-138

Qualifications due to surrogate recoveries were not required if only one of three base/neutral PAH surrogate recoveries were outside evaluation criteria. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks and method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW9-ROX-070821	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW10-ROX-070821	SVOCs	Hexachlorocyclopentadiene	**UJ**

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-205745-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
7/23/2021 7:22:11 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Reviewed 8/18/2021 MR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Detection Summary 6
Client Sample Results 7
Definitions 22
Surrogate Summary 23
Method Summary 25
Chronicle 26
QC Association 29
QC Sample Results 31
Chain of Custody 40
Receipt Checklists 41
Certification Summary 42

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Job ID: 400-205745-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-205745-1

Comments
No additional comments.

Receipt
The samples were received on 7/9/2021 9:01 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3° C.

GC/MS VOA
Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-070821-8260 (400-205745-2), MW9-ROX-070821-EB (400-205745-3), MW9-ROX-070821 (400-205745-4) and MW10-ROX-070821 (400-205745-5). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-538958 and analytical batch 400-539339 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-539339 recovered above the upper control limit for Hexachlorobenzene and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW9-ROX-070821-EB (400-205745-3). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-539339 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D LL: Surrogate recovery for the following samples were outside the upper control limit: MW9-ROX-070821-EB (400-205745-3), MW9-ROX-070821 (400-205745-4) and MW10-ROX-070821 (400-205745-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D LL: The surrogate recovery for the blank associated with preparation batch 400-538958 and analytical batch 400-539211 was outside the upper control limits.

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-539733 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

Job ID: 400-205745-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

VOA Prep

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-205745-1	TB-ROX-070821-8011	Water	07/08/21 00:00	07/09/21 09:01
400-205745-2	TB-ROX-070821-8260	Water	07/08/21 00:00	07/09/21 09:01
400-205745-3	MW9-ROX-070821-EB	Water	07/08/21 10:50	07/09/21 09:01
400-205745-4	MW9-ROX-070821	Water	07/08/21 13:00	07/09/21 09:01
400-205745-5	MW10-ROX-070821	Water	07/08/21 14:05	07/09/21 09:01

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Client Sample ID: TB-ROX-070821-8011 — Lab Sample ID: 400-205745-1

No Detections.

Client Sample ID: TB-ROX-070821-8260 — Lab Sample ID: 400-205745-2

No Detections.

Client Sample ID: MW9-ROX-070821-EB — Lab Sample ID: 400-205745-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	5.3	J	25	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: MW9-ROX-070821 — Lab Sample ID: 400-205745-4

No Detections.

Client Sample ID: MW10-ROX-070821 — Lab Sample ID: 400-205745-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Client Sample ID: TB-ROX-070821-8011
Date Collected: 07/08/21 00:00
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/16/21 12:06	07/16/21 21:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/21 12:06	07/16/21 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*	*p*	*51 - 149*	*07/16/21 12:06*	*07/16/21 21:00*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Client Sample ID: TB-ROX-070821-8260
Date Collected: 07/08/21 00:00
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/21 13:43	1
Acrolein	ND		20	10	ug/L			07/16/21 13:43	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 13:43	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 13:43	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 13:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 13:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 13:43	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 13:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/21 13:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 13:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 13:43	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 13:43	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 13:43	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 13:43	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 13:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 13:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 13:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 13:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 13:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/21 13:43	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 13:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 13:43	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 13:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 13:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 13:43	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 13:43	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 13:43	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 13:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 13:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 13:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 13:43	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 13:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 13:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 13:43	1

Client Sample ID: TB-ROX-070821-8260

Date Collected: 07/08/21 00:00
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 13:43	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 13:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 13:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 13:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 13:43	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 13:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 13:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 13:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 13:43	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 13:43	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 13:43	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 13:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 13:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 13:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 13:43	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 13:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 13:43	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*07/16/21 13:43*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/16/21 13:43*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/16/21 13:43*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Client Sample ID: MW9-ROX-070821-EB
Date Collected: 07/08/21 10:50
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/21 14:08	1
Acrolein	ND		20	10	ug/L			07/16/21 14:08	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 14:08	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 14:08	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 14:08	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 14:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 14:08	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 14:08	1
2-Butanone (MEK)	5.3	J	25	2.6	ug/L			07/16/21 14:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 14:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 14:08	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 14:08	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 14:08	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 14:08	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 14:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 14:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 14:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 14:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 14:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/21 14:08	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 14:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 14:08	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 14:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 14:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 14:08	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 14:08	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 14:08	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 14:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 14:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 14:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 14:08	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 14:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 14:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 14:08	1

Client Sample ID: MW9-ROX-070821-EB
Date Collected: 07/08/21 10:50
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 14:08	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 14:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 14:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 14:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 14:08	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 14:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 14:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 14:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 14:08	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 14:08	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 14:08	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 14:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 14:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 14:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 14:08	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 14:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 14:08	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 119*		*07/16/21 14:08*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/16/21 14:08*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/16/21 14:08*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 17:12	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/21 09:27	07/13/21 17:12	1
Anthracene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 17:12	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/12/21 09:27	07/13/21 17:12	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/12/21 09:27	07/13/21 17:12	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/12/21 09:27	07/13/21 17:12	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/12/21 09:27	07/13/21 17:12	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/12/21 09:27	07/13/21 17:12	1
Chrysene	ND		0.20	0.075	ug/L		07/12/21 09:27	07/13/21 17:12	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/12/21 09:27	07/13/21 17:12	1
Fluoranthene	ND		0.20	0.069	ug/L		07/12/21 09:27	07/13/21 17:12	1
Fluorene	ND		0.20	0.11	ug/L		07/12/21 09:27	07/13/21 17:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/12/21 09:27	07/13/21 17:12	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		07/12/21 09:27	07/13/21 17:12	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		07/12/21 09:27	07/13/21 17:12	1
Phenanthrene	ND		0.20	0.036	ug/L		07/12/21 09:27	07/13/21 17:12	1
Pyrene	ND		0.20	0.040	ug/L		07/12/21 09:27	07/13/21 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*123*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 17:12*	*1*
Nitrobenzene-d5	*108*		*19 - 130*	*07/12/21 09:27*	*07/13/21 17:12*	*1*

Client Sample ID: MW9-ROX-070821-EB
Date Collected: 07/08/21 10:50
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	185	S1+	33 - 138	07/12/21 09:27	07/13/21 17:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 23:57	1
Benzenethiol	ND		10	1.7	ug/L		07/12/21 09:27	07/14/21 23:57	1
Benzoic acid	ND		30	7.4	ug/L		07/12/21 09:27	07/14/21 23:57	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 23:57	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 23:57	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 23:57	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/21 09:27	07/14/21 23:57	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/21 09:27	07/14/21 23:57	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/21 09:27	07/14/21 23:57	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 23:57	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 23:57	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 23:57	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 23:57	1
3,3'-Dichlorobenzidine	ND	*+	10	2.6	ug/L		07/12/21 09:27	07/14/21 23:57	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
Diethyl phthalate	ND		10	0.24	ug/L		07/12/21 09:27	07/14/21 23:57	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 23:57	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 23:57	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 23:57	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/21 09:27	07/14/21 23:57	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/21 09:27	07/14/21 23:57	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 23:57	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 23:57	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 23:57	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 23:57	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/21 09:27	07/14/21 23:57	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/21 09:27	07/14/21 23:57	1
Indene	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 23:57	1
Isophorone	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 23:57	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 23:57	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/12/21 09:27	07/14/21 23:57	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 23:57	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 23:57	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/21 09:27	07/14/21 23:57	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/21 09:27	07/14/21 23:57	1
2-Nitrophenol	ND		10	5.3	ug/L		07/12/21 09:27	07/14/21 23:57	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/21 09:27	07/14/21 23:57	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 23:57	1

Client Sample ID: MW9-ROX-070821-EB
Date Collected: 07/08/21 10:50
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/12/21 09:27	07/14/21 23:57	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/21 09:27	07/14/21 23:57	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/21 09:27	07/14/21 23:57	1
Phenol	ND		10	2.6	ug/L		07/12/21 09:27	07/14/21 23:57	1
Pyridine	ND		10	3.2	ug/L		07/12/21 09:27	07/14/21 23:57	1
Quinoline	ND		10	4.5	ug/L		07/12/21 09:27	07/14/21 23:57	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/21 09:27	07/14/21 23:57	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*46 - 124*	*07/12/21 09:27*	*07/14/21 23:57*	*1*
2-Fluorophenol	*4*	*S1-*	*13 - 113*	*07/12/21 09:27*	*07/14/21 23:57*	*1*
Nitrobenzene-d5	*76*		*36 - 126*	*07/12/21 09:27*	*07/14/21 23:57*	*1*
Phenol-d5	*26*		*17 - 127*	*07/12/21 09:27*	*07/14/21 23:57*	*1*
Terphenyl-d14	*110*		*44 - 149*	*07/12/21 09:27*	*07/14/21 23:57*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*07/12/21 09:27*	*07/14/21 23:57*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/16/21 12:06	07/16/21 21:20	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/21 12:06	07/16/21 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*	*p*	*51 - 149*	*07/16/21 12:06*	*07/16/21 21:20*	*1*

Client Sample ID: MW9-ROX-070821
Date Collected: 07/08/21 13:00
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/21 15:47	1
Acrolein	ND		20	10	ug/L			07/16/21 15:47	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 15:47	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 15:47	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 15:47	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 15:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 15:47	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 15:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/21 15:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 15:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 15:47	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 15:47	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 15:47	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 15:47	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 15:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 15:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 15:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 15:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 15:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/21 15:47	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 15:47	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 15:47	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 15:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 15:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 15:47	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 15:47	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 15:47	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 15:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 15:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 15:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 15:47	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 15:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 15:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 15:47	1

Client Sample ID: MW9-ROX-070821
Date Collected: 07/08/21 13:00
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 15:47	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 15:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 15:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 15:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 15:47	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 15:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 15:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 15:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 15:47	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 15:47	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 15:47	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 15:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 15:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 15:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 15:47	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 15:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 15:47	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*07/16/21 15:47*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/16/21 15:47*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/16/21 15:47*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 17:27	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/12/21 09:27	07/13/21 17:27	1
Anthracene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 17:27	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		07/12/21 09:27	07/13/21 17:27	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/12/21 09:27	07/13/21 17:27	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/12/21 09:27	07/13/21 17:27	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/12/21 09:27	07/13/21 17:27	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		07/12/21 09:27	07/13/21 17:27	1
Chrysene	ND		0.19	0.069	ug/L		07/12/21 09:27	07/13/21 17:27	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/12/21 09:27	07/13/21 17:27	1
Fluoranthene	ND		0.19	0.064	ug/L		07/12/21 09:27	07/13/21 17:27	1
Fluorene	ND		0.19	0.10	ug/L		07/12/21 09:27	07/13/21 17:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		07/12/21 09:27	07/13/21 17:27	1
1-Methylnaphthalene	ND		0.19	0.069	ug/L		07/12/21 09:27	07/13/21 17:27	1
2-Methylnaphthalene	ND		0.19	0.056	ug/L		07/12/21 09:27	07/13/21 17:27	1
Phenanthrene	ND		0.19	0.034	ug/L		07/12/21 09:27	07/13/21 17:27	1
Pyrene	ND		0.19	0.038	ug/L		07/12/21 09:27	07/13/21 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*119*		*15 - 122*	*07/12/21 09:27*	*07/13/21 17:27*	*1*
Nitrobenzene-d5	*80*		*19 - 130*	*07/12/21 09:27*	*07/13/21 17:27*	*1*

Client Sample ID: MW9-ROX-070821
Date Collected: 07/08/21 13:00
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	181	S1+	33 - 138	07/12/21 09:27	07/13/21 17:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		07/12/21 09:27	07/15/21 00:18	1
Benzenethiol	ND		9.4	1.6	ug/L		07/12/21 09:27	07/15/21 00:18	1
Benzoic acid	ND		28	6.9	ug/L		07/12/21 09:27	07/15/21 00:18	1
Benzyl alcohol	ND		9.4	1.9	ug/L		07/12/21 09:27	07/15/21 00:18	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		07/12/21 09:27	07/15/21 00:18	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		07/12/21 09:27	07/15/21 00:18	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		07/12/21 09:27	07/15/21 00:18	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		07/12/21 09:27	07/15/21 00:18	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		07/12/21 09:27	07/15/21 00:18	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		07/12/21 09:27	07/15/21 00:18	1
4-Chloroaniline	ND		9.4	3.2	ug/L		07/12/21 09:27	07/15/21 00:18	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		07/12/21 09:27	07/15/21 00:18	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		07/12/21 09:27	07/15/21 00:18	1
2-Chlorophenol	ND		9.4	2.1	ug/L		07/12/21 09:27	07/15/21 00:18	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		07/12/21 09:27	07/15/21 00:18	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		07/12/21 09:27	07/15/21 00:18	1
Dibenzofuran	ND		9.4	0.16	ug/L		07/12/21 09:27	07/15/21 00:18	1
3,3'-Dichlorobenzidine	ND	*+	9.4	2.4	ug/L		07/12/21 09:27	07/15/21 00:18	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		07/12/21 09:27	07/15/21 00:18	1
Diethyl phthalate	ND		9.4	0.23	ug/L		07/12/21 09:27	07/15/21 00:18	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		07/12/21 09:27	07/15/21 00:18	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		07/12/21 09:27	07/15/21 00:18	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		07/12/21 09:27	07/15/21 00:18	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		07/12/21 09:27	07/15/21 00:18	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/12/21 09:27	07/15/21 00:18	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		07/12/21 09:27	07/15/21 00:18	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		07/12/21 09:27	07/15/21 00:18	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		07/12/21 09:27	07/15/21 00:18	1
1,4-Dioxane	ND		9.4	0.94	ug/L		07/12/21 09:27	07/15/21 00:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		07/12/21 09:27	07/15/21 00:18	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		07/12/21 09:27	07/15/21 00:18	1
Hexachlorocyclopentadiene	ND	UJ	19	2.4	ug/L		07/12/21 09:27	07/15/21 00:18	1
Hexachloroethane	ND		9.4	3.9	ug/L		07/12/21 09:27	07/15/21 00:18	1
Indene	ND		9.4	0.94	ug/L		07/12/21 09:27	07/15/21 00:18	1
Isophorone	ND		9.4	0.13	ug/L		07/12/21 09:27	07/15/21 00:18	1
2-Methylphenol	ND		9.4	1.7	ug/L		07/12/21 09:27	07/15/21 00:18	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/12/21 09:27	07/15/21 00:18	1
2-Nitroaniline	ND		9.4	2.1	ug/L		07/12/21 09:27	07/15/21 00:18	1
3-Nitroaniline	ND		9.4	1.7	ug/L		07/12/21 09:27	07/15/21 00:18	1
4-Nitroaniline	ND		9.4	1.4	ug/L		07/12/21 09:27	07/15/21 00:18	1
Nitrobenzene	ND		9.4	0.12	ug/L		07/12/21 09:27	07/15/21 00:18	1
2-Nitrophenol	ND		9.4	4.9	ug/L		07/12/21 09:27	07/15/21 00:18	1
4-Nitrophenol	ND		9.4	2.0	ug/L		07/12/21 09:27	07/15/21 00:18	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		07/12/21 09:27	07/15/21 00:18	1

Client Sample ID: MW9-ROX-070821
Date Collected: 07/08/21 13:00
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		07/12/21 09:27	07/15/21 00:18	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		07/12/21 09:27	07/15/21 00:18	1
Pentachlorophenol	ND		19	1.3	ug/L		07/12/21 09:27	07/15/21 00:18	1
Phenol	ND		9.4	2.4	ug/L		07/12/21 09:27	07/15/21 00:18	1
Pyridine	ND		9.4	3.0	ug/L		07/12/21 09:27	07/15/21 00:18	1
Quinoline	ND		9.4	4.2	ug/L		07/12/21 09:27	07/15/21 00:18	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		07/12/21 09:27	07/15/21 00:18	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		07/12/21 09:27	07/15/21 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*46 - 124*	*07/12/21 09:27*	*07/15/21 00:18*	*1*
2-Fluorophenol	*18*		*13 - 113*	*07/12/21 09:27*	*07/15/21 00:18*	*1*
Nitrobenzene-d5	*80*		*36 - 126*	*07/12/21 09:27*	*07/15/21 00:18*	*1*
Phenol-d5	*57*		*17 - 127*	*07/12/21 09:27*	*07/15/21 00:18*	*1*
Terphenyl-d14	*128*		*44 - 149*	*07/12/21 09:27*	*07/15/21 00:18*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*07/12/21 09:27*	*07/15/21 00:18*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/16/21 12:06	07/16/21 21:40	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/21 12:06	07/16/21 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*	*p*	*51 - 149*	*07/16/21 12:06*	*07/16/21 21:40*	*1*

Client Sample ID: MW10-ROX-070821

Date Collected: 07/08/21 14:05
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/21 16:11	1
Acrolein	ND		20	10	ug/L			07/16/21 16:11	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 16:11	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 16:11	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 16:11	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 16:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 16:11	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 16:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/21 16:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 16:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 16:11	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 16:11	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 16:11	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 16:11	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 16:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 16:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 16:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 16:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 16:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/21 16:11	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 16:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 16:11	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 16:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 16:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 16:11	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 16:11	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 16:11	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 16:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 16:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 16:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 16:11	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 16:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 16:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 16:11	1

Client Sample ID: MW10-ROX-070821
Date Collected: 07/08/21 14:05
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 16:11	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 16:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 16:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 16:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 16:11	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 16:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 16:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 16:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 16:11	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 16:11	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 16:11	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 16:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 16:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 16:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 16:11	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 16:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 16:11	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*07/16/21 16:11*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/16/21 16:11*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/16/21 16:11*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.031	ug/L		07/12/21 09:27	07/13/21 17:43	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/12/21 09:27	07/13/21 17:43	1
Anthracene	ND		0.20	0.031	ug/L		07/12/21 09:27	07/13/21 17:43	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		07/12/21 09:27	07/13/21 17:43	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		07/12/21 09:27	07/13/21 17:43	1
Benzo[b]fluoranthene	ND		0.20	0.033	ug/L		07/12/21 09:27	07/13/21 17:43	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/12/21 09:27	07/13/21 17:43	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		07/12/21 09:27	07/13/21 17:43	1
Chrysene	ND		0.20	0.073	ug/L		07/12/21 09:27	07/13/21 17:43	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		07/12/21 09:27	07/13/21 17:43	1
Fluoranthene	ND		0.20	0.067	ug/L		07/12/21 09:27	07/13/21 17:43	1
Fluorene	ND		0.20	0.11	ug/L		07/12/21 09:27	07/13/21 17:43	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		07/12/21 09:27	07/13/21 17:43	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		07/12/21 09:27	07/13/21 17:43	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		07/12/21 09:27	07/13/21 17:43	1
Phenanthrene	ND		0.20	0.035	ug/L		07/12/21 09:27	07/13/21 17:43	1
Pyrene	ND		0.20	0.039	ug/L		07/12/21 09:27	07/13/21 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*124*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 17:43*	*1*
Nitrobenzene-d5	*86*		*19 - 130*	*07/12/21 09:27*	*07/13/21 17:43*	*1*

Client Sample ID: MW10-ROX-070821
Date Collected: 07/08/21 14:05
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	172	S1+	33 - 138	07/12/21 09:27	07/13/21 17:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		07/12/21 09:27	07/15/21 00:39	1
Benzenethiol	ND		9.8	1.7	ug/L		07/12/21 09:27	07/15/21 00:39	1
Benzoic acid	ND		30	7.2	ug/L		07/12/21 09:27	07/15/21 00:39	1
Benzyl alcohol	ND		9.8	2.0	ug/L		07/12/21 09:27	07/15/21 00:39	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		07/12/21 09:27	07/15/21 00:39	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		07/12/21 09:27	07/15/21 00:39	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		07/12/21 09:27	07/15/21 00:39	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		07/12/21 09:27	07/15/21 00:39	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		07/12/21 09:27	07/15/21 00:39	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		07/12/21 09:27	07/15/21 00:39	1
4-Chloroaniline	ND		9.8	3.3	ug/L		07/12/21 09:27	07/15/21 00:39	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		07/12/21 09:27	07/15/21 00:39	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		07/12/21 09:27	07/15/21 00:39	1
2-Chlorophenol	ND		9.8	2.2	ug/L		07/12/21 09:27	07/15/21 00:39	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		07/12/21 09:27	07/15/21 00:39	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		07/12/21 09:27	07/15/21 00:39	1
Dibenzofuran	ND		9.8	0.17	ug/L		07/12/21 09:27	07/15/21 00:39	1
3,3'-Dichlorobenzidine	ND	*+	9.8	2.6	ug/L		07/12/21 09:27	07/15/21 00:39	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		07/12/21 09:27	07/15/21 00:39	1
Diethyl phthalate	ND		9.8	0.24	ug/L		07/12/21 09:27	07/15/21 00:39	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		07/12/21 09:27	07/15/21 00:39	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		07/12/21 09:27	07/15/21 00:39	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		07/12/21 09:27	07/15/21 00:39	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		07/12/21 09:27	07/15/21 00:39	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		07/12/21 09:27	07/15/21 00:39	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		07/12/21 09:27	07/15/21 00:39	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		07/12/21 09:27	07/15/21 00:39	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		07/12/21 09:27	07/15/21 00:39	1
1,4-Dioxane	ND		9.8	0.98	ug/L		07/12/21 09:27	07/15/21 00:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		07/12/21 09:27	07/15/21 00:39	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		07/12/21 09:27	07/15/21 00:39	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		07/12/21 09:27	07/15/21 00:39	1
Hexachloroethane	ND		9.8	4.1	ug/L		07/12/21 09:27	07/15/21 00:39	1
Indene	ND		9.8	0.98	ug/L		07/12/21 09:27	07/15/21 00:39	1
Isophorone	ND		9.8	0.14	ug/L		07/12/21 09:27	07/15/21 00:39	1
2-Methylphenol	ND		9.8	1.8	ug/L		07/12/21 09:27	07/15/21 00:39	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		07/12/21 09:27	07/15/21 00:39	1
2-Nitroaniline	ND		9.8	2.2	ug/L		07/12/21 09:27	07/15/21 00:39	1
3-Nitroaniline	ND		9.8	1.8	ug/L		07/12/21 09:27	07/15/21 00:39	1
4-Nitroaniline	ND		9.8	1.5	ug/L		07/12/21 09:27	07/15/21 00:39	1
Nitrobenzene	ND		9.8	0.13	ug/L		07/12/21 09:27	07/15/21 00:39	1
2-Nitrophenol	ND		9.8	5.1	ug/L		07/12/21 09:27	07/15/21 00:39	1
4-Nitrophenol	ND		9.8	2.1	ug/L		07/12/21 09:27	07/15/21 00:39	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		07/12/21 09:27	07/15/21 00:39	1

Client Sample ID: MW10-ROX-070821
Date Collected: 07/08/21 14:05
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		07/12/21 09:27	07/15/21 00:39	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		07/12/21 09:27	07/15/21 00:39	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/21 09:27	07/15/21 00:39	1
Phenol	ND		9.8	2.6	ug/L		07/12/21 09:27	07/15/21 00:39	1
Pyridine	ND		9.8	3.1	ug/L		07/12/21 09:27	07/15/21 00:39	1
Quinoline	ND		9.8	4.4	ug/L		07/12/21 09:27	07/15/21 00:39	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		07/12/21 09:27	07/15/21 00:39	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/12/21 09:27	07/15/21 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*46 - 124*	*07/12/21 09:27*	*07/15/21 00:39*	*1*
2-Fluorophenol	*22*		*13 - 113*	*07/12/21 09:27*	*07/15/21 00:39*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/12/21 09:27*	*07/15/21 00:39*	*1*
Phenol-d5	*49*		*17 - 127*	*07/12/21 09:27*	*07/15/21 00:39*	*1*
Terphenyl-d14	*116*		*44 - 149*	*07/12/21 09:27*	*07/15/21 00:39*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*07/12/21 09:27*	*07/15/21 00:39*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/16/21 12:06	07/16/21 22:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/21 12:06	07/16/21 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*	*p*	*51 - 149*	*07/16/21 12:06*	*07/16/21 22:00*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-205745-2	TB-ROX-070821-8260	97	100	97
400-205745-3	MW9-ROX-070821-EB	99	101	97
400-205745-4	MW9-ROX-070821	98	100	96
400-205745-5	MW10-ROX-070821	98	99	97
LCS 400-539625/1003	Lab Control Sample	97	101	97
MB 400-539625/5	Method Blank	97	99	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-205745-3	MW9-ROX-070821-EB	94	4 S1-	76	26	110	69
400-205745-4	MW9-ROX-070821	101	18	80	57	128	75
400-205745-5	MW10-ROX-070821	95	22	77	49	116	85
LCS 400-538958/2-A	Lab Control Sample	96	32	84	64	116	134
LCS 400-538958/3-A	Lab Control Sample	99	37	81	67	115	87
LCSD 400-538958/4-A	Lab Control Sample Dup	98	32	80	58	120	79
MB 400-538958/1-A	Method Blank	107	22	88	66	125	107

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-205745-3	MW9-ROX-070821-EB	123 S1+	108	185 S1+
400-205745-4	MW9-ROX-070821	119	80	181 S1+
400-205745-5	MW10-ROX-070821	124 S1+	86	172 S1+
LCS 400-538958/2-A	Lab Control Sample	95	87	111
MB 400-538958/1-A	Method Blank	141 S1+	108	229 S1+

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	**Client Sample ID**	**(51-149)**
400-205745-1	TB-ROX-070821-8011	91 p
400-205745-3	MW9-ROX-070821-EB	97 p
400-205745-4	MW9-ROX-070821	96 p
400-205745-5	MW10-ROX-070821	89 p
LCS 400-539677/2-A	Lab Control Sample	116
LCSD 400-539677/3-A	Lab Control Sample Dup	113
MB 400-539677/1-A	Method Blank	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Client Sample ID: TB-ROX-070821-8011

Lab Sample ID: 400-205745-1

Date Collected: 07/08/21 00:00
Date Received: 07/09/21 09:01

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.9 mL	35 mL	539677	07/16/21 12:06	DS	TAL PEN
Total/NA	Analysis	8011		1			539733	07/16/21 21:00	DS	TAL PEN

Client Sample ID: TB-ROX-070821-8260

Lab Sample ID: 400-205745-2

Date Collected: 07/08/21 00:00
Date Received: 07/09/21 09:01

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539625	07/16/21 13:43	WPD	TAL PEN

Client Sample ID: MW9-ROX-070821-EB

Lab Sample ID: 400-205745-3

Date Collected: 07/08/21 10:50
Date Received: 07/09/21 09:01

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539625	07/16/21 14:08	WPD	TAL PEN
Total/NA	Prep	3520C			247.6 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 23:57	S1B	TAL PEN
Total/NA	Prep	3520C			247.6 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 17:12	PP1	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	539677	07/16/21 12:06	DS	TAL PEN
Total/NA	Analysis	8011		1			539733	07/16/21 21:20	DS	TAL PEN

Client Sample ID: MW9-ROX-070821

Lab Sample ID: 400-205745-4

Date Collected: 07/08/21 13:00
Date Received: 07/09/21 09:01

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539625	07/16/21 15:47	WPD	TAL PEN
Total/NA	Prep	3520C			266.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/15/21 00:18	S1B	TAL PEN
Total/NA	Prep	3520C			266.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 17:27	PP1	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	539677	07/16/21 12:06	DS	TAL PEN
Total/NA	Analysis	8011		1			539733	07/16/21 21:40	DS	TAL PEN

Client Sample ID: MW10-ROX-070821

Lab Sample ID: 400-205745-5

Date Collected: 07/08/21 14:05
Date Received: 07/09/21 09:01

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539625	07/16/21 16:11	WPD	TAL PEN
Total/NA	Prep	3520C			254.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/15/21 00:39	S1B	TAL PEN

Client Sample ID: MW10-ROX-070821

Date Collected: 07/08/21 14:05
Date Received: 07/09/21 09:01

Lab Sample ID: 400-205745-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			254.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 17:43	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	539677	07/16/21 12:06	DS	TAL PEN
Total/NA	Analysis	8011		1			539733	07/16/21 22:00	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-538958/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 19:04	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 16:41	PP1	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-539625/5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539625	07/16/21 10:49	WPD	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-539677/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	539677	07/16/21 12:06	DS	TAL PEN
Total/NA	Analysis	8011		1			539733	07/16/21 15:20	DS	TAL PEN

Client Sample ID: Lab Control Sample

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 19:25	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			539211	07/13/21 16:56	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-538958/3-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 19:46	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-539625/1003
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539625	07/16/21 09:50	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-539677/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	539677	07/16/21 12:06	DS	TAL PEN
Total/NA	Analysis	8011		1			539733	07/16/21 15:40	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-538958/4-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 20:07	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-539677/3-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	539677	07/16/21 12:06	DS	TAL PEN
Total/NA	Analysis	8011		1			539733	07/16/21 16:00	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

GC/MS VOA

Analysis Batch: 539625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205745-2	TB-ROX-070821-8260	Total/NA	Water	8260B	
400-205745-3	MW9-ROX-070821-EB	Total/NA	Water	8260B	
400-205745-4	MW9-ROX-070821	Total/NA	Water	8260B	
400-205745-5	MW10-ROX-070821	Total/NA	Water	8260B	
MB 400-539625/5	Method Blank	Total/NA	Water	8260B	
LCS 400-539625/1003	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 538958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205745-3	MW9-ROX-070821-EB	Total/NA	Water	3520C	
400-205745-4	MW9-ROX-070821	Total/NA	Water	3520C	
400-205745-5	MW10-ROX-070821	Total/NA	Water	3520C	
MB 400-538958/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-538958/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-538958/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-538958/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 539211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205745-3	MW9-ROX-070821-EB	Total/NA	Water	8270D LL	538958
400-205745-4	MW9-ROX-070821	Total/NA	Water	8270D LL	538958
400-205745-5	MW10-ROX-070821	Total/NA	Water	8270D LL	538958
MB 400-538958/1-A	Method Blank	Total/NA	Water	8270D LL	538958
LCS 400-538958/2-A	Lab Control Sample	Total/NA	Water	8270D LL	538958

Analysis Batch: 539339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205745-3	MW9-ROX-070821-EB	Total/NA	Water	8270D	538958
400-205745-4	MW9-ROX-070821	Total/NA	Water	8270D	538958
400-205745-5	MW10-ROX-070821	Total/NA	Water	8270D	538958
MB 400-538958/1-A	Method Blank	Total/NA	Water	8270D	538958
LCS 400-538958/2-A	Lab Control Sample	Total/NA	Water	8270D	538958
LCS 400-538958/3-A	Lab Control Sample	Total/NA	Water	8270D	538958
LCSD 400-538958/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	538958

GC Semi VOA

Prep Batch: 539677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205745-1	TB-ROX-070821-8011	Total/NA	Water	8011	
400-205745-3	MW9-ROX-070821-EB	Total/NA	Water	8011	
400-205745-4	MW9-ROX-070821	Total/NA	Water	8011	
400-205745-5	MW10-ROX-070821	Total/NA	Water	8011	
MB 400-539677/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-539677/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-539677/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 539733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205745-1	TB-ROX-070821-8011	Total/NA	Water	8011	539677

GC Semi VOA (Continued)

Analysis Batch: 539733 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205745-3	MW9-ROX-070821-EB	Total/NA	Water	8011	539677
400-205745-4	MW9-ROX-070821	Total/NA	Water	8011	539677
400-205745-5	MW10-ROX-070821	Total/NA	Water	8011	539677
MB 400-539677/1-A	Method Blank	Total/NA	Water	8011	539677
LCS 400-539677/2-A	Lab Control Sample	Total/NA	Water	8011	539677
LCSD 400-539677/3-A	Lab Control Sample Dup	Total/NA	Water	8011	539677

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

Lab Sample ID: MB 400-539625/5
Matrix: Water
Analysis Batch: 539625

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/21 10:49	1
Acrolein	ND		20	10	ug/L			07/16/21 10:49	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 10:49	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 10:49	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 10:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 10:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 10:49	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 10:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/21 10:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 10:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 10:49	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 10:49	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 10:49	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 10:49	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 10:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 10:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 10:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 10:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 10:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/21 10:49	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 10:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 10:49	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 10:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 10:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 10:49	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 10:49	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 10:49	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 10:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 10:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 10:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 10:49	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 10:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 10:49	1

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

Lab Sample ID: MB 400-539625/5
Matrix: Water
Analysis Batch: 539625

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 10:49	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 10:49	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 10:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 10:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 10:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 10:49	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 10:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 10:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 10:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 10:49	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 10:49	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 10:49	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 10:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 10:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 10:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 10:49	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 10:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 10:49	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*07/16/21 10:49*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/16/21 10:49*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/16/21 10:49*	*1*

Lab Sample ID: LCS 400-539625/1003
Matrix: Water
Analysis Batch: 539625

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	185		ug/L		92	43 - 160
Acrolein	250	234		ug/L		93	38 - 160
Acrylonitrile	500	497		ug/L		99	64 - 142
Benzene	50.0	50.1		ug/L		100	70 - 130
Bromobenzene	50.0	46.7		ug/L		93	70 - 132
Bromochloromethane	50.0	50.7		ug/L		101	70 - 130
Bromodichloromethane	50.0	48.6		ug/L		97	67 - 133
Bromoform	50.0	42.2		ug/L		84	57 - 140
Bromomethane	25.0	24.1		ug/L		96	10 - 160
2-Butanone (MEK)	200	191		ug/L		95	61 - 145
Carbon disulfide	50.0	48.9		ug/L		98	61 - 137
Carbon tetrachloride	50.0	48.5		ug/L		97	61 - 137
Chlorobenzene	50.0	48.6		ug/L		97	70 - 130
Dibromochloromethane	50.0	45.0		ug/L		90	67 - 135
Chloroethane	25.0	25.3		ug/L		101	55 - 141

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

Lab Sample ID: LCS 400-539625/1003
Matrix: Water
Analysis Batch: 539625

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	24.3		ug/L		97	10 - 160
Chloroform	50.0	49.8		ug/L		100	69 - 130
1-Chlorohexane	50.0	51.0		ug/L		102	69 - 130
Chloromethane	25.0	23.7		ug/L		95	58 - 137
cis-1,2-Dichloroethene	50.0	48.6		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	48.5		ug/L		97	69 - 132
1,2-Dichlorobenzene	50.0	46.4		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	47.4		ug/L		95	70 - 130
1,4-Dichlorobenzene	50.0	47.2		ug/L		94	70 - 130
Dichlorodifluoromethane	25.0	23.6		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	49.1		ug/L		98	70 - 130
1,2-Dichloroethane	50.0	47.8		ug/L		96	69 - 130
1,1-Dichloroethene	50.0	51.9		ug/L		104	63 - 134
1,2-Dichloropropane	50.0	48.6		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	47.3		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	49.3		ug/L		99	52 - 135
1,1-Dichloropropene	50.0	50.5		ug/L		101	70 - 130
Ethylbenzene	50.0	49.5		ug/L		99	70 - 130
Ethyl methacrylate	50.0	46.7		ug/L		93	68 - 130
Hexachlorobutadiene	50.0	52.7		ug/L		105	53 - 140
2-Hexanone	200	197		ug/L		98	65 - 137
Isopropylbenzene	50.0	50.2		ug/L		100	70 - 130
Methylene bromide	50.0	49.9		ug/L		100	70 - 130
Methylene Chloride	50.0	46.2		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	192		ug/L		96	69 - 138
Methyl tert-butyl ether	50.0	48.4		ug/L		97	66 - 130
m-Xylene & p-Xylene	50.0	49.9		ug/L		100	70 - 130
Naphthalene	50.0	46.9		ug/L		94	47 - 149
n-Butylbenzene	50.0	49.6		ug/L		99	67 - 130
N-Propylbenzene	50.0	48.5		ug/L		97	70 - 130
o-Chlorotoluene	50.0	46.9		ug/L		94	70 - 130
o-Xylene	50.0	49.1		ug/L		98	70 - 130
p-Chlorotoluene	50.0	47.1		ug/L		94	70 - 130
p-Isopropyltoluene	50.0	49.5		ug/L		99	65 - 130
sec-Butylbenzene	50.0	49.1		ug/L		98	66 - 130
Styrene	50.0	49.1		ug/L		98	70 - 130
tert-Butylbenzene	50.0	48.4		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.7		ug/L		93	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/L		92	70 - 131
Tetrachloroethene	50.0	49.1		ug/L		98	65 - 130
Toluene	50.0	48.8		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	50.2		ug/L		100	70 - 130
trans-1,3-Dichloropropene	50.0	46.9		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	45.8		ug/L		92	60 - 138
1,2,4-Trichlorobenzene	50.0	47.4		ug/L		95	60 - 140
1,1,1-Trichloroethane	50.0	50.4		ug/L		101	68 - 130
1,1,2-Trichloroethane	50.0	48.0		ug/L		96	70 - 130
Trichloroethene	50.0	51.1		ug/L		102	70 - 130
Trichlorofluoromethane	25.0	26.7		ug/L		107	65 - 138

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

Lab Sample ID: LCS 400-539625/1003
Matrix: Water
Analysis Batch: 539625

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	46.3		ug/L		93	70 - 130
1,2,4-Trimethylbenzene	50.0	46.4		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	50.0	48.3		ug/L		97	69 - 130
Vinyl acetate	50.0	47.9		ug/L		96	26 - 160
Vinyl chloride	25.0	24.2		ug/L		97	59 - 136
Xylenes, Total	100	99.0		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 119*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

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

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
Benzenethiol	ND		10	1.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
Benzoic acid	ND		30	7.3	ug/L		07/12/21 09:27	07/14/21 19:04	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 19:04	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 19:04	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/21 09:27	07/14/21 19:04	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Diethyl phthalate	ND		10	0.24	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 19:04	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1

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

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
Indene	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Isophorone	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Nitrophenol	ND		10	5.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/21 09:27	07/14/21 19:04	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/12/21 09:27	07/14/21 19:04	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/21 09:27	07/14/21 19:04	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/21 09:27	07/14/21 19:04	1
Phenol	ND		10	2.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
Pyridine	ND		10	3.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
Quinoline	ND		10	4.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 19:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*46 - 124*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
2-Fluorophenol	*22*		*13 - 113*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
Nitrobenzene-d5	*88*		*36 - 126*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
Phenol-d5	*66*		*17 - 127*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
Terphenyl-d14	*125*		*44 - 149*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
2,4,6-Tribromophenol	*107*		*26 - 150*	*07/12/21 09:27*	*07/14/21 19:04*	*1*

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	86.4		ug/L		72	21 - 120
Benzoic acid	502	151		ug/L		30	10 - 144
Benzyl alcohol	120	81.6		ug/L		68	28 - 120
Bis(2-chloroethoxy)methane	120	91.1		ug/L		76	47 - 120
Bis(2-chloroethyl)ether	120	86.0		ug/L		72	44 - 120
bis (2-chloroisopropyl) ether	120	71.7		ug/L		60	33 - 121
Bis(2-ethylhexyl) phthalate	120	120		ug/L		100	52 - 147
4-Bromophenyl phenyl ether	120	135		ug/L		113	54 - 122
Butyl benzyl phthalate	120	118		ug/L		98	54 - 133
4-Chloroaniline	120	80.7		ug/L		67	26 - 120
4-Chloro-3-methylphenol	120	112		ug/L		93	48 - 131

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

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	120	109		ug/L		91	52 - 121
2-Chlorophenol	120	69.3		ug/L		58	40 - 120
4-Chlorophenyl phenyl ether	120	123		ug/L		102	56 - 125
Dibenz[a,h]acridine	120	115		ug/L		96	31 - 150
Dibenzofuran	120	114		ug/L		95	56 - 122
3,3'-Dichlorobenzidine	160	217	*+	ug/L		136	36 - 132
2,4-Dichlorophenol	120	95.7		ug/L		80	49 - 120
Diethyl phthalate	120	117		ug/L		98	50 - 137
2,4-Dimethylphenol	120	105		ug/L		88	48 - 120
Dimethyl phthalate	120	116		ug/L		97	57 - 124
Di-n-butyl phthalate	120	125		ug/L		105	58 - 126
4,6-Dinitro-ortho-cresol	240	186		ug/L		77	23 - 148
2,4-Dinitrophenol	240	174		ug/L		73	10 - 150
2,4-Dinitrotoluene	120	118		ug/L		99	54 - 142
2,6-Dinitrotoluene	120	119		ug/L		99	55 - 130
Di-n-octyl phthalate	120	117		ug/L		97	57 - 138
1,4-Dioxane	120	73.2		ug/L		61	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	96.3		ug/L		80	45 - 124
Hexachlorobenzene	120	145		ug/L		121	52 - 129
Hexachlorocyclopentadiene	120	54.0		ug/L		45	10 - 134
Hexachloroethane	120	95.5		ug/L		80	20 - 120
Indene	120	104		ug/L		87	49 - 120
Isophorone	120	91.3		ug/L		76	48 - 120
2-Methylphenol	120	103		ug/L		86	46 - 124
3 & 4 Methylphenol	120	90.7		ug/L		76	45 - 120
2-Nitroaniline	120	94.7		ug/L		79	51 - 145
3-Nitroaniline	120	86.8		ug/L		72	37 - 127
4-Nitroaniline	120	99.7		ug/L		83	36 - 137
Nitrobenzene	120	87.9		ug/L		73	45 - 120
2-Nitrophenol	120	83.6		ug/L		70	40 - 124
4-Nitrophenol	240	202		ug/L		84	23 - 146
N-Nitrosodimethylamine	120	87.3		ug/L		73	29 - 137
N-Nitrosodi-n-propylamine	120	99.0		ug/L		83	45 - 120
N-Nitrosodiphenylamine	119	115		ug/L		97	54 - 120
Pentachlorophenol	240	217		ug/L		90	31 - 130
Phenol	120	82.6		ug/L		69	11 - 120
Pyridine	240	141		ug/L		59	16 - 120
Quinoline	120	107		ug/L		89	49 - 130
2,4,5-Trichlorophenol	120	105		ug/L		88	51 - 136
2,4,6-Trichlorophenol	120	104		ug/L		87	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*96*		*46 - 124*
2-Fluorophenol	*32*		*13 - 113*
Nitrobenzene-d5	*84*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*116*		*44 - 149*

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

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	134		26 - 150

Lab Sample ID: LCS 400-538958/3-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	49.3		ug/L		41	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	99		46 - 124
2-Fluorophenol	37		13 - 113
Nitrobenzene-d5	81		36 - 126
Phenol-d5	67		17 - 127
Terphenyl-d14	115		44 - 149
2,4,6-Tribromophenol	87		26 - 150

Lab Sample ID: LCSD 400-538958/4-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	50.6		ug/L		42	10 - 120	NaN	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	98		46 - 124
2-Fluorophenol	32		13 - 113
Nitrobenzene-d5	80		36 - 126
Phenol-d5	58		17 - 127
Terphenyl-d14	120		44 - 149
2,4,6-Tribromophenol	79		26 - 150

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 16:41	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/21 09:27	07/13/21 16:41	1
Anthracene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/12/21 09:27	07/13/21 16:41	1
Chrysene	ND		0.20	0.074	ug/L		07/12/21 09:27	07/13/21 16:41	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/12/21 09:27	07/13/21 16:41	1
Fluoranthene	ND		0.20	0.068	ug/L		07/12/21 09:27	07/13/21 16:41	1
Fluorene	ND		0.20	0.11	ug/L		07/12/21 09:27	07/13/21 16:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/12/21 09:27	07/13/21 16:41	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/12/21 09:27	07/13/21 16:41	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/12/21 09:27	07/13/21 16:41	1
Phenanthrene	ND		0.20	0.036	ug/L		07/12/21 09:27	07/13/21 16:41	1
Pyrene	ND		0.20	0.040	ug/L		07/12/21 09:27	07/13/21 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*141*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 16:41*	*1*
Nitrobenzene-d5	*108*		*19 - 130*	*07/12/21 09:27*	*07/13/21 16:41*	*1*
Terphenyl-d14	*229*	*S1+*	*33 - 138*	*07/12/21 09:27*	*07/13/21 16:41*	*1*

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water
Analysis Batch: 539211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	120		ug/L		100	41 - 120
Acenaphthylene	120	122		ug/L		102	44 - 120
Anthracene	120	117		ug/L		98	49 - 120
Benzo[a]anthracene	120	123		ug/L		103	61 - 135
Benzo[a]pyrene	120	121		ug/L		100	52 - 120
Benzo[b]fluoranthene	120	112		ug/L		93	53 - 134
Benzo[g,h,i]perylene	120	123		ug/L		102	47 - 133
Benzo[k]fluoranthene	120	113		ug/L		94	57 - 134
Chrysene	120	111		ug/L		93	55 - 122
Dibenz(a,h)anthracene	120	143		ug/L		119	48 - 146
Fluoranthene	120	121		ug/L		101	54 - 128
Fluorene	120	141		ug/L		118	45 - 125
Indeno[1,2,3-cd]pyrene	120	133		ug/L		111	43 - 142
1-Methylnaphthalene	120	103		ug/L		86	41 - 120
2-Methylnaphthalene	120	108		ug/L		90	32 - 124
Phenanthrene	120	118		ug/L		98	48 - 120
Pyrene	120	138		ug/L		115	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*95*		*15 - 122*
Nitrobenzene-d5	*87*		*19 - 130*
Terphenyl-d14	*111*		*33 - 138*

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-539677/1-A
Matrix: Water
Analysis Batch: 539733

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539677

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/16/21 12:06	07/16/21 15:20	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/21 12:06	07/16/21 15:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/16/21 12:06*	*07/16/21 15:20*	*1*

Lab Sample ID: LCS 400-539677/2-A
Matrix: Water
Analysis Batch: 539733

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539677

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.108		ug/L		107	60 - 140		
1,2-Dibromoethane			0.101	0.107		ug/L		106	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*51 - 149*

Lab Sample ID: LCSD 400-539677/3-A
Matrix: Water
Analysis Batch: 539733

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539677

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.106		ug/L		105	60 - 140	2	30
1,2-Dibromoethane			0.101	0.101		ug/L		100	60 - 140	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*113*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL	
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES	
☐ TRANSPORTATION	☒ OTHER _ENV. SERVICES_____		

Print Bill To Contact Name:	PlaNet Site or Project ID
Wendy Pennington	25278
PO #	GSAP Project ID
60648474 – 3.2.3F	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/8/21

PAGE: 1 of 1

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Other ID

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☒ LEVEL 2 ☐ LEVEL 3 ☒ LEVEL 4 ☒ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 ; Cooler #2 ; Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

* Please include "J" values on Reports
* Please provide sample receipt upon login

☒ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☒ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-070821-8011	7/8/2021	0000	Water	2					2		X		
	TB-ROX-070821-8260	7/8/2021	0000	Water	2					2	X			
	MW9-ROX-070821-EB	7/8/2021	1050	Water	6			2		8	X	X	X	X
	MW3-ROX-070821	7/8/2021	1300	Water	6			2		8	X	X	X	X
		7/8/2021	1405	Water	6			2		8	X	X	X	X

400-205745 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature) — Time: 1600

Relinquished by: (Signature) — Time:

Time: 901

T Y SEALS 08

1/21

Page 40 of 42

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-205745-1

Login Number: 205745
List Number: 1
Creator: Chandler, Rebecca R

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3°C IR7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205745-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-205797-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/18/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-070921-8011-B	TB-ROX-070921-8260-B
MW6C-ROX-070921-EB	MW6C-ROX-070921
MW6B-ROX-070921	MW6A-ROX-070921
TB-ROX-070921-8011-A	TB-ROX-070921-8260-A
P54-ROX-070921	MW24-ROX-070921
MW26-ROX-070921	MW12-ROX-070921

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated VOC and SVOC LCS recoveries for several analytes were outside evaluation criteria. Several SVOC/PAH surrogates were outside criteria in several investigative and quality control samples. 2-Chloroethyl vinyl ether and 3,3'-dichlorobenzidine MS/MSD recoveries and/or MS/MSD RPDs were outside evaluation criteria in sample P54-ROX-070921. The continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS ID	Parameter	Analyte	LCS Recovery	LCS Criteria
LCS 400-539734/1002	VOCs	Acetone	**182**	43-160
LCS 400-539734/1002	VOCs	2-Butanone (MEK)	**184**	61-145
LCS 400-539734/1002	VOCs	Hexachlorobutadiene	**151**	53-140
LCS 400-538958/2-A	SVOCs	3,3'-Dichlorobenzidine	**136**	36-132

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. No qualification of data was required.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6C-ROX-070921-EB	PAHs	Terphenyl-d_{14}	**182**	33-138
MW6C-ROX-070921-EB	SVOCs	2-Fluorophenol	**12**	13-113
MW6C-ROX-070921	PAHs	2-Fluorobiphenyl	**139**	15-122
MW6C-ROX-070921	PAHs	Terphenyl-d_{14}	**204**	33-138
MW6B-ROX-070921	PAHs	2-Fluorobiphenyl	**135**	15-122
MW6B-ROX-070921	PAHs	Terphenyl-d_{14}	**175**	33-138
MW6A-ROX-070921	PAHs	2-Fluorobiphenyl	**131**	15-122
MW6A-ROX-070921	PAHs	Terphenyl-d_{14}	**163**	33-138
MW24-ROX-070921	PAHs	2-Fluorobiphenyl	**128**	15-122
MW24-ROX-070921	PAHs	Terphenyl-d_{14}	**172**	33-138
MW24-ROX-070921	SVOCs	2-Fluorophenol	**7**	13-113
MW26-ROX-070921	PAHs	2-Fluorobiphenyl	**124**	15-122
MW12-ROX-070921	PAHs	2-Fluorobiphenyl	**136**	15-122
MB 400-538958/1-A	PAHs	2-Fluorobiphenyl	**141**	15-122
MB 400-538958/1-A	PAHs	Terphenyl-d_{14}	**229**	33-138

Qualifications due to surrogate recoveries were not required if only one of three acid and/or base/neutral SVOC/PAH surrogate recoveries were outside evaluation criteria. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks and method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

Yes, sample P54-ROX-070921 was spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P54-ROX-070921	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
P54-ROX-070921	SVOCs	3,3'-Dichlorobenzidine	**130/125**	3	10-120/58

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether. Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
P54-ROX-070921	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6C-ROX-070921	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6B-ROX-070921	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW6A-ROX-070921	SVOCs	Hexachlorocyclopentadiene	**UJ**
P54-ROX-070921	SVOCs	Hexachlorocyclopentadiene	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW24-ROX-070921	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW26-ROX-070921	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW12-ROX-070921	SVOCs	Hexachlorocyclopentadiene	**UJ**

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-205797-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
7/26/2021 5:35:40 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Reviewed 8/18/2021 LR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Detection Summary 6
Client Sample Results 7
Definitions 45
Surrogate Summary 46
Method Summary 48
Chronicle 49
QC Association 54
QC Sample Results 57
Chain of Custody 73
Receipt Checklists 75
Certification Summary 76

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Job ID: 400-205797-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-205797-1

Comments
No additional comments.

Receipt
The samples were received on 7/10/2021 9:29 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.8° C, 1.0° C and 2.9° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-539734 recovered above the upper control limit for Acetone, 2-Butanone (MEK) and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-539734 recovered outside control limits for the following analytes: Acetone, Hexachlorobutadiene and 2-Butanone (MEK). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-070921-8260-B (400-205797-2), MW6C-ROX-070921-EB (400-205797-3), MW6C-ROX-070921 (400-205797-4), MW6B-ROX-070921 (400-205797-5), MW6A-ROX-070921 (400-205797-6), TB-ROX-070921-8260-A (400-205797-8), P54-ROX-070921 (400-205797-9), MW24-ROX-070921 (400-205797-10), MW26-ROX-070921 (400-205797-11) and MW12-ROX-070921 (400-205797-12). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-539734 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-539734 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-538958 and analytical batch 400-539339 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-538958 and analytical batch 400-539339 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-539339 recovered above the upper control limit for Hexachlorobenzene and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW6C-ROX-070921-EB (400-205797-3) and MW24-ROX-070921 (400-205797-10). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-539339 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Job ID: 400-205797-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW12-ROX-070921 (400-205797-12). These results have been reported and qualified.

Method 8270D LL: Surrogate recovery for the following samples were outside the upper control limit: MW6C-ROX-070921-EB (400-205797-3), MW6C-ROX-070921 (400-205797-4), MW6B-ROX-070921 (400-205797-5), MW6A-ROX-070921 (400-205797-6), MW24-ROX-070921 (400-205797-10) and MW26-ROX-070921 (400-205797-11). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D LL: The surrogate recovery for the blank associated with preparation batch 400-538958 and analytical batch 400-539211 was outside the upper control limits.

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

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

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

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-205797-1	TB-ROX-070921-8011-B	Water	07/09/21 00:00	07/10/21 09:29
400-205797-2	TB-ROX-070921-8260-B	Water	07/09/21 00:00	07/10/21 09:29
400-205797-3	MW6C-ROX-070921-EB	Water	07/09/21 08:10	07/10/21 09:29
400-205797-4	MW6C-ROX-070921	Water	07/09/21 10:40	07/10/21 09:29
400-205797-5	MW6B-ROX-070921	Water	07/09/21 11:15	07/10/21 09:29
400-205797-6	MW6A-ROX-070921	Water	07/09/21 12:30	07/10/21 09:29
400-205797-7	TB-ROX-070921-8011-A	Water	07/09/21 00:00	07/10/21 09:29
400-205797-8	TB-ROX-070921-8260-A	Water	07/09/21 00:00	07/10/21 09:29
400-205797-9	P54-ROX-070921	Water	07/09/21 10:40	07/10/21 09:29
400-205797-9 MS	P54-ROX-070921	Water	07/09/21 10:40	07/10/21 09:29
400-205797-9 MSD	P54-ROX-070921	Water	07/09/21 10:40	07/10/21 09:29
400-205797-10	MW24-ROX-070921	Water	07/09/21 11:50	07/10/21 09:29
400-205797-11	MW26-ROX-070921	Water	07/09/21 12:45	07/10/21 09:29
400-205797-12	MW12-ROX-070921	Water	07/09/21 13:40	07/10/21 09:29

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: TB-ROX-070921-8011-B — Lab Sample ID: 400-205797-1

No Detections.

Client Sample ID: TB-ROX-070921-8260-B — Lab Sample ID: 400-205797-2

No Detections.

Client Sample ID: MW6C-ROX-070921-EB — Lab Sample ID: 400-205797-3

No Detections.

Client Sample ID: MW6C-ROX-070921 — Lab Sample ID: 400-205797-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	0.94	J	10	0.25	ug/L	1		8270D	Total/NA

Client Sample ID: MW6B-ROX-070921 — Lab Sample ID: 400-205797-5

No Detections.

Client Sample ID: MW6A-ROX-070921 — Lab Sample ID: 400-205797-6

No Detections.

Client Sample ID: TB-ROX-070921-8011-A — Lab Sample ID: 400-205797-7

No Detections.

Client Sample ID: TB-ROX-070921-8260-A — Lab Sample ID: 400-205797-8

No Detections.

Client Sample ID: P54-ROX-070921 — Lab Sample ID: 400-205797-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.12	J	0.19	0.031	ug/L	1		8270D LL	Total/NA
Acenaphthylene	0.078	J	0.19	0.043	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.21		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.27		0.19	0.058	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.054	J	0.19	0.035	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	0.70	J	9.6	0.23	ug/L	1		8270D	Total/NA

Client Sample ID: MW24-ROX-070921 — Lab Sample ID: 400-205797-10

No Detections.

Client Sample ID: MW26-ROX-070921 — Lab Sample ID: 400-205797-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.43	J	1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW12-ROX-070921 — Lab Sample ID: 400-205797-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.50	J	1.0	0.38	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.13	J	0.19	0.057	ug/L	1		8270D LL	Total/NA
Pyridine	3.1	J	9.5	3.0	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-070921-8011-B
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/21/21 09:17	07/21/21 19:26	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/21/21 09:17	07/21/21 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*07/21/21 09:17*	*07/21/21 19:26*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: TB-ROX-070921-8260-B

Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/16/21 18:36	1
Acrolein	ND		20	10	ug/L			07/16/21 18:36	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 18:36	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 18:36	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 18:36	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 18:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 18:36	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 18:36	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/16/21 18:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 18:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 18:36	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 18:36	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 18:36	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 18:36	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 18:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 18:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 18:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 18:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 18:36	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/16/21 18:36	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 18:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 18:36	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 18:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 18:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 18:36	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 18:36	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 18:36	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 18:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 18:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 18:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 18:36	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 18:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 18:36	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 18:36	1

Client Sample ID: TB-ROX-070921-8260-B
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 18:36	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 18:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 18:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 18:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 18:36	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 18:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 18:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 18:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 18:36	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 18:36	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 18:36	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 18:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 18:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 18:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 18:36	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 18:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 18:36	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/16/21 18:36*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/16/21 18:36*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/16/21 18:36*	*1*

Client Sample ID: MW6C-ROX-070921-EB
Date Collected: 07/09/21 08:10
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/16/21 21:22	1
Acrolein	ND		20	10	ug/L			07/16/21 21:22	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 21:22	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 21:22	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 21:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 21:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 21:22	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 21:22	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/16/21 21:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 21:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 21:22	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 21:22	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 21:22	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 21:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 21:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 21:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 21:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 21:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 21:22	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/16/21 21:22	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 21:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 21:22	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 21:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 21:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 21:22	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 21:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 21:22	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 21:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 21:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 21:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 21:22	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 21:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 21:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 21:22	1

Client Sample ID: MW6C-ROX-070921-EB

Date Collected: 07/09/21 08:10
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 21:22	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 21:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 21:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 21:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 21:22	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 21:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 21:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 21:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 21:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 21:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 21:22	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 21:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 21:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 21:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 21:22	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 21:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 21:22	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/16/21 21:22*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/16/21 21:22*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/16/21 21:22*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 17:58	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/12/21 09:27	07/13/21 17:58	1
Anthracene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 17:58	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/12/21 09:27	07/13/21 17:58	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/12/21 09:27	07/13/21 17:58	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/12/21 09:27	07/13/21 17:58	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/12/21 09:27	07/13/21 17:58	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/12/21 09:27	07/13/21 17:58	1
Chrysene	ND		0.19	0.070	ug/L		07/12/21 09:27	07/13/21 17:58	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/12/21 09:27	07/13/21 17:58	1
Fluoranthene	ND		0.19	0.065	ug/L		07/12/21 09:27	07/13/21 17:58	1
Fluorene	ND		0.19	0.10	ug/L		07/12/21 09:27	07/13/21 17:58	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/12/21 09:27	07/13/21 17:58	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		07/12/21 09:27	07/13/21 17:58	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/12/21 09:27	07/13/21 17:58	1
Phenanthrene	ND		0.19	0.034	ug/L		07/12/21 09:27	07/13/21 17:58	1
Pyrene	ND		0.19	0.038	ug/L		07/12/21 09:27	07/13/21 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*120*		*15 - 122*	*07/12/21 09:27*	*07/13/21 17:58*	*1*
Nitrobenzene-d5	*89*		*19 - 130*	*07/12/21 09:27*	*07/13/21 17:58*	*1*

Client Sample ID: MW6C-ROX-070921-EB
Date Collected: 07/09/21 08:10
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	182	S1+	33 - 138	07/12/21 09:27	07/13/21 17:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 21:31	1
Benzenethiol	ND		9.5	1.6	ug/L		07/12/21 09:27	07/14/21 21:31	1
Benzoic acid	ND		29	6.9	ug/L		07/12/21 09:27	07/14/21 21:31	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 21:31	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 21:31	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 21:31	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 21:31	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/12/21 09:27	07/14/21 21:31	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/12/21 09:27	07/14/21 21:31	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/12/21 09:27	07/14/21 21:31	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/12/21 09:27	07/14/21 21:31	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 21:31	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 21:31	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 21:31	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 21:31	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 21:31	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 21:31	1
3,3'-Dichlorobenzidine	ND	*+	9.5	2.5	ug/L		07/12/21 09:27	07/14/21 21:31	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/12/21 09:27	07/14/21 21:31	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/12/21 09:27	07/14/21 21:31	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 21:31	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 21:31	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 21:31	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/12/21 09:27	07/14/21 21:31	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/12/21 09:27	07/14/21 21:31	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 21:31	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 21:31	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 21:31	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 21:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 21:31	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 21:31	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/12/21 09:27	07/14/21 21:31	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/12/21 09:27	07/14/21 21:31	1
Indene	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 21:31	1
Isophorone	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 21:31	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 21:31	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/12/21 09:27	07/14/21 21:31	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 21:31	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 21:31	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/12/21 09:27	07/14/21 21:31	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/12/21 09:27	07/14/21 21:31	1
2-Nitrophenol	ND		9.5	4.9	ug/L		07/12/21 09:27	07/14/21 21:31	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/12/21 09:27	07/14/21 21:31	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 21:31	1

Client Sample ID: MW6C-ROX-070921-EB
Date Collected: 07/09/21 08:10
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/12/21 09:27	07/14/21 21:31	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/12/21 09:27	07/14/21 21:31	1
Pentachlorophenol	ND		19	1.3	ug/L		07/12/21 09:27	07/14/21 21:31	1
Phenol	ND		9.5	2.5	ug/L		07/12/21 09:27	07/14/21 21:31	1
Pyridine	ND		9.5	3.0	ug/L		07/12/21 09:27	07/14/21 21:31	1
Quinoline	ND		9.5	4.3	ug/L		07/12/21 09:27	07/14/21 21:31	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/12/21 09:27	07/14/21 21:31	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*46 - 124*	*07/12/21 09:27*	*07/14/21 21:31*	*1*
2-Fluorophenol	*12*	*S1-*	*13 - 113*	*07/12/21 09:27*	*07/14/21 21:31*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/12/21 09:27*	*07/14/21 21:31*	*1*
Phenol-d5	*47*		*17 - 127*	*07/12/21 09:27*	*07/14/21 21:31*	*1*
Terphenyl-d14	*115*		*44 - 149*	*07/12/21 09:27*	*07/14/21 21:31*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*07/12/21 09:27*	*07/14/21 21:31*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/21/21 09:17	07/21/21 20:06	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/21/21 09:17	07/21/21 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/21/21 09:17*	*07/21/21 20:06*	*1*

Client Sample ID: MW6C-ROX-070921
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/16/21 22:45	1
Acrolein	ND		20	10	ug/L			07/16/21 22:45	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 22:45	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 22:45	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 22:45	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 22:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 22:45	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 22:45	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/16/21 22:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 22:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 22:45	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 22:45	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 22:45	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 22:45	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 22:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 22:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 22:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 22:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 22:45	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/16/21 22:45	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 22:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 22:45	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 22:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 22:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 22:45	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 22:45	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 22:45	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 22:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 22:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 22:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 22:45	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 22:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 22:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 22:45	1

Client Sample ID: MW6C-ROX-070921
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 22:45	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 22:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 22:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 22:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 22:45	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 22:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 22:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 22:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 22:45	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 22:45	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 22:45	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 22:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 22:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 22:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 22:45	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 22:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 22:45	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/16/21 22:45*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/16/21 22:45*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/16/21 22:45*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.033	ug/L		07/12/21 09:27	07/13/21 18:14	1
Acenaphthylene	ND		0.20	0.046	ug/L		07/12/21 09:27	07/13/21 18:14	1
Anthracene	ND		0.20	0.033	ug/L		07/12/21 09:27	07/13/21 18:14	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		07/12/21 09:27	07/13/21 18:14	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		07/12/21 09:27	07/13/21 18:14	1
Benzo[b]fluoranthene	ND		0.20	0.035	ug/L		07/12/21 09:27	07/13/21 18:14	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/12/21 09:27	07/13/21 18:14	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/12/21 09:27	07/13/21 18:14	1
Chrysene	ND		0.20	0.076	ug/L		07/12/21 09:27	07/13/21 18:14	1
Dibenz(a,h)anthracene	ND		0.20	0.051	ug/L		07/12/21 09:27	07/13/21 18:14	1
Fluoranthene	ND		0.20	0.070	ug/L		07/12/21 09:27	07/13/21 18:14	1
Fluorene	ND		0.20	0.11	ug/L		07/12/21 09:27	07/13/21 18:14	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.044	ug/L		07/12/21 09:27	07/13/21 18:14	1
1-Methylnaphthalene	ND		0.20	0.076	ug/L		07/12/21 09:27	07/13/21 18:14	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		07/12/21 09:27	07/13/21 18:14	1
Phenanthrene	ND		0.20	0.037	ug/L		07/12/21 09:27	07/13/21 18:14	1
Pyrene	ND		0.20	0.041	ug/L		07/12/21 09:27	07/13/21 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*139*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 18:14*	*1*
Nitrobenzene-d5	*106*		*19 - 130*	*07/12/21 09:27*	*07/13/21 18:14*	*1*

Client Sample ID: MW6C-ROX-070921

Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-4

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*204*	*S1+*	*33 - 138*	*07/12/21 09:27*	*07/13/21 18:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/12/21 09:27	07/14/21 21:52	1
Benzenethiol	ND		10	1.7	ug/L		07/12/21 09:27	07/14/21 21:52	1
Benzoic acid	ND		31	7.5	ug/L		07/12/21 09:27	07/14/21 21:52	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 21:52	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 21:52	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/12/21 09:27	07/14/21 21:52	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 21:52	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/12/21 09:27	07/14/21 21:52	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/21 09:27	07/14/21 21:52	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/21 09:27	07/14/21 21:52	1
4-Chloroaniline	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 21:52	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/12/21 09:27	07/14/21 21:52	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 21:52	1
2-Chlorophenol	ND		10	2.3	ug/L		07/12/21 09:27	07/14/21 21:52	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 21:52	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 21:52	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 21:52	1
3,3'-Dichlorobenzidine	ND	*+	10	2.7	ug/L		07/12/21 09:27	07/14/21 21:52	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/12/21 09:27	07/14/21 21:52	1
Diethyl phthalate	**0.94**	**J**	10	0.25	ug/L		07/12/21 09:27	07/14/21 21:52	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/12/21 09:27	07/14/21 21:52	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 21:52	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/12/21 09:27	07/14/21 21:52	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/21 09:27	07/14/21 21:52	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/12/21 09:27	07/14/21 21:52	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 21:52	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 21:52	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 21:52	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 21:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 21:52	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 21:52	1
Hexachlorocyclopentadiene	ND	UJ	20	2.7	ug/L		07/12/21 09:27	07/14/21 21:52	1
Hexachloroethane	ND		10	4.3	ug/L		07/12/21 09:27	07/14/21 21:52	1
Indene	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 21:52	1
Isophorone	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 21:52	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 21:52	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/12/21 09:27	07/14/21 21:52	1
2-Nitroaniline	ND		10	2.3	ug/L		07/12/21 09:27	07/14/21 21:52	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 21:52	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/21 09:27	07/14/21 21:52	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/21 09:27	07/14/21 21:52	1
2-Nitrophenol	ND		10	5.3	ug/L		07/12/21 09:27	07/14/21 21:52	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/21 09:27	07/14/21 21:52	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/12/21 09:27	07/14/21 21:52	1

Client Sample ID: MW6C-ROX-070921
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/12/21 09:27	07/14/21 21:52	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/21 09:27	07/14/21 21:52	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/21 09:27	07/14/21 21:52	1
Phenol	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 21:52	1
Pyridine	ND		10	3.3	ug/L		07/12/21 09:27	07/14/21 21:52	1
Quinoline	ND		10	4.6	ug/L		07/12/21 09:27	07/14/21 21:52	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 21:52	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/12/21 09:27	07/14/21 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*102*		*46 - 124*	*07/12/21 09:27*	*07/14/21 21:52*	*1*
2-Fluorophenol	*29*		*13 - 113*	*07/12/21 09:27*	*07/14/21 21:52*	*1*
Nitrobenzene-d5	*82*		*36 - 126*	*07/12/21 09:27*	*07/14/21 21:52*	*1*
Phenol-d5	*68*		*17 - 127*	*07/12/21 09:27*	*07/14/21 21:52*	*1*
Terphenyl-d14	*118*		*44 - 149*	*07/12/21 09:27*	*07/14/21 21:52*	*1*
2,4,6-Tribromophenol	*112*		*26 - 150*	*07/12/21 09:27*	*07/14/21 21:52*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/21/21 09:17	07/21/21 20:27	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/21/21 09:17	07/21/21 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*	*p*	*51 - 149*	*07/21/21 09:17*	*07/21/21 20:27*	*1*

Client Sample ID: MW6B-ROX-070921
Date Collected: 07/09/21 11:15
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/16/21 23:12	1
Acrolein	ND		20	10	ug/L			07/16/21 23:12	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 23:12	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 23:12	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 23:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 23:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 23:12	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 23:12	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/16/21 23:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 23:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 23:12	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 23:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 23:12	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 23:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 23:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 23:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 23:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 23:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 23:12	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/16/21 23:12	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 23:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 23:12	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 23:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 23:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 23:12	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 23:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 23:12	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 23:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 23:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 23:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 23:12	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 23:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 23:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 23:12	1

Client Sample ID: MW6B-ROX-070921
Date Collected: 07/09/21 11:15
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 23:12	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 23:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 23:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 23:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 23:12	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 23:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 23:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 23:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 23:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 23:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 23:12	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 23:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 23:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 23:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 23:12	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 23:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 23:12	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/16/21 23:12*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/16/21 23:12*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/16/21 23:12*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 18:29	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/21 09:27	07/13/21 18:29	1
Anthracene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 18:29	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/12/21 09:27	07/13/21 18:29	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/12/21 09:27	07/13/21 18:29	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/12/21 09:27	07/13/21 18:29	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/12/21 09:27	07/13/21 18:29	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/12/21 09:27	07/13/21 18:29	1
Chrysene	ND		0.20	0.074	ug/L		07/12/21 09:27	07/13/21 18:29	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/12/21 09:27	07/13/21 18:29	1
Fluoranthene	ND		0.20	0.068	ug/L		07/12/21 09:27	07/13/21 18:29	1
Fluorene	ND		0.20	0.11	ug/L		07/12/21 09:27	07/13/21 18:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/12/21 09:27	07/13/21 18:29	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/12/21 09:27	07/13/21 18:29	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/12/21 09:27	07/13/21 18:29	1
Phenanthrene	ND		0.20	0.036	ug/L		07/12/21 09:27	07/13/21 18:29	1
Pyrene	ND		0.20	0.040	ug/L		07/12/21 09:27	07/13/21 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*135*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 18:29*	*1*
Nitrobenzene-d5	*110*		*19 - 130*	*07/12/21 09:27*	*07/13/21 18:29*	*1*

Client Sample ID: MW6B-ROX-070921
Date Collected: 07/09/21 11:15
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	175	S1+	33 - 138	07/12/21 09:27	07/13/21 18:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 22:13	1
Benzenethiol	ND		10	1.7	ug/L		07/12/21 09:27	07/14/21 22:13	1
Benzoic acid	ND		30	7.3	ug/L		07/12/21 09:27	07/14/21 22:13	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 22:13	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 22:13	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 22:13	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/21 09:27	07/14/21 22:13	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/21 09:27	07/14/21 22:13	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/21 09:27	07/14/21 22:13	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 22:13	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 22:13	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 22:13	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:13	1
3,3'-Dichlorobenzidine	ND	*+	10	2.6	ug/L		07/12/21 09:27	07/14/21 22:13	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
Diethyl phthalate	ND		10	0.24	ug/L		07/12/21 09:27	07/14/21 22:13	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 22:13	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:13	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 22:13	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/21 09:27	07/14/21 22:13	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/21 09:27	07/14/21 22:13	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 22:13	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 22:13	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:13	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:13	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		07/12/21 09:27	07/14/21 22:13	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/21 09:27	07/14/21 22:13	1
Indene	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:13	1
Isophorone	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 22:13	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 22:13	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/12/21 09:27	07/14/21 22:13	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 22:13	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 22:13	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/21 09:27	07/14/21 22:13	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/21 09:27	07/14/21 22:13	1
2-Nitrophenol	ND		10	5.2	ug/L		07/12/21 09:27	07/14/21 22:13	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/21 09:27	07/14/21 22:13	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 22:13	1

Client Sample ID: MW6B-ROX-070921

Date Collected: 07/09/21 11:15
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/12/21 09:27	07/14/21 22:13	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/21 09:27	07/14/21 22:13	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/21 09:27	07/14/21 22:13	1
Phenol	ND		10	2.6	ug/L		07/12/21 09:27	07/14/21 22:13	1
Pyridine	ND		10	3.2	ug/L		07/12/21 09:27	07/14/21 22:13	1
Quinoline	ND		10	4.5	ug/L		07/12/21 09:27	07/14/21 22:13	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/21 09:27	07/14/21 22:13	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*46 - 124*	*07/12/21 09:27*	*07/14/21 22:13*	*1*
2-Fluorophenol	*41*		*13 - 113*	*07/12/21 09:27*	*07/14/21 22:13*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/12/21 09:27*	*07/14/21 22:13*	*1*
Phenol-d5	*65*		*17 - 127*	*07/12/21 09:27*	*07/14/21 22:13*	*1*
Terphenyl-d14	*99*		*44 - 149*	*07/12/21 09:27*	*07/14/21 22:13*	*1*
2,4,6-Tribromophenol	*108*		*26 - 150*	*07/12/21 09:27*	*07/14/21 22:13*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/21/21 09:17	07/21/21 20:47	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/21/21 09:17	07/21/21 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*	*p*	*51 - 149*	*07/21/21 09:17*	*07/21/21 20:47*	*1*

Client Sample ID: MW6A-ROX-070921

Date Collected: 07/09/21 12:30
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/16/21 23:40	1
Acrolein	ND		20	10	ug/L			07/16/21 23:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 23:40	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 23:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 23:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 23:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 23:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 23:40	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/16/21 23:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 23:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 23:40	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 23:40	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 23:40	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 23:40	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 23:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 23:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 23:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 23:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 23:40	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/16/21 23:40	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 23:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 23:40	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 23:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 23:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 23:40	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 23:40	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 23:40	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 23:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 23:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 23:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 23:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 23:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 23:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 23:40	1

Client Sample ID: MW6A-ROX-070921
Date Collected: 07/09/21 12:30
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 23:40	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 23:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 23:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 23:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 23:40	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 23:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 23:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 23:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 23:40	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 23:40	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 23:40	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 23:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 23:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 23:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 23:40	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 23:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 23:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/16/21 23:40*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/16/21 23:40*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/16/21 23:40*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.033	ug/L		07/12/21 09:27	07/13/21 18:45	1
Acenaphthylene	ND		0.20	0.046	ug/L		07/12/21 09:27	07/13/21 18:45	1
Anthracene	ND		0.20	0.033	ug/L		07/12/21 09:27	07/13/21 18:45	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		07/12/21 09:27	07/13/21 18:45	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		07/12/21 09:27	07/13/21 18:45	1
Benzo[b]fluoranthene	ND		0.20	0.035	ug/L		07/12/21 09:27	07/13/21 18:45	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/12/21 09:27	07/13/21 18:45	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/12/21 09:27	07/13/21 18:45	1
Chrysene	ND		0.20	0.076	ug/L		07/12/21 09:27	07/13/21 18:45	1
Dibenz(a,h)anthracene	ND		0.20	0.051	ug/L		07/12/21 09:27	07/13/21 18:45	1
Fluoranthene	ND		0.20	0.070	ug/L		07/12/21 09:27	07/13/21 18:45	1
Fluorene	ND		0.20	0.11	ug/L		07/12/21 09:27	07/13/21 18:45	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.044	ug/L		07/12/21 09:27	07/13/21 18:45	1
1-Methylnaphthalene	ND		0.20	0.076	ug/L		07/12/21 09:27	07/13/21 18:45	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		07/12/21 09:27	07/13/21 18:45	1
Phenanthrene	ND		0.20	0.037	ug/L		07/12/21 09:27	07/13/21 18:45	1
Pyrene	ND		0.20	0.041	ug/L		07/12/21 09:27	07/13/21 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*131*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 18:45*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*07/12/21 09:27*	*07/13/21 18:45*	*1*

Client Sample ID: MW6A-ROX-070921

Date Collected: 07/09/21 12:30
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-6

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*163*	*S1+*	*33 - 138*	*07/12/21 09:27*	*07/13/21 18:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/12/21 09:27	07/14/21 22:34	1
Benzenethiol	ND		10	1.7	ug/L		07/12/21 09:27	07/14/21 22:34	1
Benzoic acid	ND		31	7.5	ug/L		07/12/21 09:27	07/14/21 22:34	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 22:34	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 22:34	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/12/21 09:27	07/14/21 22:34	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 22:34	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/12/21 09:27	07/14/21 22:34	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/21 09:27	07/14/21 22:34	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/21 09:27	07/14/21 22:34	1
4-Chloroaniline	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 22:34	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/12/21 09:27	07/14/21 22:34	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 22:34	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 22:34	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 22:34	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:34	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:34	1
3,3'-Dichlorobenzidine	ND	*+	10	2.7	ug/L		07/12/21 09:27	07/14/21 22:34	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/12/21 09:27	07/14/21 22:34	1
Diethyl phthalate	ND		10	0.25	ug/L		07/12/21 09:27	07/14/21 22:34	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/12/21 09:27	07/14/21 22:34	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:34	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/12/21 09:27	07/14/21 22:34	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/21 09:27	07/14/21 22:34	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/12/21 09:27	07/14/21 22:34	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 22:34	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 22:34	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:34	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:34	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 22:34	1
Hexachlorocyclopentadiene	ND	U5	20	2.7	ug/L		07/12/21 09:27	07/14/21 22:34	1
Hexachloroethane	ND		10	4.3	ug/L		07/12/21 09:27	07/14/21 22:34	1
Indene	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 22:34	1
Isophorone	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 22:34	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 22:34	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/12/21 09:27	07/14/21 22:34	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 22:34	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 22:34	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/21 09:27	07/14/21 22:34	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/21 09:27	07/14/21 22:34	1
2-Nitrophenol	ND		10	5.3	ug/L		07/12/21 09:27	07/14/21 22:34	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/21 09:27	07/14/21 22:34	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/12/21 09:27	07/14/21 22:34	1

Client Sample ID: MW6A-ROX-070921
Date Collected: 07/09/21 12:30
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/12/21 09:27	07/14/21 22:34	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/21 09:27	07/14/21 22:34	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/21 09:27	07/14/21 22:34	1
Phenol	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 22:34	1
Pyridine	ND		10	3.3	ug/L		07/12/21 09:27	07/14/21 22:34	1
Quinoline	ND		10	4.6	ug/L		07/12/21 09:27	07/14/21 22:34	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 22:34	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/12/21 09:27	07/14/21 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*46 - 124*	*07/12/21 09:27*	*07/14/21 22:34*	*1*
2-Fluorophenol	*15*		*13 - 113*	*07/12/21 09:27*	*07/14/21 22:34*	*1*
Nitrobenzene-d5	*86*		*36 - 126*	*07/12/21 09:27*	*07/14/21 22:34*	*1*
Phenol-d5	*52*		*17 - 127*	*07/12/21 09:27*	*07/14/21 22:34*	*1*
Terphenyl-d14	*109*		*44 - 149*	*07/12/21 09:27*	*07/14/21 22:34*	*1*
2,4,6-Tribromophenol	*122*		*26 - 150*	*07/12/21 09:27*	*07/14/21 22:34*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/21/21 09:17	07/21/21 21:07	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/21/21 09:17	07/21/21 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*	*p*	*51 - 149*	*07/21/21 09:17*	*07/21/21 21:07*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: TB-ROX-070921-8011-A
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-7
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/21/21 09:17	07/21/21 21:27	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/21/21 09:17	07/21/21 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*07/21/21 09:17*	*07/21/21 21:27*	*1*

Client Sample ID: TB-ROX-070921-8260-A

Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/16/21 19:03	1
Acrolein	ND		20	10	ug/L			07/16/21 19:03	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 19:03	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 19:03	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 19:03	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 19:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 19:03	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 19:03	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/16/21 19:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 19:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 19:03	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 19:03	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 19:03	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 19:03	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 19:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 19:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 19:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 19:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 19:03	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/16/21 19:03	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 19:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 19:03	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 19:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 19:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 19:03	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 19:03	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 19:03	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 19:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 19:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 19:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 19:03	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 19:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 19:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 19:03	1

Client Sample ID: TB-ROX-070921-8260-A
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 19:03	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 19:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 19:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 19:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 19:03	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 19:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 19:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 19:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 19:03	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 19:03	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 19:03	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 19:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 19:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 19:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 19:03	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 19:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 19:03	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/16/21 19:03*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/16/21 19:03*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/16/21 19:03*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: P54-ROX-070921
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/16/21 19:31	1
Acrolein	ND		20	10	ug/L			07/16/21 19:31	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 19:31	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 19:31	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 19:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 19:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 19:31	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 19:31	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/16/21 19:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 19:31	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			07/16/21 19:31	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 19:31	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 19:31	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 19:31	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 19:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 19:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 19:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 19:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 19:31	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/16/21 19:31	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 19:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 19:31	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 19:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 19:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 19:31	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 19:31	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 19:31	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 19:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 19:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 19:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 19:31	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 19:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 19:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 19:31	1

Client Sample ID: P54-ROX-070921
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 19:31	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 19:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 19:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 19:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 19:31	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 19:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 19:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 19:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 19:31	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 19:31	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 19:31	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 19:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 19:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 19:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 19:31	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 19:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 19:31	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/16/21 19:31*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/16/21 19:31*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/16/21 19:31*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.12**	**J**	0.19	0.031	ug/L		07/12/21 09:27	07/22/21 13:58	1
Acenaphthylene	**0.078**	**J**	0.19	0.043	ug/L		07/12/21 09:27	07/22/21 13:58	1
Anthracene	ND		0.19	0.031	ug/L		07/12/21 09:27	07/22/21 13:58	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/12/21 09:27	07/22/21 13:58	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/12/21 09:27	07/22/21 13:58	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		07/12/21 09:27	07/22/21 13:58	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/12/21 09:27	07/22/21 13:58	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		07/12/21 09:27	07/22/21 13:58	1
Chrysene	ND		0.19	0.071	ug/L		07/12/21 09:27	07/22/21 13:58	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/12/21 09:27	07/22/21 13:58	1
Fluoranthene	ND		0.19	0.065	ug/L		07/12/21 09:27	07/22/21 13:58	1
Fluorene	ND		0.19	0.11	ug/L		07/12/21 09:27	07/22/21 13:58	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/12/21 09:27	07/22/21 13:58	1
1-Methylnaphthalene	**0.21**		0.19	0.071	ug/L		07/12/21 09:27	07/22/21 13:58	1
2-Methylnaphthalene	**0.27**		0.19	0.058	ug/L		07/12/21 09:27	07/22/21 13:58	1
Phenanthrene	**0.054**	**J**	0.19	0.035	ug/L		07/12/21 09:27	07/22/21 13:58	1
Pyrene	ND		0.19	0.038	ug/L		07/12/21 09:27	07/22/21 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*15 - 122*	*07/12/21 09:27*	*07/22/21 13:58*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*07/12/21 09:27*	*07/22/21 13:58*	*1*

Client Sample ID: P54-ROX-070921
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	115		33 - 138	07/12/21 09:27	07/22/21 13:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		07/12/21 09:27	07/14/21 21:10	1
Benzenethiol	ND		9.6	1.6	ug/L		07/12/21 09:27	07/14/21 21:10	1
Benzoic acid	ND		29	7.0	ug/L		07/12/21 09:27	07/14/21 21:10	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/12/21 09:27	07/14/21 21:10	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		07/12/21 09:27	07/14/21 21:10	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		07/12/21 09:27	07/14/21 21:10	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		07/12/21 09:27	07/14/21 21:10	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/12/21 09:27	07/14/21 21:10	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		07/12/21 09:27	07/14/21 21:10	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		07/12/21 09:27	07/14/21 21:10	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/12/21 09:27	07/14/21 21:10	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		07/12/21 09:27	07/14/21 21:10	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		07/12/21 09:27	07/14/21 21:10	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/12/21 09:27	07/14/21 21:10	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/12/21 09:27	07/14/21 21:10	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		07/12/21 09:27	07/14/21 21:10	1
Dibenzofuran	ND		9.6	0.16	ug/L		07/12/21 09:27	07/14/21 21:10	1
3,3'-Dichlorobenzidine	ND	*+ F1	9.6	2.5	ug/L		07/12/21 09:27	07/14/21 21:10	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/12/21 09:27	07/14/21 21:10	1
Diethyl phthalate	**0.70**	J	9.6	0.23	ug/L		07/12/21 09:27	07/14/21 21:10	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/12/21 09:27	07/14/21 21:10	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		07/12/21 09:27	07/14/21 21:10	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/12/21 09:27	07/14/21 21:10	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		07/12/21 09:27	07/14/21 21:10	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/12/21 09:27	07/14/21 21:10	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/12/21 09:27	07/14/21 21:10	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/12/21 09:27	07/14/21 21:10	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		07/12/21 09:27	07/14/21 21:10	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/12/21 09:27	07/14/21 21:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/12/21 09:27	07/14/21 21:10	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		07/12/21 09:27	07/14/21 21:10	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		07/12/21 09:27	07/14/21 21:10	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/12/21 09:27	07/14/21 21:10	1
Indene	ND		9.6	0.96	ug/L		07/12/21 09:27	07/14/21 21:10	1
Isophorone	ND		9.6	0.13	ug/L		07/12/21 09:27	07/14/21 21:10	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/12/21 09:27	07/14/21 21:10	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/12/21 09:27	07/14/21 21:10	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/12/21 09:27	07/14/21 21:10	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/12/21 09:27	07/14/21 21:10	1
4-Nitroaniline	ND		9.6	1.4	ug/L		07/12/21 09:27	07/14/21 21:10	1
Nitrobenzene	ND		9.6	0.12	ug/L		07/12/21 09:27	07/14/21 21:10	1
2-Nitrophenol	ND		9.6	5.0	ug/L		07/12/21 09:27	07/14/21 21:10	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/12/21 09:27	07/14/21 21:10	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/12/21 09:27	07/14/21 21:10	1

Client Sample ID: P54-ROX-070921
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/12/21 09:27	07/14/21 21:10	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		07/12/21 09:27	07/14/21 21:10	1
Pentachlorophenol	ND		19	1.3	ug/L		07/12/21 09:27	07/14/21 21:10	1
Phenol	ND		9.6	2.5	ug/L		07/12/21 09:27	07/14/21 21:10	1
Pyridine	ND		9.6	3.1	ug/L		07/12/21 09:27	07/14/21 21:10	1
Quinoline	ND		9.6	4.3	ug/L		07/12/21 09:27	07/14/21 21:10	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		07/12/21 09:27	07/14/21 21:10	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/12/21 09:27	07/14/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*46 - 124*	*07/12/21 09:27*	*07/14/21 21:10*	*1*
2-Fluorophenol	*44*		*13 - 113*	*07/12/21 09:27*	*07/14/21 21:10*	*1*
Nitrobenzene-d5	*85*		*36 - 126*	*07/12/21 09:27*	*07/14/21 21:10*	*1*
Phenol-d5	*72*		*17 - 127*	*07/12/21 09:27*	*07/14/21 21:10*	*1*
Terphenyl-d14	*119*		*44 - 149*	*07/12/21 09:27*	*07/14/21 21:10*	*1*
2,4,6-Tribromophenol	*93*		*26 - 150*	*07/12/21 09:27*	*07/14/21 21:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/21/21 09:17	07/21/21 21:47	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/21/21 09:17	07/21/21 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*p*	*51 - 149*	*07/21/21 09:17*	*07/21/21 21:47*	*1*

Client Sample ID: MW24-ROX-070921

Date Collected: 07/09/21 11:50
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/17/21 00:07	1
Acrolein	ND		20	10	ug/L			07/17/21 00:07	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/21 00:07	1
Benzene	ND		1.0	0.38	ug/L			07/17/21 00:07	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/21 00:07	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/21 00:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Bromoform	ND		5.0	0.71	ug/L			07/17/21 00:07	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/21 00:07	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/17/21 00:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/21 00:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/21 00:07	1
Chloroform	ND		1.0	0.60	ug/L			07/17/21 00:07	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/21 00:07	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/21 00:07	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/21 00:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/21 00:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/21 00:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/21 00:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/21 00:07	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/17/21 00:07	1
2-Hexanone	ND		25	3.1	ug/L			07/17/21 00:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/21 00:07	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/21 00:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/21 00:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/21 00:07	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/21 00:07	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/21 00:07	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/21 00:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/21 00:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/21 00:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/21 00:07	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/21 00:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/21 00:07	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/21 00:07	1

Client Sample ID: MW24-ROX-070921
Date Collected: 07/09/21 11:50
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/21 00:07	1
Styrene	ND		1.0	1.0	ug/L			07/17/21 00:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/21 00:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/21 00:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/21 00:07	1
Toluene	ND		1.0	0.41	ug/L			07/17/21 00:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/21 00:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/21 00:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/21 00:07	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/21 00:07	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/21 00:07	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/21 00:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/21 00:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/21 00:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/21 00:07	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/21 00:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/21 00:07	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/21 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/17/21 00:07*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/17/21 00:07*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/17/21 00:07*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		07/12/21 09:27	07/13/21 19:47	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/12/21 09:27	07/13/21 19:47	1
Anthracene	ND		0.19	0.031	ug/L		07/12/21 09:27	07/13/21 19:47	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/12/21 09:27	07/13/21 19:47	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/12/21 09:27	07/13/21 19:47	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/12/21 09:27	07/13/21 19:47	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/12/21 09:27	07/13/21 19:47	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/12/21 09:27	07/13/21 19:47	1
Chrysene	ND		0.19	0.071	ug/L		07/12/21 09:27	07/13/21 19:47	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/12/21 09:27	07/13/21 19:47	1
Fluoranthene	ND		0.19	0.065	ug/L		07/12/21 09:27	07/13/21 19:47	1
Fluorene	ND		0.19	0.10	ug/L		07/12/21 09:27	07/13/21 19:47	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/12/21 09:27	07/13/21 19:47	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		07/12/21 09:27	07/13/21 19:47	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/12/21 09:27	07/13/21 19:47	1
Phenanthrene	ND		0.19	0.034	ug/L		07/12/21 09:27	07/13/21 19:47	1
Pyrene	ND		0.19	0.038	ug/L		07/12/21 09:27	07/13/21 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*128*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 19:47*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*07/12/21 09:27*	*07/13/21 19:47*	*1*

Client Sample ID: MW24-ROX-070921
Date Collected: 07/09/21 11:50
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*172*	*S1+*	*33 - 138*	*07/12/21 09:27*	*07/13/21 19:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 22:55	1
Benzenethiol	ND		9.5	1.6	ug/L		07/12/21 09:27	07/14/21 22:55	1
Benzoic acid	ND		29	7.0	ug/L		07/12/21 09:27	07/14/21 22:55	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 22:55	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 22:55	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 22:55	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 22:55	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/12/21 09:27	07/14/21 22:55	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/12/21 09:27	07/14/21 22:55	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/12/21 09:27	07/14/21 22:55	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/12/21 09:27	07/14/21 22:55	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 22:55	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 22:55	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 22:55	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 22:55	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 22:55	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 22:55	1
3,3'-Dichlorobenzidine	ND	*+	9.5	2.5	ug/L		07/12/21 09:27	07/14/21 22:55	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/12/21 09:27	07/14/21 22:55	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/12/21 09:27	07/14/21 22:55	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 22:55	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 22:55	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 22:55	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/12/21 09:27	07/14/21 22:55	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/12/21 09:27	07/14/21 22:55	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 22:55	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 22:55	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 22:55	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 22:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 22:55	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 22:55	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		07/12/21 09:27	07/14/21 22:55	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/12/21 09:27	07/14/21 22:55	1
Indene	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 22:55	1
Isophorone	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 22:55	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 22:55	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/12/21 09:27	07/14/21 22:55	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 22:55	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 22:55	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/12/21 09:27	07/14/21 22:55	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/12/21 09:27	07/14/21 22:55	1
2-Nitrophenol	ND		9.5	5.0	ug/L		07/12/21 09:27	07/14/21 22:55	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/12/21 09:27	07/14/21 22:55	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 22:55	1

Client Sample ID: MW24-ROX-070921
Date Collected: 07/09/21 11:50
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/12/21 09:27	07/14/21 22:55	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/12/21 09:27	07/14/21 22:55	1
Pentachlorophenol	ND		19	1.3	ug/L		07/12/21 09:27	07/14/21 22:55	1
Phenol	ND		9.5	2.5	ug/L		07/12/21 09:27	07/14/21 22:55	1
Pyridine	ND		9.5	3.1	ug/L		07/12/21 09:27	07/14/21 22:55	1
Quinoline	ND		9.5	4.3	ug/L		07/12/21 09:27	07/14/21 22:55	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/12/21 09:27	07/14/21 22:55	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*46 - 124*	*07/12/21 09:27*	*07/14/21 22:55*	*1*
2-Fluorophenol	*7*	*S1-*	*13 - 113*	*07/12/21 09:27*	*07/14/21 22:55*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*07/12/21 09:27*	*07/14/21 22:55*	*1*
Phenol-d5	*32*		*17 - 127*	*07/12/21 09:27*	*07/14/21 22:55*	*1*
Terphenyl-d14	*116*		*44 - 149*	*07/12/21 09:27*	*07/14/21 22:55*	*1*
2,4,6-Tribromophenol	*78*		*26 - 150*	*07/12/21 09:27*	*07/14/21 22:55*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/21/21 09:17	07/21/21 22:48	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/21/21 09:17	07/21/21 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*	*p*	*51 - 149*	*07/21/21 09:17*	*07/21/21 22:48*	*1*

Client Sample ID: MW26-ROX-070921

Date Collected: 07/09/21 12:45
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/17/21 00:35	1
Acrolein	ND		20	10	ug/L			07/17/21 00:35	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/21 00:35	1
Benzene	0.43	J	1.0	0.38	ug/L			07/17/21 00:35	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/21 00:35	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/21 00:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Bromoform	ND		5.0	0.71	ug/L			07/17/21 00:35	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/21 00:35	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/17/21 00:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/21 00:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/21 00:35	1
Chloroform	ND		1.0	0.60	ug/L			07/17/21 00:35	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/21 00:35	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/21 00:35	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/21 00:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/21 00:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/21 00:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/21 00:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/21 00:35	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/17/21 00:35	1
2-Hexanone	ND		25	3.1	ug/L			07/17/21 00:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/21 00:35	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/21 00:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/21 00:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/21 00:35	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/21 00:35	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/21 00:35	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/21 00:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/21 00:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/21 00:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/21 00:35	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/21 00:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/21 00:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/21 00:35	1

Client Sample ID: MW26-ROX-070921
Date Collected: 07/09/21 12:45
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/21 00:35	1
Styrene	ND		1.0	1.0	ug/L			07/17/21 00:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/21 00:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/21 00:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/21 00:35	1
Toluene	ND		1.0	0.41	ug/L			07/17/21 00:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/21 00:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/21 00:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/21 00:35	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/21 00:35	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/21 00:35	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/21 00:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/21 00:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/21 00:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/21 00:35	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/21 00:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/21 00:35	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/21 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/17/21 00:35*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/17/21 00:35*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/17/21 00:35*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 20:02	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/12/21 09:27	07/13/21 20:02	1
Anthracene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 20:02	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/12/21 09:27	07/13/21 20:02	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/12/21 09:27	07/13/21 20:02	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/12/21 09:27	07/13/21 20:02	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/12/21 09:27	07/13/21 20:02	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/12/21 09:27	07/13/21 20:02	1
Chrysene	ND		0.19	0.071	ug/L		07/12/21 09:27	07/13/21 20:02	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/12/21 09:27	07/13/21 20:02	1
Fluoranthene	ND		0.19	0.065	ug/L		07/12/21 09:27	07/13/21 20:02	1
Fluorene	ND		0.19	0.10	ug/L		07/12/21 09:27	07/13/21 20:02	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/12/21 09:27	07/13/21 20:02	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		07/12/21 09:27	07/13/21 20:02	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/12/21 09:27	07/13/21 20:02	1
Phenanthrene	ND		0.19	0.034	ug/L		07/12/21 09:27	07/13/21 20:02	1
Pyrene	ND		0.19	0.038	ug/L		07/12/21 09:27	07/13/21 20:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*124*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 20:02*	*1*
Nitrobenzene-d5	*115*		*19 - 130*	*07/12/21 09:27*	*07/13/21 20:02*	*1*

Client Sample ID: MW26-ROX-070921
Date Collected: 07/09/21 12:45
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	117		33 - 138	07/12/21 09:27	07/13/21 20:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 23:16	1
Benzenethiol	ND		9.5	1.6	ug/L		07/12/21 09:27	07/14/21 23:16	1
Benzoic acid	ND		29	7.0	ug/L		07/12/21 09:27	07/14/21 23:16	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 23:16	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 23:16	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 23:16	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 23:16	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/12/21 09:27	07/14/21 23:16	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/12/21 09:27	07/14/21 23:16	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/12/21 09:27	07/14/21 23:16	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/12/21 09:27	07/14/21 23:16	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 23:16	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 23:16	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 23:16	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 23:16	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:16	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:16	1
3,3'-Dichlorobenzidine	ND	*+	9.5	2.5	ug/L		07/12/21 09:27	07/14/21 23:16	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/12/21 09:27	07/14/21 23:16	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/12/21 09:27	07/14/21 23:16	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 23:16	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:16	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 23:16	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/12/21 09:27	07/14/21 23:16	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/12/21 09:27	07/14/21 23:16	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 23:16	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 23:16	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:16	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:16	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:16	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		07/12/21 09:27	07/14/21 23:16	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/12/21 09:27	07/14/21 23:16	1
Indene	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:16	1
Isophorone	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 23:16	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 23:16	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/12/21 09:27	07/14/21 23:16	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 23:16	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 23:16	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/12/21 09:27	07/14/21 23:16	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/12/21 09:27	07/14/21 23:16	1
2-Nitrophenol	ND		9.5	5.0	ug/L		07/12/21 09:27	07/14/21 23:16	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/12/21 09:27	07/14/21 23:16	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 23:16	1

Client Sample ID: MW26-ROX-070921
Date Collected: 07/09/21 12:45
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/12/21 09:27	07/14/21 23:16	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/12/21 09:27	07/14/21 23:16	1
Pentachlorophenol	ND		19	1.3	ug/L		07/12/21 09:27	07/14/21 23:16	1
Phenol	ND		9.5	2.5	ug/L		07/12/21 09:27	07/14/21 23:16	1
Pyridine	ND		9.5	3.0	ug/L		07/12/21 09:27	07/14/21 23:16	1
Quinoline	ND		9.5	4.3	ug/L		07/12/21 09:27	07/14/21 23:16	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/12/21 09:27	07/14/21 23:16	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*46 - 124*	*07/12/21 09:27*	*07/14/21 23:16*	*1*
2-Fluorophenol	*23*		*13 - 113*	*07/12/21 09:27*	*07/14/21 23:16*	*1*
Nitrobenzene-d5	*82*		*36 - 126*	*07/12/21 09:27*	*07/14/21 23:16*	*1*
Phenol-d5	*39*		*17 - 127*	*07/12/21 09:27*	*07/14/21 23:16*	*1*
Terphenyl-d14	*94*		*44 - 149*	*07/12/21 09:27*	*07/14/21 23:16*	*1*
2,4,6-Tribromophenol	*70*		*26 - 150*	*07/12/21 09:27*	*07/14/21 23:16*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/21/21 09:17	07/21/21 23:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/21/21 09:17	07/21/21 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*	*p*	*51 - 149*	*07/21/21 09:17*	*07/21/21 23:08*	*1*

Client Sample ID: MW12-ROX-070921
Date Collected: 07/09/21 13:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/17/21 01:03	1
Acrolein	ND		20	10	ug/L			07/17/21 01:03	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/21 01:03	1
Benzene	0.50	J	1.0	0.38	ug/L			07/17/21 01:03	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/21 01:03	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/21 01:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Bromoform	ND		5.0	0.71	ug/L			07/17/21 01:03	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/21 01:03	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/17/21 01:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/21 01:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/21 01:03	1
Chloroform	ND		1.0	0.60	ug/L			07/17/21 01:03	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/17/21 01:03	1
Chloromethane	ND		1.0	0.83	ug/L			07/17/21 01:03	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/21 01:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/21 01:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/21 01:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/21 01:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/21 01:03	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/17/21 01:03	1
2-Hexanone	ND		25	3.1	ug/L			07/17/21 01:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/21 01:03	1
Methylene bromide	ND		5.0	0.59	ug/L			07/17/21 01:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/21 01:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/21 01:03	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/17/21 01:03	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/17/21 01:03	1
Naphthalene	ND		1.0	1.0	ug/L			07/17/21 01:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/21 01:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/21 01:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/21 01:03	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/21 01:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/21 01:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/21 01:03	1

Client Sample ID: MW12-ROX-070921
Date Collected: 07/09/21 13:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/21 01:03	1
Styrene	ND		1.0	1.0	ug/L			07/17/21 01:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/21 01:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/17/21 01:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/17/21 01:03	1
Toluene	ND		1.0	0.41	ug/L			07/17/21 01:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/21 01:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/17/21 01:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/21 01:03	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/17/21 01:03	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/17/21 01:03	1
Trichloroethene	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/17/21 01:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/21 01:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/21 01:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/21 01:03	1
Vinyl acetate	ND		25	2.0	ug/L			07/17/21 01:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/21 01:03	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/21 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/17/21 01:03*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/17/21 01:03*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/17/21 01:03*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 20:18	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/12/21 09:27	07/13/21 20:18	1
Anthracene	ND		0.19	0.030	ug/L		07/12/21 09:27	07/13/21 20:18	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/12/21 09:27	07/13/21 20:18	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/12/21 09:27	07/13/21 20:18	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/12/21 09:27	07/13/21 20:18	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/12/21 09:27	07/13/21 20:18	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/12/21 09:27	07/13/21 20:18	1
Chrysene	ND		0.19	0.071	ug/L		07/12/21 09:27	07/13/21 20:18	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/12/21 09:27	07/13/21 20:18	1
Fluoranthene	ND		0.19	0.065	ug/L		07/12/21 09:27	07/13/21 20:18	1
Fluorene	ND		0.19	0.10	ug/L		07/12/21 09:27	07/13/21 20:18	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/12/21 09:27	07/13/21 20:18	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		07/12/21 09:27	07/13/21 20:18	1
2-Methylnaphthalene	0.13	J	0.19	0.057	ug/L		07/12/21 09:27	07/13/21 20:18	1
Phenanthrene	ND		0.19	0.034	ug/L		07/12/21 09:27	07/13/21 20:18	1
Pyrene	ND		0.19	0.038	ug/L		07/12/21 09:27	07/13/21 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*136*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 20:18*	*1*
Nitrobenzene-d5	*92*		*19 - 130*	*07/12/21 09:27*	*07/13/21 20:18*	*1*

Client Sample ID: MW12-ROX-070921
Date Collected: 07/09/21 13:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	137		33 - 138	07/12/21 09:27	07/13/21 20:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 23:37	1
Benzenethiol	ND		9.5	1.6	ug/L		07/12/21 09:27	07/14/21 23:37	1
Benzoic acid	ND		29	7.0	ug/L		07/12/21 09:27	07/14/21 23:37	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 23:37	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 23:37	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 23:37	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/12/21 09:27	07/14/21 23:37	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/12/21 09:27	07/14/21 23:37	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/12/21 09:27	07/14/21 23:37	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/12/21 09:27	07/14/21 23:37	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/12/21 09:27	07/14/21 23:37	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/12/21 09:27	07/14/21 23:37	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 23:37	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 23:37	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/12/21 09:27	07/14/21 23:37	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:37	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:37	1
3,3'-Dichlorobenzidine	ND	*+	9.5	2.5	ug/L		07/12/21 09:27	07/14/21 23:37	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/12/21 09:27	07/14/21 23:37	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/12/21 09:27	07/14/21 23:37	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 23:37	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:37	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/12/21 09:27	07/14/21 23:37	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/12/21 09:27	07/14/21 23:37	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/12/21 09:27	07/14/21 23:37	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 23:37	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/12/21 09:27	07/14/21 23:37	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:37	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:37	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/12/21 09:27	07/14/21 23:37	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		07/12/21 09:27	07/14/21 23:37	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/12/21 09:27	07/14/21 23:37	1
Indene	ND		9.5	0.95	ug/L		07/12/21 09:27	07/14/21 23:37	1
Isophorone	ND		9.5	0.13	ug/L		07/12/21 09:27	07/14/21 23:37	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 23:37	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/12/21 09:27	07/14/21 23:37	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/12/21 09:27	07/14/21 23:37	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/12/21 09:27	07/14/21 23:37	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/12/21 09:27	07/14/21 23:37	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/12/21 09:27	07/14/21 23:37	1
2-Nitrophenol	ND		9.5	5.0	ug/L		07/12/21 09:27	07/14/21 23:37	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/12/21 09:27	07/14/21 23:37	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 23:37	1

Client Sample ID: MW12-ROX-070921
Date Collected: 07/09/21 13:40
Date Received: 07/10/21 09:29

Lab Sample ID: 400-205797-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/12/21 09:27	07/14/21 23:37	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/12/21 09:27	07/14/21 23:37	1
Pentachlorophenol	ND		19	1.3	ug/L		07/12/21 09:27	07/14/21 23:37	1
Phenol	ND		9.5	2.5	ug/L		07/12/21 09:27	07/14/21 23:37	1
Pyridine	3.1	J	9.5	3.0	ug/L		07/12/21 09:27	07/14/21 23:37	1
Quinoline	ND		9.5	4.3	ug/L		07/12/21 09:27	07/14/21 23:37	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/12/21 09:27	07/14/21 23:37	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/12/21 09:27	07/14/21 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*46 - 124*	*07/12/21 09:27*	*07/14/21 23:37*	*1*
2-Fluorophenol	*24*		*13 - 113*	*07/12/21 09:27*	*07/14/21 23:37*	*1*
Nitrobenzene-d5	*80*		*36 - 126*	*07/12/21 09:27*	*07/14/21 23:37*	*1*
Phenol-d5	*42*		*17 - 127*	*07/12/21 09:27*	*07/14/21 23:37*	*1*
Terphenyl-d14	*96*		*44 - 149*	*07/12/21 09:27*	*07/14/21 23:37*	*1*
2,4,6-Tribromophenol	*52*		*26 - 150*	*07/12/21 09:27*	*07/14/21 23:37*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/21/21 09:17	07/21/21 23:49	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/21/21 09:17	07/21/21 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*	*p*	*51 - 149*	*07/21/21 09:17*	*07/21/21 23:49*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-205797-2	TB-ROX-070921-8260-B	78	101	98
400-205797-3	MW6C-ROX-070921-EB	79	103	99
400-205797-4	MW6C-ROX-070921	77	104	96
400-205797-5	MW6B-ROX-070921	77	101	98
400-205797-6	MW6A-ROX-070921	79	107	98
400-205797-8	TB-ROX-070921-8260-A	77	102	97
400-205797-9	P54-ROX-070921	78	101	101
400-205797-9 MS	P54-ROX-070921	81	98	99
400-205797-9 MSD	P54-ROX-070921	83	99	98
400-205797-10	MW24-ROX-070921	79	102	99
400-205797-11	MW26-ROX-070921	78	106	99
400-205797-12	MW12-ROX-070921	77	101	97
LCS 400-539734/1002	Lab Control Sample	81	97	100
MB 400-539734/4	Method Blank	81	101	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-205797-3	MW6C-ROX-070921-EB	95	12 S1-	77	47	115	72
400-205797-4	MW6C-ROX-070921	102	29	82	68	118	112
400-205797-5	MW6B-ROX-070921	94	41	77	65	99	108
400-205797-6	MW6A-ROX-070921	108	15	86	52	109	122
400-205797-9	P54-ROX-070921	100	44	85	72	119	93
400-205797-9 MS	P54-ROX-070921	92	38	81	69	108	131
400-205797-9 MSD	P54-ROX-070921	93	41	83	70	110	132
400-205797-10	MW24-ROX-070921	98	7 S1-	79	32	116	78
400-205797-11	MW26-ROX-070921	99	23	82	39	94	70
400-205797-12	MW12-ROX-070921	98	24	80	42	96	52
LCS 400-538958/2-A	Lab Control Sample	96	32	84	64	116	134
LCS 400-538958/3-A	Lab Control Sample	99	37	81	67	115	87
LCSD 400-538958/4-A	Lab Control Sample Dup	98	32	80	58	120	79
MB 400-538958/1-A	Method Blank	107	22	88	66	125	107

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-205797-3	MW6C-ROX-070921-EB	120	89	182 S1+
400-205797-4	MW6C-ROX-070921	139 S1+	106	204 S1+
400-205797-5	MW6B-ROX-070921	135 S1+	110	175 S1+
400-205797-6	MW6A-ROX-070921	131 S1+	101	163 S1+
400-205797-9	P54-ROX-070921	100	95	115
400-205797-9 MS	P54-ROX-070921	83	103	94
400-205797-9 MSD	P54-ROX-070921	90	89	101
400-205797-10	MW24-ROX-070921	128 S1+	95	172 S1+
400-205797-11	MW26-ROX-070921	124 S1+	115	117
400-205797-12	MW12-ROX-070921	136 S1+	92	137
LCS 400-538958/2-A	Lab Control Sample	95	87	111
MB 400-538958/1-A	Method Blank	141 S1+	108	229 S1+

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-205797-1	TB-ROX-070921-8011-B	94
400-205797-3	MW6C-ROX-070921-EB	92
400-205797-4	MW6C-ROX-070921	95 p
400-205797-5	MW6B-ROX-070921	90 p
400-205797-6	MW6A-ROX-070921	97 p
400-205797-7	TB-ROX-070921-8011-A	96
400-205797-9	P54-ROX-070921	94 p
400-205797-9 MS	P54-ROX-070921	107 p
400-205797-9 MSD	P54-ROX-070921	112 p
400-205797-10	MW24-ROX-070921	96 p
400-205797-11	MW26-ROX-070921	99 p
400-205797-12	MW12-ROX-070921	98 p
LCS 400-540220/2-A	Lab Control Sample	111
MB 400-540220/1-A	Method Blank	97

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: TB-ROX-070921-8011-B

Lab Sample ID: 400-205797-1
Matrix: Water
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 19:26	DS	TAL PEN

Client Sample ID: TB-ROX-070921-8260-B

Lab Sample ID: 400-205797-2
Matrix: Water
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 18:36	WPD	TAL PEN

Client Sample ID: MW6C-ROX-070921-EB

Lab Sample ID: 400-205797-3
Matrix: Water
Date Collected: 07/09/21 08:10
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 21:22	WPD	TAL PEN
Total/NA	Prep	3520C			263 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 21:31	S1B	TAL PEN
Total/NA	Prep	3520C			263 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 17:58	PP1	TAL PEN
Total/NA	Prep	8011			33.9 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 20:06	DS	TAL PEN

Client Sample ID: MW6C-ROX-070921

Lab Sample ID: 400-205797-4
Matrix: Water
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 22:45	WPD	TAL PEN
Total/NA	Prep	3520C			244.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 21:52	S1B	TAL PEN
Total/NA	Prep	3520C			244.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 18:14	PP1	TAL PEN
Total/NA	Prep	8011			33.2 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 20:27	DS	TAL PEN

Client Sample ID: MW6B-ROX-070921

Lab Sample ID: 400-205797-5
Matrix: Water
Date Collected: 07/09/21 11:15
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 23:12	WPD	TAL PEN
Total/NA	Prep	3520C			249.8 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 22:13	S1B	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: MW6B-ROX-070921

Lab Sample ID: 400-205797-5
Matrix: Water
Date Collected: 07/09/21 11:15
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			249.8 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 18:29	PP1	TAL PEN
Total/NA	Prep	8011			34.1 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 20:47	DS	TAL PEN

Client Sample ID: MW6A-ROX-070921

Lab Sample ID: 400-205797-6
Matrix: Water
Date Collected: 07/09/21 12:30
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 23:40	WPD	TAL PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 22:34	S1B	TAL PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 18:45	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 21:07	DS	TAL PEN

Client Sample ID: TB-ROX-070921-8011-A

Lab Sample ID: 400-205797-7
Matrix: Water
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.6 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 21:27	DS	TAL PEN

Client Sample ID: TB-ROX-070921-8260-A

Lab Sample ID: 400-205797-8
Matrix: Water
Date Collected: 07/09/21 00:00
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 19:03	WPD	TAL PEN

Client Sample ID: P54-ROX-070921

Lab Sample ID: 400-205797-9
Matrix: Water
Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 19:31	WPD	TAL PEN
Total/NA	Prep	3520C			260.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 21:10	S1B	TAL PEN
Total/NA	Prep	3520C			260.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 13:58	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 21:47	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: MW24-ROX-070921

Lab Sample ID: 400-205797-10

Date Collected: 07/09/21 11:50
Matrix: Water
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/17/21 00:07	WPD	TAL PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 22:55	S1B	TAL PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 19:47	PP1	TAL PEN
Total/NA	Prep	8011			33.7 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 22:48	DS	TAL PEN

Client Sample ID: MW26-ROX-070921

Lab Sample ID: 400-205797-11

Date Collected: 07/09/21 12:45
Matrix: Water
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/17/21 00:35	WPD	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 23:16	S1B	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 20:02	PP1	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 23:08	DS	TAL PEN

Client Sample ID: MW12-ROX-070921

Lab Sample ID: 400-205797-12

Date Collected: 07/09/21 13:40
Matrix: Water
Date Received: 07/10/21 09:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/17/21 01:03	WPD	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 23:37	S1B	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 20:18	PP1	TAL PEN
Total/NA	Prep	8011			34 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 23:49	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-538958/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 19:04	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539211	07/13/21 16:41	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-539734/4
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 18:08	WPD	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-540220/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 16:23	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-538958/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 19:25	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			539211	07/13/21 16:56	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-538958/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 19:46	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-539734/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 17:07	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540220/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 16:44	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-538958/4-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 20:07	S1B	TAL PEN

Client Sample ID: P54-ROX-070921

Lab Sample ID: 400-205797-9 MS

Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 19:58	WPD	TAL PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 20:28	S1B	TAL PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			539211	07/13/21 19:16	PP1	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 22:08	DS	TAL PEN

Client Sample ID: P54-ROX-070921

Lab Sample ID: 400-205797-9 MSD

Date Collected: 07/09/21 10:40
Date Received: 07/10/21 09:29

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539734	07/16/21 20:26	WPD	TAL PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539339	07/14/21 20:49	S1B	TAL PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	538958	07/12/21 09:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			539211	07/13/21 19:31	PP1	TAL PEN
Total/NA	Prep	8011			33.9 mL	35 mL	540220	07/21/21 09:17	DS	TAL PEN
Total/NA	Analysis	8011		1			540243	07/21/21 22:28	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 539734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-2	TB-ROX-070921-8260-B	Total/NA	Water	8260B	
400-205797-3	MW6C-ROX-070921-EB	Total/NA	Water	8260B	
400-205797-4	MW6C-ROX-070921	Total/NA	Water	8260B	
400-205797-5	MW6B-ROX-070921	Total/NA	Water	8260B	
400-205797-6	MW6A-ROX-070921	Total/NA	Water	8260B	
400-205797-8	TB-ROX-070921-8260-A	Total/NA	Water	8260B	
400-205797-9	P54-ROX-070921	Total/NA	Water	8260B	
400-205797-10	MW24-ROX-070921	Total/NA	Water	8260B	
400-205797-11	MW26-ROX-070921	Total/NA	Water	8260B	
400-205797-12	MW12-ROX-070921	Total/NA	Water	8260B	
MB 400-539734/4	Method Blank	Total/NA	Water	8260B	
LCS 400-539734/1002	Lab Control Sample	Total/NA	Water	8260B	
400-205797-9 MS	P54-ROX-070921	Total/NA	Water	8260B	
400-205797-9 MSD	P54-ROX-070921	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 538958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-3	MW6C-ROX-070921-EB	Total/NA	Water	3520C	
400-205797-4	MW6C-ROX-070921	Total/NA	Water	3520C	
400-205797-5	MW6B-ROX-070921	Total/NA	Water	3520C	
400-205797-6	MW6A-ROX-070921	Total/NA	Water	3520C	
400-205797-9	P54-ROX-070921	Total/NA	Water	3520C	
400-205797-10	MW24-ROX-070921	Total/NA	Water	3520C	
400-205797-11	MW26-ROX-070921	Total/NA	Water	3520C	
400-205797-12	MW12-ROX-070921	Total/NA	Water	3520C	
MB 400-538958/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-538958/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-538958/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-538958/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-205797-9 MS	P54-ROX-070921	Total/NA	Water	3520C	
400-205797-9 MSD	P54-ROX-070921	Total/NA	Water	3520C	

Analysis Batch: 539211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-3	MW6C-ROX-070921-EB	Total/NA	Water	8270D LL	538958
400-205797-4	MW6C-ROX-070921	Total/NA	Water	8270D LL	538958
400-205797-5	MW6B-ROX-070921	Total/NA	Water	8270D LL	538958
400-205797-6	MW6A-ROX-070921	Total/NA	Water	8270D LL	538958
400-205797-10	MW24-ROX-070921	Total/NA	Water	8270D LL	538958
400-205797-11	MW26-ROX-070921	Total/NA	Water	8270D LL	538958
400-205797-12	MW12-ROX-070921	Total/NA	Water	8270D LL	538958
MB 400-538958/1-A	Method Blank	Total/NA	Water	8270D LL	538958
LCS 400-538958/2-A	Lab Control Sample	Total/NA	Water	8270D LL	538958
400-205797-9 MS	P54-ROX-070921	Total/NA	Water	8270D LL	538958
400-205797-9 MSD	P54-ROX-070921	Total/NA	Water	8270D LL	538958

Analysis Batch: 539339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-3	MW6C-ROX-070921-EB	Total/NA	Water	8270D	538958

GC/MS Semi VOA (Continued)

Analysis Batch: 539339 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-4	MW6C-ROX-070921	Total/NA	Water	8270D	538958
400-205797-5	MW6B-ROX-070921	Total/NA	Water	8270D	538958
400-205797-6	MW6A-ROX-070921	Total/NA	Water	8270D	538958
400-205797-9	P54-ROX-070921	Total/NA	Water	8270D	538958
400-205797-10	MW24-ROX-070921	Total/NA	Water	8270D	538958
400-205797-11	MW26-ROX-070921	Total/NA	Water	8270D	538958
400-205797-12	MW12-ROX-070921	Total/NA	Water	8270D	538958
MB 400-538958/1-A	Method Blank	Total/NA	Water	8270D	538958
LCS 400-538958/2-A	Lab Control Sample	Total/NA	Water	8270D	538958
LCS 400-538958/3-A	Lab Control Sample	Total/NA	Water	8270D	538958
LCSD 400-538958/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	538958
400-205797-9 MS	P54-ROX-070921	Total/NA	Water	8270D	538958
400-205797-9 MSD	P54-ROX-070921	Total/NA	Water	8270D	538958

Analysis Batch: 540521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-9	P54-ROX-070921	Total/NA	Water	8270D LL	538958

GC Semi VOA

Prep Batch: 540220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-1	TB-ROX-070921-8011-B	Total/NA	Water	8011	
400-205797-3	MW6C-ROX-070921-EB	Total/NA	Water	8011	
400-205797-4	MW6C-ROX-070921	Total/NA	Water	8011	
400-205797-5	MW6B-ROX-070921	Total/NA	Water	8011	
400-205797-6	MW6A-ROX-070921	Total/NA	Water	8011	
400-205797-7	TB-ROX-070921-8011-A	Total/NA	Water	8011	
400-205797-9	P54-ROX-070921	Total/NA	Water	8011	
400-205797-10	MW24-ROX-070921	Total/NA	Water	8011	
400-205797-11	MW26-ROX-070921	Total/NA	Water	8011	
400-205797-12	MW12-ROX-070921	Total/NA	Water	8011	
MB 400-540220/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-540220/2-A	Lab Control Sample	Total/NA	Water	8011	
400-205797-9 MS	P54-ROX-070921	Total/NA	Water	8011	
400-205797-9 MSD	P54-ROX-070921	Total/NA	Water	8011	

Analysis Batch: 540243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-1	TB-ROX-070921-8011-B	Total/NA	Water	8011	540220
400-205797-3	MW6C-ROX-070921-EB	Total/NA	Water	8011	540220
400-205797-4	MW6C-ROX-070921	Total/NA	Water	8011	540220
400-205797-5	MW6B-ROX-070921	Total/NA	Water	8011	540220
400-205797-6	MW6A-ROX-070921	Total/NA	Water	8011	540220
400-205797-7	TB-ROX-070921-8011-A	Total/NA	Water	8011	540220
400-205797-9	P54-ROX-070921	Total/NA	Water	8011	540220
400-205797-10	MW24-ROX-070921	Total/NA	Water	8011	540220
400-205797-11	MW26-ROX-070921	Total/NA	Water	8011	540220
400-205797-12	MW12-ROX-070921	Total/NA	Water	8011	540220
MB 400-540220/1-A	Method Blank	Total/NA	Water	8011	540220
LCS 400-540220/2-A	Lab Control Sample	Total/NA	Water	8011	540220

GC Semi VOA (Continued)

Analysis Batch: 540243 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205797-9 MS	P54-ROX-070921	Total/NA	Water	8011	540220
400-205797-9 MSD	P54-ROX-070921	Total/NA	Water	8011	540220

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

Lab Sample ID: MB 400-539734/4
Matrix: Water
Analysis Batch: 539734

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/16/21 18:08	1
Acrolein	ND		20	10	ug/L			07/16/21 18:08	1
Acrylonitrile	ND		10	2.8	ug/L			07/16/21 18:08	1
Benzene	ND		1.0	0.38	ug/L			07/16/21 18:08	1
Bromobenzene	ND		1.0	0.54	ug/L			07/16/21 18:08	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/16/21 18:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Bromoform	ND		5.0	0.71	ug/L			07/16/21 18:08	1
Bromomethane	ND		1.0	0.98	ug/L			07/16/21 18:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/16/21 18:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Chloroethane	ND		1.0	0.76	ug/L			07/16/21 18:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/16/21 18:08	1
Chloroform	ND		1.0	0.60	ug/L			07/16/21 18:08	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/16/21 18:08	1
Chloromethane	ND		1.0	0.83	ug/L			07/16/21 18:08	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 18:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/21 18:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/16/21 18:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/16/21 18:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/16/21 18:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/16/21 18:08	1
2-Hexanone	ND		25	3.1	ug/L			07/16/21 18:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/16/21 18:08	1
Methylene bromide	ND		5.0	0.59	ug/L			07/16/21 18:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/16/21 18:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/16/21 18:08	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/16/21 18:08	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/16/21 18:08	1
Naphthalene	ND		1.0	1.0	ug/L			07/16/21 18:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/16/21 18:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/16/21 18:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/16/21 18:08	1
o-Xylene	ND		5.0	0.60	ug/L			07/16/21 18:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/16/21 18:08	1

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

Lab Sample ID: MB 400-539734/4
Matrix: Water
Analysis Batch: 539734

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/16/21 18:08	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/16/21 18:08	1
Styrene	ND		1.0	1.0	ug/L			07/16/21 18:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/16/21 18:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/16/21 18:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/16/21 18:08	1
Toluene	ND		1.0	0.41	ug/L			07/16/21 18:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/16/21 18:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/16/21 18:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/16/21 18:08	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/16/21 18:08	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/16/21 18:08	1
Trichloroethene	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/16/21 18:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/16/21 18:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/16/21 18:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/16/21 18:08	1
Vinyl acetate	ND		25	2.0	ug/L			07/16/21 18:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/16/21 18:08	1
Xylenes, Total	ND		10	1.6	ug/L			07/16/21 18:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*72 - 119*		*07/16/21 18:08*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/16/21 18:08*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/16/21 18:08*	*1*

Lab Sample ID: LCS 400-539734/1002
Matrix: Water
Analysis Batch: 539734

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	363	*+	ug/L		182	43 - 160
Acrolein	500	509		ug/L		102	38 - 160
Acrylonitrile	500	366		ug/L		73	64 - 142
Benzene	50.0	54.0		ug/L		108	70 - 130
Bromobenzene	50.0	57.1		ug/L		114	70 - 132
Bromochloromethane	50.0	52.4		ug/L		105	70 - 130
Bromodichloromethane	50.0	46.1		ug/L		92	67 - 133
Bromoform	50.0	49.4		ug/L		99	57 - 140
Bromomethane	50.0	64.5		ug/L		129	10 - 160
2-Butanone (MEK)	200	367	*+	ug/L		184	61 - 145
Carbon disulfide	50.0	53.8		ug/L		108	61 - 137
Carbon tetrachloride	50.0	49.1		ug/L		98	61 - 137
Chlorobenzene	50.0	53.4		ug/L		107	70 - 130
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
Chloroethane	50.0	50.0		ug/L		100	55 - 141

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

Lab Sample ID: LCS 400-539734/1002
Matrix: Water
Analysis Batch: 539734

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	30.8		ug/L		62	10 - 160
Chloroform	50.0	49.5		ug/L		99	69 - 130
1-Chlorohexane	50.0	43.9		ug/L		88	69 - 130
Chloromethane	50.0	31.8		ug/L		64	58 - 137
cis-1,2-Dichloroethene	50.0	53.1		ug/L		106	68 - 130
cis-1,3-Dichloropropene	50.0	51.3		ug/L		103	69 - 132
1,2-Dichlorobenzene	50.0	55.5		ug/L		111	67 - 130
1,3-Dichlorobenzene	50.0	60.1		ug/L		120	70 - 130
1,4-Dichlorobenzene	50.0	61.7		ug/L		123	70 - 130
Dichlorodifluoromethane	50.0	30.8		ug/L		62	41 - 146
1,1-Dichloroethane	50.0	46.4		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	40.1		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	53.8		ug/L		108	63 - 134
1,2-Dichloropropane	50.0	46.8		ug/L		94	70 - 130
1,3-Dichloropropane	50.0	49.7		ug/L		99	70 - 130
2,2-Dichloropropane	50.0	49.2		ug/L		98	52 - 135
1,1-Dichloropropene	50.0	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	53.9		ug/L		108	70 - 130
Ethyl methacrylate	50.0	51.7		ug/L		103	68 - 130
Hexachlorobutadiene	50.0	75.5	*+	ug/L		151	53 - 140
2-Hexanone	200	235		ug/L		118	65 - 137
Isopropylbenzene	50.0	54.6		ug/L		109	70 - 130
Methylene bromide	50.0	50.3		ug/L		101	70 - 130
Methylene Chloride	50.0	55.3		ug/L		111	66 - 135
4-Methyl-2-pentanone (MIBK)	200	167		ug/L		84	69 - 138
Methyl tert-butyl ether	50.0	50.7		ug/L		101	66 - 130
m-Xylene & p-Xylene	50.0	51.2		ug/L		102	70 - 130
Naphthalene	50.0	49.0		ug/L		98	47 - 149
n-Butylbenzene	50.0	52.5		ug/L		105	67 - 130
N-Propylbenzene	50.0	53.2		ug/L		106	70 - 130
o-Chlorotoluene	50.0	49.0		ug/L		98	70 - 130
o-Xylene	50.0	51.0		ug/L		102	70 - 130
p-Chlorotoluene	50.0	47.8		ug/L		96	70 - 130
p-Isopropyltoluene	50.0	53.3		ug/L		107	65 - 130
sec-Butylbenzene	50.0	50.7		ug/L		101	66 - 130
Styrene	50.0	51.7		ug/L		103	70 - 130
tert-Butylbenzene	50.0	49.0		ug/L		98	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/L		107	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.2		ug/L		92	70 - 131
Tetrachloroethene	50.0	62.0		ug/L		124	65 - 130
Toluene	50.0	50.5		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	53.0		ug/L		106	70 - 130
trans-1,3-Dichloropropene	50.0	48.2		ug/L		96	63 - 130
1,2,3-Trichlorobenzene	50.0	63.5		ug/L		127	60 - 138
1,2,4-Trichlorobenzene	50.0	63.6		ug/L		127	60 - 140
1,1,1-Trichloroethane	50.0	46.1		ug/L		92	68 - 130
1,1,2-Trichloroethane	50.0	50.4		ug/L		101	70 - 130
Trichloroethene	50.0	58.5		ug/L		117	70 - 130
Trichlorofluoromethane	50.0	47.4		ug/L		95	65 - 138

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

Lab Sample ID: LCS 400-539734/1002
Matrix: Water
Analysis Batch: 539734

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	43.0		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	46.9		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	50.0	47.7		ug/L		95	69 - 130
Vinyl acetate	100	121		ug/L		121	26 - 160
Vinyl chloride	50.0	44.1		ug/L		88	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*72 - 119*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 539734

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*+	200	174		ug/L		87	43 - 150
Acrolein	ND		500	588		ug/L		118	38 - 150
Acrylonitrile	ND		500	429		ug/L		86	62 - 149
Benzene	ND		50.0	54.9		ug/L		110	56 - 142
Bromobenzene	ND		50.0	56.1		ug/L		112	59 - 136
Bromochloromethane	ND		50.0	54.3		ug/L		109	64 - 140
Bromodichloromethane	ND		50.0	49.4		ug/L		99	59 - 143
Bromoform	ND		50.0	54.3		ug/L		109	50 - 140
Bromomethane	ND		50.0	54.8		ug/L		110	10 - 150
2-Butanone (MEK)	ND	*+	200	248		ug/L		124	55 - 150
Carbon disulfide	ND		50.0	54.2		ug/L		108	48 - 150
Carbon tetrachloride	ND		50.0	48.7		ug/L		97	55 - 145
Chlorobenzene	ND		50.0	53.6		ug/L		107	64 - 130
Dibromochloromethane	ND		50.0	50.3		ug/L		101	56 - 143
Chloroethane	ND		50.0	46.9		ug/L		94	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	51.2		ug/L		102	60 - 141
1-Chlorohexane	ND		50.0	41.2		ug/L		82	56 - 136
Chloromethane	ND		50.0	32.0		ug/L		64	49 - 148
cis-1,2-Dichloroethene	ND		50.0	53.6		ug/L		107	59 - 143
cis-1,3-Dichloropropene	ND		50.0	53.2		ug/L		106	57 - 140
1,2-Dichlorobenzene	ND		50.0	56.3		ug/L		113	52 - 137
1,3-Dichlorobenzene	ND		50.0	59.2		ug/L		118	54 - 135
1,4-Dichlorobenzene	ND		50.0	59.2		ug/L		118	53 - 135
Dichlorodifluoromethane	ND		50.0	31.1		ug/L		62	16 - 150
1,1-Dichloroethane	ND		50.0	47.7		ug/L		95	61 - 144
1,2-Dichloroethane	ND		50.0	43.4		ug/L		87	60 - 141
1,1-Dichloroethene	ND		50.0	53.5		ug/L		107	54 - 147
1,2-Dichloropropane	ND		50.0	48.8		ug/L		98	66 - 137
1,3-Dichloropropane	ND		50.0	53.0		ug/L		106	66 - 133
2,2-Dichloropropane	ND		50.0	49.9		ug/L		100	42 - 144

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

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 539734

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	51.3		ug/L		103	65 - 136
Ethylbenzene	ND		50.0	51.2		ug/L		102	58 - 131
Ethyl methacrylate	ND		50.0	56.4		ug/L		113	64 - 130
Hexachlorobutadiene	ND	*+	50.0	66.4		ug/L		133	31 - 149
2-Hexanone	ND		200	163		ug/L		81	65 - 140
Isopropylbenzene	ND		50.0	52.7		ug/L		105	56 - 133
Methylene bromide	ND		50.0	53.8		ug/L		108	63 - 138
Methylene Chloride	ND		50.0	55.2		ug/L		110	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	175		ug/L		87	63 - 146
Methyl tert-butyl ether	ND		50.0	56.6		ug/L		113	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.2		ug/L		98	57 - 130
Naphthalene	ND		50.0	53.0		ug/L		106	25 - 150
n-Butylbenzene	ND		50.0	47.4		ug/L		95	41 - 142
N-Propylbenzene	ND		50.0	50.1		ug/L		100	51 - 138
o-Chlorotoluene	ND		50.0	47.2		ug/L		94	53 - 134
o-Xylene	ND		50.0	50.4		ug/L		101	61 - 130
p-Chlorotoluene	ND		50.0	46.1		ug/L		92	54 - 133
p-Isopropyltoluene	ND		50.0	50.1		ug/L		100	48 - 139
sec-Butylbenzene	ND		50.0	47.5		ug/L		95	50 - 138
Styrene	ND		50.0	50.3		ug/L		101	58 - 131
tert-Butylbenzene	ND		50.0	46.0		ug/L		92	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	53.4		ug/L		107	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	53.3		ug/L		107	66 - 135
Tetrachloroethene	ND		50.0	53.9		ug/L		108	52 - 133
Toluene	ND		50.0	50.2		ug/L		100	65 - 130
trans-1,2-Dichloroethene	ND		50.0	53.7		ug/L		107	61 - 143
trans-1,3-Dichloropropene	ND		50.0	50.5		ug/L		101	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	62.5		ug/L		125	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	59.5		ug/L		119	39 - 148
1,1,1-Trichloroethane	ND		50.0	47.2		ug/L		94	57 - 142
1,1,2-Trichloroethane	ND		50.0	52.9		ug/L		106	66 - 131
Trichloroethene	ND		50.0	57.5		ug/L		115	64 - 136
Trichlorofluoromethane	ND		50.0	46.0		ug/L		92	54 - 150
1,2,3-Trichloropropane	ND		50.0	48.6		ug/L		97	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	45.2		ug/L		90	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	45.4		ug/L		91	52 - 135
Vinyl acetate	ND		100	138		ug/L		138	26 - 150
Vinyl chloride	ND		50.0	44.2		ug/L		88	46 - 150
Xylenes, Total	ND		100	99.5		ug/L		100	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*72 - 119*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: 400-205797-9 MSD
Matrix: Water
Analysis Batch: 539734

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*+	200	175		ug/L		87	43 - 150	1	30
Acrolein	ND		500	583		ug/L		117	38 - 150	1	31
Acrylonitrile	ND		500	418		ug/L		84	62 - 149	3	30
Benzene	ND		50.0	53.1		ug/L		106	56 - 142	3	30
Bromobenzene	ND		50.0	54.8		ug/L		110	59 - 136	2	30
Bromochloromethane	ND		50.0	50.9		ug/L		102	64 - 140	6	30
Bromodichloromethane	ND		50.0	47.4		ug/L		95	59 - 143	4	30
Bromoform	ND		50.0	54.5		ug/L		109	50 - 140	0	30
Bromomethane	ND		50.0	57.9		ug/L		116	10 - 150	6	50
2-Butanone (MEK)	ND	*+	200	250		ug/L		125	55 - 150	1	30
Carbon disulfide	ND		50.0	52.0		ug/L		104	48 - 150	4	30
Carbon tetrachloride	ND		50.0	47.6		ug/L		95	55 - 145	2	30
Chlorobenzene	ND		50.0	51.4		ug/L		103	64 - 130	4	30
Dibromochloromethane	ND		50.0	50.1		ug/L		100	56 - 143	1	30
Chloroethane	ND		50.0	47.8		ug/L		96	50 - 150	2	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	49.0		ug/L		98	60 - 141	4	30
1-Chlorohexane	ND		50.0	40.0		ug/L		80	56 - 136	3	30
Chloromethane	ND		50.0	29.8		ug/L		60	49 - 148	7	31
cis-1,2-Dichloroethene	ND		50.0	52.6		ug/L		105	59 - 143	2	30
cis-1,3-Dichloropropene	ND		50.0	51.5		ug/L		103	57 - 140	3	30
1,2-Dichlorobenzene	ND		50.0	54.8		ug/L		110	52 - 137	3	30
1,3-Dichlorobenzene	ND		50.0	58.5		ug/L		117	54 - 135	1	30
1,4-Dichlorobenzene	ND		50.0	57.0		ug/L		114	53 - 135	4	30
Dichlorodifluoromethane	ND		50.0	30.7		ug/L		61	16 - 150	1	31
1,1-Dichloroethane	ND		50.0	46.2		ug/L		92	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	42.0		ug/L		84	60 - 141	3	30
1,1-Dichloroethene	ND		50.0	52.0		ug/L		104	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	46.1		ug/L		92	66 - 137	6	30
1,3-Dichloropropane	ND		50.0	51.3		ug/L		103	66 - 133	3	30
2,2-Dichloropropane	ND		50.0	47.8		ug/L		96	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	51.7		ug/L		103	65 - 136	1	30
Ethylbenzene	ND		50.0	49.8		ug/L		100	58 - 131	3	30
Ethyl methacrylate	ND		50.0	55.5		ug/L		111	64 - 130	2	30
Hexachlorobutadiene	ND	*+	50.0	65.8		ug/L		132	31 - 149	1	36
2-Hexanone	ND		200	161		ug/L		80	65 - 140	1	30
Isopropylbenzene	ND		50.0	50.5		ug/L		101	56 - 133	4	30
Methylene bromide	ND		50.0	53.5		ug/L		107	63 - 138	1	30
Methylene Chloride	ND		50.0	53.1		ug/L		106	60 - 146	4	32
4-Methyl-2-pentanone (MIBK)	ND		200	171		ug/L		86	63 - 146	2	30
Methyl tert-butyl ether	ND		50.0	54.5		ug/L		109	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	47.8		ug/L		96	57 - 130	3	30
Naphthalene	ND		50.0	53.6		ug/L		107	25 - 150	1	30
n-Butylbenzene	ND		50.0	48.0		ug/L		96	41 - 142	1	31
N-Propylbenzene	ND		50.0	48.9		ug/L		98	51 - 138	2	30
o-Chlorotoluene	ND		50.0	46.5		ug/L		93	53 - 134	1	30
o-Xylene	ND		50.0	48.0		ug/L		96	61 - 130	5	30
p-Chlorotoluene	ND		50.0	44.8		ug/L		90	54 - 133	3	30

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

Lab Sample ID: 400-205797-9 MSD
Matrix: Water
Analysis Batch: 539734

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	49.8		ug/L		100	48 - 139	1	30
sec-Butylbenzene	ND		50.0	48.2		ug/L		96	50 - 138	1	30
Styrene	ND		50.0	48.4		ug/L		97	58 - 131	4	30
tert-Butylbenzene	ND		50.0	46.2		ug/L		92	54 - 146	0	30
1,1,1,2-Tetrachloroethane	ND		50.0	51.7		ug/L		103	59 - 137	3	30
1,1,2,2-Tetrachloroethane	ND		50.0	52.5		ug/L		105	66 - 135	2	30
Tetrachloroethene	ND		50.0	52.2		ug/L		104	52 - 133	3	30
Toluene	ND		50.0	48.6		ug/L		97	65 - 130	3	30
trans-1,2-Dichloroethene	ND		50.0	52.2		ug/L		104	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	48.4		ug/L		97	53 - 133	4	30
1,2,3-Trichlorobenzene	ND		50.0	62.5		ug/L		125	43 - 145	0	30
1,2,4-Trichlorobenzene	ND		50.0	60.2		ug/L		120	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	46.1		ug/L		92	57 - 142	2	30
1,1,2-Trichloroethane	ND		50.0	50.4		ug/L		101	66 - 131	5	30
Trichloroethene	ND		50.0	57.5		ug/L		115	64 - 136	0	30
Trichlorofluoromethane	ND		50.0	46.2		ug/L		92	54 - 150	1	30
1,2,3-Trichloropropane	ND		50.0	48.4		ug/L		97	65 - 133	0	30
1,2,4-Trimethylbenzene	ND		50.0	45.1		ug/L		90	50 - 139	0	30
1,3,5-Trimethylbenzene	ND		50.0	45.1		ug/L		90	52 - 135	1	30
Vinyl acetate	ND		100	137		ug/L		137	26 - 150	1	33
Vinyl chloride	ND		50.0	42.2		ug/L		84	46 - 150	5	30
Xylenes, Total	ND		100	95.9		ug/L		96	59 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*83*		*72 - 119*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
Benzenethiol	ND		10	1.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
Benzoic acid	ND		30	7.3	ug/L		07/12/21 09:27	07/14/21 19:04	1
Benzyl alcohol	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 19:04	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/12/21 09:27	07/14/21 19:04	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/12/21 09:27	07/14/21 19:04	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Chloroaniline	ND		10	3.4	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Chlorophenol	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 19:04	1

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

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Dibenzofuran	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Diethyl phthalate	ND		10	0.24	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/12/21 09:27	07/14/21 19:04	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
1,4-Dioxane	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/12/21 09:27	07/14/21 19:04	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
Hexachloroethane	ND		10	4.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
Indene	ND		10	1.0	ug/L		07/12/21 09:27	07/14/21 19:04	1
Isophorone	ND		10	0.14	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Methylphenol	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Nitroaniline	ND		10	2.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
3-Nitroaniline	ND		10	1.8	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Nitroaniline	ND		10	1.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
Nitrobenzene	ND		10	0.13	ug/L		07/12/21 09:27	07/14/21 19:04	1
2-Nitrophenol	ND		10	5.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
4-Nitrophenol	ND		10	2.1	ug/L		07/12/21 09:27	07/14/21 19:04	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/12/21 09:27	07/14/21 19:04	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/12/21 09:27	07/14/21 19:04	1
Pentachlorophenol	ND		20	1.4	ug/L		07/12/21 09:27	07/14/21 19:04	1
Phenol	ND		10	2.6	ug/L		07/12/21 09:27	07/14/21 19:04	1
Pyridine	ND		10	3.2	ug/L		07/12/21 09:27	07/14/21 19:04	1
Quinoline	ND		10	4.5	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/12/21 09:27	07/14/21 19:04	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/21 09:27	07/14/21 19:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*46 - 124*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
2-Fluorophenol	*22*		*13 - 113*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
Nitrobenzene-d5	*88*		*36 - 126*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
Phenol-d5	*66*		*17 - 127*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
Terphenyl-d14	*125*		*44 - 149*	*07/12/21 09:27*	*07/14/21 19:04*	*1*
2,4,6-Tribromophenol	*107*		*26 - 150*	*07/12/21 09:27*	*07/14/21 19:04*	*1*

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

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	86.4		ug/L		72	21 - 120
Benzoic acid	502	151		ug/L		30	10 - 144
Benzyl alcohol	120	81.6		ug/L		68	28 - 120
Bis(2-chloroethoxy)methane	120	91.1		ug/L		76	47 - 120
Bis(2-chloroethyl)ether	120	86.0		ug/L		72	44 - 120
bis (2-chloroisopropyl) ether	120	71.7		ug/L		60	33 - 121
Bis(2-ethylhexyl) phthalate	120	120		ug/L		100	52 - 147
4-Bromophenyl phenyl ether	120	135		ug/L		113	54 - 122
Butyl benzyl phthalate	120	118		ug/L		98	54 - 133
4-Chloroaniline	120	80.7		ug/L		67	26 - 120
4-Chloro-3-methylphenol	120	112		ug/L		93	48 - 131
2-Chloronaphthalene	120	109		ug/L		91	52 - 121
2-Chlorophenol	120	69.3		ug/L		58	40 - 120
4-Chlorophenyl phenyl ether	120	123		ug/L		102	56 - 125
Dibenz[a,h]acridine	120	115		ug/L		96	31 - 150
Dibenzofuran	120	114		ug/L		95	56 - 122
3,3'-Dichlorobenzidine	160	217	*+	ug/L		136	36 - 132
2,4-Dichlorophenol	120	95.7		ug/L		80	49 - 120
Diethyl phthalate	120	117		ug/L		98	50 - 137
2,4-Dimethylphenol	120	105		ug/L		88	48 - 120
Dimethyl phthalate	120	116		ug/L		97	57 - 124
Di-n-butyl phthalate	120	125		ug/L		105	58 - 126
4,6-Dinitro-ortho-cresol	240	186		ug/L		77	23 - 148
2,4-Dinitrophenol	240	174		ug/L		73	10 - 150
2,4-Dinitrotoluene	120	118		ug/L		99	54 - 142
2,6-Dinitrotoluene	120	119		ug/L		99	55 - 130
Di-n-octyl phthalate	120	117		ug/L		97	57 - 138
1,4-Dioxane	120	73.2		ug/L		61	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	96.3		ug/L		80	45 - 124
Hexachlorobenzene	120	145		ug/L		121	52 - 129
Hexachlorocyclopentadiene	120	54.0		ug/L		45	10 - 134
Hexachloroethane	120	95.5		ug/L		80	20 - 120
Indene	120	104		ug/L		87	49 - 120
Isophorone	120	91.3		ug/L		76	48 - 120
2-Methylphenol	120	103		ug/L		86	46 - 124
3 & 4 Methylphenol	120	90.7		ug/L		76	45 - 120
2-Nitroaniline	120	94.7		ug/L		79	51 - 145
3-Nitroaniline	120	86.8		ug/L		72	37 - 127
4-Nitroaniline	120	99.7		ug/L		83	36 - 137
Nitrobenzene	120	87.9		ug/L		73	45 - 120
2-Nitrophenol	120	83.6		ug/L		70	40 - 124
4-Nitrophenol	240	202		ug/L		84	23 - 146
N-Nitrosodimethylamine	120	87.3		ug/L		73	29 - 137
N-Nitrosodi-n-propylamine	120	99.0		ug/L		83	45 - 120
N-Nitrosodiphenylamine	119	115		ug/L		97	54 - 120
Pentachlorophenol	240	217		ug/L		90	31 - 130
Phenol	120	82.6		ug/L		69	11 - 120
Pyridine	240	141		ug/L		59	16 - 120

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

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	107		ug/L		89	49 - 130
2,4,5-Trichlorophenol	120	105		ug/L		88	51 - 136
2,4,6-Trichlorophenol	120	104		ug/L		87	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*96*		*46 - 124*
2-Fluorophenol	*32*		*13 - 113*
Nitrobenzene-d5	*84*		*36 - 126*
Phenol-d5	*64*		*17 - 127*
Terphenyl-d14	*116*		*44 - 149*
2,4,6-Tribromophenol	*134*		*26 - 150*

Lab Sample ID: LCS 400-538958/3-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	49.3		ug/L		41	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*99*		*46 - 124*
2-Fluorophenol	*37*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*67*		*17 - 127*
Terphenyl-d14	*115*		*44 - 149*
2,4,6-Tribromophenol	*87*		*26 - 150*

Lab Sample ID: LCSD 400-538958/4-A
Matrix: Water
Analysis Batch: 539339

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	50.6		ug/L		42	10 - 120	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*46 - 124*
2-Fluorophenol	*32*		*13 - 113*
Nitrobenzene-d5	*80*		*36 - 126*
Phenol-d5	*58*		*17 - 127*
Terphenyl-d14	*120*		*44 - 149*
2,4,6-Tribromophenol	*79*		*26 - 150*

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 539339

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		114	77.8		ug/L		69	10 - 120

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

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 539339

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzoic acid	ND		475	208		ug/L		44	10 - 149
Benzyl alcohol	ND		114	72.1		ug/L		64	33 - 120
Bis(2-chloroethoxy)methane	ND		114	82.6		ug/L		73	26 - 120
Bis(2-chloroethyl)ether	ND		114	76.9		ug/L		68	42 - 120
bis (2-chloroisopropyl) ether	ND		114	64.1		ug/L		56	28 - 120
Bis(2-ethylhexyl) phthalate	ND		114	106		ug/L		94	39 - 120
4-Bromophenyl phenyl ether	ND		114	120		ug/L		106	40 - 120
Butyl benzyl phthalate	ND		114	105		ug/L		92	45 - 120
4-Chloroaniline	ND		114	74.5		ug/L		66	10 - 120
4-Chloro-3-methylphenol	ND		114	105		ug/L		92	34 - 120
2-Chloronaphthalene	ND		114	96.9		ug/L		85	39 - 120
2-Chlorophenol	ND		114	76.1		ug/L		67	25 - 120
4-Chlorophenyl phenyl ether	ND		114	112		ug/L		99	44 - 120
Dibenz[a,h]acridine	ND		113	104		ug/L		91	50 - 150
Dibenzofuran	ND		114	103		ug/L		91	25 - 130
3,3'-Dichlorobenzidine	ND	*+ F1	151	196	F1	ug/L		130	10 - 120
2,4-Dichlorophenol	ND		114	96.5		ug/L		85	31 - 120
Diethyl phthalate	0.70	J	114	107		ug/L		94	46 - 120
2,4-Dimethylphenol	ND		114	95.7		ug/L		84	21 - 120
Dimethyl phthalate	ND		114	105		ug/L		92	38 - 120
Di-n-butyl phthalate	ND		114	114		ug/L		100	49 - 120
4,6-Dinitro-ortho-cresol	ND		227	175		ug/L		77	25 - 120
2,4-Dinitrophenol	ND		227	169		ug/L		74	15 - 140
2,4-Dinitrotoluene	ND		114	109		ug/L		96	53 - 120
2,6-Dinitrotoluene	ND		114	108		ug/L		95	43 - 120
Di-n-octyl phthalate	ND		114	104		ug/L		92	35 - 121
1,4-Dioxane	ND		114	62.8		ug/L		55	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		114	86.3		ug/L		76	50 - 150
Hexachlorobenzene	ND		114	131		ug/L		115	38 - 122
Hexachlorocyclopentadiene	ND		114	44.9		ug/L		40	10 - 120
Hexachloroethane	ND		114	82.5		ug/L		73	10 - 150
Indene	ND		114	92.6		ug/L		82	50 - 150
Isophorone	ND		114	82.4		ug/L		73	42 - 120
2-Methylphenol	ND		114	101		ug/L		89	28 - 120
3 & 4 Methylphenol	ND		114	88.0		ug/L		78	31 - 120
2-Nitroaniline	ND		114	85.9		ug/L		76	45 - 120
3-Nitroaniline	ND		114	79.4		ug/L		70	10 - 130
4-Nitroaniline	ND		114	89.6		ug/L		79	10 - 132
Nitrobenzene	ND		114	81.2		ug/L		72	39 - 120
2-Nitrophenol	ND		114	90.4		ug/L		80	33 - 120
4-Nitrophenol	ND		227	188		ug/L		83	10 - 120
N-Nitrosodimethylamine	ND		114	75.7		ug/L		67	10 - 139
N-Nitrosodi-n-propylamine	ND		114	88.2		ug/L		78	37 - 124
N-Nitrosodiphenylamine	ND		113	102		ug/L		91	10 - 150
Pentachlorophenol	ND		227	194		ug/L		85	29 - 130
Phenol	ND		114	82.6		ug/L		73	10 - 150
Pyridine	ND		227	127		ug/L		56	10 - 120
Quinoline	ND		113	95.5		ug/L		84	51 - 120

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

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 539339

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		114	100		ug/L		88	34 - 120
2,4,6-Trichlorophenol	ND		114	99.4		ug/L		88	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*46 - 124*
2-Fluorophenol	*38*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*69*		*17 - 127*
Terphenyl-d14	*108*		*44 - 149*
2,4,6-Tribromophenol	*131*		*26 - 150*

Lab Sample ID: 400-205797-9 MSD
Matrix: Water
Analysis Batch: 539339

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		114	78.7		ug/L		69	10 - 120	1	63
Benzoic acid	ND		477	216		ug/L		45	10 - 149	3	49
Benzyl alcohol	ND		114	70.3		ug/L		62	33 - 120	3	37
Bis(2-chloroethoxy)methane	ND		114	83.7		ug/L		73	26 - 120	1	70
Bis(2-chloroethyl)ether	ND		114	80.0		ug/L		70	42 - 120	4	42
bis (2-chloroisopropyl) ether	ND		114	65.1		ug/L		57	28 - 120	1	41
Bis(2-ethylhexyl) phthalate	ND		114	108		ug/L		95	39 - 120	2	35
4-Bromophenyl phenyl ether	ND		114	122		ug/L		107	40 - 120	1	30
Butyl benzyl phthalate	ND		114	108		ug/L		94	45 - 120	2	32
4-Chloroaniline	ND		114	55.6		ug/L		49	10 - 120	29	94
4-Chloro-3-methylphenol	ND		114	108		ug/L		95	34 - 120	3	40
2-Chloronaphthalene	ND		114	101		ug/L		88	39 - 120	4	29
2-Chlorophenol	ND		114	80.8		ug/L		71	25 - 120	6	42
4-Chlorophenyl phenyl ether	ND		114	114		ug/L		100	44 - 120	1	27
Dibenz[a,h]acridine	ND		114	100		ug/L		88	50 - 150	3	40
Dibenzofuran	ND		114	105		ug/L		92	25 - 130	2	29
3,3'-Dichlorobenzidine	ND	*+ F1	152	190	F1	ug/L		125	10 - 120	3	58
2,4-Dichlorophenol	ND		114	102		ug/L		90	31 - 120	6	43
Diethyl phthalate	0.70	J	114	109		ug/L		95	46 - 120	2	40
2,4-Dimethylphenol	ND		114	99.9		ug/L		88	21 - 120	4	47
Dimethyl phthalate	ND		114	107		ug/L		94	38 - 120	2	36
Di-n-butyl phthalate	ND		114	114		ug/L		100	49 - 120	1	32
4,6-Dinitro-ortho-cresol	ND		228	179		ug/L		78	25 - 120	2	42
2,4-Dinitrophenol	ND		228	171		ug/L		75	15 - 140	1	36
2,4-Dinitrotoluene	ND		114	111		ug/L		97	53 - 120	2	28
2,6-Dinitrotoluene	ND		114	112		ug/L		98	43 - 120	4	28
Di-n-octyl phthalate	ND		114	107		ug/L		93	35 - 121	2	35
1,4-Dioxane	ND		114	64.8		ug/L		57	50 - 150	3	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		114	87.7		ug/L		77	50 - 150	2	40
Hexachlorobenzene	ND		114	133		ug/L		117	38 - 122	2	33
Hexachlorocyclopentadiene	ND		114	47.9		ug/L		42	10 - 120	6	50
Hexachloroethane	ND		114	85.0		ug/L		75	10 - 150	3	41

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

Lab Sample ID: 400-205797-9 MSD
Matrix: Water
Analysis Batch: 539339

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	ND		114	95.0		ug/L		83	50 - 150	3	40
Isophorone	ND		114	84.8		ug/L		74	42 - 120	3	33
2-Methylphenol	ND		114	102		ug/L		89	28 - 120	0	47
3 & 4 Methylphenol	ND		114	89.2		ug/L		78	31 - 120	1	47
2-Nitroaniline	ND		114	88.7		ug/L		78	45 - 120	3	33
3-Nitroaniline	ND		114	78.5		ug/L		69	10 - 130	1	39
4-Nitroaniline	ND		114	81.5		ug/L		71	10 - 132	9	50
Nitrobenzene	ND		114	84.1		ug/L		74	39 - 120	4	35
2-Nitrophenol	ND		114	94.5		ug/L		83	33 - 120	4	43
4-Nitrophenol	ND		228	174		ug/L		76	10 - 120	8	82
N-Nitrosodimethylamine	ND		114	79.7		ug/L		70	10 - 139	5	62
N-Nitrosodi-n-propylamine	ND		114	90.5		ug/L		79	37 - 124	3	36
N-Nitrosodiphenylamine	ND		113	104		ug/L		92	10 - 150	1	34
Pentachlorophenol	ND		228	201		ug/L		88	29 - 130	4	42
Phenol	ND		114	85.2		ug/L		75	10 - 150	3	52
Pyridine	ND		228	136		ug/L		60	10 - 120	7	55
Quinoline	ND		114	99.7		ug/L		88	51 - 120	4	40
2,4,5-Trichlorophenol	ND		114	105		ug/L		92	34 - 120	5	42
2,4,6-Trichlorophenol	ND		114	104		ug/L		91	33 - 120	5	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*46 - 124*
2-Fluorophenol	*41*		*13 - 113*
Nitrobenzene-d5	*83*		*36 - 126*
Phenol-d5	*70*		*17 - 127*
Terphenyl-d14	*110*		*44 - 149*
2,4,6-Tribromophenol	*132*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 16:41	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/21 09:27	07/13/21 16:41	1
Anthracene	ND		0.20	0.032	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/12/21 09:27	07/13/21 16:41	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/12/21 09:27	07/13/21 16:41	1
Chrysene	ND		0.20	0.074	ug/L		07/12/21 09:27	07/13/21 16:41	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/12/21 09:27	07/13/21 16:41	1
Fluoranthene	ND		0.20	0.068	ug/L		07/12/21 09:27	07/13/21 16:41	1
Fluorene	ND		0.20	0.11	ug/L		07/12/21 09:27	07/13/21 16:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/12/21 09:27	07/13/21 16:41	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/12/21 09:27	07/13/21 16:41	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-538958/1-A
Matrix: Water
Analysis Batch: 539211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 538958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/12/21 09:27	07/13/21 16:41	1
Phenanthrene	ND		0.20	0.036	ug/L		07/12/21 09:27	07/13/21 16:41	1
Pyrene	ND		0.20	0.040	ug/L		07/12/21 09:27	07/13/21 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*141*	*S1+*	*15 - 122*	*07/12/21 09:27*	*07/13/21 16:41*	*1*
Nitrobenzene-d5	*108*		*19 - 130*	*07/12/21 09:27*	*07/13/21 16:41*	*1*
Terphenyl-d14	*229*	*S1+*	*33 - 138*	*07/12/21 09:27*	*07/13/21 16:41*	*1*

Lab Sample ID: LCS 400-538958/2-A
Matrix: Water
Analysis Batch: 539211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	120		ug/L		100	41 - 120
Acenaphthylene	120	122		ug/L		102	44 - 120
Anthracene	120	117		ug/L		98	49 - 120
Benzo[a]anthracene	120	123		ug/L		103	61 - 135
Benzo[a]pyrene	120	121		ug/L		100	52 - 120
Benzo[b]fluoranthene	120	112		ug/L		93	53 - 134
Benzo[g,h,i]perylene	120	123		ug/L		102	47 - 133
Benzo[k]fluoranthene	120	113		ug/L		94	57 - 134
Chrysene	120	111		ug/L		93	55 - 122
Dibenz(a,h)anthracene	120	143		ug/L		119	48 - 146
Fluoranthene	120	121		ug/L		101	54 - 128
Fluorene	120	141		ug/L		118	45 - 125
Indeno[1,2,3-cd]pyrene	120	133		ug/L		111	43 - 142
1-Methylnaphthalene	120	103		ug/L		86	41 - 120
2-Methylnaphthalene	120	108		ug/L		90	32 - 124
Phenanthrene	120	118		ug/L		98	48 - 120
Pyrene	120	138		ug/L		115	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*95*		*15 - 122*
Nitrobenzene-d5	*87*		*19 - 130*
Terphenyl-d14	*111*		*33 - 138*

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 539211

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		114	102		ug/L		90	35 - 113
Acenaphthylene	ND		114	101		ug/L		89	41 - 118
Anthracene	ND		114	97.8		ug/L		86	45 - 122
Benzo[a]anthracene	ND		114	99.6		ug/L		88	55 - 133
Benzo[a]pyrene	ND		114	96.0		ug/L		85	50 - 108
Benzo[b]fluoranthene	ND		114	93.6		ug/L		82	50 - 128

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 539211

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	ND		114	99.0		ug/L		87	46 - 133
Benzo[k]fluoranthene	ND		114	91.5		ug/L		81	52 - 128
Chrysene	ND		114	92.5		ug/L		81	52 - 116
Dibenz(a,h)anthracene	ND		114	122		ug/L		107	52 - 143
Fluoranthene	ND		114	99.5		ug/L		88	32 - 150
Fluorene	ND		114	119		ug/L		105	15 - 150
Indeno[1,2,3-cd]pyrene	ND		114	111		ug/L		97	41 - 141
1-Methylnaphthalene	0.17	J	114	88.5		ug/L		78	10 - 150
2-Methylnaphthalene	0.23		114	91.5		ug/L		80	10 - 150
Phenanthrene	ND		114	100		ug/L		88	36 - 125
Pyrene	ND		114	115		ug/L		101	41 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*15 - 122*
Nitrobenzene-d5	*103*		*19 - 130*
Terphenyl-d14	*94*		*33 - 138*

Lab Sample ID: 400-205797-9 MSD
Matrix: Water
Analysis Batch: 539211

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 538958

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		114	106		ug/L		93	35 - 113	4	49
Acenaphthylene	ND		114	106		ug/L		93	41 - 118	5	48
Anthracene	ND		114	104		ug/L		91	45 - 122	6	56
Benzo[a]anthracene	ND		114	104		ug/L		91	55 - 133	4	57
Benzo[a]pyrene	ND		114	101		ug/L		89	50 - 108	5	59
Benzo[b]fluoranthene	ND		114	99.9		ug/L		88	50 - 128	6	62
Benzo[g,h,i]perylene	ND		114	99.8		ug/L		88	46 - 133	1	58
Benzo[k]fluoranthene	ND		114	94.7		ug/L		83	52 - 128	3	58
Chrysene	ND		114	96.6		ug/L		85	52 - 116	4	59
Dibenz(a,h)anthracene	ND		114	124		ug/L		109	52 - 143	1	60
Fluoranthene	ND		114	109		ug/L		95	32 - 150	9	59
Fluorene	ND		114	124		ug/L		109	15 - 150	4	49
Indeno[1,2,3-cd]pyrene	ND		114	115		ug/L		101	41 - 141	3	58
1-Methylnaphthalene	0.17	J	114	86.6		ug/L		76	10 - 150	2	66
2-Methylnaphthalene	0.23		114	87.5		ug/L		77	10 - 150	4	66
Phenanthrene	ND		114	104		ug/L		91	36 - 125	4	69
Pyrene	ND		114	122		ug/L		107	41 - 127	6	58

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*15 - 122*
Nitrobenzene-d5	*89*		*19 - 130*
Terphenyl-d14	*101*		*33 - 138*

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-540220/1-A
Matrix: Water
Analysis Batch: 540243

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540220

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/21/21 09:17	07/21/21 16:23	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/21/21 09:17	07/21/21 16:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*07/21/21 09:17*	*07/21/21 16:23*	*1*

Lab Sample ID: LCS 400-540220/2-A
Matrix: Water
Analysis Batch: 540243

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.106		ug/L		105	60 - 140
1,2-Dibromoethane	0.101	0.107		ug/L		106	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*51 - 149*

Lab Sample ID: 400-205797-9 MS
Matrix: Water
Analysis Batch: 540243

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 540220

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.103	0.109		ug/L		106	10 - 150
1,2-Dibromoethane	ND		0.103	0.104		ug/L		101	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*	*p*	*51 - 149*

Lab Sample ID: 400-205797-9 MSD
Matrix: Water
Analysis Batch: 540243

Client Sample ID: P54-ROX-070921
Prep Type: Total/NA
Prep Batch: 540220

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		0.104	0.109		ug/L		105	10 - 150	1	20
1,2-Dibromoethane	ND		0.104	0.108	p	ug/L		104	39 - 150	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*112*	*p*	*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/9/21
PO #	**GSAP Project ID**	PAGE: 1 of 2
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington;

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

SAMPLER NAME(S) Print: Mary D'Angelo, Joe Mayer

LAB USE ONLY

TELEPHONE: 314-429-0100 — FAX: 314-429-0462 — Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° — Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

400-205797 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-070921-8011-B	7/9/2021	0000	Water	2					2		X		
	TB-ROX-070921-8260-B	7/9/2021	0000	Water	2					2	X			
	MW6C-ROX-070921-EB	7/9/2021	0810	Water	6			2		8	X	X	X	X
	MW6C-ROX-070921	7/9/2021	1040	Water	6			2		8	X	X	X	X
	MW6B-ROX-070921	7/9/2021	1115	Water	6			2		8	X	X	X	X
	MW6A-ROX-070921	7/9/2021	1230	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature) M D'Angelo — Received by: (Signature) FEDEX: 5174 1258 5739 / 5174 1258 5728 / 5174 1258 5717 — Date: 7/9/21 — Time: 1500

Relinquished by: (Signature) — Received by: (Signature) — Date: — Time:

Relinquished by: (Signature) — Received by: (Signature) — Date: 7-10-21 — Time: 9:29

CUSTODY SEALS: 1003507 / 1003506 / 1003509 / 1003508 / 1003510 / 1003511

2.9c, 0.8c, 1.0c IR7

Version: 2Apr21

Page 73 of 76

7/26/2021

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG | ☐ PIPELINE | ☐ RETAIL
☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES
☐ TRANSPORTATION | ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/9/21
PO #	**GSAP Project ID**	PAGE: 2 of 2
60648474 -- 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60648474 -- 3.2.3F
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington
PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122
E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com
AECOM Other ID:
SAMPLER NAME(S) (Print): Tony Jones, Aaron Oliver
LAB USE ONLY:

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60648474 -- 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-070921-8011-A	7/9/2021	0000	Water	2					2		X			
	TB-ROX-070921-8260-A	7/9/2021	0000	Water	2					2	X				
	P54-ROX-070921	7/9/2021	1040	Water	6			2		8	X	X	X	X	
	P54-ROX-070921-MS	7/9/2021	1040	Water	6			2		8	X	X	X	X	
	P54-ROX-070921-MSD	7/9/2021	1040	Water	6			2		8	X	X	X	X	
	MW24-ROX-070921	7/9/2021	1150	Water	6			2		8	X	X	X	X	
	MW26-ROX-070921	7/9/2021	1245	Water	6			2		8	X	X	X	X	
	MW12-ROX-070921	7/9/2021	1340	Water	6			2		8	X	X	X	X	

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	FEDEX: See page 1	7/9/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7.10.21	Time: 9:29

CUSTODY SEALS: See page 1

2.9°c, 0.8°c, 1.0°c IR7

Version: 2Apr21

Page 74 of 79

7/26/2021

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-205797-1

Login Number: 205797
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9°C, 0.8°C, 1.0°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205797-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-205857-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/18/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-071221-8011-A	TB-ROX-071221-8260-A
MW16-ROX-071221	MW11-ROX-071221
MW1-ROX-071221	MW3-ROX-071221
TB-ROX-071221-8011-B	TB-ROX-071221-8260-B
MW6D-ROX-071221	P93C-ROX-071221
P114R-ROX-071221	MW13-ROX-071221

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated several VOC and SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, for several analytes were outside evaluation criteria. Several SVOC/PAH surrogates were outside criteria in several investigative and quality control samples. Several VOC and SVOC MS/MSD recoveries and/or MS/MSD RPDs were outside evaluation criteria in sample P114R-ROX-071221. Although not indicated in the laboratory case narrative, the SVOC internal standard recovery for 1,4-dichlorobenzene-d_4 was outside criteria in sample P93C-ROX-071221. The continuing calibration verification for benzyl alcohol was outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-539831/1003	VOCs	Acetone	**210**	NA	43-160
LCS 400-539831/1003	VOCs	2-Butanone (MEK)	**210**	NA	61-145
LCS 400-539313/2-A	SVOCs	3,3'-Dichlorobenzidine	**147**	NA	36-132
LCS/LCSD 400-539313/3-A/4-A	SVOCs	Benzenethiol	**5/7**	**NaN**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-539313/3-A/4-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-071221	SVOCs	Benzenethiol	**UJ**
MW11-ROX-071221	SVOCs	Benzenethiol	**UJ**
MW1-ROX-071221	SVOCs	Benzenethiol	**UJ**
MW3-ROX-071221	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-071221	SVOCs	Benzenethiol	**UJ**
P93C-ROX-071221	SVOCs	Benzenethiol	**UJ**
P114R-ROX-071221	SVOCs	Benzenethiol	**UJ**
MW13-ROX-071221	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW11-ROX-071221	PAHs	Terphenyl-d_{14}	**145**	33-138
P114R-ROX-071221	SVOCs	2,4,6-Tribromophenol	**160**	26-150
MW13-ROX-071221	SVOCs	2,4,6-Tribromophenol	**154**	26-150
P114R-ROX-071221 MS	SVOCs	2,4,6-Tribromophenol	**161**	26-150
MB 400-539313/1-A	PAHs	Terphenyl-d_{14}	**145**	33-138

Qualifications due to surrogate recoveries were not required if only one of three acid or base/neutral SVOC surrogate recoveries were outside evaluation criteria. Matrix spike and method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

Yes, sample P114R-ROX-071221 was spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P114R-ROX-071221	VOCs	2-Chloroethyl vinyl ether	10/**0**	**NC**	10-150/50
P114R-ROX-071221	SVOCs	2-Chlorophenol	78/48	**47**	25-120/42
P114R-ROX-071221	SVOCs	4,6-Dinitro-ortho-cresol	**125**/108	14	25-120/42
P114R-ROX-071221	SVOCs	Hexachlorobenzene	**125/125**	1	38-122/33
P114R-ROX-071221	SVOCs	Pentachlorophenol	**135**/125	7	29-130/42

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification. Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-071221	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
P93C-ROX-071221	SVOCs	1,4-Dichlorobenzene-d_4	**608156**	303456	151728-606912

Analytical data associated with internal standard recoveries outside evaluation criteria were non-detect and did not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for benzyl alcohol was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-071221	SVOCs	Benzyl alcohol	**UJ**
MW11-ROX-071221	SVOCs	Benzyl alcohol	**UJ**
MW1-ROX-071221	SVOCs	Benzyl alcohol	**UJ**
MW3-ROX-071221	SVOCs	Benzyl alcohol	**UJ**
MW6D-ROX-071221	SVOCs	Benzyl alcohol	**UJ**
P114R-ROX-071221	SVOCs	Benzyl alcohol	**UJ**
MW13-ROX-071221	SVOCs	Benzyl alcohol	**UJ**

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-205857-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
7/29/2021 2:17:25 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

Links

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Reviewed 8/18/2021 MR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Detection Summary 6
Client Sample Results 8
Definitions 46
Surrogate Summary 47
Method Summary 49
Chronicle 50
QC Association 56
QC Sample Results 59
Chain of Custody 76
Receipt Checklists 78
Certification Summary 79

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Job ID: 400-205857-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-205857-1

Comments
No additional comments.

Receipt
The samples were received on 7/13/2021 9:39 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.1° C, 1.2° C and 1.4° C.

GC/MS VOA
Method 8260B: The laboratory control sample (LCS) for analytical batch 400-539831 recovered outside control limits for the following analytes: Acetone and 2-Butanone (MEK). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-539831 recovered above the upper control limit for Acetone, 2-Butanone (MEK) and Vinyl acetate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071221-8260-A (400-205857-2), MW16-ROX-071221 (400-205857-3), MW11-ROX-071221 (400-205857-4), MW1-ROX-071221 (400-205857-5), MW3-ROX-071221 (400-205857-6), TB-ROX-071221-8260-B (400-205857-8), MW6D-ROX-071221 (400-205857-9), P93C-ROX-071221 (400-205857-10), P114R-ROX-071221 (400-205857-11) and MW13-ROX-071221 (400-205857-12). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 400-539831 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-539831 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 400-539572 recovered outside acceptance criteria, low biased, for Benzyl alcohol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-539572 recovered above the upper control limit for 4-Bromophenyl phenyl ether and Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-539313 and analytical batch 400-539572 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-539313 and analytical batch 400-539572 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-539670 recovered above the upper control limit for Hexachloroethane, N-Nitrosodimethylamine, 2,2'-oxybis[1-chloropropane], N-Nitrosodi-n-propylamine and Benzyl alcohol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-205857-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540203 recovered above the upper control limit for Di-n-butyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-540002 and analytical batch 400-540203 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: Sample was re-extracted to verify a 6.7 ug/L Bis(2-ethylhexyl) phthalate detection. Both sets of data are reported. MW3-ROX-071221 (400-205857-6)

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-539313 and analytical batch 400-539572 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW11-ROX-071221 (400-205857-4) and (MB 400-539313/1-A). These results have been reported and qualified.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-540855 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

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

VOA Prep

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-205857-1	TB-ROX-071221-8011-A	Water	07/12/21 00:00	07/13/21 09:39
400-205857-2	TB-ROX-071221-8260-A	Water	07/12/21 00:00	07/13/21 09:39
400-205857-3	MW16-ROX-071221	Water	07/12/21 08:50	07/13/21 09:39
400-205857-4	MW11-ROX-071221	Water	07/12/21 09:40	07/13/21 09:39
400-205857-5	MW1-ROX-071221	Water	07/12/21 10:30	07/13/21 09:39
400-205857-6	MW3-ROX-071221	Water	07/12/21 12:25	07/13/21 09:39
400-205857-7	TB-ROX-071221-8011-B	Water	07/12/21 00:00	07/13/21 09:39
400-205857-8	TB-ROX-071221-8260-B	Water	07/12/21 00:00	07/13/21 09:39
400-205857-9	MW6D-ROX-071221	Water	07/12/21 09:05	07/13/21 09:39
400-205857-10	P93C-ROX-071221	Water	07/12/21 11:00	07/13/21 09:39
400-205857-11	P114R-ROX-071221	Water	07/12/21 12:35	07/13/21 09:39
400-205857-11 MS	P114R-ROX-071221	Water	07/12/21 12:35	07/13/21 09:39
400-205857-11 MSD	P114R-ROX-071221	Water	07/12/21 12:35	07/13/21 09:39
400-205857-12	MW13-ROX-071221	Water	07/12/21 14:00	07/13/21 09:39

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: TB-ROX-071221-8011-A — Lab Sample ID: 400-205857-1

No Detections.

Client Sample ID: TB-ROX-071221-8260-A — Lab Sample ID: 400-205857-2

No Detections.

Client Sample ID: MW16-ROX-071221 — Lab Sample ID: 400-205857-3

No Detections.

Client Sample ID: MW11-ROX-071221 — Lab Sample ID: 400-205857-4

No Detections.

Client Sample ID: MW1-ROX-071221 — Lab Sample ID: 400-205857-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.76	J	1.0	0.74	ug/L	1		8260B	Total/NA
Diethyl phthalate	0.39	J	9.6	0.23	ug/L	1		8270D	Total/NA
Di-n-butyl phthalate	2.8	J	9.6	2.6	ug/L	1		8270D	Total/NA

Client Sample ID: MW3-ROX-071221 — Lab Sample ID: 400-205857-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.65	J	1.0	0.38	ug/L	1		8260B	Total/NA
Isopropylbenzene	13		1.0	0.53	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.79	J	1.0	0.74	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	30		5.0	1.6	ug/L	1		8260B	Total/NA
N-Propylbenzene	23		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	3.8	J	5.0	0.60	ug/L	1		8260B	Total/NA
sec-Butylbenzene	0.78	J	1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.66	J	1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	9.6		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	34		10	1.6	ug/L	1		8260B	Total/NA
Diethyl phthalate	0.60	J	9.5	0.23	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-071221-8011-B — Lab Sample ID: 400-205857-7

No Detections.

Client Sample ID: TB-ROX-071221-8260-B — Lab Sample ID: 400-205857-8

No Detections.

Client Sample ID: MW6D-ROX-071221 — Lab Sample ID: 400-205857-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	1.6		0.21	0.078	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.078	J	0.21	0.063	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	1.0	J	11	0.25	ug/L	1		8270D	Total/NA

Client Sample ID: P93C-ROX-071221 — Lab Sample ID: 400-205857-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.4		1.0	0.74	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: P114R-ROX-071221

Lab Sample ID: 400-205857-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.1		1.0	0.74	ug/L	1		8260B	Total/NA
Benzoic acid	21	J	32	7.9	ug/L	1		8270D	Total/NA
Bis(2-ethylhexyl) phthalate	5.9	J	11	5.4	ug/L	1		8270D	Total/NA
Dibenz[a,h]acridine	4.3	J	11	1.1	ug/L	1		8270D	Total/NA

Client Sample ID: MW13-ROX-071221

Lab Sample ID: 400-205857-12

No Detections.

This Detection Summary does not include radiochemical test results.

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: TB-ROX-071221-8011-A
Date Collected: 07/12/21 00:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/26/21 09:13	07/26/21 16:17	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/26/21 09:13	07/26/21 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*07/26/21 09:13*	*07/26/21 16:17*	*1*

Client Sample ID: TB-ROX-071221-8260-A

Date Collected: 07/12/21 00:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 09:09	1
Acrolein	ND		20	10	ug/L			07/18/21 09:09	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 09:09	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 09:09	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 09:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 09:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 09:09	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 09:09	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 09:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 09:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 09:09	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 09:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 09:09	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 09:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 09:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 09:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 09:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 09:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 09:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 09:09	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 09:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 09:09	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 09:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 09:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 09:09	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/21 09:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 09:09	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 09:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 09:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 09:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 09:09	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 09:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 09:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 09:09	1

Client Sample ID: TB-ROX-071221-8260-A
Date Collected: 07/12/21 00:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 09:09	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 09:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 09:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 09:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 09:09	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 09:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 09:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 09:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 09:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 09:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 09:09	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 09:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 09:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 09:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 09:09	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 09:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 09:09	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 09:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/18/21 09:09*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/18/21 09:09*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/18/21 09:09*	*1*

Client Sample ID: MW16-ROX-071221
Date Collected: 07/12/21 08:50
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 10:23	1
Acrolein	ND		20	10	ug/L			07/18/21 10:23	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 10:23	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 10:23	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 10:23	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 10:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 10:23	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 10:23	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 10:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 10:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 10:23	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 10:23	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 10:23	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 10:23	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 10:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 10:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 10:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 10:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 10:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 10:23	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 10:23	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 10:23	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 10:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 10:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 10:23	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/21 10:23	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 10:23	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 10:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 10:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 10:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 10:23	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 10:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 10:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 10:23	1

Client Sample ID: MW16-ROX-071221
Date Collected: 07/12/21 08:50
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 10:23	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 10:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 10:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 10:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 10:23	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 10:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 10:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 10:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 10:23	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:23	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 10:23	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 10:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 10:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 10:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 10:23	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 10:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 10:23	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/18/21 10:23*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/18/21 10:23*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/18/21 10:23*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/14/21 09:53	07/16/21 12:57	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/14/21 09:53	07/16/21 12:57	1
Anthracene	ND		0.19	0.030	ug/L		07/14/21 09:53	07/16/21 12:57	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/14/21 09:53	07/16/21 12:57	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/14/21 09:53	07/16/21 12:57	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/14/21 09:53	07/16/21 12:57	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/14/21 09:53	07/15/21 21:13	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/14/21 09:53	07/16/21 12:57	1
Chrysene	ND		0.19	0.070	ug/L		07/14/21 09:53	07/16/21 12:57	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/14/21 09:53	07/15/21 21:13	1
Fluoranthene	ND		0.19	0.065	ug/L		07/14/21 09:53	07/16/21 12:57	1
Fluorene	ND		0.19	0.10	ug/L		07/14/21 09:53	07/16/21 12:57	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/14/21 09:53	07/15/21 21:13	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		07/14/21 09:53	07/16/21 12:57	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/14/21 09:53	07/16/21 12:57	1
Phenanthrene	ND		0.19	0.034	ug/L		07/14/21 09:53	07/16/21 12:57	1
Pyrene	ND		0.19	0.038	ug/L		07/14/21 09:53	07/16/21 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*15 - 122*	*07/14/21 09:53*	*07/16/21 12:57*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*07/14/21 09:53*	*07/16/21 12:57*	*1*

Client Sample ID: MW16-ROX-071221
Date Collected: 07/12/21 08:50
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	111		33 - 138	07/14/21 09:53	07/16/21 12:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/14/21 09:53	07/15/21 20:44	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		07/14/21 09:53	07/15/21 20:44	1
Benzoic acid	ND		28	6.9	ug/L		07/14/21 09:53	07/15/21 20:44	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		07/14/21 09:53	07/15/21 20:44	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/14/21 09:53	07/15/21 20:44	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/14/21 09:53	07/15/21 20:44	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/14/21 09:53	07/15/21 20:44	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		07/14/21 09:53	07/15/21 20:44	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/14/21 09:53	07/15/21 20:44	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/14/21 09:53	07/15/21 20:44	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/14/21 09:53	07/15/21 20:44	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/14/21 09:53	07/15/21 20:44	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/14/21 09:53	07/15/21 20:44	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/14/21 09:53	07/15/21 20:44	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/14/21 09:53	07/15/21 20:44	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 20:44	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 20:44	1
3,3'-Dichlorobenzidine	ND	*+	9.5	2.5	ug/L		07/14/21 09:53	07/15/21 20:44	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		07/14/21 09:53	07/15/21 20:44	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/14/21 09:53	07/15/21 20:44	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 20:44	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 20:44	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/14/21 09:53	07/15/21 20:44	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/14/21 09:53	07/15/21 20:44	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/14/21 09:53	07/15/21 20:44	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/14/21 09:53	07/15/21 20:44	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/14/21 09:53	07/15/21 20:44	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 20:44	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 20:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 20:44	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 20:44	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/14/21 09:53	07/15/21 20:44	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/14/21 09:53	07/15/21 20:44	1
Indene	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 20:44	1
Isophorone	ND		9.5	0.13	ug/L		07/14/21 09:53	07/15/21 20:44	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/14/21 09:53	07/15/21 20:44	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/14/21 09:53	07/15/21 20:44	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/14/21 09:53	07/15/21 20:44	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/14/21 09:53	07/15/21 20:44	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/14/21 09:53	07/15/21 20:44	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/14/21 09:53	07/15/21 20:44	1
2-Nitrophenol	ND		9.5	4.9	ug/L		07/14/21 09:53	07/15/21 20:44	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/14/21 09:53	07/15/21 20:44	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 20:44	1

Client Sample ID: MW16-ROX-071221
Date Collected: 07/12/21 08:50
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/14/21 09:53	07/15/21 20:44	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/14/21 09:53	07/15/21 20:44	1
Pentachlorophenol	ND		19	1.3	ug/L		07/14/21 09:53	07/15/21 20:44	1
Phenol	ND		9.5	2.5	ug/L		07/14/21 09:53	07/15/21 20:44	1
Pyridine	ND		9.5	3.0	ug/L		07/14/21 09:53	07/15/21 20:44	1
Quinoline	ND		9.5	4.3	ug/L		07/14/21 09:53	07/15/21 20:44	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/14/21 09:53	07/15/21 20:44	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*46 - 124*	*07/14/21 09:53*	*07/15/21 20:44*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/14/21 09:53*	*07/15/21 20:44*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/14/21 09:53*	*07/15/21 20:44*	*1*
Phenol-d5	*59*		*17 - 127*	*07/14/21 09:53*	*07/15/21 20:44*	*1*
Terphenyl-d14	*105*		*44 - 149*	*07/14/21 09:53*	*07/15/21 20:44*	*1*
2,4,6-Tribromophenol	*120*		*26 - 150*	*07/14/21 09:53*	*07/15/21 20:44*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/26/21 09:13	07/26/21 16:37	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/26/21 09:13	07/26/21 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*	*p*	*51 - 149*	*07/26/21 09:13*	*07/26/21 16:37*	*1*

Client Sample ID: MW11-ROX-071221

Date Collected: 07/12/21 09:40
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 10:46	1
Acrolein	ND		20	10	ug/L			07/18/21 10:46	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 10:46	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 10:46	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 10:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 10:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 10:46	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 10:46	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 10:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 10:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 10:46	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 10:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 10:46	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 10:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 10:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 10:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 10:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 10:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 10:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 10:46	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 10:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 10:46	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 10:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 10:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 10:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/21 10:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 10:46	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 10:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 10:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 10:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 10:46	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 10:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 10:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 10:46	1

Client Sample ID: MW11-ROX-071221
Date Collected: 07/12/21 09:40
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 10:46	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 10:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 10:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 10:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 10:46	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 10:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 10:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 10:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 10:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 10:46	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 10:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 10:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 10:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 10:46	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 10:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 10:46	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/18/21 10:46*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/18/21 10:46*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/18/21 10:46*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/14/21 09:53	07/16/21 13:14	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/14/21 09:53	07/16/21 13:14	1
Anthracene	ND		0.19	0.030	ug/L		07/14/21 09:53	07/16/21 13:14	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		07/14/21 09:53	07/16/21 13:14	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/14/21 09:53	07/16/21 13:14	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/14/21 09:53	07/16/21 13:14	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/14/21 09:53	07/15/21 21:29	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/14/21 09:53	07/16/21 13:14	1
Chrysene	ND		0.19	0.070	ug/L		07/14/21 09:53	07/16/21 13:14	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/14/21 09:53	07/15/21 21:29	1
Fluoranthene	ND		0.19	0.064	ug/L		07/14/21 09:53	07/16/21 13:14	1
Fluorene	ND		0.19	0.10	ug/L		07/14/21 09:53	07/16/21 13:14	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/14/21 09:53	07/15/21 21:29	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		07/14/21 09:53	07/16/21 13:14	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/14/21 09:53	07/16/21 13:14	1
Phenanthrene	ND		0.19	0.034	ug/L		07/14/21 09:53	07/16/21 13:14	1
Pyrene	ND		0.19	0.038	ug/L		07/14/21 09:53	07/16/21 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*15 - 122*	*07/14/21 09:53*	*07/16/21 13:14*	*1*
Nitrobenzene-d5	*111*		*19 - 130*	*07/14/21 09:53*	*07/16/21 13:14*	*1*

Client Sample ID: MW11-ROX-071221
Date Collected: 07/12/21 09:40
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	145	S1+	33 - 138	07/14/21 09:53	07/16/21 13:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/14/21 09:53	07/15/21 21:05	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		07/14/21 09:53	07/15/21 21:05	1
Benzoic acid	ND		28	6.9	ug/L		07/14/21 09:53	07/15/21 21:05	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		07/14/21 09:53	07/15/21 21:05	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/14/21 09:53	07/15/21 21:05	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/14/21 09:53	07/15/21 21:05	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/14/21 09:53	07/15/21 21:05	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		07/14/21 09:53	07/15/21 21:05	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/14/21 09:53	07/15/21 21:05	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/14/21 09:53	07/15/21 21:05	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/14/21 09:53	07/15/21 21:05	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/14/21 09:53	07/15/21 21:05	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/14/21 09:53	07/15/21 21:05	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/14/21 09:53	07/15/21 21:05	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/14/21 09:53	07/15/21 21:05	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:05	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:05	1
3,3'-Dichlorobenzidine	ND	*+	9.5	2.5	ug/L		07/14/21 09:53	07/15/21 21:05	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		07/14/21 09:53	07/15/21 21:05	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/14/21 09:53	07/15/21 21:05	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 21:05	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:05	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/14/21 09:53	07/15/21 21:05	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/14/21 09:53	07/15/21 21:05	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/14/21 09:53	07/15/21 21:05	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/14/21 09:53	07/15/21 21:05	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/14/21 09:53	07/15/21 21:05	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:05	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:05	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:05	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/14/21 09:53	07/15/21 21:05	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/14/21 09:53	07/15/21 21:05	1
Indene	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:05	1
Isophorone	ND		9.5	0.13	ug/L		07/14/21 09:53	07/15/21 21:05	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/14/21 09:53	07/15/21 21:05	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/14/21 09:53	07/15/21 21:05	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/14/21 09:53	07/15/21 21:05	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/14/21 09:53	07/15/21 21:05	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/14/21 09:53	07/15/21 21:05	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/14/21 09:53	07/15/21 21:05	1
2-Nitrophenol	ND		9.5	4.9	ug/L		07/14/21 09:53	07/15/21 21:05	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/14/21 09:53	07/15/21 21:05	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 21:05	1

Client Sample ID: MW11-ROX-071221
Date Collected: 07/12/21 09:40
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/14/21 09:53	07/15/21 21:05	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/14/21 09:53	07/15/21 21:05	1
Pentachlorophenol	ND		19	1.3	ug/L		07/14/21 09:53	07/15/21 21:05	1
Phenol	ND		9.5	2.5	ug/L		07/14/21 09:53	07/15/21 21:05	1
Pyridine	ND		9.5	3.0	ug/L		07/14/21 09:53	07/15/21 21:05	1
Quinoline	ND		9.5	4.3	ug/L		07/14/21 09:53	07/15/21 21:05	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/14/21 09:53	07/15/21 21:05	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*46 - 124*	*07/14/21 09:53*	*07/15/21 21:05*	*1*
2-Fluorophenol	*87*		*13 - 113*	*07/14/21 09:53*	*07/15/21 21:05*	*1*
Nitrobenzene-d5	*83*		*36 - 126*	*07/14/21 09:53*	*07/15/21 21:05*	*1*
Phenol-d5	*88*		*17 - 127*	*07/14/21 09:53*	*07/15/21 21:05*	*1*
Terphenyl-d14	*117*		*44 - 149*	*07/14/21 09:53*	*07/15/21 21:05*	*1*
2,4,6-Tribromophenol	*141*		*26 - 150*	*07/14/21 09:53*	*07/15/21 21:05*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/26/21 09:13	07/26/21 16:58	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/26/21 09:13	07/26/21 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*	*p*	*51 - 149*	*07/26/21 09:13*	*07/26/21 16:58*	*1*

Client Sample ID: MW1-ROX-071221
Date Collected: 07/12/21 10:30
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 11:09	1
Acrolein	ND		20	10	ug/L			07/18/21 11:09	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 11:09	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 11:09	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 11:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 11:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 11:09	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 11:09	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 11:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 11:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 11:09	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 11:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 11:09	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 11:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 11:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 11:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 11:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 11:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 11:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 11:09	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 11:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 11:09	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 11:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 11:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 11:09	1
Methyl tert-butyl ether	0.76	J	1.0	0.74	ug/L			07/18/21 11:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 11:09	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 11:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 11:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 11:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 11:09	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 11:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 11:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 11:09	1

Client Sample ID: MW1-ROX-071221

Date Collected: 07/12/21 10:30
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 11:09	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 11:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 11:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 11:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 11:09	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 11:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 11:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 11:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 11:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 11:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 11:09	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 11:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 11:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 11:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 11:09	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 11:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 11:09	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/18/21 11:09*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/18/21 11:09*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/18/21 11:09*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		07/14/21 09:53	07/16/21 12:22	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/14/21 09:53	07/16/21 12:22	1
Anthracene	ND		0.19	0.031	ug/L		07/14/21 09:53	07/16/21 12:22	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/14/21 09:53	07/16/21 12:22	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/14/21 09:53	07/16/21 12:22	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		07/14/21 09:53	07/16/21 12:22	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/14/21 09:53	07/15/21 21:44	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		07/14/21 09:53	07/16/21 12:22	1
Chrysene	ND		0.19	0.071	ug/L		07/14/21 09:53	07/16/21 12:22	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/14/21 09:53	07/15/21 21:44	1
Fluoranthene	ND		0.19	0.065	ug/L		07/14/21 09:53	07/16/21 12:22	1
Fluorene	ND		0.19	0.11	ug/L		07/14/21 09:53	07/16/21 12:22	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/14/21 09:53	07/15/21 21:44	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		07/14/21 09:53	07/16/21 12:22	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/14/21 09:53	07/16/21 12:22	1
Phenanthrene	ND		0.19	0.034	ug/L		07/14/21 09:53	07/16/21 12:22	1
Pyrene	ND		0.19	0.038	ug/L		07/14/21 09:53	07/16/21 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*15 - 122*	*07/14/21 09:53*	*07/16/21 12:22*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*07/14/21 09:53*	*07/16/21 12:22*	*1*

Client Sample ID: MW1-ROX-071221
Date Collected: 07/12/21 10:30
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	123		33 - 138	07/14/21 09:53	07/16/21 12:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		07/14/21 09:53	07/15/21 21:26	1
Benzenethiol	ND	*- UJ	9.6	1.6	ug/L		07/14/21 09:53	07/15/21 21:26	1
Benzoic acid	ND		29	7.0	ug/L		07/14/21 09:53	07/15/21 21:26	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		07/14/21 09:53	07/15/21 21:26	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		07/14/21 09:53	07/15/21 21:26	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		07/14/21 09:53	07/15/21 21:26	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		07/14/21 09:53	07/15/21 21:26	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/14/21 09:53	07/15/21 21:26	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		07/14/21 09:53	07/15/21 21:26	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		07/14/21 09:53	07/15/21 21:26	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/14/21 09:53	07/15/21 21:26	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/14/21 09:53	07/15/21 21:26	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		07/14/21 09:53	07/15/21 21:26	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/14/21 09:53	07/15/21 21:26	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/14/21 09:53	07/15/21 21:26	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		07/14/21 09:53	07/15/21 21:26	1
Dibenzofuran	ND		9.6	0.16	ug/L		07/14/21 09:53	07/15/21 21:26	1
3,3'-Dichlorobenzidine	ND	*+	9.6	2.5	ug/L		07/14/21 09:53	07/15/21 21:26	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/14/21 09:53	07/15/21 21:26	1
Diethyl phthalate	0.39	J	9.6	0.23	ug/L		07/14/21 09:53	07/15/21 21:26	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		07/14/21 09:53	07/15/21 21:26	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		07/14/21 09:53	07/15/21 21:26	1
Di-n-butyl phthalate	2.8	J	9.6	2.6	ug/L		07/14/21 09:53	07/15/21 21:26	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		07/14/21 09:53	07/15/21 21:26	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/14/21 09:53	07/15/21 21:26	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/14/21 09:53	07/15/21 21:26	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/14/21 09:53	07/15/21 21:26	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		07/14/21 09:53	07/15/21 21:26	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/14/21 09:53	07/15/21 21:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/14/21 09:53	07/15/21 21:26	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		07/14/21 09:53	07/15/21 21:26	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/14/21 09:53	07/15/21 21:26	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/14/21 09:53	07/15/21 21:26	1
Indene	ND		9.6	0.96	ug/L		07/14/21 09:53	07/15/21 21:26	1
Isophorone	ND		9.6	0.13	ug/L		07/14/21 09:53	07/15/21 21:26	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/14/21 09:53	07/15/21 21:26	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/14/21 09:53	07/15/21 21:26	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/14/21 09:53	07/15/21 21:26	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/14/21 09:53	07/15/21 21:26	1
4-Nitroaniline	ND		9.6	1.4	ug/L		07/14/21 09:53	07/15/21 21:26	1
Nitrobenzene	ND		9.6	0.12	ug/L		07/14/21 09:53	07/15/21 21:26	1
2-Nitrophenol	ND		9.6	5.0	ug/L		07/14/21 09:53	07/15/21 21:26	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/14/21 09:53	07/15/21 21:26	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		07/14/21 09:53	07/15/21 21:26	1

Client Sample ID: MW1-ROX-071221
Date Collected: 07/12/21 10:30
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/14/21 09:53	07/15/21 21:26	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		07/14/21 09:53	07/15/21 21:26	1
Pentachlorophenol	ND		19	1.3	ug/L		07/14/21 09:53	07/15/21 21:26	1
Phenol	ND		9.6	2.5	ug/L		07/14/21 09:53	07/15/21 21:26	1
Pyridine	ND		9.6	3.1	ug/L		07/14/21 09:53	07/15/21 21:26	1
Quinoline	ND		9.6	4.3	ug/L		07/14/21 09:53	07/15/21 21:26	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/14/21 09:53	07/15/21 21:26	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/14/21 09:53	07/15/21 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*46 - 124*	*07/14/21 09:53*	*07/15/21 21:26*	*1*
2-Fluorophenol	*37*		*13 - 113*	*07/14/21 09:53*	*07/15/21 21:26*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/14/21 09:53*	*07/15/21 21:26*	*1*
Phenol-d5	*66*		*17 - 127*	*07/14/21 09:53*	*07/15/21 21:26*	*1*
Terphenyl-d14	*114*		*44 - 149*	*07/14/21 09:53*	*07/15/21 21:26*	*1*
2,4,6-Tribromophenol	*128*		*26 - 150*	*07/14/21 09:53*	*07/15/21 21:26*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/26/21 09:13	07/26/21 17:18	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/26/21 09:13	07/26/21 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*	*p*	*51 - 149*	*07/26/21 09:13*	*07/26/21 17:18*	*1*

Client Sample ID: MW3-ROX-071221

Date Collected: 07/12/21 12:25
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 14:17	1
Acrolein	ND		20	10	ug/L			07/18/21 14:17	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 14:17	1
Benzene	**0.65**	**J**	1.0	0.38	ug/L			07/18/21 14:17	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 14:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 14:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 14:17	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 14:17	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 14:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 14:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 14:17	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 14:17	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 14:17	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 14:17	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 14:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 14:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 14:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 14:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 14:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 14:17	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 14:17	1
Isopropylbenzene	**13**		1.0	0.53	ug/L			07/18/21 14:17	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 14:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 14:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 14:17	1
Methyl tert-butyl ether	**0.79**	**J**	1.0	0.74	ug/L			07/18/21 14:17	1
m-Xylene & p-Xylene	**30**		5.0	1.6	ug/L			07/18/21 14:17	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 14:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 14:17	1
N-Propylbenzene	**23**		1.0	0.69	ug/L			07/18/21 14:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 14:17	1
o-Xylene	**3.8**	**J**	5.0	0.60	ug/L			07/18/21 14:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 14:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 14:17	1

Client Sample ID: MW3-ROX-071221
Date Collected: 07/12/21 12:25
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.78	J	1.0	0.70	ug/L			07/18/21 14:17	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 14:17	1
tert-Butylbenzene	0.66	J	1.0	0.63	ug/L			07/18/21 14:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 14:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 14:17	1
Toluene	9.6		1.0	0.41	ug/L			07/18/21 14:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 14:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 14:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 14:17	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 14:17	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 14:17	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 14:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 14:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 14:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 14:17	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 14:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 14:17	1
Xylenes, Total	34		10	1.6	ug/L			07/18/21 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/18/21 14:17*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/18/21 14:17*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*07/18/21 14:17*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/14/21 09:53	07/16/21 13:31	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/14/21 09:53	07/16/21 13:31	1
Anthracene	ND		0.19	0.030	ug/L		07/14/21 09:53	07/16/21 13:31	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/14/21 09:53	07/16/21 13:31	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/14/21 09:53	07/16/21 13:31	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/14/21 09:53	07/16/21 13:31	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/14/21 09:53	07/15/21 22:00	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/14/21 09:53	07/16/21 13:31	1
Chrysene	ND		0.19	0.070	ug/L		07/14/21 09:53	07/16/21 13:31	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/14/21 09:53	07/15/21 22:00	1
Fluoranthene	ND		0.19	0.064	ug/L		07/14/21 09:53	07/16/21 13:31	1
Fluorene	ND		0.19	0.10	ug/L		07/14/21 09:53	07/16/21 13:31	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/14/21 09:53	07/15/21 22:00	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		07/14/21 09:53	07/16/21 13:31	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/14/21 09:53	07/16/21 13:31	1
Phenanthrene	ND		0.19	0.034	ug/L		07/14/21 09:53	07/16/21 13:31	1
Pyrene	ND		0.19	0.038	ug/L		07/14/21 09:53	07/16/21 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*15 - 122*	*07/14/21 09:53*	*07/16/21 13:31*	*1*
Nitrobenzene-d5	*100*		*19 - 130*	*07/14/21 09:53*	*07/16/21 13:31*	*1*

Client Sample ID: MW3-ROX-071221
Date Collected: 07/12/21 12:25
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	119		33 - 138	07/14/21 09:53	07/16/21 13:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/14/21 09:53	07/15/21 21:47	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		07/14/21 09:53	07/15/21 21:47	1
Benzoic acid	ND		28	6.9	ug/L		07/14/21 09:53	07/15/21 21:47	1
Benzyl alcohol	ND	UJ	9.5	1.9	ug/L		07/14/21 09:53	07/15/21 21:47	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/14/21 09:53	07/15/21 21:47	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/14/21 09:53	07/15/21 21:47	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/14/21 09:53	07/15/21 21:47	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/19/21 15:33	07/21/21 15:21	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/14/21 09:53	07/15/21 21:47	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/14/21 09:53	07/15/21 21:47	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/14/21 09:53	07/15/21 21:47	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/14/21 09:53	07/15/21 21:47	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/14/21 09:53	07/15/21 21:47	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/14/21 09:53	07/15/21 21:47	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/14/21 09:53	07/15/21 21:47	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:47	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:47	1
3,3'-Dichlorobenzidine	ND	*+	9.5	2.5	ug/L		07/14/21 09:53	07/15/21 21:47	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		07/14/21 09:53	07/15/21 21:47	1
Diethyl phthalate	0.60	J	9.5	0.23	ug/L		07/14/21 09:53	07/15/21 21:47	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 21:47	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:47	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/14/21 09:53	07/15/21 21:47	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/14/21 09:53	07/15/21 21:47	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/14/21 09:53	07/15/21 21:47	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/14/21 09:53	07/15/21 21:47	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/14/21 09:53	07/15/21 21:47	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:47	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:47	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/14/21 09:53	07/15/21 21:47	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/14/21 09:53	07/15/21 21:47	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/14/21 09:53	07/15/21 21:47	1
Indene	ND		9.5	0.95	ug/L		07/14/21 09:53	07/15/21 21:47	1
Isophorone	ND		9.5	0.13	ug/L		07/14/21 09:53	07/15/21 21:47	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/14/21 09:53	07/15/21 21:47	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/14/21 09:53	07/15/21 21:47	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/14/21 09:53	07/15/21 21:47	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/14/21 09:53	07/15/21 21:47	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/14/21 09:53	07/15/21 21:47	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/14/21 09:53	07/15/21 21:47	1
2-Nitrophenol	ND		9.5	4.9	ug/L		07/14/21 09:53	07/15/21 21:47	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/14/21 09:53	07/15/21 21:47	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 21:47	1

Client Sample ID: MW3-ROX-071221
Date Collected: 07/12/21 12:25
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/14/21 09:53	07/15/21 21:47	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/14/21 09:53	07/15/21 21:47	1
Pentachlorophenol	ND		19	1.3	ug/L		07/14/21 09:53	07/15/21 21:47	1
Phenol	ND		9.5	2.5	ug/L		07/14/21 09:53	07/15/21 21:47	1
Pyridine	ND		9.5	3.0	ug/L		07/14/21 09:53	07/15/21 21:47	1
Quinoline	ND		9.5	4.3	ug/L		07/14/21 09:53	07/15/21 21:47	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/14/21 09:53	07/15/21 21:47	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/14/21 09:53	07/15/21 21:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*46 - 124*	*07/14/21 09:53*	*07/15/21 21:47*	*1*
2-Fluorobiphenyl	*79*		*46 - 124*	*07/19/21 15:33*	*07/21/21 15:21*	*1*
2-Fluorophenol	*46*		*13 - 113*	*07/14/21 09:53*	*07/15/21 21:47*	*1*
2-Fluorophenol	*63*		*13 - 113*	*07/19/21 15:33*	*07/21/21 15:21*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*07/14/21 09:53*	*07/15/21 21:47*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*07/19/21 15:33*	*07/21/21 15:21*	*1*
Phenol-d5	*75*		*17 - 127*	*07/14/21 09:53*	*07/15/21 21:47*	*1*
Phenol-d5	*70*		*17 - 127*	*07/19/21 15:33*	*07/21/21 15:21*	*1*
Terphenyl-d14	*112*		*44 - 149*	*07/14/21 09:53*	*07/15/21 21:47*	*1*
Terphenyl-d14	*75*		*44 - 149*	*07/19/21 15:33*	*07/21/21 15:21*	*1*
2,4,6-Tribromophenol	*137*		*26 - 150*	*07/14/21 09:53*	*07/15/21 21:47*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*07/19/21 15:33*	*07/21/21 15:21*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/26/21 09:13	07/26/21 17:38	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/26/21 09:13	07/26/21 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*	*p*	*51 - 149*	*07/26/21 09:13*	*07/26/21 17:38*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: TB-ROX-071221-8011-B
Date Collected: 07/12/21 00:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-7
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/26/21 09:13	07/26/21 17:59	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/26/21 09:13	07/26/21 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/26/21 09:13*	*07/26/21 17:59*	*1*

Client Sample ID: TB-ROX-071221-8260-B
Date Collected: 07/12/21 00:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 09:36	1
Acrolein	ND		20	10	ug/L			07/18/21 09:36	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 09:36	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 09:36	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 09:36	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 09:36	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 09:36	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 09:36	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 09:36	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 09:36	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 09:36	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 09:36	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 09:36	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 09:36	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 09:36	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 09:36	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 09:36	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 09:36	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 09:36	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 09:36	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 09:36	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 09:36	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 09:36	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 09:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 09:36	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/21 09:36	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 09:36	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 09:36	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 09:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 09:36	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 09:36	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 09:36	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 09:36	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 09:36	1

Client Sample ID: TB-ROX-071221-8260-B
Date Collected: 07/12/21 00:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 09:36	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 09:36	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 09:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 09:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 09:36	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 09:36	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 09:36	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 09:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 09:36	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 09:36	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 09:36	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 09:36	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 09:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 09:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 09:36	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 09:36	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 09:36	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 09:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/18/21 09:36*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/18/21 09:36*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/18/21 09:36*	*1*

Client Sample ID: MW6D-ROX-071221

Date Collected: 07/12/21 09:05
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 14:45	1
Acrolein	ND		20	10	ug/L			07/18/21 14:45	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 14:45	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 14:45	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 14:45	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 14:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 14:45	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 14:45	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 14:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 14:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 14:45	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 14:45	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 14:45	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 14:45	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 14:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 14:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 14:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 14:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 14:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 14:45	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 14:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 14:45	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 14:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 14:45	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/21 14:45	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 14:45	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 14:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 14:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 14:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 14:45	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 14:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 14:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 14:45	1

Client Sample ID: MW6D-ROX-071221

Date Collected: 07/12/21 09:05
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 14:45	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 14:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 14:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 14:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 14:45	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 14:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 14:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 14:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 14:45	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 14:45	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 14:45	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 14:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 14:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 14:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 14:45	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 14:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 14:45	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/18/21 14:45*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/18/21 14:45*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/18/21 14:45*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.034	ug/L		07/14/21 09:53	07/16/21 12:39	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/14/21 09:53	07/16/21 12:39	1
Anthracene	ND		0.21	0.034	ug/L		07/14/21 09:53	07/16/21 12:39	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/14/21 09:53	07/16/21 12:39	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		07/14/21 09:53	07/16/21 12:39	1
Benzo[b]fluoranthene	ND		0.21	0.036	ug/L		07/14/21 09:53	07/16/21 12:39	1
Benzo[g,h,i]perylene	ND		0.21	0.14	ug/L		07/14/21 09:53	07/15/21 22:16	1
Benzo[k]fluoranthene	ND		0.21	0.11	ug/L		07/14/21 09:53	07/16/21 12:39	1
Chrysene	ND		0.21	0.078	ug/L		07/14/21 09:53	07/16/21 12:39	1
Dibenz(a,h)anthracene	ND		0.21	0.053	ug/L		07/14/21 09:53	07/15/21 22:16	1
Fluoranthene	ND		0.21	0.071	ug/L		07/14/21 09:53	07/16/21 12:39	1
Fluorene	ND		0.21	0.12	ug/L		07/14/21 09:53	07/16/21 12:39	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/14/21 09:53	07/15/21 22:16	1
1-Methylnaphthalene	**1.6**		0.21	0.078	ug/L		07/14/21 09:53	07/16/21 12:39	1
2-Methylnaphthalene	**0.078**	**J**	0.21	0.063	ug/L		07/14/21 09:53	07/16/21 12:39	1
Phenanthrene	ND		0.21	0.038	ug/L		07/14/21 09:53	07/16/21 12:39	1
Pyrene	ND		0.21	0.042	ug/L		07/14/21 09:53	07/16/21 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*15 - 122*	*07/14/21 09:53*	*07/16/21 12:39*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*07/14/21 09:53*	*07/16/21 12:39*	*1*

Client Sample ID: MW6D-ROX-071221
Date Collected: 07/12/21 09:05
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	107		33 - 138	07/14/21 09:53	07/16/21 12:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.0	ug/L		07/14/21 09:53	07/15/21 22:08	1
Benzenethiol	ND	*- UJ	11	1.8	ug/L		07/14/21 09:53	07/15/21 22:08	1
Benzoic acid	ND		32	7.7	ug/L		07/14/21 09:53	07/15/21 22:08	1
Benzyl alcohol	ND	UJ	11	2.1	ug/L		07/14/21 09:53	07/15/21 22:08	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		07/14/21 09:53	07/15/21 22:08	1
Bis(2-chloroethyl)ether	ND		11	2.8	ug/L		07/14/21 09:53	07/15/21 22:08	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		07/14/21 09:53	07/15/21 22:08	1
Bis(2-ethylhexyl) phthalate	ND		11	5.3	ug/L		07/14/21 09:53	07/15/21 22:08	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		07/14/21 09:53	07/15/21 22:08	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		07/14/21 09:53	07/15/21 22:08	1
4-Chloroaniline	ND		11	3.6	ug/L		07/14/21 09:53	07/15/21 22:08	1
4-Chloro-3-methylphenol	ND		11	4.0	ug/L		07/14/21 09:53	07/15/21 22:08	1
2-Chloronaphthalene	ND		11	0.15	ug/L		07/14/21 09:53	07/15/21 22:08	1
2-Chlorophenol	ND		11	2.3	ug/L		07/14/21 09:53	07/15/21 22:08	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		07/14/21 09:53	07/15/21 22:08	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		07/14/21 09:53	07/15/21 22:08	1
Dibenzofuran	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 22:08	1
3,3'-Dichlorobenzidine	ND	*+	11	2.7	ug/L		07/14/21 09:53	07/15/21 22:08	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		07/14/21 09:53	07/15/21 22:08	1
Diethyl phthalate	1.0	J	11	0.25	ug/L		07/14/21 09:53	07/15/21 22:08	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		07/14/21 09:53	07/15/21 22:08	1
Dimethyl phthalate	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 22:08	1
Di-n-butyl phthalate	ND		11	2.8	ug/L		07/14/21 09:53	07/15/21 22:08	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		07/14/21 09:53	07/15/21 22:08	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		07/14/21 09:53	07/15/21 22:08	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		07/14/21 09:53	07/15/21 22:08	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		07/14/21 09:53	07/15/21 22:08	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 22:08	1
1,4-Dioxane	ND		11	1.1	ug/L		07/14/21 09:53	07/15/21 22:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/14/21 09:53	07/15/21 22:08	1
Hexachlorobenzene	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 22:08	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/14/21 09:53	07/15/21 22:08	1
Hexachloroethane	ND		11	4.4	ug/L		07/14/21 09:53	07/15/21 22:08	1
Indene	ND		11	1.1	ug/L		07/14/21 09:53	07/15/21 22:08	1
Isophorone	ND		11	0.15	ug/L		07/14/21 09:53	07/15/21 22:08	1
2-Methylphenol	ND		11	1.9	ug/L		07/14/21 09:53	07/15/21 22:08	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		07/14/21 09:53	07/15/21 22:08	1
2-Nitroaniline	ND		11	2.3	ug/L		07/14/21 09:53	07/15/21 22:08	1
3-Nitroaniline	ND		11	1.9	ug/L		07/14/21 09:53	07/15/21 22:08	1
4-Nitroaniline	ND		11	1.6	ug/L		07/14/21 09:53	07/15/21 22:08	1
Nitrobenzene	ND		11	0.14	ug/L		07/14/21 09:53	07/15/21 22:08	1
2-Nitrophenol	ND		11	5.5	ug/L		07/14/21 09:53	07/15/21 22:08	1
4-Nitrophenol	ND		11	2.2	ug/L		07/14/21 09:53	07/15/21 22:08	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		07/14/21 09:53	07/15/21 22:08	1

Client Sample ID: MW6D-ROX-071221
Date Collected: 07/12/21 09:05
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	3.5	ug/L		07/14/21 09:53	07/15/21 22:08	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		07/14/21 09:53	07/15/21 22:08	1
Pentachlorophenol	ND		21	1.5	ug/L		07/14/21 09:53	07/15/21 22:08	1
Phenol	ND		11	2.7	ug/L		07/14/21 09:53	07/15/21 22:08	1
Pyridine	ND		11	3.4	ug/L		07/14/21 09:53	07/15/21 22:08	1
Quinoline	ND		11	4.7	ug/L		07/14/21 09:53	07/15/21 22:08	1
2,4,5-Trichlorophenol	ND		11	3.9	ug/L		07/14/21 09:53	07/15/21 22:08	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		07/14/21 09:53	07/15/21 22:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*46 - 124*	*07/14/21 09:53*	*07/15/21 22:08*	*1*
2-Fluorophenol	*33*		*13 - 113*	*07/14/21 09:53*	*07/15/21 22:08*	*1*
Nitrobenzene-d5	*81*		*36 - 126*	*07/14/21 09:53*	*07/15/21 22:08*	*1*
Phenol-d5	*70*		*17 - 127*	*07/14/21 09:53*	*07/15/21 22:08*	*1*
Terphenyl-d14	*106*		*44 - 149*	*07/14/21 09:53*	*07/15/21 22:08*	*1*
2,4,6-Tribromophenol	*141*		*26 - 150*	*07/14/21 09:53*	*07/15/21 22:08*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/26/21 09:13	07/26/21 18:19	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/26/21 09:13	07/26/21 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*	*p*	*51 - 149*	*07/26/21 09:13*	*07/26/21 18:19*	*1*

Client Sample ID: P93C-ROX-071221
Date Collected: 07/12/21 11:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 15:11	1
Acrolein	ND		20	10	ug/L			07/18/21 15:11	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 15:11	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 15:11	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 15:11	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 15:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 15:11	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 15:11	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 15:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 15:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 15:11	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 15:11	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 15:11	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 15:11	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 15:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 15:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 15:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 15:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 15:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 15:11	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 15:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 15:11	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 15:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 15:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 15:11	1
Methyl tert-butyl ether	2.4		1.0	0.74	ug/L			07/18/21 15:11	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 15:11	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 15:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 15:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 15:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 15:11	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 15:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 15:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 15:11	1

Client Sample ID: P93C-ROX-071221
Date Collected: 07/12/21 11:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 15:11	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 15:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 15:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 15:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 15:11	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 15:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 15:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 15:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 15:11	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 15:11	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 15:11	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 15:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 15:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 15:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 15:11	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 15:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 15:11	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/18/21 15:11*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/18/21 15:11*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/18/21 15:11*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/14/21 09:53	07/16/21 13:48	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/14/21 09:53	07/16/21 13:48	1
Anthracene	ND		0.21	0.033	ug/L		07/14/21 09:53	07/16/21 13:48	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/14/21 09:53	07/16/21 13:48	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/14/21 09:53	07/16/21 13:48	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/14/21 09:53	07/16/21 13:48	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/14/21 09:53	07/15/21 22:31	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/14/21 09:53	07/16/21 13:48	1
Chrysene	ND		0.21	0.077	ug/L		07/14/21 09:53	07/16/21 13:48	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/14/21 09:53	07/15/21 22:31	1
Fluoranthene	ND		0.21	0.070	ug/L		07/14/21 09:53	07/16/21 13:48	1
Fluorene	ND		0.21	0.11	ug/L		07/14/21 09:53	07/16/21 13:48	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.044	ug/L		07/14/21 09:53	07/15/21 22:31	1
1-Methylnaphthalene	ND		0.21	0.077	ug/L		07/14/21 09:53	07/16/21 13:48	1
2-Methylnaphthalene	ND		0.21	0.062	ug/L		07/14/21 09:53	07/16/21 13:48	1
Phenanthrene	ND		0.21	0.037	ug/L		07/14/21 09:53	07/16/21 13:48	1
Pyrene	ND		0.21	0.041	ug/L		07/14/21 09:53	07/16/21 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*15 - 122*	*07/14/21 09:53*	*07/16/21 13:48*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*07/14/21 09:53*	*07/16/21 13:48*	*1*

Client Sample ID: P93C-ROX-071221
Date Collected: 07/12/21 11:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	134		33 - 138	07/14/21 09:53	07/16/21 13:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/14/21 09:53	07/16/21 19:48	1
Benzenethiol	ND	*- U5	10	1.8	ug/L		07/14/21 09:53	07/28/21 13:25	1
Benzoic acid	ND		31	7.5	ug/L		07/14/21 09:53	07/15/21 22:29	1
Benzyl alcohol	ND		10	2.1	ug/L		07/14/21 09:53	07/16/21 19:48	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 22:29	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/14/21 09:53	07/16/21 19:48	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/14/21 09:53	07/16/21 19:48	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/14/21 09:53	07/15/21 22:29	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/14/21 09:53	07/15/21 22:29	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/14/21 09:53	07/15/21 22:29	1
4-Chloroaniline	ND		10	3.5	ug/L		07/14/21 09:53	07/15/21 22:29	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/14/21 09:53	07/15/21 22:29	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/14/21 09:53	07/15/21 22:29	1
2-Chlorophenol	ND		10	2.3	ug/L		07/14/21 09:53	07/16/21 19:48	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/14/21 09:53	07/15/21 22:29	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 22:29	1
Dibenzofuran	ND		10	0.18	ug/L		07/14/21 09:53	07/15/21 22:29	1
3,3'-Dichlorobenzidine	ND	*+	10	2.7	ug/L		07/14/21 09:53	07/15/21 22:29	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/14/21 09:53	07/15/21 22:29	1
Diethyl phthalate	ND		10	0.25	ug/L		07/14/21 09:53	07/15/21 22:29	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/14/21 09:53	07/15/21 22:29	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/14/21 09:53	07/15/21 22:29	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/14/21 09:53	07/15/21 22:29	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/14/21 09:53	07/15/21 22:29	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/14/21 09:53	07/15/21 22:29	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/14/21 09:53	07/15/21 22:29	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/14/21 09:53	07/15/21 22:29	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/14/21 09:53	07/15/21 22:29	1
1,4-Dioxane	ND		10	1.0	ug/L		07/14/21 09:53	07/16/21 19:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 22:29	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/14/21 09:53	07/15/21 22:29	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/14/21 09:53	07/15/21 22:29	1
Hexachloroethane	ND		10	4.3	ug/L		07/14/21 09:53	07/16/21 19:48	1
Indene	ND		10	1.0	ug/L		07/14/21 09:53	07/16/21 19:48	1
Isophorone	ND		10	0.14	ug/L		07/14/21 09:53	07/15/21 22:29	1
2-Methylphenol	ND		10	1.9	ug/L		07/14/21 09:53	07/16/21 19:48	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/14/21 09:53	07/16/21 19:48	1
2-Nitroaniline	ND		10	2.3	ug/L		07/14/21 09:53	07/15/21 22:29	1
3-Nitroaniline	ND		10	1.9	ug/L		07/14/21 09:53	07/15/21 22:29	1
4-Nitroaniline	ND		10	1.6	ug/L		07/14/21 09:53	07/15/21 22:29	1
Nitrobenzene	ND		10	0.13	ug/L		07/14/21 09:53	07/15/21 22:29	1
2-Nitrophenol	ND		10	5.4	ug/L		07/14/21 09:53	07/15/21 22:29	1
4-Nitrophenol	ND		10	2.2	ug/L		07/14/21 09:53	07/15/21 22:29	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/14/21 09:53	07/16/21 19:48	1

Client Sample ID: P93C-ROX-071221
Date Collected: 07/12/21 11:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/14/21 09:53	07/16/21 19:48	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/14/21 09:53	07/15/21 22:29	1
Pentachlorophenol	ND		21	1.4	ug/L		07/14/21 09:53	07/15/21 22:29	1
Phenol	ND		10	2.7	ug/L		07/14/21 09:53	07/16/21 19:48	1
Pyridine	ND		10	3.3	ug/L		07/14/21 09:53	07/16/21 19:48	1
Quinoline	ND		10	4.7	ug/L		07/14/21 09:53	07/15/21 22:29	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/14/21 09:53	07/15/21 22:29	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/14/21 09:53	07/15/21 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*46 - 124*	*07/14/21 09:53*	*07/15/21 22:29*	*1*
2-Fluorophenol	*16*		*13 - 113*	*07/14/21 09:53*	*07/16/21 19:48*	*1*
Nitrobenzene-d5	*45*		*36 - 126*	*07/14/21 09:53*	*07/15/21 22:29*	*1*
Phenol-d5	*47*		*17 - 127*	*07/14/21 09:53*	*07/16/21 19:48*	*1*
Terphenyl-d14	*59*		*44 - 149*	*07/14/21 09:53*	*07/15/21 22:29*	*1*
2,4,6-Tribromophenol	*76*		*26 - 150*	*07/14/21 09:53*	*07/15/21 22:29*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/26/21 09:13	07/26/21 18:39	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/26/21 09:13	07/26/21 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*	*p*	*51 - 149*	*07/26/21 09:13*	*07/26/21 18:39*	*1*

Client Sample ID: P114R-ROX-071221
Date Collected: 07/12/21 12:35
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 10:00	1
Acrolein	ND		20	10	ug/L			07/18/21 10:00	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 10:00	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 10:00	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 10:00	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 10:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 10:00	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 10:00	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 10:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 10:00	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			07/18/21 10:00	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 10:00	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 10:00	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 10:00	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 10:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 10:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 10:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 10:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 10:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 10:00	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 10:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 10:00	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 10:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 10:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 10:00	1
Methyl tert-butyl ether	2.1		1.0	0.74	ug/L			07/18/21 10:00	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 10:00	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 10:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 10:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 10:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 10:00	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 10:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 10:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 10:00	1

Client Sample ID: P114R-ROX-071221
Date Collected: 07/12/21 12:35
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 10:00	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 10:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 10:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 10:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 10:00	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 10:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 10:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 10:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 10:00	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 10:00	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 10:00	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 10:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 10:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 10:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 10:00	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 10:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 10:00	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 10:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/18/21 10:00*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/18/21 10:00*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/18/21 10:00*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.22	0.035	ug/L		07/14/21 09:53	07/16/21 14:05	1
Acenaphthylene	ND		0.22	0.049	ug/L		07/14/21 09:53	07/16/21 14:05	1
Anthracene	ND		0.22	0.035	ug/L		07/14/21 09:53	07/16/21 14:05	1
Benzo[a]anthracene	ND		0.22	0.050	ug/L		07/14/21 09:53	07/16/21 14:05	1
Benzo[a]pyrene	ND		0.22	0.045	ug/L		07/14/21 09:53	07/16/21 14:05	1
Benzo[b]fluoranthene	ND		0.22	0.037	ug/L		07/14/21 09:53	07/16/21 14:05	1
Benzo[g,h,i]perylene	ND		0.22	0.14	ug/L		07/14/21 09:53	07/15/21 22:47	1
Benzo[k]fluoranthene	ND		0.22	0.11	ug/L		07/14/21 09:53	07/16/21 14:05	1
Chrysene	ND		0.22	0.080	ug/L		07/14/21 09:53	07/16/21 14:05	1
Dibenz(a,h)anthracene	ND		0.22	0.054	ug/L		07/14/21 09:53	07/15/21 22:47	1
Fluoranthene	ND		0.22	0.073	ug/L		07/14/21 09:53	07/16/21 14:05	1
Fluorene	ND		0.22	0.12	ug/L		07/14/21 09:53	07/16/21 14:05	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.046	ug/L		07/14/21 09:53	07/15/21 22:47	1
1-Methylnaphthalene	ND		0.22	0.080	ug/L		07/14/21 09:53	07/16/21 14:05	1
2-Methylnaphthalene	ND		0.22	0.065	ug/L		07/14/21 09:53	07/16/21 14:05	1
Phenanthrene	ND		0.22	0.039	ug/L		07/14/21 09:53	07/16/21 14:05	1
Pyrene	ND		0.22	0.043	ug/L		07/14/21 09:53	07/16/21 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*15 - 122*	*07/14/21 09:53*	*07/16/21 14:05*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*07/14/21 09:53*	*07/16/21 14:05*	*1*

Client Sample ID: P114R-ROX-071221
Date Collected: 07/12/21 12:35
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	73		33 - 138	07/14/21 09:53	07/16/21 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.1	ug/L		07/14/21 09:53	07/15/21 20:23	1
Benzenethiol	ND	*- UJ	11	1.8	ug/L		07/14/21 09:53	07/15/21 20:23	1
Benzoic acid	21	J	32	7.9	ug/L		07/14/21 09:53	07/15/21 20:23	1
Benzyl alcohol	ND	UJ	11	2.2	ug/L		07/14/21 09:53	07/15/21 20:23	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		07/14/21 09:53	07/15/21 20:23	1
Bis(2-chloroethyl)ether	ND		11	2.9	ug/L		07/14/21 09:53	07/15/21 20:23	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		07/14/21 09:53	07/15/21 20:23	1
Bis(2-ethylhexyl) phthalate	5.9	J	11	5.4	ug/L		07/14/21 09:53	07/15/21 20:23	1
4-Bromophenyl phenyl ether	ND		11	0.22	ug/L		07/14/21 09:53	07/15/21 20:23	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		07/14/21 09:53	07/15/21 20:23	1
4-Chloroaniline	ND		11	3.7	ug/L		07/14/21 09:53	07/15/21 20:23	1
4-Chloro-3-methylphenol	ND		11	4.1	ug/L		07/14/21 09:53	07/15/21 20:23	1
2-Chloronaphthalene	ND		11	0.15	ug/L		07/14/21 09:53	07/15/21 20:23	1
2-Chlorophenol	ND		11	2.4	ug/L		07/14/21 09:53	07/15/21 20:23	1
4-Chlorophenyl phenyl ether	ND		11	2.2	ug/L		07/14/21 09:53	07/15/21 20:23	1
Dibenz[a,h]acridine	4.3	J	11	1.1	ug/L		07/14/21 09:53	07/15/21 20:23	1
Dibenzofuran	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 20:23	1
3,3'-Dichlorobenzidine	ND	*+	11	2.8	ug/L		07/14/21 09:53	07/15/21 20:23	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		07/14/21 09:53	07/15/21 20:23	1
Diethyl phthalate	ND		11	0.26	ug/L		07/14/21 09:53	07/15/21 20:23	1
2,4-Dimethylphenol	ND		11	3.8	ug/L		07/14/21 09:53	07/15/21 20:23	1
Dimethyl phthalate	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 20:23	1
Di-n-butyl phthalate	ND		11	2.9	ug/L		07/14/21 09:53	07/15/21 20:23	1
4,6-Dinitro-ortho-cresol	ND		11	1.7	ug/L		07/14/21 09:53	07/15/21 20:23	1
2,4-Dinitrophenol	ND		32	3.7	ug/L		07/14/21 09:53	07/15/21 20:23	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		07/14/21 09:53	07/15/21 20:23	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		07/14/21 09:53	07/15/21 20:23	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 20:23	1
1,4-Dioxane	ND		11	1.1	ug/L		07/14/21 09:53	07/15/21 20:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/14/21 09:53	07/15/21 20:23	1
Hexachlorobenzene	ND		11	0.18	ug/L		07/14/21 09:53	07/15/21 20:23	1
Hexachlorocyclopentadiene	ND		22	2.8	ug/L		07/14/21 09:53	07/15/21 20:23	1
Hexachloroethane	ND		11	4.5	ug/L		07/14/21 09:53	07/15/21 20:23	1
Indene	ND		11	1.1	ug/L		07/14/21 09:53	07/15/21 20:23	1
Isophorone	ND		11	0.15	ug/L		07/14/21 09:53	07/15/21 20:23	1
2-Methylphenol	ND		11	1.9	ug/L		07/14/21 09:53	07/15/21 20:23	1
3 & 4 Methylphenol	ND		22	0.42	ug/L		07/14/21 09:53	07/15/21 20:23	1
2-Nitroaniline	ND		11	2.4	ug/L		07/14/21 09:53	07/15/21 20:23	1
3-Nitroaniline	ND		11	1.9	ug/L		07/14/21 09:53	07/15/21 20:23	1
4-Nitroaniline	ND		11	1.6	ug/L		07/14/21 09:53	07/15/21 20:23	1
Nitrobenzene	ND		11	0.14	ug/L		07/14/21 09:53	07/15/21 20:23	1
2-Nitrophenol	ND		11	5.6	ug/L		07/14/21 09:53	07/15/21 20:23	1
4-Nitrophenol	ND		11	2.3	ug/L		07/14/21 09:53	07/15/21 20:23	1
N-Nitrosodimethylamine	ND		11	3.8	ug/L		07/14/21 09:53	07/15/21 20:23	1

Client Sample ID: P114R-ROX-071221
Date Collected: 07/12/21 12:35
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	3.6	ug/L		07/14/21 09:53	07/15/21 20:23	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		07/14/21 09:53	07/15/21 20:23	1
Pentachlorophenol	ND		22	1.5	ug/L		07/14/21 09:53	07/15/21 20:23	1
Phenol	ND		11	2.8	ug/L		07/14/21 09:53	07/15/21 20:23	1
Pyridine	ND		11	3.5	ug/L		07/14/21 09:53	07/15/21 20:23	1
Quinoline	ND		11	4.9	ug/L		07/14/21 09:53	07/15/21 20:23	1
2,4,5-Trichlorophenol	ND		11	4.0	ug/L		07/14/21 09:53	07/15/21 20:23	1
2,4,6-Trichlorophenol	ND		11	3.8	ug/L		07/14/21 09:53	07/15/21 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*46 - 124*	*07/14/21 09:53*	*07/15/21 20:23*	*1*
2-Fluorophenol	*53*		*13 - 113*	*07/14/21 09:53*	*07/15/21 20:23*	*1*
Nitrobenzene-d5	*86*		*36 - 126*	*07/14/21 09:53*	*07/15/21 20:23*	*1*
Phenol-d5	*78*		*17 - 127*	*07/14/21 09:53*	*07/15/21 20:23*	*1*
Terphenyl-d14	*80*		*44 - 149*	*07/14/21 09:53*	*07/15/21 20:23*	*1*
2,4,6-Tribromophenol	*160*	*S1+*	*26 - 150*	*07/14/21 09:53*	*07/15/21 20:23*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/26/21 09:13	07/26/21 19:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/26/21 09:13	07/26/21 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*	*p*	*51 - 149*	*07/26/21 09:13*	*07/26/21 19:00*	*1*

Client Sample ID: MW13-ROX-071221
Date Collected: 07/12/21 14:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/18/21 15:35	1
Acrolein	ND		20	10	ug/L			07/18/21 15:35	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 15:35	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 15:35	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 15:35	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 15:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 15:35	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 15:35	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/21 15:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 15:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 15:35	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 15:35	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 15:35	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 15:35	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 15:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 15:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 15:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 15:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 15:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 15:35	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 15:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 15:35	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 15:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 15:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 15:35	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/21 15:35	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 15:35	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 15:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 15:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 15:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 15:35	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 15:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 15:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 15:35	1

Client Sample ID: MW13-ROX-071221
Date Collected: 07/12/21 14:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 15:35	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 15:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 15:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 15:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 15:35	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 15:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 15:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 15:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 15:35	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 15:35	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 15:35	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 15:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 15:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 15:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 15:35	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 15:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 15:35	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/18/21 15:35*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/18/21 15:35*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/18/21 15:35*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/14/21 09:53	07/16/21 14:22	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/14/21 09:53	07/16/21 14:22	1
Anthracene	ND		0.20	0.032	ug/L		07/14/21 09:53	07/16/21 14:22	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/14/21 09:53	07/16/21 14:22	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/14/21 09:53	07/16/21 14:22	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/14/21 09:53	07/16/21 14:22	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/14/21 09:53	07/15/21 23:02	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/14/21 09:53	07/16/21 14:22	1
Chrysene	ND		0.20	0.074	ug/L		07/14/21 09:53	07/16/21 14:22	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/14/21 09:53	07/15/21 23:02	1
Fluoranthene	ND		0.20	0.068	ug/L		07/14/21 09:53	07/16/21 14:22	1
Fluorene	ND		0.20	0.11	ug/L		07/14/21 09:53	07/16/21 14:22	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/14/21 09:53	07/15/21 23:02	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/14/21 09:53	07/16/21 14:22	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/14/21 09:53	07/16/21 14:22	1
Phenanthrene	ND		0.20	0.036	ug/L		07/14/21 09:53	07/16/21 14:22	1
Pyrene	ND		0.20	0.040	ug/L		07/14/21 09:53	07/16/21 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*15 - 122*	*07/14/21 09:53*	*07/16/21 14:22*	*1*
Nitrobenzene-d5	*105*		*19 - 130*	*07/14/21 09:53*	*07/16/21 14:22*	*1*

Client Sample ID: MW13-ROX-071221
Date Collected: 07/12/21 14:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	54		33 - 138	07/14/21 09:53	07/16/21 14:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/14/21 09:53	07/15/21 22:50	1
Benzenethiol	ND	*- UJ	10	1.7	ug/L		07/14/21 09:53	07/15/21 22:50	1
Benzoic acid	ND		30	7.3	ug/L		07/14/21 09:53	07/15/21 22:50	1
Benzyl alcohol	ND	UJ	10	2.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/14/21 09:53	07/15/21 22:50	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/14/21 09:53	07/15/21 22:50	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/14/21 09:53	07/15/21 22:50	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/14/21 09:53	07/15/21 22:50	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/14/21 09:53	07/15/21 22:50	1
4-Chloroaniline	ND		10	3.4	ug/L		07/14/21 09:53	07/15/21 22:50	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/14/21 09:53	07/15/21 22:50	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/14/21 09:53	07/15/21 22:50	1
2-Chlorophenol	ND		10	2.2	ug/L		07/14/21 09:53	07/15/21 22:50	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
Dibenzofuran	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 22:50	1
3,3'-Dichlorobenzidine	ND	*+	10	2.6	ug/L		07/14/21 09:53	07/15/21 22:50	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
Diethyl phthalate	ND		10	0.24	ug/L		07/14/21 09:53	07/15/21 22:50	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/14/21 09:53	07/15/21 22:50	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 22:50	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/14/21 09:53	07/15/21 22:50	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/14/21 09:53	07/15/21 22:50	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/14/21 09:53	07/15/21 22:50	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/14/21 09:53	07/15/21 22:50	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/14/21 09:53	07/15/21 22:50	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 22:50	1
1,4-Dioxane	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 22:50	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/14/21 09:53	07/15/21 22:50	1
Hexachloroethane	ND		10	4.2	ug/L		07/14/21 09:53	07/15/21 22:50	1
Indene	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 22:50	1
Isophorone	ND		10	0.14	ug/L		07/14/21 09:53	07/15/21 22:50	1
2-Methylphenol	ND		10	1.8	ug/L		07/14/21 09:53	07/15/21 22:50	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/14/21 09:53	07/15/21 22:50	1
2-Nitroaniline	ND		10	2.2	ug/L		07/14/21 09:53	07/15/21 22:50	1
3-Nitroaniline	ND		10	1.8	ug/L		07/14/21 09:53	07/15/21 22:50	1
4-Nitroaniline	ND		10	1.5	ug/L		07/14/21 09:53	07/15/21 22:50	1
Nitrobenzene	ND		10	0.13	ug/L		07/14/21 09:53	07/15/21 22:50	1
2-Nitrophenol	ND		10	5.2	ug/L		07/14/21 09:53	07/15/21 22:50	1
4-Nitrophenol	ND		10	2.1	ug/L		07/14/21 09:53	07/15/21 22:50	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/14/21 09:53	07/15/21 22:50	1

Client Sample ID: MW13-ROX-071221
Date Collected: 07/12/21 14:00
Date Received: 07/13/21 09:39

Lab Sample ID: 400-205857-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/14/21 09:53	07/15/21 22:50	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/14/21 09:53	07/15/21 22:50	1
Pentachlorophenol	ND		20	1.4	ug/L		07/14/21 09:53	07/15/21 22:50	1
Phenol	ND		10	2.6	ug/L		07/14/21 09:53	07/15/21 22:50	1
Pyridine	ND		10	3.2	ug/L		07/14/21 09:53	07/15/21 22:50	1
Quinoline	ND		10	4.5	ug/L		07/14/21 09:53	07/15/21 22:50	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/14/21 09:53	07/15/21 22:50	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/14/21 09:53	07/15/21 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*46 - 124*	*07/14/21 09:53*	*07/15/21 22:50*	*1*
2-Fluorophenol	*44*		*13 - 113*	*07/14/21 09:53*	*07/15/21 22:50*	*1*
Nitrobenzene-d5	*83*		*36 - 126*	*07/14/21 09:53*	*07/15/21 22:50*	*1*
Phenol-d5	*74*		*17 - 127*	*07/14/21 09:53*	*07/15/21 22:50*	*1*
Terphenyl-d14	*58*		*44 - 149*	*07/14/21 09:53*	*07/15/21 22:50*	*1*
2,4,6-Tribromophenol	*154*	*S1+*	*26 - 150*	*07/14/21 09:53*	*07/15/21 22:50*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/26/21 09:14	07/26/21 20:21	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/26/21 09:14	07/26/21 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*	*p*	*51 - 149*	*07/26/21 09:14*	*07/26/21 20:21*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-205857-2	TB-ROX-071221-8260-A	77	99	97
400-205857-3	MW16-ROX-071221	79	103	98
400-205857-4	MW11-ROX-071221	79	103	98
400-205857-5	MW1-ROX-071221	77	102	96
400-205857-6	MW3-ROX-071221	79	101	95
400-205857-8	TB-ROX-071221-8260-B	76	103	96
400-205857-9	MW6D-ROX-071221	79	104	96
400-205857-10	P93C-ROX-071221	77	100	96
400-205857-11	P114R-ROX-071221	77	101	98
400-205857-11 MS	P114R-ROX-071221	81	96	97
400-205857-11 MSD	P114R-ROX-071221	79	98	95
400-205857-12	MW13-ROX-071221	78	104	97
LCS 400-539831/1003	Lab Control Sample	81	98	98
MB 400-539831/5	Method Blank	77	106	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-205857-3	MW16-ROX-071221	94	25	77	59	105	120
400-205857-4	MW11-ROX-071221	104	87	83	88	117	141
400-205857-5	MW1-ROX-071221	98	37	77	66	114	128
400-205857-6	MW3-ROX-071221	101	46	79	75	112	137
400-205857-6	MW3-ROX-071221	79	63	65	70	75	80
400-205857-9	MW6D-ROX-071221	99	33	81	70	106	141
400-205857-10	P93C-ROX-071221	54		45		59	76
400-205857-10	P93C-ROX-071221		16		47		
400-205857-11	P114R-ROX-071221	104	53	86	78	80	160 S1+
400-205857-11 MS	P114R-ROX-071221	99	51	80	77	102	161 S1+
400-205857-11 MSD	P114R-ROX-071221	96	23	76	54	107	145
400-205857-12	MW13-ROX-071221	103	44	83	74	58	154 S1+
LCS 400-539313/2-A	Lab Control Sample	101	47	78	73	114	150
LCS 400-539313/3-A	Lab Control Sample	96	18	75	46	117	92
LCS 400-540002/2-A	Lab Control Sample	90	67	87	78	80	85
LCSD 400-539313/4-A	Lab Control Sample Dup	93	41	73	65	99	99
MB 400-539313/1-A	Method Blank	113	25	90	69	132	113
MB 400-540002/1-A	Method Blank	83	43	68	62	85	63

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	FBP (15-122)	NBZ (19-130)	TPHL (33-138)
400-205857-3	MW16-ROX-071221	85	98	111
400-205857-4	MW11-ROX-071221	89	111	145 S1+
400-205857-5	MW1-ROX-071221	89	101	123
400-205857-6	MW3-ROX-071221	98	100	119
400-205857-9	MW6D-ROX-071221	84	95	107
400-205857-10	P93C-ROX-071221	95	98	134
400-205857-11	P114R-ROX-071221	86	101	73
400-205857-11 MS	P114R-ROX-071221	104	112	84
400-205857-11 MSD	P114R-ROX-071221	92	97	85
400-205857-12	MW13-ROX-071221	88	105	54
LCS 400-539313/2-A	Lab Control Sample	86	98	93
MB 400-539313/1-A	Method Blank	97	118	145 S1+

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB2 (51-149)
400-205857-1	TB-ROX-071221-8011-A	97
400-205857-3	MW16-ROX-071221	100 p
400-205857-4	MW11-ROX-071221	98 p
400-205857-5	MW1-ROX-071221	99 p
400-205857-6	MW3-ROX-071221	100 p
400-205857-7	TB-ROX-071221-8011-B	99
400-205857-9	MW6D-ROX-071221	102 p
400-205857-10	P93C-ROX-071221	93 p
400-205857-11	P114R-ROX-071221	92 p
400-205857-11 MS	P114R-ROX-071221	101 p
400-205857-11 MSD	P114R-ROX-071221	108 p
400-205857-12	MW13-ROX-071221	104 p
LCS 400-540856/2-A	Lab Control Sample	111 p
LCSD 400-540856/3-A	Lab Control Sample Dup	111 p
MB 400-540856/1-A	Method Blank	96

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: TB-ROX-071221-8011-A

Lab Sample ID: 400-205857-1

Date Collected: 07/12/21 00:00
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 16:17	DS	TAL PEN

Client Sample ID: TB-ROX-071221-8260-A

Lab Sample ID: 400-205857-2

Date Collected: 07/12/21 00:00
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 09:09	WPD	TAL PEN

Client Sample ID: MW16-ROX-071221

Lab Sample ID: 400-205857-3

Date Collected: 07/12/21 08:50
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 10:23	WPD	TAL PEN
Total/NA	Prep	3520C			263.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 20:44	S1B	TAL PEN
Total/NA	Prep	3520C			263.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 12:57	KJA	TAL PEN
Total/NA	Prep	3520C			263.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 21:13	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 16:37	DS	TAL PEN

Client Sample ID: MW11-ROX-071221

Lab Sample ID: 400-205857-4

Date Collected: 07/12/21 09:40
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 10:46	WPD	TAL PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 21:05	S1B	TAL PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 13:14	KJA	TAL PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 21:29	PP1	TAL PEN
Total/NA	Prep	8011			34.1 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 16:58	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: MW1-ROX-071221

Lab Sample ID: 400-205857-5

Date Collected: 07/12/21 10:30
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 11:09	WPD	TAL PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 21:26	S1B	TAL PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 12:22	KJA	TAL PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 21:44	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 17:18	DS	TAL PEN

Client Sample ID: MW3-ROX-071221

Lab Sample ID: 400-205857-6

Date Collected: 07/12/21 12:25
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 14:17	WPD	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 21:47	S1B	TAL PEN
Total/NA	Prep	3520C			260.2 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 15:21	S1B	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 13:31	KJA	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 22:00	PP1	TAL PEN
Total/NA	Prep	8011			34.1 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 17:38	DS	TAL PEN

Client Sample ID: TB-ROX-071221-8011-B

Lab Sample ID: 400-205857-7

Date Collected: 07/12/21 00:00
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.4 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 17:59	DS	TAL PEN

Client Sample ID: TB-ROX-071221-8260-B

Lab Sample ID: 400-205857-8

Date Collected: 07/12/21 00:00
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 09:36	WPD	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: MW6D-ROX-071221

Lab Sample ID: 400-205857-9

Date Collected: 07/12/21 09:05
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 14:45	WPD	TAL PEN
Total/NA	Prep	3520C			238 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 22:08	S1B	TAL PEN
Total/NA	Prep	3520C			238 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 12:39	KJA	TAL PEN
Total/NA	Prep	3520C			238 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 22:16	PP1	TAL PEN
Total/NA	Prep	8011			33.9 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 18:19	DS	TAL PEN

Client Sample ID: P93C-ROX-071221

Lab Sample ID: 400-205857-10

Date Collected: 07/12/21 11:00
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 15:11	WPD	TAL PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539670	07/16/21 19:48	S1B	TAL PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 22:29	S1B	TAL PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541259	07/28/21 13:25	S1B	TAL PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 13:48	KJA	TAL PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 22:31	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 18:39	DS	TAL PEN

Client Sample ID: P114R-ROX-071221

Lab Sample ID: 400-205857-11

Date Collected: 07/12/21 12:35
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 10:00	WPD	TAL PEN
Total/NA	Prep	3520C			231.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 20:23	S1B	TAL PEN
Total/NA	Prep	3520C			231.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 14:05	KJA	TAL PEN
Total/NA	Prep	3520C			231.8 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 22:47	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 19:00	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: MW13-ROX-071221

Lab Sample ID: 400-205857-12

Date Collected: 07/12/21 14:00
Matrix: Water
Date Received: 07/13/21 09:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 15:35	WPD	TAL PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 22:50	S1B	TAL PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 14:22	KJA	TAL PEN
Total/NA	Prep	3520C			248.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 23:02	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	540856	07/26/21 09:14	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 20:21	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-539313/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 18:17	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539642	07/16/21 12:05	KJA	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			539560	07/15/21 20:42	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-539831/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 08:46	WPD	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-540002/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 10:11	S1B	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-540856/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 12:14	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-539313/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 18:38	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			539560	07/15/21 20:58	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-539313/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 18:59	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-539831/1003
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 07:51	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540002/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 10:36	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540856/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 12:34	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-539313/4-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 19:20	S1B	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-540856/3-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 12:54	DS	TAL PEN

Client Sample ID: P114R-ROX-071221

Lab Sample ID: 400-205857-11 MS

Date Collected: 07/12/21 12:35
Date Received: 07/13/21 09:39

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 12:20	WPD	TAL PEN
Total/NA	Prep	3520C			242.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 19:41	S1B	TAL PEN
Total/NA	Prep	3520C			242.4 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			539560	07/15/21 23:18	PP1	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 19:40	DS	TAL PEN

Client Sample ID: P114R-ROX-071221

Lab Sample ID: 400-205857-11 MSD

Date Collected: 07/12/21 12:35
Date Received: 07/13/21 09:39

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539831	07/18/21 12:42	WPD	TAL PEN
Total/NA	Prep	3520C			241 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D		1			539572	07/15/21 20:02	S1B	TAL PEN
Total/NA	Prep	3520C			241 mL	1 mL	539313	07/14/21 09:53	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			539560	07/15/21 23:33	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	540856	07/26/21 09:13	DS	TAL PEN
Total/NA	Analysis	8011		1			540855	07/26/21 20:00	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

GC/MS VOA

Analysis Batch: 539831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-2	TB-ROX-071221-8260-A	Total/NA	Water	8260B	
400-205857-3	MW16-ROX-071221	Total/NA	Water	8260B	
400-205857-4	MW11-ROX-071221	Total/NA	Water	8260B	
400-205857-5	MW1-ROX-071221	Total/NA	Water	8260B	
400-205857-6	MW3-ROX-071221	Total/NA	Water	8260B	
400-205857-8	TB-ROX-071221-8260-B	Total/NA	Water	8260B	
400-205857-9	MW6D-ROX-071221	Total/NA	Water	8260B	
400-205857-10	P93C-ROX-071221	Total/NA	Water	8260B	
400-205857-11	P114R-ROX-071221	Total/NA	Water	8260B	
400-205857-12	MW13-ROX-071221	Total/NA	Water	8260B	
MB 400-539831/5	Method Blank	Total/NA	Water	8260B	
LCS 400-539831/1003	Lab Control Sample	Total/NA	Water	8260B	
400-205857-11 MS	P114R-ROX-071221	Total/NA	Water	8260B	
400-205857-11 MSD	P114R-ROX-071221	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 539313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-3	MW16-ROX-071221	Total/NA	Water	3520C	
400-205857-4	MW11-ROX-071221	Total/NA	Water	3520C	
400-205857-5	MW1-ROX-071221	Total/NA	Water	3520C	
400-205857-6	MW3-ROX-071221	Total/NA	Water	3520C	
400-205857-9	MW6D-ROX-071221	Total/NA	Water	3520C	
400-205857-10	P93C-ROX-071221	Total/NA	Water	3520C	
400-205857-11	P114R-ROX-071221	Total/NA	Water	3520C	
400-205857-12	MW13-ROX-071221	Total/NA	Water	3520C	
MB 400-539313/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-539313/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-539313/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-539313/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-205857-11 MS	P114R-ROX-071221	Total/NA	Water	3520C	
400-205857-11 MSD	P114R-ROX-071221	Total/NA	Water	3520C	

Analysis Batch: 539560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-3	MW16-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-4	MW11-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-5	MW1-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-6	MW3-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-9	MW6D-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-10	P93C-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-11	P114R-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-12	MW13-ROX-071221	Total/NA	Water	8270D LL	539313
MB 400-539313/1-A	Method Blank	Total/NA	Water	8270D LL	539313
LCS 400-539313/2-A	Lab Control Sample	Total/NA	Water	8270D LL	539313
400-205857-11 MS	P114R-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-11 MSD	P114R-ROX-071221	Total/NA	Water	8270D LL	539313

GC/MS Semi VOA

Analysis Batch: 539572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-3	MW16-ROX-071221	Total/NA	Water	8270D	539313
400-205857-4	MW11-ROX-071221	Total/NA	Water	8270D	539313
400-205857-5	MW1-ROX-071221	Total/NA	Water	8270D	539313
400-205857-6	MW3-ROX-071221	Total/NA	Water	8270D	539313
400-205857-9	MW6D-ROX-071221	Total/NA	Water	8270D	539313
400-205857-10	P93C-ROX-071221	Total/NA	Water	8270D	539313
400-205857-11	P114R-ROX-071221	Total/NA	Water	8270D	539313
400-205857-12	MW13-ROX-071221	Total/NA	Water	8270D	539313
MB 400-539313/1-A	Method Blank	Total/NA	Water	8270D	539313
LCS 400-539313/2-A	Lab Control Sample	Total/NA	Water	8270D	539313
LCS 400-539313/3-A	Lab Control Sample	Total/NA	Water	8270D	539313
LCSD 400-539313/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	539313
400-205857-11 MS	P114R-ROX-071221	Total/NA	Water	8270D	539313
400-205857-11 MSD	P114R-ROX-071221	Total/NA	Water	8270D	539313

Analysis Batch: 539642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-3	MW16-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-4	MW11-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-5	MW1-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-6	MW3-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-9	MW6D-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-10	P93C-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-11	P114R-ROX-071221	Total/NA	Water	8270D LL	539313
400-205857-12	MW13-ROX-071221	Total/NA	Water	8270D LL	539313
MB 400-539313/1-A	Method Blank	Total/NA	Water	8270D LL	539313

Analysis Batch: 539670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-10	P93C-ROX-071221	Total/NA	Water	8270D	539313

Prep Batch: 540002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-6	MW3-ROX-071221	Total/NA	Water	3520C	
MB 400-540002/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	3520C	

Analysis Batch: 540203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-6	MW3-ROX-071221	Total/NA	Water	8270D	540002
MB 400-540002/1-A	Method Blank	Total/NA	Water	8270D	540002
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	8270D	540002

Analysis Batch: 541259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-10	P93C-ROX-071221	Total/NA	Water	8270D	539313

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

GC Semi VOA

Analysis Batch: 540855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-1	TB-ROX-071221-8011-A	Total/NA	Water	8011	540856
400-205857-3	MW16-ROX-071221	Total/NA	Water	8011	540856
400-205857-4	MW11-ROX-071221	Total/NA	Water	8011	540856
400-205857-5	MW1-ROX-071221	Total/NA	Water	8011	540856
400-205857-6	MW3-ROX-071221	Total/NA	Water	8011	540856
400-205857-7	TB-ROX-071221-8011-B	Total/NA	Water	8011	540856
400-205857-9	MW6D-ROX-071221	Total/NA	Water	8011	540856
400-205857-10	P93C-ROX-071221	Total/NA	Water	8011	540856
400-205857-11	P114R-ROX-071221	Total/NA	Water	8011	540856
400-205857-12	MW13-ROX-071221	Total/NA	Water	8011	540856
MB 400-540856/1-A	Method Blank	Total/NA	Water	8011	540856
LCS 400-540856/2-A	Lab Control Sample	Total/NA	Water	8011	540856
LCSD 400-540856/3-A	Lab Control Sample Dup	Total/NA	Water	8011	540856
400-205857-11 MS	P114R-ROX-071221	Total/NA	Water	8011	540856
400-205857-11 MSD	P114R-ROX-071221	Total/NA	Water	8011	540856

Prep Batch: 540856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205857-1	TB-ROX-071221-8011-A	Total/NA	Water	8011	
400-205857-3	MW16-ROX-071221	Total/NA	Water	8011	
400-205857-4	MW11-ROX-071221	Total/NA	Water	8011	
400-205857-5	MW1-ROX-071221	Total/NA	Water	8011	
400-205857-6	MW3-ROX-071221	Total/NA	Water	8011	
400-205857-7	TB-ROX-071221-8011-B	Total/NA	Water	8011	
400-205857-9	MW6D-ROX-071221	Total/NA	Water	8011	
400-205857-10	P93C-ROX-071221	Total/NA	Water	8011	
400-205857-11	P114R-ROX-071221	Total/NA	Water	8011	
400-205857-12	MW13-ROX-071221	Total/NA	Water	8011	
MB 400-540856/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-540856/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-540856/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-205857-11 MS	P114R-ROX-071221	Total/NA	Water	8011	
400-205857-11 MSD	P114R-ROX-071221	Total/NA	Water	8011	

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

Lab Sample ID: MB 400-539831/5
Matrix: Water
Analysis Batch: 539831

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/18/21 08:46	1
Acrolein	ND		20	10	ug/L			07/18/21 08:46	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/21 08:46	1
Benzene	ND		1.0	0.38	ug/L			07/18/21 08:46	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/21 08:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/21 08:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Bromoform	ND		5.0	0.71	ug/L			07/18/21 08:46	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/21 08:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/21 08:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/21 08:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/21 08:46	1
Chloroform	ND		1.0	0.60	ug/L			07/18/21 08:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/18/21 08:46	1
Chloromethane	ND		1.0	0.83	ug/L			07/18/21 08:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 08:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/21 08:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/21 08:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/21 08:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/21 08:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/21 08:46	1
2-Hexanone	ND		25	3.1	ug/L			07/18/21 08:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/21 08:46	1
Methylene bromide	ND		5.0	0.59	ug/L			07/18/21 08:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/21 08:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/21 08:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/18/21 08:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/18/21 08:46	1
Naphthalene	ND		1.0	1.0	ug/L			07/18/21 08:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/21 08:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/21 08:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/21 08:46	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/21 08:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/21 08:46	1

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

Lab Sample ID: MB 400-539831/5
Matrix: Water
Analysis Batch: 539831

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/21 08:46	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/21 08:46	1
Styrene	ND		1.0	1.0	ug/L			07/18/21 08:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/21 08:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/18/21 08:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/18/21 08:46	1
Toluene	ND		1.0	0.41	ug/L			07/18/21 08:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/21 08:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/18/21 08:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/21 08:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/18/21 08:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/18/21 08:46	1
Trichloroethene	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/18/21 08:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/21 08:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/21 08:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/21 08:46	1
Vinyl acetate	ND		25	2.0	ug/L			07/18/21 08:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/21 08:46	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/21 08:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/18/21 08:46*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/18/21 08:46*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/18/21 08:46*	*1*

Lab Sample ID: LCS 400-539831/1003
Matrix: Water
Analysis Batch: 539831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	419	*+	ug/L		210	43 - 160
Acrolein	500	653		ug/L		131	38 - 160
Acrylonitrile	500	410		ug/L		82	64 - 142
Benzene	50.0	52.8		ug/L		106	70 - 130
Bromobenzene	50.0	53.4		ug/L		107	70 - 132
Bromochloromethane	50.0	51.8		ug/L		104	70 - 130
Bromodichloromethane	50.0	47.2		ug/L		94	67 - 133
Bromoform	50.0	52.2		ug/L		104	57 - 140
Bromomethane	50.0	64.7		ug/L		129	10 - 160
2-Butanone (MEK)	200	421	*+	ug/L		210	61 - 145
Carbon disulfide	50.0	48.8		ug/L		98	61 - 137
Carbon tetrachloride	50.0	46.3		ug/L		93	61 - 137
Chlorobenzene	50.0	50.9		ug/L		102	70 - 130
Dibromochloromethane	50.0	49.3		ug/L		99	67 - 135
Chloroethane	50.0	55.1		ug/L		110	55 - 141

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

Lab Sample ID: LCS 400-539831/1003
Matrix: Water
Analysis Batch: 539831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	38.7		ug/L		77	10 - 160
Chloroform	50.0	48.9		ug/L		98	69 - 130
1-Chlorohexane	50.0	40.0		ug/L		80	69 - 130
Chloromethane	50.0	36.7		ug/L		73	58 - 137
cis-1,2-Dichloroethene	50.0	52.1		ug/L		104	68 - 130
cis-1,3-Dichloropropene	50.0	53.2		ug/L		106	69 - 132
1,2-Dichlorobenzene	50.0	55.6		ug/L		111	67 - 130
1,3-Dichlorobenzene	50.0	57.9		ug/L		116	70 - 130
1,4-Dichlorobenzene	50.0	57.8		ug/L		116	70 - 130
Dichlorodifluoromethane	50.0	34.6		ug/L		69	41 - 146
1,1-Dichloroethane	50.0	45.6		ug/L		91	70 - 130
1,2-Dichloroethane	50.0	41.8		ug/L		84	69 - 130
1,1-Dichloroethene	50.0	50.3		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	46.5		ug/L		93	70 - 130
1,3-Dichloropropane	50.0	50.7		ug/L		101	70 - 130
2,2-Dichloropropane	50.0	48.7		ug/L		97	52 - 135
1,1-Dichloropropene	50.0	49.3		ug/L		99	70 - 130
Ethylbenzene	50.0	50.0		ug/L		100	70 - 130
Ethyl methacrylate	50.0	53.9		ug/L		108	68 - 130
Hexachlorobutadiene	50.0	66.2		ug/L		132	53 - 140
2-Hexanone	200	261		ug/L		130	65 - 137
Isopropylbenzene	50.0	50.8		ug/L		102	70 - 130
Methylene bromide	50.0	53.8		ug/L		108	70 - 130
Methylene Chloride	50.0	53.1		ug/L		106	66 - 135
4-Methyl-2-pentanone (MIBK)	200	191		ug/L		95	69 - 138
Methyl tert-butyl ether	50.0	55.6		ug/L		111	66 - 130
m-Xylene & p-Xylene	50.0	49.1		ug/L		98	70 - 130
Naphthalene	50.0	51.9		ug/L		104	47 - 149
n-Butylbenzene	50.0	46.7		ug/L		93	67 - 130
N-Propylbenzene	50.0	47.7		ug/L		95	70 - 130
o-Chlorotoluene	50.0	44.7		ug/L		89	70 - 130
o-Xylene	50.0	48.5		ug/L		97	70 - 130
p-Chlorotoluene	50.0	44.4		ug/L		89	70 - 130
p-Isopropyltoluene	50.0	49.3		ug/L		99	65 - 130
sec-Butylbenzene	50.0	46.0		ug/L		92	66 - 130
Styrene	50.0	49.0		ug/L		98	70 - 130
tert-Butylbenzene	50.0	44.1		ug/L		88	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.0		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/L		97	70 - 131
Tetrachloroethene	50.0	56.8		ug/L		114	65 - 130
Toluene	50.0	48.5		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	52.4		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	48.7		ug/L		97	63 - 130
1,2,3-Trichlorobenzene	50.0	62.3		ug/L		125	60 - 138
1,2,4-Trichlorobenzene	50.0	60.2		ug/L		120	60 - 140
1,1,1-Trichloroethane	50.0	44.4		ug/L		89	68 - 130
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	70 - 130
Trichloroethene	50.0	56.5		ug/L		113	70 - 130
Trichlorofluoromethane	50.0	52.8		ug/L		106	65 - 138

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

Lab Sample ID: LCS 400-539831/1003
Matrix: Water
Analysis Batch: 539831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	44.7		ug/L		89	70 - 130
1,3,5-Trimethylbenzene	50.0	44.8		ug/L		90	69 - 130
Vinyl acetate	100	152		ug/L		152	26 - 160
Vinyl chloride	50.0	49.8		ug/L		100	59 - 136
Xylenes, Total	100	97.6		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*72 - 119*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 539831

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*+	200	150		ug/L		75	43 - 150
Acrolein	ND		500	486		ug/L		97	38 - 150
Acrylonitrile	ND		500	364		ug/L		73	62 - 149
Benzene	ND		50.0	48.5		ug/L		97	56 - 142
Bromobenzene	ND		50.0	45.1		ug/L		90	59 - 136
Bromochloromethane	ND		50.0	48.3		ug/L		97	64 - 140
Bromodichloromethane	ND		50.0	41.8		ug/L		84	59 - 143
Bromoform	ND		50.0	44.2		ug/L		88	50 - 140
Bromomethane	ND		50.0	48.2		ug/L		96	10 - 150
2-Butanone (MEK)	ND	*+	200	202		ug/L		101	55 - 150
Carbon disulfide	ND		50.0	44.5		ug/L		89	48 - 150
Carbon tetrachloride	ND		50.0	42.4		ug/L		85	55 - 145
Chlorobenzene	ND		50.0	44.9		ug/L		90	64 - 130
Dibromochloromethane	ND		50.0	43.8		ug/L		88	56 - 143
Chloroethane	ND		50.0	41.2		ug/L		82	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	4.85	J	ug/L		10	10 - 150
Chloroform	ND		50.0	44.0		ug/L		88	60 - 141
1-Chlorohexane	ND		50.0	35.1		ug/L		70	56 - 136
Chloromethane	ND		50.0	26.3		ug/L		53	49 - 148
cis-1,2-Dichloroethene	ND		50.0	46.9		ug/L		94	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.2		ug/L		92	57 - 140
1,2-Dichlorobenzene	ND		50.0	45.5		ug/L		91	52 - 137
1,3-Dichlorobenzene	ND		50.0	47.6		ug/L		95	54 - 135
1,4-Dichlorobenzene	ND		50.0	48.2		ug/L		96	53 - 135
Dichlorodifluoromethane	ND		50.0	26.7		ug/L		53	16 - 150
1,1-Dichloroethane	ND		50.0	41.0		ug/L		82	61 - 144
1,2-Dichloroethane	ND		50.0	38.1		ug/L		76	60 - 141
1,1-Dichloroethene	ND		50.0	45.9		ug/L		92	54 - 147
1,2-Dichloropropane	ND		50.0	41.1		ug/L		82	66 - 137
1,3-Dichloropropane	ND		50.0	44.4		ug/L		89	66 - 133
2,2-Dichloropropane	ND		50.0	43.0		ug/L		86	42 - 144

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

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 539831

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	45.4		ug/L		91	65 - 136
Ethylbenzene	ND		50.0	43.4		ug/L		87	58 - 131
Ethyl methacrylate	ND		50.0	48.5		ug/L		97	64 - 130
Hexachlorobutadiene	ND		50.0	55.1		ug/L		110	31 - 149
2-Hexanone	ND		200	134		ug/L		67	65 - 140
Isopropylbenzene	ND		50.0	44.2		ug/L		88	56 - 133
Methylene bromide	ND		50.0	47.5		ug/L		95	63 - 138
Methylene Chloride	ND		50.0	47.5		ug/L		95	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	146		ug/L		73	63 - 146
Methyl tert-butyl ether	2.1		50.0	50.7		ug/L		97	59 - 137
m-Xylene & p-Xylene	ND		50.0	42.2		ug/L		84	57 - 130
Naphthalene	ND		50.0	44.2		ug/L		88	25 - 150
n-Butylbenzene	ND		50.0	40.1		ug/L		80	41 - 142
N-Propylbenzene	ND		50.0	41.5		ug/L		83	51 - 138
o-Chlorotoluene	ND		50.0	39.5		ug/L		79	53 - 134
o-Xylene	ND		50.0	42.4		ug/L		85	61 - 130
p-Chlorotoluene	ND		50.0	37.9		ug/L		76	54 - 133
p-Isopropyltoluene	ND		50.0	42.1		ug/L		84	48 - 139
sec-Butylbenzene	ND		50.0	40.3		ug/L		81	50 - 138
Styrene	ND		50.0	42.3		ug/L		85	58 - 131
tert-Butylbenzene	ND		50.0	38.3		ug/L		77	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	45.4		ug/L		91	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	42.6		ug/L		85	66 - 135
Tetrachloroethene	ND		50.0	45.8		ug/L		92	52 - 133
Toluene	ND		50.0	43.2		ug/L		86	65 - 130
trans-1,2-Dichloroethene	ND		50.0	46.1		ug/L		92	61 - 143
trans-1,3-Dichloropropene	ND		50.0	41.2		ug/L		82	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	51.0		ug/L		102	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	48.6		ug/L		97	39 - 148
1,1,1-Trichloroethane	ND		50.0	40.7		ug/L		81	57 - 142
1,1,2-Trichloroethane	ND		50.0	45.9		ug/L		92	66 - 131
Trichloroethene	ND		50.0	50.2		ug/L		100	64 - 136
Trichlorofluoromethane	ND		50.0	40.0		ug/L		80	54 - 150
1,2,3-Trichloropropane	ND		50.0	37.6		ug/L		75	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	38.6		ug/L		77	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	38.9		ug/L		78	52 - 135
Vinyl acetate	ND		100	120		ug/L		120	26 - 150
Vinyl chloride	ND		50.0	37.5		ug/L		75	46 - 150
Xylenes, Total	ND		100	84.6		ug/L		85	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*72 - 119*
Dibromofluoromethane	*96*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

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

Lab Sample ID: 400-205857-11 MSD
Matrix: Water
Analysis Batch: 539831

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*+	200	172		ug/L		86	43 - 150	14	30
Acrolein	ND		500	587		ug/L		117	38 - 150	19	31
Acrylonitrile	ND		500	416		ug/L		83	62 - 149	13	30
Benzene	ND		50.0	52.7		ug/L		105	56 - 142	8	30
Bromobenzene	ND		50.0	50.7		ug/L		101	59 - 136	12	30
Bromochloromethane	ND		50.0	52.5		ug/L		105	64 - 140	8	30
Bromodichloromethane	ND		50.0	46.3		ug/L		93	59 - 143	10	30
Bromoform	ND		50.0	49.9		ug/L		100	50 - 140	12	30
Bromomethane	ND		50.0	62.8		ug/L		126	10 - 150	26	50
2-Butanone (MEK)	ND	*+	200	226		ug/L		113	55 - 150	11	30
Carbon disulfide	ND		50.0	50.0		ug/L		100	48 - 150	12	30
Carbon tetrachloride	ND		50.0	46.6		ug/L		93	55 - 145	10	30
Chlorobenzene	ND		50.0	48.5		ug/L		97	64 - 130	8	30
Dibromochloromethane	ND		50.0	46.6		ug/L		93	56 - 143	6	30
Chloroethane	ND		50.0	51.3		ug/L		103	50 - 150	22	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	48.6		ug/L		97	60 - 141	10	30
1-Chlorohexane	ND		50.0	38.9		ug/L		78	56 - 136	10	30
Chloromethane	ND		50.0	31.6		ug/L		63	49 - 148	18	31
cis-1,2-Dichloroethene	ND		50.0	51.6		ug/L		103	59 - 143	9	30
cis-1,3-Dichloropropene	ND		50.0	51.7		ug/L		103	57 - 140	11	30
1,2-Dichlorobenzene	ND		50.0	52.3		ug/L		105	52 - 137	14	30
1,3-Dichlorobenzene	ND		50.0	54.1		ug/L		108	54 - 135	13	30
1,4-Dichlorobenzene	ND		50.0	53.8		ug/L		108	53 - 135	11	30
Dichlorodifluoromethane	ND		50.0	31.6		ug/L		63	16 - 150	17	31
1,1-Dichloroethane	ND		50.0	44.5		ug/L		89	61 - 144	8	30
1,2-Dichloroethane	ND		50.0	42.6		ug/L		85	60 - 141	11	30
1,1-Dichloroethene	ND		50.0	50.1		ug/L		100	54 - 147	9	30
1,2-Dichloropropane	ND		50.0	46.2		ug/L		92	66 - 137	12	30
1,3-Dichloropropane	ND		50.0	47.8		ug/L		96	66 - 133	7	30
2,2-Dichloropropane	ND		50.0	48.8		ug/L		98	42 - 144	13	31
1,1-Dichloropropene	ND		50.0	49.1		ug/L		98	65 - 136	8	30
Ethylbenzene	ND		50.0	47.5		ug/L		95	58 - 131	9	30
Ethyl methacrylate	ND		50.0	53.0		ug/L		106	64 - 130	9	30
Hexachlorobutadiene	ND		50.0	64.0		ug/L		128	31 - 149	15	36
2-Hexanone	ND		200	149		ug/L		75	65 - 140	11	30
Isopropylbenzene	ND		50.0	48.4		ug/L		97	56 - 133	9	30
Methylene bromide	ND		50.0	52.4		ug/L		105	63 - 138	10	30
Methylene Chloride	ND		50.0	52.7		ug/L		105	60 - 146	10	32
4-Methyl-2-pentanone (MIBK)	ND		200	174		ug/L		87	63 - 146	17	30
Methyl tert-butyl ether	2.1		50.0	56.4		ug/L		109	59 - 137	11	30
m-Xylene & p-Xylene	ND		50.0	46.2		ug/L		92	57 - 130	9	30
Naphthalene	ND		50.0	50.8		ug/L		102	25 - 150	14	30
n-Butylbenzene	ND		50.0	45.7		ug/L		91	41 - 142	13	31
N-Propylbenzene	ND		50.0	46.4		ug/L		93	51 - 138	11	30
o-Chlorotoluene	ND		50.0	43.6		ug/L		87	53 - 134	10	30
o-Xylene	ND		50.0	46.1		ug/L		92	61 - 130	9	30
p-Chlorotoluene	ND		50.0	42.8		ug/L		86	54 - 133	12	30

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

Lab Sample ID: 400-205857-11 MSD
Matrix: Water
Analysis Batch: 539831

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	47.5		ug/L		95	48 - 139	12	30
sec-Butylbenzene	ND		50.0	45.2		ug/L		90	50 - 138	11	30
Styrene	ND		50.0	46.4		ug/L		93	58 - 131	9	30
tert-Butylbenzene	ND		50.0	42.7		ug/L		85	54 - 146	11	30
1,1,1,2-Tetrachloroethane	ND		50.0	49.3		ug/L		99	59 - 137	8	30
1,1,2,2-Tetrachloroethane	ND		50.0	47.1		ug/L		94	66 - 135	10	30
Tetrachloroethene	ND		50.0	50.0		ug/L		100	52 - 133	9	30
Toluene	ND		50.0	46.7		ug/L		93	65 - 130	8	30
trans-1,2-Dichloroethene	ND		50.0	51.7		ug/L		103	61 - 143	12	30
trans-1,3-Dichloropropene	ND		50.0	46.2		ug/L		92	53 - 133	11	30
1,2,3-Trichlorobenzene	ND		50.0	58.4		ug/L		117	43 - 145	13	30
1,2,4-Trichlorobenzene	ND		50.0	55.7		ug/L		111	39 - 148	14	30
1,1,1-Trichloroethane	ND		50.0	45.8		ug/L		92	57 - 142	12	30
1,1,2-Trichloroethane	ND		50.0	49.2		ug/L		98	66 - 131	7	30
Trichloroethene	ND		50.0	56.4		ug/L		113	64 - 136	12	30
Trichlorofluoromethane	ND		50.0	47.3		ug/L		95	54 - 150	17	30
1,2,3-Trichloropropane	ND		50.0	42.0		ug/L		84	65 - 133	11	30
1,2,4-Trimethylbenzene	ND		50.0	42.7		ug/L		85	50 - 139	10	30
1,3,5-Trimethylbenzene	ND		50.0	43.0		ug/L		86	52 - 135	10	30
Vinyl acetate	ND		100	146		ug/L		146	26 - 150	20	33
Vinyl chloride	ND		50.0	44.3		ug/L		89	46 - 150	17	30
Xylenes, Total	ND		100	92.3		ug/L		92	59 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*72 - 119*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: MB 400-539313/1-A
Matrix: Water
Analysis Batch: 539572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/14/21 09:53	07/15/21 18:17	1
Benzenethiol	ND		10	1.7	ug/L		07/14/21 09:53	07/15/21 18:17	1
Benzoic acid	ND		30	7.3	ug/L		07/14/21 09:53	07/15/21 18:17	1
Benzyl alcohol	ND		10	2.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/14/21 09:53	07/15/21 18:17	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/14/21 09:53	07/15/21 18:17	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/14/21 09:53	07/15/21 18:17	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/14/21 09:53	07/15/21 18:17	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/14/21 09:53	07/15/21 18:17	1
4-Chloroaniline	ND		10	3.4	ug/L		07/14/21 09:53	07/15/21 18:17	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/14/21 09:53	07/15/21 18:17	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/14/21 09:53	07/15/21 18:17	1
2-Chlorophenol	ND		10	2.2	ug/L		07/14/21 09:53	07/15/21 18:17	1

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

Lab Sample ID: MB 400-539313/1-A
Matrix: Water
Analysis Batch: 539572

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
Dibenzofuran	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 18:17	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/14/21 09:53	07/15/21 18:17	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
Diethyl phthalate	ND		10	0.24	ug/L		07/14/21 09:53	07/15/21 18:17	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/14/21 09:53	07/15/21 18:17	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 18:17	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/14/21 09:53	07/15/21 18:17	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/14/21 09:53	07/15/21 18:17	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/14/21 09:53	07/15/21 18:17	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/14/21 09:53	07/15/21 18:17	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/14/21 09:53	07/15/21 18:17	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 18:17	1
1,4-Dioxane	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/14/21 09:53	07/15/21 18:17	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/14/21 09:53	07/15/21 18:17	1
Hexachloroethane	ND		10	4.2	ug/L		07/14/21 09:53	07/15/21 18:17	1
Indene	ND		10	1.0	ug/L		07/14/21 09:53	07/15/21 18:17	1
Isophorone	ND		10	0.14	ug/L		07/14/21 09:53	07/15/21 18:17	1
2-Methylphenol	ND		10	1.8	ug/L		07/14/21 09:53	07/15/21 18:17	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/14/21 09:53	07/15/21 18:17	1
2-Nitroaniline	ND		10	2.2	ug/L		07/14/21 09:53	07/15/21 18:17	1
3-Nitroaniline	ND		10	1.8	ug/L		07/14/21 09:53	07/15/21 18:17	1
4-Nitroaniline	ND		10	1.5	ug/L		07/14/21 09:53	07/15/21 18:17	1
Nitrobenzene	ND		10	0.13	ug/L		07/14/21 09:53	07/15/21 18:17	1
2-Nitrophenol	ND		10	5.2	ug/L		07/14/21 09:53	07/15/21 18:17	1
4-Nitrophenol	ND		10	2.1	ug/L		07/14/21 09:53	07/15/21 18:17	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/14/21 09:53	07/15/21 18:17	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/14/21 09:53	07/15/21 18:17	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/14/21 09:53	07/15/21 18:17	1
Pentachlorophenol	ND		20	1.4	ug/L		07/14/21 09:53	07/15/21 18:17	1
Phenol	ND		10	2.6	ug/L		07/14/21 09:53	07/15/21 18:17	1
Pyridine	ND		10	3.2	ug/L		07/14/21 09:53	07/15/21 18:17	1
Quinoline	ND		10	4.5	ug/L		07/14/21 09:53	07/15/21 18:17	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/14/21 09:53	07/15/21 18:17	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/14/21 09:53	07/15/21 18:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*113*		*46 - 124*	*07/14/21 09:53*	*07/15/21 18:17*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/14/21 09:53*	*07/15/21 18:17*	*1*
Nitrobenzene-d5	*90*		*36 - 126*	*07/14/21 09:53*	*07/15/21 18:17*	*1*
Phenol-d5	*69*		*17 - 127*	*07/14/21 09:53*	*07/15/21 18:17*	*1*
Terphenyl-d14	*132*		*44 - 149*	*07/14/21 09:53*	*07/15/21 18:17*	*1*
2,4,6-Tribromophenol	*113*		*26 - 150*	*07/14/21 09:53*	*07/15/21 18:17*	*1*

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

Lab Sample ID: LCS 400-539313/2-A
Matrix: Water
Analysis Batch: 539572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	96.9		ug/L		81	21 - 120
Benzoic acid	502	287		ug/L		57	10 - 144
Benzyl alcohol	120	91.3		ug/L		76	28 - 120
Bis(2-chloroethoxy)methane	120	94.0		ug/L		78	47 - 120
Bis(2-chloroethyl)ether	120	87.4		ug/L		73	44 - 120
bis (2-chloroisopropyl) ether	120	72.2		ug/L		60	33 - 121
Bis(2-ethylhexyl) phthalate	120	121		ug/L		101	52 - 147
4-Bromophenyl phenyl ether	120	145		ug/L		121	54 - 122
Butyl benzyl phthalate	120	120		ug/L		100	54 - 133
4-Chloroaniline	120	89.8		ug/L		75	26 - 120
4-Chloro-3-methylphenol	120	120		ug/L		100	48 - 131
2-Chloronaphthalene	120	116		ug/L		97	52 - 121
2-Chlorophenol	120	88.6		ug/L		74	40 - 120
4-Chlorophenyl phenyl ether	120	131		ug/L		109	56 - 125
Dibenz[a,h]acridine	120	127		ug/L		106	31 - 150
Dibenzofuran	120	119		ug/L		99	56 - 122
3,3'-Dichlorobenzidine	160	235	*+	ug/L		147	36 - 132
2,4-Dichlorophenol	120	111		ug/L		92	49 - 120
Diethyl phthalate	120	122		ug/L		101	50 - 137
2,4-Dimethylphenol	120	110		ug/L		91	48 - 120
Dimethyl phthalate	120	122		ug/L		102	57 - 124
Di-n-butyl phthalate	120	128		ug/L		107	58 - 126
4,6-Dinitro-ortho-cresol	240	245		ug/L		102	23 - 148
2,4-Dinitrophenol	240	240		ug/L		100	10 - 150
2,4-Dinitrotoluene	120	127		ug/L		106	54 - 142
2,6-Dinitrotoluene	120	128		ug/L		107	55 - 130
Di-n-octyl phthalate	120	122		ug/L		102	57 - 138
1,4-Dioxane	120	76.2		ug/L		63	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	98.0		ug/L		82	45 - 124
Hexachlorobenzene	120	155		ug/L		129	52 - 129
Hexachlorocyclopentadiene	120	77.3		ug/L		64	10 - 134
Hexachloroethane	120	99.1		ug/L		83	20 - 120
Indene	120	108		ug/L		90	49 - 120
Isophorone	120	93.4		ug/L		78	48 - 120
2-Methylphenol	120	109		ug/L		91	46 - 124
3 & 4 Methylphenol	120	98.1		ug/L		82	45 - 120
2-Nitroaniline	120	99.6		ug/L		83	51 - 145
3-Nitroaniline	120	90.4		ug/L		75	37 - 127
4-Nitroaniline	120	98.9		ug/L		82	36 - 137
Nitrobenzene	120	91.2		ug/L		76	45 - 120
2-Nitrophenol	120	105		ug/L		88	40 - 124
4-Nitrophenol	240	243		ug/L		101	23 - 146
N-Nitrosodimethylamine	120	90.2		ug/L		75	29 - 137
N-Nitrosodi-n-propylamine	120	102		ug/L		85	45 - 120
N-Nitrosodiphenylamine	119	123		ug/L		103	54 - 120
Pentachlorophenol	240	265		ug/L		110	31 - 130
Phenol	120	80.4		ug/L		67	11 - 120
Pyridine	240	147		ug/L		61	16 - 120

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

Lab Sample ID: LCS 400-539313/2-A
Matrix: Water
Analysis Batch: 539572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	115		ug/L		96	49 - 130
2,4,5-Trichlorophenol	120	122		ug/L		102	51 - 136
2,4,6-Trichlorophenol	120	121		ug/L		101	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*101*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*78*		*36 - 126*
Phenol-d5	*73*		*17 - 127*
Terphenyl-d14	*114*		*44 - 149*
2,4,6-Tribromophenol	*150*		*26 - 150*

Lab Sample ID: LCS 400-539313/3-A
Matrix: Water
Analysis Batch: 539572

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	6.35	J *-	ug/L		5	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*96*		*46 - 124*
2-Fluorophenol	*18*		*13 - 113*
Nitrobenzene-d5	*75*		*36 - 126*
Phenol-d5	*46*		*17 - 127*
Terphenyl-d14	*117*		*44 - 149*
2,4,6-Tribromophenol	*92*		*26 - 150*

Lab Sample ID: LCSD 400-539313/4-A
Matrix: Water
Analysis Batch: 539572

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	8.61	J *-	ug/L		7	10 - 120	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*46 - 124*
2-Fluorophenol	*41*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*65*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*99*		*26 - 150*

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 539572

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		124	97.7		ug/L		79	10 - 120

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

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 539572

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzoic acid	21	J	518	537		ug/L		100	10 - 149
Benzyl alcohol	ND		124	91.4		ug/L		74	33 - 120
Bis(2-chloroethoxy)methane	ND		124	98.2		ug/L		79	26 - 120
Bis(2-chloroethyl)ether	ND		124	88.7		ug/L		72	42 - 120
bis (2-chloroisopropyl) ether	ND		124	74.4		ug/L		60	28 - 120
Bis(2-ethylhexyl) phthalate	5.9	J	124	117		ug/L		90	39 - 120
4-Bromophenyl phenyl ether	ND		124	146		ug/L		118	40 - 120
Butyl benzyl phthalate	ND		124	120		ug/L		97	45 - 120
4-Chloroaniline	ND		124	71.4		ug/L		58	10 - 120
4-Chloro-3-methylphenol	ND		124	126		ug/L		102	34 - 120
2-Chloronaphthalene	ND		124	119		ug/L		97	39 - 120
2-Chlorophenol	ND		124	96.4		ug/L		78	25 - 120
4-Chlorophenyl phenyl ether	ND		124	132		ug/L		106	44 - 120
Dibenz[a,h]acridine	4.3	J	123	118		ug/L		92	50 - 150
Dibenzofuran	ND		124	122		ug/L		99	25 - 130
3,3'-Dichlorobenzidine	ND	*+	165	54.3		ug/L		33	10 - 120
2,4-Dichlorophenol	ND		124	119		ug/L		96	31 - 120
Diethyl phthalate	ND		124	125		ug/L		101	46 - 120
2,4-Dimethylphenol	ND		124	114		ug/L		92	21 - 120
Dimethyl phthalate	ND		124	125		ug/L		101	38 - 120
Di-n-butyl phthalate	ND		124	125		ug/L		101	49 - 120
4,6-Dinitro-ortho-cresol	ND		248	310	F1	ug/L		125	25 - 120
2,4-Dinitrophenol	ND		248	325		ug/L		131	15 - 140
2,4-Dinitrotoluene	ND		124	131		ug/L		106	53 - 120
2,6-Dinitrotoluene	ND		124	132		ug/L		106	43 - 120
Di-n-octyl phthalate	ND		124	119		ug/L		96	35 - 121
1,4-Dioxane	ND		124	73.0		ug/L		59	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		124	98.3		ug/L		79	50 - 150
Hexachlorobenzene	ND		124	154	F1	ug/L		125	38 - 122
Hexachlorocyclopentadiene	ND		124	85.1		ug/L		69	10 - 120
Hexachloroethane	ND		124	108		ug/L		88	10 - 150
Indene	ND		124	113		ug/L		91	50 - 150
Isophorone	ND		124	96.9		ug/L		78	42 - 120
2-Methylphenol	ND		124	121		ug/L		98	28 - 120
3 & 4 Methylphenol	ND		124	104		ug/L		84	31 - 120
2-Nitroaniline	ND		124	103		ug/L		83	45 - 120
3-Nitroaniline	ND		124	67.9		ug/L		55	10 - 130
4-Nitroaniline	ND		124	97.8		ug/L		79	10 - 132
Nitrobenzene	ND		124	93.7		ug/L		76	39 - 120
2-Nitrophenol	ND		124	115		ug/L		93	33 - 120
4-Nitrophenol	ND		248	271		ug/L		109	10 - 120
N-Nitrosodimethylamine	ND		124	87.5		ug/L		71	10 - 139
N-Nitrosodi-n-propylamine	ND		124	107		ug/L		86	37 - 124
N-Nitrosodiphenylamine	ND		123	121		ug/L		98	10 - 150
Pentachlorophenol	ND		248	334	F1	ug/L		135	29 - 130
Phenol	ND		124	98.0		ug/L		79	10 - 150
Pyridine	ND		248	150		ug/L		61	10 - 120
Quinoline	ND		123	115		ug/L		93	51 - 120

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

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 539572

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		124	135		ug/L		109	34 - 120
2,4,6-Trichlorophenol	ND		124	123		ug/L		99	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*99*		*46 - 124*
2-Fluorophenol	*51*		*13 - 113*
Nitrobenzene-d5	*80*		*36 - 126*
Phenol-d5	*77*		*17 - 127*
Terphenyl-d14	*102*		*44 - 149*
2,4,6-Tribromophenol	*161*	*S1+*	*26 - 150*

Lab Sample ID: 400-205857-11 MSD
Matrix: Water
Analysis Batch: 539572

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		124	93.5		ug/L		75	10 - 120	4	63
Benzoic acid	21	J	521	425		ug/L		78	10 - 149	23	49
Benzyl alcohol	ND		124	97.0		ug/L		78	33 - 120	6	37
Bis(2-chloroethoxy)methane	ND		124	94.3		ug/L		76	26 - 120	4	70
Bis(2-chloroethyl)ether	ND		124	88.1		ug/L		71	42 - 120	1	42
bis (2-chloroisopropyl) ether	ND		124	72.3		ug/L		58	28 - 120	3	41
Bis(2-ethylhexyl) phthalate	5.9	J	124	120		ug/L		92	39 - 120	3	35
4-Bromophenyl phenyl ether	ND		124	146		ug/L		118	40 - 120	0	30
Butyl benzyl phthalate	ND		124	121		ug/L		98	45 - 120	1	32
4-Chloroaniline	ND		124	45.5		ug/L		37	10 - 120	44	94
4-Chloro-3-methylphenol	ND		124	112		ug/L		90	34 - 120	12	40
2-Chloronaphthalene	ND		124	115		ug/L		93	39 - 120	4	29
2-Chlorophenol	ND		124	59.6	F2	ug/L		48	25 - 120	47	42
4-Chlorophenyl phenyl ether	ND		124	130		ug/L		104	44 - 120	1	27
Dibenz[a,h]acridine	4.3	J	124	121		ug/L		94	50 - 150	3	40
Dibenzofuran	ND		124	119		ug/L		96	25 - 130	3	29
3,3'-Dichlorobenzidine	ND	*+	166	44.7		ug/L		27	10 - 120	19	58
2,4-Dichlorophenol	ND		124	92.2		ug/L		74	31 - 120	25	43
Diethyl phthalate	ND		124	120		ug/L		97	46 - 120	4	40
2,4-Dimethylphenol	ND		124	108		ug/L		87	21 - 120	5	47
Dimethyl phthalate	ND		124	121		ug/L		97	38 - 120	4	36
Di-n-butyl phthalate	ND		124	125		ug/L		100	49 - 120	0	32
4,6-Dinitro-ortho-cresol	ND		249	269		ug/L		108	25 - 120	14	42
2,4-Dinitrophenol	ND		249	283		ug/L		114	15 - 140	14	36
2,4-Dinitrotoluene	ND		124	127		ug/L		102	53 - 120	3	28
2,6-Dinitrotoluene	ND		124	129		ug/L		103	43 - 120	2	28
Di-n-octyl phthalate	ND		124	123		ug/L		99	35 - 121	3	35
1,4-Dioxane	ND		124	70.4		ug/L		57	50 - 150	4	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		124	96.3		ug/L		77	50 - 150	2	40
Hexachlorobenzene	ND		124	156	F1	ug/L		125	38 - 122	1	33
Hexachlorocyclopentadiene	ND		124	89.6		ug/L		72	10 - 120	5	50
Hexachloroethane	ND		124	101		ug/L		81	10 - 150	7	41

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

Lab Sample ID: 400-205857-11 MSD
Matrix: Water
Analysis Batch: 539572

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	ND		124	108		ug/L		87	50 - 150	5	40
Isophorone	ND		124	93.7		ug/L		75	42 - 120	3	33
2-Methylphenol	ND		124	103		ug/L		82	28 - 120	16	47
3 & 4 Methylphenol	ND		124	87.9		ug/L		71	31 - 120	16	47
2-Nitroaniline	ND		124	96.5		ug/L		78	45 - 120	6	33
3-Nitroaniline	ND		124	69.4		ug/L		56	10 - 130	2	39
4-Nitroaniline	ND		124	94.0		ug/L		76	10 - 132	4	50
Nitrobenzene	ND		124	90.0		ug/L		72	39 - 120	4	35
2-Nitrophenol	ND		124	83.8		ug/L		67	33 - 120	31	43
4-Nitrophenol	ND		249	254		ug/L		102	10 - 120	6	82
N-Nitrosodimethylamine	ND		124	85.9		ug/L		69	10 - 139	2	62
N-Nitrosodi-n-propylamine	ND		124	102		ug/L		82	37 - 124	5	36
N-Nitrosodiphenylamine	ND		123	119		ug/L		96	10 - 150	2	34
Pentachlorophenol	ND		249	311		ug/L		125	29 - 130	7	42
Phenol	ND		124	62.4		ug/L		50	10 - 150	44	52
Pyridine	ND		249	148		ug/L		59	10 - 120	2	55
Quinoline	ND		124	112		ug/L		90	51 - 120	3	40
2,4,5-Trichlorophenol	ND		124	111		ug/L		89	34 - 120	19	42
2,4,6-Trichlorophenol	ND		124	104		ug/L		83	33 - 120	17	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*96*		*46 - 124*
2-Fluorophenol	*23*		*13 - 113*
Nitrobenzene-d5	*76*		*36 - 126*
Phenol-d5	*54*		*17 - 127*
Terphenyl-d14	*107*		*44 - 149*
2,4,6-Tribromophenol	*145*		*26 - 150*

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/19/21 15:33	07/21/21 10:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
2-Fluorophenol	*43*		*13 - 113*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Phenol-d5	*62*		*17 - 127*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Terphenyl-d14	*85*		*44 - 149*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
2,4,6-Tribromophenol	*63*		*26 - 150*	*07/19/21 15:33*	*07/21/21 10:11*	*1*

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

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate	120	120		ug/L		100	52 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*67*		*13 - 113*
Nitrobenzene-d5	*87*		*36 - 126*
Phenol-d5	*78*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*85*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-539313/1-A
Matrix: Water
Analysis Batch: 539560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/14/21 09:53	07/15/21 20:42	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/14/21 09:53	07/15/21 20:42	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/14/21 09:53	07/15/21 20:42	1

Lab Sample ID: MB 400-539313/1-A
Matrix: Water
Analysis Batch: 539642

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 539313

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/14/21 09:53	07/16/21 12:05	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/14/21 09:53	07/16/21 12:05	1
Anthracene	ND		0.20	0.032	ug/L		07/14/21 09:53	07/16/21 12:05	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/14/21 09:53	07/16/21 12:05	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/14/21 09:53	07/16/21 12:05	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/14/21 09:53	07/16/21 12:05	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/14/21 09:53	07/16/21 12:05	1
Chrysene	ND		0.20	0.074	ug/L		07/14/21 09:53	07/16/21 12:05	1
Fluoranthene	ND		0.20	0.068	ug/L		07/14/21 09:53	07/16/21 12:05	1
Fluorene	ND		0.20	0.11	ug/L		07/14/21 09:53	07/16/21 12:05	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/14/21 09:53	07/16/21 12:05	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/14/21 09:53	07/16/21 12:05	1
Phenanthrene	ND		0.20	0.036	ug/L		07/14/21 09:53	07/16/21 12:05	1
Pyrene	ND		0.20	0.040	ug/L		07/14/21 09:53	07/16/21 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*15 - 122*	*07/14/21 09:53*	*07/16/21 12:05*	*1*
Nitrobenzene-d5	*118*		*19 - 130*	*07/14/21 09:53*	*07/16/21 12:05*	*1*
Terphenyl-d14	*145*	*S1+*	*33 - 138*	*07/14/21 09:53*	*07/16/21 12:05*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-539313/2-A
Matrix: Water
Analysis Batch: 539560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	112		ug/L		93	41 - 120
Acenaphthylene	120	113		ug/L		94	44 - 120
Anthracene	120	112		ug/L		93	49 - 120
Benzo[a]anthracene	120	113		ug/L		94	61 - 135
Benzo[a]pyrene	120	111		ug/L		92	52 - 120
Benzo[b]fluoranthene	120	105		ug/L		88	53 - 134
Benzo[g,h,i]perylene	120	101		ug/L		84	47 - 133
Benzo[k]fluoranthene	120	104		ug/L		87	57 - 134
Chrysene	120	104		ug/L		87	55 - 122
Dibenz(a,h)anthracene	120	126		ug/L		105	48 - 146
Fluoranthene	120	116		ug/L		97	54 - 128
Fluorene	120	133		ug/L		111	45 - 125
Indeno[1,2,3-cd]pyrene	120	116		ug/L		97	43 - 142
1-Methylnaphthalene	120	82.4		ug/L		69	41 - 120
2-Methylnaphthalene	120	84.9		ug/L		71	32 - 124
Phenanthrene	120	115		ug/L		96	48 - 120
Pyrene	120	123		ug/L		103	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*15 - 122*
Nitrobenzene-d5	*98*		*19 - 130*
Terphenyl-d14	*93*		*33 - 138*

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 539560

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		124	130		ug/L		105	35 - 113
Acenaphthylene	ND		124	130		ug/L		105	41 - 118
Anthracene	ND		124	123		ug/L		99	45 - 122
Benzo[a]anthracene	ND		124	111		ug/L		90	55 - 133
Benzo[a]pyrene	ND		124	113		ug/L		91	50 - 108
Benzo[b]fluoranthene	ND		124	105		ug/L		85	50 - 128
Benzo[g,h,i]perylene	ND		124	107		ug/L		86	46 - 133
Benzo[k]fluoranthene	ND		124	112		ug/L		91	52 - 128
Chrysene	ND		124	107		ug/L		87	52 - 116
Dibenz(a,h)anthracene	ND		124	134		ug/L		108	52 - 143
Fluoranthene	ND		124	110		ug/L		89	32 - 150
Fluorene	ND		124	150		ug/L		121	15 - 150
Indeno[1,2,3-cd]pyrene	ND		124	120		ug/L		97	41 - 141
1-Methylnaphthalene	ND		124	102		ug/L		82	10 - 150
2-Methylnaphthalene	ND		124	103		ug/L		84	10 - 150
Phenanthrene	ND		124	125		ug/L		101	36 - 125
Pyrene	ND		124	115		ug/L		93	41 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*104*		*15 - 122*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 539560

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*112*		*19 - 130*
Terphenyl-d14	*84*		*33 - 138*

Lab Sample ID: 400-205857-11 MSD
Matrix: Water
Analysis Batch: 539560

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 539313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		124	127		ug/L		102	35 - 113	2	49
Acenaphthylene	ND		124	123		ug/L		99	41 - 118	5	48
Anthracene	ND		124	119		ug/L		95	45 - 122	4	56
Benzo[a]anthracene	ND		124	117		ug/L		94	55 - 133	5	57
Benzo[a]pyrene	ND		124	114		ug/L		92	50 - 108	1	59
Benzo[b]fluoranthene	ND		124	114		ug/L		91	50 - 128	8	62
Benzo[g,h,i]perylene	ND		124	116		ug/L		93	46 - 133	8	58
Benzo[k]fluoranthene	ND		124	106		ug/L		85	52 - 128	6	58
Chrysene	ND		124	109		ug/L		88	52 - 116	2	59
Dibenz(a,h)anthracene	ND		124	142		ug/L		114	52 - 143	6	60
Fluoranthene	ND		124	108		ug/L		87	32 - 150	2	59
Fluorene	ND		124	147		ug/L		118	15 - 150	2	49
Indeno[1,2,3-cd]pyrene	ND		124	129		ug/L		104	41 - 141	7	58
1-Methylnaphthalene	ND		124	94.3		ug/L		76	10 - 150	7	66
2-Methylnaphthalene	ND		124	98.9		ug/L		79	10 - 150	4	66
Phenanthrene	ND		124	122		ug/L		98	36 - 125	2	69
Pyrene	ND		124	113		ug/L		91	41 - 127	2	58

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*15 - 122*
Nitrobenzene-d5	*97*		*19 - 130*
Terphenyl-d14	*85*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-540856/1-A
Matrix: Water
Analysis Batch: 540855

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540856

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/26/21 09:13	07/26/21 12:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/26/21 09:13	07/26/21 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*07/26/21 09:13*	*07/26/21 12:14*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-540856/2-A
Matrix: Water
Analysis Batch: 540855

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540856

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.105	p	ug/L		105	60 - 140
1,2-Dibromoethane	0.101	0.106	p	ug/L		106	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*111*	*p*	*51 - 149*

Lab Sample ID: LCSD 400-540856/3-A
Matrix: Water
Analysis Batch: 540855

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540856

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.107	p	ug/L		106	60 - 140	1	30
1,2-Dibromoethane	0.101	0.106	p	ug/L		106	60 - 140	0	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*111*	*p*	*51 - 149*

Lab Sample ID: 400-205857-11 MS
Matrix: Water
Analysis Batch: 540855

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 540856

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.102	0.0925	p	ug/L		91	10 - 150
1,2-Dibromoethane	ND		0.102	0.101		ug/L		99	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*	*p*	*51 - 149*

Lab Sample ID: 400-205857-11 MSD
Matrix: Water
Analysis Batch: 540855

Client Sample ID: P114R-ROX-071221
Prep Type: Total/NA
Prep Batch: 540856

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		0.101	0.0933	p	ug/L		93	10 - 150	1	20
1,2-Dibromoethane	ND		0.101	0.100		ug/L		99	39 - 150	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*108*	*p*	*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/12/21
PO #	GSAP Project ID	PAGE: 1 of 2
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington
TELEPHONE: 314-429-0100 FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington
PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122
E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com
AECOM Offer ID:

SAMPLER NAME(S) (Print): Tony Jones, Aaron Oliver
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071221-8011-A	7/12/2021	0000	Water	2					2		X		
	TB-ROX-071221-8260-A	7/12/2021	0000	Water	2					2	X			
	MW16-ROX-071221	7/12/2021	0850	Water	6			2		8	X	X	X	X
	MW11-ROX-071221	7/12/2021	0940	Water	6			2		8	X	X	X	X
	MW1-ROX-071221	7/12/2021	1030	Water	6			2		8	X	X	X	X
	MW3-ROX-071221	7/12/2021	1225	Water	6			2		8	X	X	X	X

400-205857 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT
1.2°C IR9
0.1°C / 1.4°C IR9
Container PID Readings or Laboratory Notes

7/12/21

Relinquished by: (Signature)	Received by: (Signature) FEDEX: 517412585670, 517412585680 517412585691	Date: 7/12/21	Time: 1500
Relinquished by: (Signature)	Received by: (Signature)	Date: 7/13/21	Time: 0939
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 2Apr21

CUSTODY SEALS: 1599616, 1599617, 1599618, 1599619, 1599620,1599621

Page 76 of 79

7/29/2021

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/12/21
PO #	**GSAP Project ID**	PAGE: 2 of 2
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Work ID:

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

- Please include "J" values on Reports
- Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071221-8011-B	7/12/2021	0000	Water	2					2		X		
	TB-ROX-071221-8260-B	7/12/2021	0000	Water	2					2	X			
	MW6D-ROX-071221	7/12/2021	0905	Water	6			2		8	X	X	X	X
	P93C-ROX-071221	7/12/2021	1100	Water	6			2		8	X	X	X	X
	P114R-ROX-071221	7/12/2021	1235	Water	6			2		8	X	X	X	X
	P114R-ROX-071221-MS	7/12/2021	1235	Water	6			2		8	X	X	X	X
	P114R-ROX-071221-MSD	7/12/2021	1235	Water	6			2		8	X	X	X	X
	MW13-ROX-071221	7/12/2021	1400	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 1-2°C IR9,

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	FEDEX: see page 1	7/12/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
		7/13/21	939
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

CUSTODY SEALS: see page 1

Version: 2Apr21

Page 77 of 79

7/29/2021

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-205857-1

Login Number: 205857
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2°C, 0.1°C, 1.4°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205857-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-205903-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/18/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-071321-8011-BP	TB-ROX-071321-8260-BP
MW23-ROX-071321	

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative and cooler receipt form did not indicate any problems.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

Yes

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-205903-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
7/28/2021 4:18:11 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Reviewed 8/18/2021 LR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 4
Detection Summary 5
Client Sample Results 6
Definitions 13
Surrogate Summary 14
Method Summary 16
Chronicle 17
QC Association 19
QC Sample Results 20
Chain of Custody 29
Receipt Checklists 30
Certification Summary 31

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Job ID: 400-205903-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-205903-1

Comments
No additional comments.

Receipt
The samples were received on 7/14/2021 9:17 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.3° C and 1.3° C.

GC/MS VOA
Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071321-8260-BP (400-205903-2) and MW23-ROX-071321 (400-205903-3). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540203 recovered above the upper control limit for Di-n-butyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-541126 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-205903-1	TB-ROX-071321-8011-BP	Water	07/13/21 00:00	07/14/21 09:17
400-205903-2	TB-ROX-071321-8260-BP	Water	07/13/21 00:00	07/14/21 09:17
400-205903-3	MW23-ROX-071321	Water	07/13/21 09:20	07/14/21 09:17

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Client Sample ID: TB-ROX-071321-8011-BP

Lab Sample ID: 400-205903-1

No Detections.

Client Sample ID: TB-ROX-071321-8260-BP

Lab Sample ID: 400-205903-2

No Detections.

Client Sample ID: MW23-ROX-071321

Lab Sample ID: 400-205903-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.084	J	0.19	0.058	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	0.90	J	9.7	0.23	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Client Sample ID: TB-ROX-071321-8011-BP
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205903-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/27/21 10:34	07/27/21 15:49	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/27/21 10:34	07/27/21 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 15:49*	*1*

Client Sample ID: TB-ROX-071321-8260-BP

Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205903-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 09:30	1
Acrolein	ND		20	10	ug/L			07/19/21 09:30	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 09:30	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 09:30	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 09:30	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 09:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 09:30	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 09:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 09:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 09:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 09:30	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 09:30	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 09:30	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 09:30	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 09:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 09:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 09:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 09:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 09:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 09:30	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 09:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 09:30	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 09:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 09:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 09:30	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 09:30	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 09:30	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 09:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 09:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 09:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 09:30	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 09:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 09:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 09:30	1

Client Sample ID: TB-ROX-071321-8260-BP
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205903-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 09:30	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 09:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 09:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 09:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 09:30	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 09:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 09:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 09:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 09:30	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:30	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 09:30	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 09:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 09:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 09:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 09:30	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 09:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 09:30	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 09:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*07/19/21 09:30*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/19/21 09:30*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/19/21 09:30*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Client Sample ID: MW23-ROX-071321
Date Collected: 07/13/21 09:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205903-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 14:05	1
Acrolein	ND		20	10	ug/L			07/19/21 14:05	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 14:05	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 14:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 14:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 14:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 14:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 14:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 14:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 14:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 14:05	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 14:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 14:05	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 14:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 14:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 14:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 14:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 14:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 14:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 14:05	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 14:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 14:05	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 14:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 14:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 14:05	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 14:05	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 14:05	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 14:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 14:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 14:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 14:05	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 14:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 14:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 14:05	1

Client Sample ID: MW23-ROX-071321

Date Collected: 07/13/21 09:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205903-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 14:05	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 14:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 14:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 14:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 14:05	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 14:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 14:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 14:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 14:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 14:05	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 14:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 14:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 14:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 14:05	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 14:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 14:05	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*07/19/21 14:05*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/19/21 14:05*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/19/21 14:05*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		07/19/21 15:33	07/22/21 00:40	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/19/21 15:33	07/22/21 00:40	1
Anthracene	ND		0.19	0.031	ug/L		07/19/21 15:33	07/22/21 00:40	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/19/21 15:33	07/22/21 00:40	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		07/19/21 15:33	07/22/21 00:40	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		07/19/21 15:33	07/22/21 00:40	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		07/19/21 15:33	07/22/21 00:40	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		07/19/21 15:33	07/22/21 00:40	1
Chrysene	ND		0.19	0.071	ug/L		07/19/21 15:33	07/22/21 00:40	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/19/21 15:33	07/22/21 00:40	1
Fluoranthene	ND		0.19	0.066	ug/L		07/19/21 15:33	07/22/21 00:40	1
Fluorene	ND		0.19	0.11	ug/L		07/19/21 15:33	07/22/21 00:40	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		07/19/21 15:33	07/22/21 00:40	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		07/19/21 15:33	07/22/21 00:40	1
2-Methylnaphthalene	**0.084**	J	0.19	0.058	ug/L		07/19/21 15:33	07/22/21 00:40	1
Phenanthrene	ND		0.19	0.035	ug/L		07/19/21 15:33	07/22/21 00:40	1
Pyrene	ND		0.19	0.039	ug/L		07/19/21 15:33	07/22/21 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*15 - 122*	*07/19/21 15:33*	*07/22/21 00:40*	*1*
Nitrobenzene-d5	*85*		*19 - 130*	*07/19/21 15:33*	*07/22/21 00:40*	*1*

Client Sample ID: MW23-ROX-071321
Date Collected: 07/13/21 09:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205903-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*94*		*33 - 138*	*07/19/21 15:33*	*07/22/21 00:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/19/21 15:33	07/21/21 13:11	1
Benzenethiol	ND		9.7	1.6	ug/L		07/19/21 15:33	07/21/21 13:11	1
Benzoic acid	ND		29	7.0	ug/L		07/19/21 15:33	07/21/21 13:11	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/19/21 15:33	07/21/21 13:11	1
Bis(2-chloroethoxy)methane	ND		9.7	0.15	ug/L		07/19/21 15:33	07/21/21 13:11	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		07/19/21 15:33	07/21/21 13:11	1
bis (2-chloroisopropyl) ether	ND		9.7	0.15	ug/L		07/19/21 15:33	07/21/21 13:11	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		07/19/21 15:33	07/21/21 13:11	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		07/19/21 15:33	07/21/21 13:11	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		07/19/21 15:33	07/21/21 13:11	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/19/21 15:33	07/21/21 13:11	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/19/21 15:33	07/21/21 13:11	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		07/19/21 15:33	07/21/21 13:11	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/19/21 15:33	07/21/21 13:11	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/19/21 15:33	07/21/21 13:11	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		07/19/21 15:33	07/21/21 13:11	1
Dibenzofuran	ND		9.7	0.16	ug/L		07/19/21 15:33	07/21/21 13:11	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		07/19/21 15:33	07/21/21 13:11	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/19/21 15:33	07/21/21 13:11	1
Diethyl phthalate	0.90	J	9.7	0.23	ug/L		07/19/21 15:33	07/21/21 13:11	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		07/19/21 15:33	07/21/21 13:11	1
Dimethyl phthalate	ND		9.7	0.16	ug/L		07/19/21 15:33	07/21/21 13:11	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/19/21 15:33	07/21/21 13:11	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.5	ug/L		07/19/21 15:33	07/21/21 13:11	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/19/21 15:33	07/21/21 13:11	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/19/21 15:33	07/21/21 13:11	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/19/21 15:33	07/21/21 13:11	1
Di-n-octyl phthalate	ND		9.7	0.16	ug/L		07/19/21 15:33	07/21/21 13:11	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/19/21 15:33	07/21/21 13:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/19/21 15:33	07/21/21 13:11	1
Hexachlorobenzene	ND		9.7	0.16	ug/L		07/19/21 15:33	07/21/21 13:11	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/19/21 15:33	07/21/21 13:11	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/19/21 15:33	07/21/21 13:11	1
Indene	ND		9.7	0.97	ug/L		07/19/21 15:33	07/21/21 13:11	1
Isophorone	ND		9.7	0.14	ug/L		07/19/21 15:33	07/21/21 13:11	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/19/21 15:33	07/21/21 13:11	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		07/19/21 15:33	07/21/21 13:11	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/19/21 15:33	07/21/21 13:11	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/19/21 15:33	07/21/21 13:11	1
4-Nitroaniline	ND		9.7	1.4	ug/L		07/19/21 15:33	07/21/21 13:11	1
Nitrobenzene	ND		9.7	0.13	ug/L		07/19/21 15:33	07/21/21 13:11	1
2-Nitrophenol	ND		9.7	5.0	ug/L		07/19/21 15:33	07/21/21 13:11	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/19/21 15:33	07/21/21 13:11	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/19/21 15:33	07/21/21 13:11	1

Client Sample ID: MW23-ROX-071321
Date Collected: 07/13/21 09:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205903-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/19/21 15:33	07/21/21 13:11	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		07/19/21 15:33	07/21/21 13:11	1
Pentachlorophenol	ND		19	1.4	ug/L		07/19/21 15:33	07/21/21 13:11	1
Phenol	ND		9.7	2.5	ug/L		07/19/21 15:33	07/21/21 13:11	1
Pyridine	ND		9.7	3.1	ug/L		07/19/21 15:33	07/21/21 13:11	1
Quinoline	ND		9.7	4.3	ug/L		07/19/21 15:33	07/21/21 13:11	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/19/21 15:33	07/21/21 13:11	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/19/21 15:33	07/21/21 13:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*46 - 124*	*07/19/21 15:33*	*07/21/21 13:11*	*1*
2-Fluorophenol	*75*		*13 - 113*	*07/19/21 15:33*	*07/21/21 13:11*	*1*
Nitrobenzene-d5	*76*		*36 - 126*	*07/19/21 15:33*	*07/21/21 13:11*	*1*
Phenol-d5	*81*		*17 - 127*	*07/19/21 15:33*	*07/21/21 13:11*	*1*
Terphenyl-d14	*97*		*44 - 149*	*07/19/21 15:33*	*07/21/21 13:11*	*1*
2,4,6-Tribromophenol	*82*		*26 - 150*	*07/19/21 15:33*	*07/21/21 13:11*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/27/21 10:34	07/27/21 16:09	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/27/21 10:34	07/27/21 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 16:09*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-205903-2	TB-ROX-071321-8260-BP	95	105	98
400-205903-3	MW23-ROX-071321	96	106	97
LCS 400-539856/1002	Lab Control Sample	99	107	95
MB 400-539856/4	Method Blank	97	105	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-205903-3	MW23-ROX-071321	93	75	76	81	97	82
LCS 400-540002/2-A	Lab Control Sample	90	67	87	78	80	85
LCS 400-540002/5-A	Lab Control Sample	85	71	69	77	80	70
LCSD 400-540002/6-A	Lab Control Sample Dup	90	77	74	83	92	75
MB 400-540002/1-A	Method Blank	83	43	68	62	85	63

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-205903-3	MW23-ROX-071321	90	85	94
LCS 400-540002/2-A	Lab Control Sample	76	87	83
MB 400-540002/1-A	Method Blank	86	79	93

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-205903-1	TB-ROX-071321-8011-BP	90 p

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	**Client Sample ID**	**BFB2 (51-149)**
400-205903-3	MW23-ROX-071321	82 p
LCS 400-541070/2-A	Lab Control Sample	101
MB 400-541070/1-A	Method Blank	86 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Client Sample ID: TB-ROX-071321-8011-BP

Lab Sample ID: 400-205903-1
Matrix: Water

Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.5 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 15:49	DS	TAL PEN

Client Sample ID: TB-ROX-071321-8260-BP

Lab Sample ID: 400-205903-2
Matrix: Water

Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 09:30	WPD	TAL PEN

Client Sample ID: MW23-ROX-071321

Lab Sample ID: 400-205903-3
Matrix: Water

Date Collected: 07/13/21 09:20
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 14:05	WPD	TAL PEN
Total/NA	Prep	3520C			259 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 13:11	S1B	TAL PEN
Total/NA	Prep	3520C			259 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540430	07/22/21 00:40	KJA	TAL PEN
Total/NA	Prep	8011			33.7 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 16:09	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-539856/4
Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 08:17	WPD	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-540002/1-A
Matrix: Water

Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 10:11	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540430	07/21/21 21:30	KJA	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-541070/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 15:08	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-539856/1002

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 07:21	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540002/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 10:36	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			540430	07/21/21 21:47	KJA	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540002/5-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 12:19	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541070/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 15:28	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-540002/6-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 12:45	S1B	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

GC/MS VOA

Analysis Batch: 539856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205903-2	TB-ROX-071321-8260-BP	Total/NA	Water	8260B	
400-205903-3	MW23-ROX-071321	Total/NA	Water	8260B	
MB 400-539856/4	Method Blank	Total/NA	Water	8260B	
LCS 400-539856/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 540002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205903-3	MW23-ROX-071321	Total/NA	Water	3520C	
MB 400-540002/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-540002/5-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-540002/6-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 540203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205903-3	MW23-ROX-071321	Total/NA	Water	8270D	540002
MB 400-540002/1-A	Method Blank	Total/NA	Water	8270D	540002
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	8270D	540002
LCS 400-540002/5-A	Lab Control Sample	Total/NA	Water	8270D	540002
LCSD 400-540002/6-A	Lab Control Sample Dup	Total/NA	Water	8270D	540002

Analysis Batch: 540430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205903-3	MW23-ROX-071321	Total/NA	Water	8270D LL	540002
MB 400-540002/1-A	Method Blank	Total/NA	Water	8270D LL	540002
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	8270D LL	540002

GC Semi VOA

Prep Batch: 541070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205903-1	TB-ROX-071321-8011-BP	Total/NA	Water	8011	
400-205903-3	MW23-ROX-071321	Total/NA	Water	8011	
MB 400-541070/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-541070/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 541126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205903-1	TB-ROX-071321-8011-BP	Total/NA	Water	8011	541070
400-205903-3	MW23-ROX-071321	Total/NA	Water	8011	541070
MB 400-541070/1-A	Method Blank	Total/NA	Water	8011	541070
LCS 400-541070/2-A	Lab Control Sample	Total/NA	Water	8011	541070

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

Lab Sample ID: MB 400-539856/4
Matrix: Water
Analysis Batch: 539856

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 08:17	1
Acrolein	ND		20	10	ug/L			07/19/21 08:17	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 08:17	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 08:17	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 08:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 08:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 08:17	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 08:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 08:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 08:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 08:17	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 08:17	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 08:17	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 08:17	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 08:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 08:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 08:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 08:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 08:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 08:17	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 08:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 08:17	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 08:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 08:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 08:17	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 08:17	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 08:17	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 08:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 08:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 08:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 08:17	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 08:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 08:17	1

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

Lab Sample ID: MB 400-539856/4
Matrix: Water
Analysis Batch: 539856

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 08:17	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 08:17	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 08:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 08:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 08:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 08:17	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 08:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 08:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 08:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 08:17	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 08:17	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 08:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 08:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 08:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 08:17	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 08:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 08:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*07/19/21 08:17*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/19/21 08:17*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/19/21 08:17*	*1*

Lab Sample ID: LCS 400-539856/1002
Matrix: Water
Analysis Batch: 539856

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	182		ug/L		91	43 - 160
Acrolein	500	475		ug/L		95	38 - 160
Acrylonitrile	500	463		ug/L		93	64 - 142
Benzene	50.0	43.0		ug/L		86	70 - 130
Bromobenzene	50.0	46.5		ug/L		93	70 - 132
Bromochloromethane	50.0	46.2		ug/L		92	70 - 130
Bromodichloromethane	50.0	44.6		ug/L		89	67 - 133
Bromoform	50.0	46.4		ug/L		93	57 - 140
Bromomethane	50.0	50.8		ug/L		102	10 - 160
2-Butanone (MEK)	200	184		ug/L		92	61 - 145
Carbon disulfide	50.0	40.7		ug/L		81	61 - 137
Carbon tetrachloride	50.0	43.8		ug/L		88	61 - 137
Chlorobenzene	50.0	44.9		ug/L		90	70 - 130
Dibromochloromethane	50.0	44.9		ug/L		90	67 - 135
Chloroethane	50.0	43.5		ug/L		87	55 - 141

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

Lab Sample ID: LCS 400-539856/1002
Matrix: Water
Analysis Batch: 539856

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	34.7		ug/L		69	10 - 160
Chloroform	50.0	42.6		ug/L		85	69 - 130
1-Chlorohexane	50.0	46.6		ug/L		93	69 - 130
Chloromethane	50.0	40.0		ug/L		80	58 - 137
cis-1,2-Dichloroethene	50.0	43.4		ug/L		87	68 - 130
cis-1,3-Dichloropropene	50.0	45.3		ug/L		91	69 - 132
1,2-Dichlorobenzene	50.0	46.7		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	48.1		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	46.0		ug/L		92	70 - 130
Dichlorodifluoromethane	50.0	29.2		ug/L		58	41 - 146
1,1-Dichloroethane	50.0	42.3		ug/L		85	70 - 130
1,2-Dichloroethane	50.0	42.7		ug/L		85	69 - 130
1,1-Dichloroethene	50.0	41.0		ug/L		82	63 - 134
1,2-Dichloropropane	50.0	43.9		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	44.6		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	44.3		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	43.5		ug/L		87	70 - 130
Ethylbenzene	50.0	45.2		ug/L		90	70 - 130
Ethyl methacrylate	50.0	45.2		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	52.1		ug/L		104	53 - 140
2-Hexanone	200	178		ug/L		89	65 - 137
Isopropylbenzene	50.0	46.8		ug/L		94	70 - 130
Methylene bromide	50.0	45.8		ug/L		92	70 - 130
Methylene Chloride	50.0	42.2		ug/L		84	66 - 135
4-Methyl-2-pentanone (MIBK)	200	191		ug/L		96	69 - 138
Methyl tert-butyl ether	50.0	44.6		ug/L		89	66 - 130
m-Xylene & p-Xylene	50.0	43.1		ug/L		86	70 - 130
Naphthalene	50.0	41.3		ug/L		83	47 - 149
n-Butylbenzene	50.0	50.9		ug/L		102	67 - 130
N-Propylbenzene	50.0	49.6		ug/L		99	70 - 130
o-Chlorotoluene	50.0	47.8		ug/L		96	70 - 130
o-Xylene	50.0	44.5		ug/L		89	70 - 130
p-Chlorotoluene	50.0	47.7		ug/L		95	70 - 130
p-Isopropyltoluene	50.0	51.1		ug/L		102	65 - 130
sec-Butylbenzene	50.0	49.7		ug/L		99	66 - 130
Styrene	50.0	45.9		ug/L		92	70 - 130
tert-Butylbenzene	50.0	47.6		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.5		ug/L		91	70 - 131
Tetrachloroethene	50.0	42.6		ug/L		85	65 - 130
Toluene	50.0	40.2		ug/L		80	70 - 130
trans-1,2-Dichloroethene	50.0	43.3		ug/L		87	70 - 130
trans-1,3-Dichloropropene	50.0	45.1		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	45.0		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	46.1		ug/L		92	60 - 140
1,1,1-Trichloroethane	50.0	43.0		ug/L		86	68 - 130
1,1,2-Trichloroethane	50.0	45.1		ug/L		90	70 - 130
Trichloroethene	50.0	44.7		ug/L		89	70 - 130
Trichlorofluoromethane	50.0	44.7		ug/L		89	65 - 138

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

Lab Sample ID: LCS 400-539856/1002
Matrix: Water
Analysis Batch: 539856

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	48.3		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	48.3		ug/L		97	69 - 130
Vinyl acetate	100	105		ug/L		105	26 - 160
Vinyl chloride	50.0	41.4		ug/L		83	59 - 136
Xylenes, Total	100	87.6		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 119*
Dibromofluoromethane	*107*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
Benzenethiol	ND		10	1.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
Benzoic acid	ND		30	7.3	ug/L		07/19/21 15:33	07/21/21 10:11	1
Benzyl alcohol	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 10:11	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 10:11	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/19/21 15:33	07/21/21 10:11	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Chloroaniline	ND		10	3.4	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Chlorophenol	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Dibenzofuran	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Diethyl phthalate	ND		10	0.24	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 10:11	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
1,4-Dioxane	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1

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

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
Hexachloroethane	ND		10	4.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
Indene	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Isophorone	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Methylphenol	ND		10	1.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Nitroaniline	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
3-Nitroaniline	ND		10	1.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Nitroaniline	ND		10	1.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
Nitrobenzene	ND		10	0.13	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Nitrophenol	ND		10	5.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Nitrophenol	ND		10	2.1	ug/L		07/19/21 15:33	07/21/21 10:11	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/19/21 15:33	07/21/21 10:11	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/19/21 15:33	07/21/21 10:11	1
Pentachlorophenol	ND		20	1.4	ug/L		07/19/21 15:33	07/21/21 10:11	1
Phenol	ND		10	2.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
Pyridine	ND		10	3.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
Quinoline	ND		10	4.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 10:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
2-Fluorophenol	*43*		*13 - 113*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Phenol-d5	*62*		*17 - 127*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Terphenyl-d14	*85*		*44 - 149*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
2,4,6-Tribromophenol	*63*		*26 - 150*	*07/19/21 15:33*	*07/21/21 10:11*	*1*

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	107		ug/L		89	21 - 120
Benzoic acid	502	341		ug/L		68	10 - 144
Benzyl alcohol	120	102		ug/L		85	28 - 120
Bis(2-chloroethoxy)methane	120	104		ug/L		87	47 - 120
Bis(2-chloroethyl)ether	120	85.4		ug/L		71	44 - 120
bis (2-chloroisopropyl) ether	120	101		ug/L		84	33 - 121
Bis(2-ethylhexyl) phthalate	120	120		ug/L		100	52 - 147
4-Bromophenyl phenyl ether	120	105		ug/L		87	54 - 122
Butyl benzyl phthalate	120	108		ug/L		90	54 - 133
4-Chloroaniline	120	82.7		ug/L		69	26 - 120
4-Chloro-3-methylphenol	120	106		ug/L		88	48 - 131

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

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	120	102		ug/L		85	52 - 121
2-Chlorophenol	120	88.5		ug/L		74	40 - 120
4-Chlorophenyl phenyl ether	120	107		ug/L		89	56 - 125
Dibenz[a,h]acridine	120	115		ug/L		96	31 - 150
Dibenzofuran	120	106		ug/L		89	56 - 122
3,3'-Dichlorobenzidine	160	156		ug/L		97	36 - 132
2,4-Dichlorophenol	120	96.5		ug/L		80	49 - 120
Diethyl phthalate	120	116		ug/L		96	50 - 137
2,4-Dimethylphenol	120	105		ug/L		88	48 - 120
Dimethyl phthalate	120	108		ug/L		90	57 - 124
Di-n-butyl phthalate	120	122		ug/L		102	58 - 126
4,6-Dinitro-ortho-cresol	240	211		ug/L		88	23 - 148
2,4-Dinitrophenol	240	221		ug/L		92	10 - 150
2,4-Dinitrotoluene	120	99.7		ug/L		83	54 - 142
2,6-Dinitrotoluene	120	107		ug/L		89	55 - 130
Di-n-octyl phthalate	120	118		ug/L		98	57 - 138
1,4-Dioxane	120	72.4		ug/L		60	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	106		ug/L		88	45 - 124
Hexachlorobenzene	120	110		ug/L		92	52 - 129
Hexachlorocyclopentadiene	120	81.1		ug/L		68	10 - 134
Hexachloroethane	120	89.7		ug/L		75	20 - 120
Indene	120	108		ug/L		90	49 - 120
Isophorone	120	108		ug/L		90	48 - 120
2-Methylphenol	120	99.8		ug/L		83	46 - 124
3 & 4 Methylphenol	120	102		ug/L		85	45 - 120
2-Nitroaniline	120	98.9		ug/L		82	51 - 145
3-Nitroaniline	120	85.9		ug/L		72	37 - 127
4-Nitroaniline	120	98.5		ug/L		82	36 - 137
Nitrobenzene	120	95.0		ug/L		79	45 - 120
2-Nitrophenol	120	96.1		ug/L		80	40 - 124
4-Nitrophenol	240	192		ug/L		80	23 - 146
N-Nitrosodimethylamine	120	102		ug/L		85	29 - 137
N-Nitrosodi-n-propylamine	120	116		ug/L		97	45 - 120
N-Nitrosodiphenylamine	119	105		ug/L		88	54 - 120
Pentachlorophenol	240	236		ug/L		98	31 - 130
Phenol	120	91.8		ug/L		77	11 - 120
Pyridine	240	152		ug/L		63	16 - 120
Quinoline	120	114		ug/L		96	49 - 130
2,4,5-Trichlorophenol	120	96.6		ug/L		81	51 - 136
2,4,6-Trichlorophenol	120	101		ug/L		84	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*67*		*13 - 113*
Nitrobenzene-d5	*87*		*36 - 126*
Phenol-d5	*78*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*

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

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	85		26 - 150

Lab Sample ID: LCS 400-540002/5-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	76.0		ug/L		63	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	85		46 - 124
2-Fluorophenol	71		13 - 113
Nitrobenzene-d5	69		36 - 126
Phenol-d5	77		17 - 127
Terphenyl-d14	80		44 - 149
2,4,6-Tribromophenol	70		26 - 150

Lab Sample ID: LCSD 400-540002/6-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	83.0		ug/L		69	10 - 120	9	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	90		46 - 124
2-Fluorophenol	77		13 - 113
Nitrobenzene-d5	74		36 - 126
Phenol-d5	83		17 - 127
Terphenyl-d14	92		44 - 149
2,4,6-Tribromophenol	75		26 - 150

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/19/21 15:33	07/21/21 21:30	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/19/21 15:33	07/21/21 21:30	1
Anthracene	ND		0.20	0.032	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/19/21 15:33	07/21/21 21:30	1
Chrysene	ND		0.20	0.074	ug/L		07/19/21 15:33	07/21/21 21:30	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/19/21 15:33	07/21/21 21:30	1
Fluoranthene	ND		0.20	0.068	ug/L		07/19/21 15:33	07/21/21 21:30	1
Fluorene	ND		0.20	0.11	ug/L		07/19/21 15:33	07/21/21 21:30	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/19/21 15:33	07/21/21 21:30	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/19/21 15:33	07/21/21 21:30	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/19/21 15:33	07/21/21 21:30	1
Phenanthrene	ND		0.20	0.036	ug/L		07/19/21 15:33	07/21/21 21:30	1
Pyrene	ND		0.20	0.040	ug/L		07/19/21 15:33	07/21/21 21:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*15 - 122*	*07/19/21 15:33*	*07/21/21 21:30*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*07/19/21 15:33*	*07/21/21 21:30*	*1*
Terphenyl-d14	*93*		*33 - 138*	*07/19/21 15:33*	*07/21/21 21:30*	*1*

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	92.5		ug/L		77	41 - 120
Acenaphthylene	120	103		ug/L		86	44 - 120
Anthracene	120	99.4		ug/L		83	49 - 120
Benzo[a]anthracene	120	105		ug/L		88	61 - 135
Benzo[a]pyrene	120	110		ug/L		92	52 - 120
Benzo[b]fluoranthene	120	122		ug/L		101	53 - 134
Benzo[g,h,i]perylene	120	112		ug/L		93	47 - 133
Benzo[k]fluoranthene	120	109		ug/L		91	57 - 134
Chrysene	120	97.2		ug/L		81	55 - 122
Dibenz(a,h)anthracene	120	114		ug/L		95	48 - 146
Fluoranthene	120	105		ug/L		88	54 - 128
Fluorene	120	99.7		ug/L		83	45 - 125
Indeno[1,2,3-cd]pyrene	120	98.1		ug/L		82	43 - 142
1-Methylnaphthalene	120	90.4		ug/L		75	41 - 120
2-Methylnaphthalene	120	93.7		ug/L		78	32 - 124
Phenanthrene	120	94.9		ug/L		79	48 - 120
Pyrene	120	103		ug/L		86	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*15 - 122*
Nitrobenzene-d5	*87*		*19 - 130*
Terphenyl-d14	*83*		*33 - 138*

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-541070/1-A
Matrix: Water
Analysis Batch: 541126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 15:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 15:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 15:08*	*1*

Lab Sample ID: LCS 400-541070/2-A
Matrix: Water
Analysis Batch: 541126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541070

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.110		ug/L		109	60 - 140
1,2-Dibromoethane	0.101	0.104		ug/L		104	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*51 - 149*

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/13/21
PO #	GSAP Project ID	PAGE: 1 of 1
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington
TELEPHONE: 314-429-0100 FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington
PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122
E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com
AECOM Offer ID:

SAMPLER NAME(S) (Print): Brett Howell, Aaron Oliver
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071321-8011-BP	7/13/2021	0000	Water	2					2		X		
	TB-ROX-071321-8260-BP	7/13/2021	0000	Water	2					2	X			
	MW23-ROX-071321	7/13/2021	0920	Water	6			2		8	X	X	X	X

400-205903 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	FEDEX: 517412585658, 949566012783	7/13/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-14-21	Time: 9:17

CUSTODY SEALS: 1599622, 1599623, 1599626,1599627

1.3c, 1.3c IK9

Version 2Apr21

Page 29 of 31

4/28/2021

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-205903-1

Login Number: 205903
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3, 1.3°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205903-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-205904-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/19/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-071321-8011-A	TB-ROX-071321-8260-A
ROST4PZG-ROX-071321	TB-ROX-071321-8011-B
TB-ROX-071321-8260-B	MW27-ROX-071321
MW14-ROX-071321	P66-ROX-071321

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated the VOC by 8011 surrogate 4-bromofluorobenzene was outside criteria in sample ROST4PZG-ROX-071321. Several VOC and SVOC MS/MSD recoveries and/or MS/MSD RPDs were outside evaluation criteria in sample ROST4PZG-ROX-071321. Sample P66-ROX-071321 was diluted to bring VOCs into calibration range of the instrument. These issues are addressed further in the appropriate sections of this data review.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

Yes

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
ROST4PZG-ROX-071321	VOCs by 8011	4-Bromofluorobenzene	**161**	51-149

Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

Yes, sample ROST4PZG-ROX-071321 was spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
ROST4PZG-ROX-071321	VOCs	2-Butanone (MEK)	**53/54**	2	55-150/30
ROST4PZG-ROX-071321	VOCs	2-Chloroethyl vinyl ether	30/12	**85**	10-150/50
ROST4PZG-ROX-071321	VOCs	2-Hexanone	**60/60**	0	65-140/30
ROST4PZG-ROX-071321	SVOCs	Quinoline	**49/44**	12	51-120/40

Analytical data that required qualification based on MS/MSD data are included in the table below. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-071321	VOCs	2-Butanone (MEK)	**UJ**
ROST4PZG-ROX-071321	VOCs	2-Hexanone	**UJ**
ROST4PZG-ROX-071321	SVOCs	Quinoline	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-205904-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
7/28/2021 6:24:21 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Reviewed 8/19/2021 LR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 4
Detection Summary 5
Client Sample Results 7
Definitions 29
Surrogate Summary 30
Method Summary 32
Chronicle 33
QC Association 37
QC Sample Results 39
Chain of Custody 55
Receipt Checklists 57
Certification Summary 58

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Job ID: 400-205904-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-205904-1

Comments
No additional comments.

Receipt
The samples were received on 7/14/2021 9:17 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.3° C and 1.3° C.

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-539856 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-539856 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071321-8260-A (400-205904-2), ROST4PZG-ROX-071321 (400-205904-3), TB-ROX-071321-8260-B (400-205904-5), MW27-ROX-071321 (400-205904-6), MW14-ROX-071321 (400-205904-7) and P66-ROX-071321 (400-205904-8). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: P66-ROX-071321 (400-205904-8). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540203 recovered above the upper control limit for Di-n-butyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-540002 and analytical batch 400-540203 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-541126 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: Surrogate recovery for the following sample was outside control limits: ROST4PZG-ROX-071321 (400-205904-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-205904-1	TB-ROX-071321-8011-A	Water	07/13/21 00:00	07/14/21 09:17
400-205904-2	TB-ROX-071321-8260-A	Water	07/13/21 00:00	07/14/21 09:17
400-205904-3	ROST4PZG-ROX-071321	Water	07/13/21 10:30	07/14/21 09:17
400-205904-3 MS	ROST4PZG-ROX-071321	Water	07/13/21 10:30	07/14/21 09:17
400-205904-3 MSD	ROST4PZG-ROX-071321	Water	07/13/21 10:30	07/14/21 09:17
400-205904-4	TB-ROX-071321-8011-B	Water	07/13/21 00:00	07/14/21 09:17
400-205904-5	TB-ROX-071321-8260-B	Water	07/13/21 00:00	07/14/21 09:17
400-205904-6	MW27-ROX-071321	Water	07/13/21 09:40	07/14/21 09:17
400-205904-7	MW14-ROX-071321	Water	07/13/21 11:20	07/14/21 09:17
400-205904-8	P66-ROX-071321	Water	07/13/21 12:15	07/14/21 09:17

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: TB-ROX-071321-8011-A — Lab Sample ID: 400-205904-1

No Detections.

Client Sample ID: TB-ROX-071321-8260-A — Lab Sample ID: 400-205904-2

No Detections.

Client Sample ID: ROST4PZG-ROX-071321 — Lab Sample ID: 400-205904-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.46	J	1.0	0.38	ug/L	1		8260B	Total/NA
N-Propylbenzene	0.75	J	1.0	0.69	ug/L	1		8260B	Total/NA
Toluene	0.84	J	1.0	0.41	ug/L	1		8260B	Total/NA

Client Sample ID: TB-ROX-071321-8011-B — Lab Sample ID: 400-205904-4

No Detections.

Client Sample ID: TB-ROX-071321-8260-B — Lab Sample ID: 400-205904-5

No Detections.

Client Sample ID: MW27-ROX-071321 — Lab Sample ID: 400-205904-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	23	J	31	7.5	ug/L	1		8270D	Total/NA
Diethyl phthalate	0.89	J	10	0.25	ug/L	1		8270D	Total/NA

Client Sample ID: MW14-ROX-071321 — Lab Sample ID: 400-205904-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	23	J	31	7.5	ug/L	1		8270D	Total/NA
Diethyl phthalate	0.71	J	10	0.25	ug/L	1		8270D	Total/NA

Client Sample ID: P66-ROX-071321 — Lab Sample ID: 400-205904-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	160		2.0	1.0	ug/L	2		8260B	Total/NA
Isopropylbenzene	55		2.0	1.1	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene	490		10	3.2	ug/L	2		8260B	Total/NA
Naphthalene	14		2.0	2.0	ug/L	2		8260B	Total/NA
n-Butylbenzene	5.9		2.0	1.5	ug/L	2		8260B	Total/NA
N-Propylbenzene	91		2.0	1.4	ug/L	2		8260B	Total/NA
o-Xylene	270		10	1.2	ug/L	2		8260B	Total/NA
sec-Butylbenzene	9.6		2.0	1.4	ug/L	2		8260B	Total/NA
tert-Butylbenzene	5.0		2.0	1.3	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene	38		2.0	1.6	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene	8.6		2.0	1.1	ug/L	2		8260B	Total/NA
Xylenes, Total	760		20	3.2	ug/L	2		8260B	Total/NA
Benzene - DL	1200		20	7.6	ug/L	20		8260B	Total/NA
Toluene - DL	3900		20	8.2	ug/L	20		8260B	Total/NA
Acenaphthene	1.3		0.20	0.032	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.15	J	0.20	0.068	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	41		0.20	0.074	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	19		0.20	0.060	ug/L	1		8270D LL	Total/NA
Pyrene	0.39		0.20	0.040	ug/L	1		8270D LL	Total/NA
Benzoic acid	110		30	7.3	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: P66-ROX-071321 (Continued)

Lab Sample ID: 400-205904-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenzofuran	1.1	J	10	0.17	ug/L	1		8270D	Total/NA
2-Methylphenol	25		10	1.8	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	26		20	0.39	ug/L	1		8270D	Total/NA
Phenol	29		10	2.6	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: TB-ROX-071321-8011-A
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/27/21 10:34	07/27/21 16:30	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/27/21 10:34	07/27/21 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/27/21 10:34*	*07/27/21 16:30*	*1*

Client Sample ID: TB-ROX-071321-8260-A
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 08:41	1
Acrolein	ND		20	10	ug/L			07/19/21 08:41	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 08:41	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 08:41	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 08:41	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 08:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 08:41	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 08:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 08:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 08:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 08:41	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 08:41	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 08:41	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 08:41	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 08:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 08:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 08:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 08:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 08:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 08:41	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 08:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 08:41	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 08:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 08:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 08:41	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 08:41	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 08:41	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 08:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 08:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 08:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 08:41	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 08:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 08:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 08:41	1

Client Sample ID: TB-ROX-071321-8260-A
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 08:41	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 08:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 08:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 08:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 08:41	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 08:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 08:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 08:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 08:41	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:41	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 08:41	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 08:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 08:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 08:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 08:41	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 08:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 08:41	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 08:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*07/19/21 08:41*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/19/21 08:41*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/19/21 08:41*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: ROST4PZG-ROX-071321
Date Collected: 07/13/21 10:30
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 09:55	1
Acrolein	ND		20	10	ug/L			07/19/21 09:55	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 09:55	1
Benzene	0.46	J	1.0	0.38	ug/L			07/19/21 09:55	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 09:55	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 09:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 09:55	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 09:55	1
2-Butanone (MEK)	ND	F1 UJ	25	2.6	ug/L			07/19/21 09:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 09:55	1
2-Chloroethyl vinyl ether	ND	F2	5.0	2.0	ug/L			07/19/21 09:55	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 09:55	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 09:55	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 09:55	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 09:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 09:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 09:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 09:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 09:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 09:55	1
2-Hexanone	ND	F1 UJ	25	3.1	ug/L			07/19/21 09:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 09:55	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 09:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 09:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 09:55	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 09:55	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 09:55	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 09:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 09:55	1
N-Propylbenzene	0.75	J	1.0	0.69	ug/L			07/19/21 09:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 09:55	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 09:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 09:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 09:55	1

Client Sample ID: ROST4PZG-ROX-071321
Date Collected: 07/13/21 10:30
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 09:55	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 09:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 09:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 09:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 09:55	1
Toluene	0.84	J	1.0	0.41	ug/L			07/19/21 09:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 09:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 09:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 09:55	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:55	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 09:55	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 09:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 09:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 09:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 09:55	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 09:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 09:55	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 09:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*07/19/21 09:55*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/19/21 09:55*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/19/21 09:55*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/19/21 15:33	07/21/21 22:39	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/19/21 15:33	07/21/21 22:39	1
Anthracene	ND		0.19	0.030	ug/L		07/19/21 15:33	07/21/21 22:39	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		07/19/21 15:33	07/21/21 22:39	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/19/21 15:33	07/21/21 22:39	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/19/21 15:33	07/21/21 22:39	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/19/21 15:33	07/21/21 22:39	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		07/19/21 15:33	07/21/21 22:39	1
Chrysene	ND		0.19	0.070	ug/L		07/19/21 15:33	07/21/21 22:39	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/19/21 15:33	07/21/21 22:39	1
Fluoranthene	ND		0.19	0.064	ug/L		07/19/21 15:33	07/21/21 22:39	1
Fluorene	ND		0.19	0.10	ug/L		07/19/21 15:33	07/21/21 22:39	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		07/19/21 15:33	07/21/21 22:39	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		07/19/21 15:33	07/21/21 22:39	1
2-Methylnaphthalene	ND		0.19	0.056	ug/L		07/19/21 15:33	07/21/21 22:39	1
Phenanthrene	ND		0.19	0.034	ug/L		07/19/21 15:33	07/21/21 22:39	1
Pyrene	ND		0.19	0.038	ug/L		07/19/21 15:33	07/21/21 22:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*15 - 122*	*07/19/21 15:33*	*07/21/21 22:39*	*1*
Nitrobenzene-d5	*80*		*19 - 130*	*07/19/21 15:33*	*07/21/21 22:39*	*1*

Client Sample ID: ROST4PZG-ROX-071321
Date Collected: 07/13/21 10:30
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*33 - 138*	*07/19/21 15:33*	*07/21/21 22:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		07/19/21 15:33	07/21/21 13:37	1
Benzenethiol	ND		9.4	1.6	ug/L		07/19/21 15:33	07/21/21 13:37	1
Benzoic acid	ND		28	6.9	ug/L		07/19/21 15:33	07/21/21 13:37	1
Benzyl alcohol	ND		9.4	1.9	ug/L		07/19/21 15:33	07/21/21 13:37	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		07/19/21 15:33	07/21/21 13:37	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		07/19/21 15:33	07/21/21 13:37	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		07/19/21 15:33	07/21/21 13:37	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		07/19/21 15:33	07/21/21 13:37	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		07/19/21 15:33	07/21/21 13:37	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		07/19/21 15:33	07/21/21 13:37	1
4-Chloroaniline	ND		9.4	3.2	ug/L		07/19/21 15:33	07/21/21 13:37	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		07/19/21 15:33	07/21/21 13:37	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		07/19/21 15:33	07/21/21 13:37	1
2-Chlorophenol	ND		9.4	2.1	ug/L		07/19/21 15:33	07/21/21 13:37	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		07/19/21 15:33	07/21/21 13:37	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		07/19/21 15:33	07/21/21 13:37	1
Dibenzofuran	ND		9.4	0.16	ug/L		07/19/21 15:33	07/21/21 13:37	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		07/19/21 15:33	07/21/21 13:37	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		07/19/21 15:33	07/21/21 13:37	1
Diethyl phthalate	ND		9.4	0.23	ug/L		07/19/21 15:33	07/21/21 13:37	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		07/19/21 15:33	07/21/21 13:37	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		07/19/21 15:33	07/21/21 13:37	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		07/19/21 15:33	07/21/21 13:37	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		07/19/21 15:33	07/21/21 13:37	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/19/21 15:33	07/21/21 13:37	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		07/19/21 15:33	07/21/21 13:37	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		07/19/21 15:33	07/21/21 13:37	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		07/19/21 15:33	07/21/21 13:37	1
1,4-Dioxane	ND		9.4	0.94	ug/L		07/19/21 15:33	07/21/21 13:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		07/19/21 15:33	07/21/21 13:37	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		07/19/21 15:33	07/21/21 13:37	1
Hexachlorocyclopentadiene	ND		19	2.4	ug/L		07/19/21 15:33	07/21/21 13:37	1
Hexachloroethane	ND		9.4	4.0	ug/L		07/19/21 15:33	07/21/21 13:37	1
Indene	ND		9.4	0.94	ug/L		07/19/21 15:33	07/21/21 13:37	1
Isophorone	ND		9.4	0.13	ug/L		07/19/21 15:33	07/21/21 13:37	1
2-Methylphenol	ND		9.4	1.7	ug/L		07/19/21 15:33	07/21/21 13:37	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/19/21 15:33	07/21/21 13:37	1
2-Nitroaniline	ND		9.4	2.1	ug/L		07/19/21 15:33	07/21/21 13:37	1
3-Nitroaniline	ND		9.4	1.7	ug/L		07/19/21 15:33	07/21/21 13:37	1
4-Nitroaniline	ND		9.4	1.4	ug/L		07/19/21 15:33	07/21/21 13:37	1
Nitrobenzene	ND		9.4	0.12	ug/L		07/19/21 15:33	07/21/21 13:37	1
2-Nitrophenol	ND		9.4	4.9	ug/L		07/19/21 15:33	07/21/21 13:37	1
4-Nitrophenol	ND		9.4	2.0	ug/L		07/19/21 15:33	07/21/21 13:37	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		07/19/21 15:33	07/21/21 13:37	1

Client Sample ID: ROST4PZG-ROX-071321
Date Collected: 07/13/21 10:30
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		07/19/21 15:33	07/21/21 13:37	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		07/19/21 15:33	07/21/21 13:37	1
Pentachlorophenol	ND		19	1.3	ug/L		07/19/21 15:33	07/21/21 13:37	1
Phenol	ND		9.4	2.4	ug/L		07/19/21 15:33	07/21/21 13:37	1
Pyridine	ND		9.4	3.0	ug/L		07/19/21 15:33	07/21/21 13:37	1
Quinoline	ND	F1	9.4	4.2	ug/L		07/19/21 15:33	07/21/21 13:37	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		07/19/21 15:33	07/21/21 13:37	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		07/19/21 15:33	07/21/21 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*46 - 124*	*07/19/21 15:33*	*07/21/21 13:37*	*1*
2-Fluorophenol	*51*		*13 - 113*	*07/19/21 15:33*	*07/21/21 13:37*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*07/19/21 15:33*	*07/21/21 13:37*	*1*
Phenol-d5	*66*		*17 - 127*	*07/19/21 15:33*	*07/21/21 13:37*	*1*
Terphenyl-d14	*84*		*44 - 149*	*07/19/21 15:33*	*07/21/21 13:37*	*1*
2,4,6-Tribromophenol	*76*		*26 - 150*	*07/19/21 15:33*	*07/21/21 13:37*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 16:50	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*161*	*p S1+*	*51 - 149*	*07/27/21 10:34*	*07/27/21 16:50*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: TB-ROX-071321-8011-B
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-4
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 17:52	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*07/27/21 10:34*	*07/27/21 17:52*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: TB-ROX-071321-8260-B
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 09:06	1
Acrolein	ND		20	10	ug/L			07/19/21 09:06	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 09:06	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 09:06	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 09:06	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 09:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 09:06	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 09:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 09:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 09:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 09:06	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 09:06	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 09:06	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 09:06	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 09:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 09:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 09:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 09:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 09:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 09:06	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 09:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 09:06	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 09:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 09:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 09:06	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 09:06	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 09:06	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 09:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 09:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 09:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 09:06	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 09:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 09:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 09:06	1

Client Sample ID: TB-ROX-071321-8260-B
Date Collected: 07/13/21 00:00
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 09:06	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 09:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 09:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 09:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 09:06	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 09:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 09:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 09:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 09:06	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 09:06	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 09:06	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 09:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 09:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 09:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 09:06	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 09:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 09:06	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 09:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*07/19/21 09:06*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/19/21 09:06*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/19/21 09:06*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: MW27-ROX-071321
Date Collected: 07/13/21 09:40
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 14:31	1
Acrolein	ND		20	10	ug/L			07/19/21 14:31	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 14:31	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 14:31	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 14:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 14:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 14:31	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 14:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 14:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 14:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 14:31	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 14:31	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 14:31	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 14:31	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 14:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 14:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 14:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 14:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 14:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 14:31	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 14:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 14:31	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 14:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 14:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 14:31	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 14:31	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 14:31	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 14:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 14:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 14:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 14:31	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 14:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 14:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 14:31	1

Client Sample ID: MW27-ROX-071321
Date Collected: 07/13/21 09:40
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 14:31	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 14:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 14:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 14:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 14:31	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 14:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 14:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 14:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 14:31	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:31	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 14:31	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 14:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 14:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 14:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 14:31	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 14:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 14:31	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*07/19/21 14:31*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/19/21 14:31*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/19/21 14:31*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.033	ug/L		07/19/21 15:33	07/21/21 23:48	1
Acenaphthylene	ND		0.20	0.046	ug/L		07/19/21 15:33	07/21/21 23:48	1
Anthracene	ND		0.20	0.033	ug/L		07/19/21 15:33	07/21/21 23:48	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		07/19/21 15:33	07/21/21 23:48	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		07/19/21 15:33	07/21/21 23:48	1
Benzo[b]fluoranthene	ND		0.20	0.035	ug/L		07/19/21 15:33	07/21/21 23:48	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/19/21 15:33	07/21/21 23:48	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/19/21 15:33	07/21/21 23:48	1
Chrysene	ND		0.20	0.076	ug/L		07/19/21 15:33	07/21/21 23:48	1
Dibenz(a,h)anthracene	ND		0.20	0.051	ug/L		07/19/21 15:33	07/21/21 23:48	1
Fluoranthene	ND		0.20	0.069	ug/L		07/19/21 15:33	07/21/21 23:48	1
Fluorene	ND		0.20	0.11	ug/L		07/19/21 15:33	07/21/21 23:48	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.044	ug/L		07/19/21 15:33	07/21/21 23:48	1
1-Methylnaphthalene	ND		0.20	0.076	ug/L		07/19/21 15:33	07/21/21 23:48	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		07/19/21 15:33	07/21/21 23:48	1
Phenanthrene	ND		0.20	0.037	ug/L		07/19/21 15:33	07/21/21 23:48	1
Pyrene	ND		0.20	0.041	ug/L		07/19/21 15:33	07/21/21 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*15 - 122*	*07/19/21 15:33*	*07/21/21 23:48*	*1*
Nitrobenzene-d5	*85*		*19 - 130*	*07/19/21 15:33*	*07/21/21 23:48*	*1*

Client Sample ID: MW27-ROX-071321
Date Collected: 07/13/21 09:40
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	94		33 - 138	07/19/21 15:33	07/21/21 23:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/19/21 15:33	07/21/21 14:03	1
Benzenethiol	ND		10	1.7	ug/L		07/19/21 15:33	07/21/21 14:03	1
Benzoic acid	23	J	31	7.5	ug/L		07/19/21 15:33	07/21/21 14:03	1
Benzyl alcohol	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 14:03	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 14:03	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/19/21 15:33	07/21/21 14:03	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 14:03	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/19/21 15:33	07/21/21 14:03	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/19/21 15:33	07/21/21 14:03	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/19/21 15:33	07/21/21 14:03	1
4-Chloroaniline	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 14:03	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/19/21 15:33	07/21/21 14:03	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 14:03	1
2-Chlorophenol	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 14:03	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 14:03	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:03	1
Dibenzofuran	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:03	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 14:03	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/19/21 15:33	07/21/21 14:03	1
Diethyl phthalate	0.89	J	10	0.25	ug/L		07/19/21 15:33	07/21/21 14:03	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/19/21 15:33	07/21/21 14:03	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:03	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/19/21 15:33	07/21/21 14:03	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/19/21 15:33	07/21/21 14:03	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/19/21 15:33	07/21/21 14:03	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 14:03	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 14:03	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:03	1
1,4-Dioxane	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:03	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:03	1
Hexachlorocyclopentadiene	ND		20	2.7	ug/L		07/19/21 15:33	07/21/21 14:03	1
Hexachloroethane	ND		10	4.3	ug/L		07/19/21 15:33	07/21/21 14:03	1
Indene	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:03	1
Isophorone	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 14:03	1
2-Methylphenol	ND		10	1.8	ug/L		07/19/21 15:33	07/21/21 14:03	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/19/21 15:33	07/21/21 14:03	1
2-Nitroaniline	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 14:03	1
3-Nitroaniline	ND		10	1.8	ug/L		07/19/21 15:33	07/21/21 14:03	1
4-Nitroaniline	ND		10	1.5	ug/L		07/19/21 15:33	07/21/21 14:03	1
Nitrobenzene	ND		10	0.13	ug/L		07/19/21 15:33	07/21/21 14:03	1
2-Nitrophenol	ND		10	5.3	ug/L		07/19/21 15:33	07/21/21 14:03	1
4-Nitrophenol	ND		10	2.1	ug/L		07/19/21 15:33	07/21/21 14:03	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/19/21 15:33	07/21/21 14:03	1

Client Sample ID: MW27-ROX-071321
Date Collected: 07/13/21 09:40
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/19/21 15:33	07/21/21 14:03	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/19/21 15:33	07/21/21 14:03	1
Pentachlorophenol	ND		20	1.4	ug/L		07/19/21 15:33	07/21/21 14:03	1
Phenol	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 14:03	1
Pyridine	ND		10	3.3	ug/L		07/19/21 15:33	07/21/21 14:03	1
Quinoline	ND		10	4.6	ug/L		07/19/21 15:33	07/21/21 14:03	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 14:03	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/19/21 15:33	07/21/21 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*46 - 124*	*07/19/21 15:33*	*07/21/21 14:03*	*1*
2-Fluorophenol	*62*		*13 - 113*	*07/19/21 15:33*	*07/21/21 14:03*	*1*
Nitrobenzene-d5	*76*		*36 - 126*	*07/19/21 15:33*	*07/21/21 14:03*	*1*
Phenol-d5	*70*		*17 - 127*	*07/19/21 15:33*	*07/21/21 14:03*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/19/21 15:33*	*07/21/21 14:03*	*1*
2,4,6-Tribromophenol	*76*		*26 - 150*	*07/19/21 15:33*	*07/21/21 14:03*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/27/21 10:34	07/27/21 18:12	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*07/27/21 10:34*	*07/27/21 18:12*	*1*

Client Sample ID: MW14-ROX-071321
Date Collected: 07/13/21 11:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 14:57	1
Acrolein	ND		20	10	ug/L			07/19/21 14:57	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 14:57	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 14:57	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 14:57	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 14:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 14:57	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 14:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 14:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 14:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 14:57	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 14:57	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 14:57	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 14:57	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 14:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 14:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 14:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 14:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 14:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 14:57	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 14:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 14:57	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 14:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 14:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 14:57	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 14:57	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 14:57	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 14:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 14:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 14:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 14:57	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 14:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 14:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 14:57	1

Client Sample ID: MW14-ROX-071321
Date Collected: 07/13/21 11:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 14:57	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 14:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 14:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 14:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 14:57	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 14:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 14:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 14:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 14:57	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 14:57	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 14:57	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 14:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 14:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 14:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 14:57	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 14:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 14:57	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 119*		*07/19/21 14:57*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/19/21 14:57*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/19/21 14:57*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/19/21 15:33	07/22/21 00:05	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/19/21 15:33	07/22/21 00:05	1
Anthracene	ND		0.21	0.033	ug/L		07/19/21 15:33	07/22/21 00:05	1
Benzo[a]anthracene	ND		0.21	0.047	ug/L		07/19/21 15:33	07/22/21 00:05	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/19/21 15:33	07/22/21 00:05	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/19/21 15:33	07/22/21 00:05	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/19/21 15:33	07/22/21 00:05	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/19/21 15:33	07/22/21 00:05	1
Chrysene	ND		0.21	0.076	ug/L		07/19/21 15:33	07/22/21 00:05	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		07/19/21 15:33	07/22/21 00:05	1
Fluoranthene	ND		0.21	0.070	ug/L		07/19/21 15:33	07/22/21 00:05	1
Fluorene	ND		0.21	0.11	ug/L		07/19/21 15:33	07/22/21 00:05	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.044	ug/L		07/19/21 15:33	07/22/21 00:05	1
1-Methylnaphthalene	ND		0.21	0.076	ug/L		07/19/21 15:33	07/22/21 00:05	1
2-Methylnaphthalene	ND		0.21	0.062	ug/L		07/19/21 15:33	07/22/21 00:05	1
Phenanthrene	ND		0.21	0.037	ug/L		07/19/21 15:33	07/22/21 00:05	1
Pyrene	ND		0.21	0.041	ug/L		07/19/21 15:33	07/22/21 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*15 - 122*	*07/19/21 15:33*	*07/22/21 00:05*	*1*
Nitrobenzene-d5	*76*		*19 - 130*	*07/19/21 15:33*	*07/22/21 00:05*	*1*

Client Sample ID: MW14-ROX-071321
Date Collected: 07/13/21 11:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	96		33 - 138	07/19/21 15:33	07/22/21 00:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/19/21 15:33	07/21/21 14:29	1
Benzenethiol	ND		10	1.7	ug/L		07/19/21 15:33	07/21/21 14:29	1
Benzoic acid	**23**	J	31	7.5	ug/L		07/19/21 15:33	07/21/21 14:29	1
Benzyl alcohol	ND		10	2.1	ug/L		07/19/21 15:33	07/21/21 14:29	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 14:29	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/19/21 15:33	07/21/21 14:29	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 14:29	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/19/21 15:33	07/21/21 14:29	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/19/21 15:33	07/21/21 14:29	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/19/21 15:33	07/21/21 14:29	1
4-Chloroaniline	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 14:29	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/19/21 15:33	07/21/21 14:29	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 14:29	1
2-Chlorophenol	ND		10	2.3	ug/L		07/19/21 15:33	07/21/21 14:29	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/19/21 15:33	07/21/21 14:29	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:29	1
Dibenzofuran	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:29	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 14:29	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/19/21 15:33	07/21/21 14:29	1
Diethyl phthalate	**0.71**	J	10	0.25	ug/L		07/19/21 15:33	07/21/21 14:29	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/19/21 15:33	07/21/21 14:29	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:29	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/19/21 15:33	07/21/21 14:29	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/19/21 15:33	07/21/21 14:29	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/19/21 15:33	07/21/21 14:29	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 14:29	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 14:29	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:29	1
1,4-Dioxane	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:29	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:29	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/19/21 15:33	07/21/21 14:29	1
Hexachloroethane	ND		10	4.3	ug/L		07/19/21 15:33	07/21/21 14:29	1
Indene	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:29	1
Isophorone	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 14:29	1
2-Methylphenol	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 14:29	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/19/21 15:33	07/21/21 14:29	1
2-Nitroaniline	ND		10	2.3	ug/L		07/19/21 15:33	07/21/21 14:29	1
3-Nitroaniline	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 14:29	1
4-Nitroaniline	ND		10	1.5	ug/L		07/19/21 15:33	07/21/21 14:29	1
Nitrobenzene	ND		10	0.13	ug/L		07/19/21 15:33	07/21/21 14:29	1
2-Nitrophenol	ND		10	5.3	ug/L		07/19/21 15:33	07/21/21 14:29	1
4-Nitrophenol	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 14:29	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/19/21 15:33	07/21/21 14:29	1

Client Sample ID: MW14-ROX-071321
Date Collected: 07/13/21 11:20
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/19/21 15:33	07/21/21 14:29	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/19/21 15:33	07/21/21 14:29	1
Pentachlorophenol	ND		21	1.4	ug/L		07/19/21 15:33	07/21/21 14:29	1
Phenol	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 14:29	1
Pyridine	ND		10	3.3	ug/L		07/19/21 15:33	07/21/21 14:29	1
Quinoline	ND		10	4.6	ug/L		07/19/21 15:33	07/21/21 14:29	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 14:29	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/19/21 15:33	07/21/21 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*46 - 124*	*07/19/21 15:33*	*07/21/21 14:29*	*1*
2-Fluorophenol	*69*		*13 - 113*	*07/19/21 15:33*	*07/21/21 14:29*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*07/19/21 15:33*	*07/21/21 14:29*	*1*
Phenol-d5	*75*		*17 - 127*	*07/19/21 15:33*	*07/21/21 14:29*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/19/21 15:33*	*07/21/21 14:29*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*07/19/21 15:33*	*07/21/21 14:29*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/27/21 10:34	07/27/21 18:53	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 18:53*	*1*

Client Sample ID: P66-ROX-071321
Date Collected: 07/13/21 12:15
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50	20	ug/L			07/19/21 10:44	2
Acrolein	ND		40	20	ug/L			07/19/21 10:44	2
Acrylonitrile	ND		20	5.6	ug/L			07/19/21 10:44	2
Bromobenzene	ND		2.0	1.1	ug/L			07/19/21 10:44	2
Bromochloromethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Bromoform	ND		10	1.4	ug/L			07/19/21 10:44	2
Bromomethane	ND		2.0	2.0	ug/L			07/19/21 10:44	2
2-Butanone (MEK)	ND		50	5.2	ug/L			07/19/21 10:44	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Carbon tetrachloride	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Chlorobenzene	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Dibromochloromethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Chloroethane	ND		2.0	1.5	ug/L			07/19/21 10:44	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/19/21 10:44	2
Chloroform	ND		2.0	1.2	ug/L			07/19/21 10:44	2
1-Chlorohexane	ND		2.0	1.4	ug/L			07/19/21 10:44	2
Chloromethane	ND		2.0	1.7	ug/L			07/19/21 10:44	2
cis-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/19/21 10:44	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/19/21 10:44	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/19/21 10:44	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/19/21 10:44	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/19/21 10:44	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,2-Dichloroethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Ethylbenzene	**160**		2.0	1.0	ug/L			07/19/21 10:44	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/19/21 10:44	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/19/21 10:44	2
2-Hexanone	ND		50	6.2	ug/L			07/19/21 10:44	2
Isopropylbenzene	**55**		2.0	1.1	ug/L			07/19/21 10:44	2
Methylene bromide	ND		10	1.2	ug/L			07/19/21 10:44	2
Methylene Chloride	ND		10	6.0	ug/L			07/19/21 10:44	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/19/21 10:44	2
Methyl tert-butyl ether	ND		2.0	1.5	ug/L			07/19/21 10:44	2
m-Xylene & p-Xylene	**490**		10	3.2	ug/L			07/19/21 10:44	2
Naphthalene	**14**		2.0	2.0	ug/L			07/19/21 10:44	2
n-Butylbenzene	**5.9**		2.0	1.5	ug/L			07/19/21 10:44	2
N-Propylbenzene	**91**		2.0	1.4	ug/L			07/19/21 10:44	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/19/21 10:44	2
o-Xylene	**270**		10	1.2	ug/L			07/19/21 10:44	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/19/21 10:44	2
p-Isopropyltoluene	ND		2.0	1.4	ug/L			07/19/21 10:44	2
sec-Butylbenzene	**9.6**		2.0	1.4	ug/L			07/19/21 10:44	2

Client Sample ID: P66-ROX-071321
Date Collected: 07/13/21 12:15
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		2.0	2.0	ug/L			07/19/21 10:44	2
tert-Butylbenzene	5.0		2.0	1.3	ug/L			07/19/21 10:44	2
1,1,1,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Tetrachloroethene	ND		2.0	1.2	ug/L			07/19/21 10:44	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/19/21 10:44	2
trans-1,3-Dichloropropene	ND		10	1.0	ug/L			07/19/21 10:44	2
1,2,3-Trichlorobenzene	ND		2.0	1.4	ug/L			07/19/21 10:44	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/19/21 10:44	2
1,1,1-Trichloroethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,1,2-Trichloroethane	ND		10	1.0	ug/L			07/19/21 10:44	2
Trichloroethene	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			07/19/21 10:44	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/19/21 10:44	2
1,2,4-Trimethylbenzene	38		2.0	1.6	ug/L			07/19/21 10:44	2
1,3,5-Trimethylbenzene	8.6		2.0	1.1	ug/L			07/19/21 10:44	2
Vinyl acetate	ND		50	4.0	ug/L			07/19/21 10:44	2
Vinyl chloride	ND		2.0	1.0	ug/L			07/19/21 10:44	2
Xylenes, Total	760		20	3.2	ug/L			07/19/21 10:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*07/19/21 10:44*	*2*
Dibromofluoromethane	*109*		*75 - 126*		*07/19/21 10:44*	*2*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/19/21 10:44*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1200		20	7.6	ug/L			07/19/21 17:33	20
Toluene	3900		20	8.2	ug/L			07/19/21 17:33	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*07/19/21 17:33*	*20*
Dibromofluoromethane	*107*		*75 - 126*		*07/19/21 17:33*	*20*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/19/21 17:33*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.3		0.20	0.032	ug/L		07/19/21 15:33	07/22/21 00:22	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/19/21 15:33	07/22/21 00:22	1
Anthracene	ND		0.20	0.032	ug/L		07/19/21 15:33	07/22/21 00:22	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/19/21 15:33	07/22/21 00:22	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/19/21 15:33	07/22/21 00:22	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/19/21 15:33	07/22/21 00:22	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/19/21 15:33	07/22/21 00:22	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/19/21 15:33	07/22/21 00:22	1
Chrysene	ND		0.20	0.074	ug/L		07/19/21 15:33	07/22/21 00:22	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/19/21 15:33	07/22/21 00:22	1
Fluoranthene	0.15	J	0.20	0.068	ug/L		07/19/21 15:33	07/22/21 00:22	1
Fluorene	ND		0.20	0.11	ug/L		07/19/21 15:33	07/22/21 00:22	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/19/21 15:33	07/22/21 00:22	1

Client Sample ID: P66-ROX-071321
Date Collected: 07/13/21 12:15
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-8
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	41		0.20	0.074	ug/L		07/19/21 15:33	07/22/21 00:22	1
2-Methylnaphthalene	19		0.20	0.060	ug/L		07/19/21 15:33	07/22/21 00:22	1
Phenanthrene	ND		0.20	0.036	ug/L		07/19/21 15:33	07/22/21 00:22	1
Pyrene	0.39		0.20	0.040	ug/L		07/19/21 15:33	07/22/21 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*15 - 122*	*07/19/21 15:33*	*07/22/21 00:22*	*1*
Nitrobenzene-d5	*72*		*19 - 130*	*07/19/21 15:33*	*07/22/21 00:22*	*1*
Terphenyl-d14	*64*		*33 - 138*	*07/19/21 15:33*	*07/22/21 00:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 14:55	1
Benzenethiol	ND		10	1.7	ug/L		07/19/21 15:33	07/21/21 14:55	1
Benzoic acid	110		30	7.3	ug/L		07/19/21 15:33	07/21/21 14:55	1
Benzyl alcohol	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 14:55	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 14:55	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 14:55	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/19/21 15:33	07/21/21 14:55	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/19/21 15:33	07/21/21 14:55	1
4-Chloroaniline	ND		10	3.4	ug/L		07/19/21 15:33	07/21/21 14:55	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 14:55	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 14:55	1
2-Chlorophenol	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 14:55	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
Dibenzofuran	1.1	J	10	0.17	ug/L		07/19/21 15:33	07/21/21 14:55	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/19/21 15:33	07/21/21 14:55	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
Diethyl phthalate	ND		10	0.24	ug/L		07/19/21 15:33	07/21/21 14:55	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 14:55	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:55	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 14:55	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/19/21 15:33	07/21/21 14:55	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/19/21 15:33	07/21/21 14:55	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 14:55	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 14:55	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:55	1
1,4-Dioxane	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 14:55	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/19/21 15:33	07/21/21 14:55	1
Hexachloroethane	ND		10	4.2	ug/L		07/19/21 15:33	07/21/21 14:55	1
Indene	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 14:55	1
Isophorone	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 14:55	1
2-Methylphenol	25		10	1.8	ug/L		07/19/21 15:33	07/21/21 14:55	1
3 & 4 Methylphenol	26		20	0.39	ug/L		07/19/21 15:33	07/21/21 14:55	1

Client Sample ID: P66-ROX-071321
Date Collected: 07/13/21 12:15
Date Received: 07/14/21 09:17

Lab Sample ID: 400-205904-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 14:55	1
3-Nitroaniline	ND		10	1.8	ug/L		07/19/21 15:33	07/21/21 14:55	1
4-Nitroaniline	ND		10	1.5	ug/L		07/19/21 15:33	07/21/21 14:55	1
Nitrobenzene	ND		10	0.13	ug/L		07/19/21 15:33	07/21/21 14:55	1
2-Nitrophenol	ND		10	5.2	ug/L		07/19/21 15:33	07/21/21 14:55	1
4-Nitrophenol	ND		10	2.1	ug/L		07/19/21 15:33	07/21/21 14:55	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 14:55	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/19/21 15:33	07/21/21 14:55	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/19/21 15:33	07/21/21 14:55	1
Pentachlorophenol	ND		20	1.4	ug/L		07/19/21 15:33	07/21/21 14:55	1
Phenol	29		10	2.6	ug/L		07/19/21 15:33	07/21/21 14:55	1
Pyridine	ND		10	3.2	ug/L		07/19/21 15:33	07/21/21 14:55	1
Quinoline	ND		10	4.5	ug/L		07/19/21 15:33	07/21/21 14:55	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/19/21 15:33	07/21/21 14:55	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*46 - 124*	*07/19/21 15:33*	*07/21/21 14:55*	*1*
2-Fluorophenol	*52*		*13 - 113*	*07/19/21 15:33*	*07/21/21 14:55*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*07/19/21 15:33*	*07/21/21 14:55*	*1*
Phenol-d5	*64*		*17 - 127*	*07/19/21 15:33*	*07/21/21 14:55*	*1*
Terphenyl-d14	*72*		*44 - 149*	*07/19/21 15:33*	*07/21/21 14:55*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*07/19/21 15:33*	*07/21/21 14:55*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/27/21 10:34	07/27/21 19:13	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 19:13*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-205904-2	TB-ROX-071321-8260-A	97	104	98
400-205904-3	ROST4PZG-ROX-071321	96	106	96
400-205904-3 MS	ROST4PZG-ROX-071321	98	104	97
400-205904-3 MSD	ROST4PZG-ROX-071321	99	103	98
400-205904-5	TB-ROX-071321-8260-B	97	105	97
400-205904-6	MW27-ROX-071321	98	105	99
400-205904-7	MW14-ROX-071321	99	106	99
400-205904-8	P66-ROX-071321	95	109	96
400-205904-8 - DL	P66-ROX-071321	95	107	99
LCS 400-539856/1002	Lab Control Sample	99	107	95
MB 400-539856/4	Method Blank	97	105	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-205904-3	ROST4PZG-ROX-071321	84	51	70	66	84	76
400-205904-3 MS	ROST4PZG-ROX-071321	84	65	81	75	78	87
400-205904-3 MSD	ROST4PZG-ROX-071321	82	63	78	72	72	84
400-205904-6	MW27-ROX-071321	91	62	76	70	86	76
400-205904-7	MW14-ROX-071321	84	69	67	75	86	75
400-205904-8	P66-ROX-071321	72	52	59	64	72	75
LCS 400-540002/2-A	Lab Control Sample	90	67	87	78	80	85
LCS 400-540002/5-A	Lab Control Sample	85	71	69	77	80	70
LCSD 400-540002/6-A	Lab Control Sample Dup	90	77	74	83	92	75
MB 400-540002/1-A	Method Blank	83	43	68	62	85	63

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-205904-3	ROST4PZG-ROX-071321	82	80	85
400-205904-3 MS	ROST4PZG-ROX-071321	94	92	101
400-205904-3 MSD	ROST4PZG-ROX-071321	74	73	77

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-205904-1
Project/Site: ROXANA QUARTERLY GW

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-205904-6	MW27-ROX-071321	85	85	94
400-205904-7	MW14-ROX-071321	81	76	96
400-205904-8	P66-ROX-071321	67	72	64
LCS 400-540002/2-A	Lab Control Sample	76	87	83
MB 400-540002/1-A	Method Blank	86	79	93

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-205904-1	TB-ROX-071321-8011-A	92
400-205904-3	ROST4PZG-ROX-071321	161 p S1+
400-205904-3 MS	ROST4PZG-ROX-071321	97 p
400-205904-3 MSD	ROST4PZG-ROX-071321	99 p
400-205904-4	TB-ROX-071321-8011-B	90
400-205904-6	MW27-ROX-071321	90
400-205904-7	MW14-ROX-071321	86 p
400-205904-8	P66-ROX-071321	76 p
LCS 400-541070/2-A	Lab Control Sample	101
MB 400-541070/1-A	Method Blank	86 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: TB-ROX-071321-8011-A

Lab Sample ID: 400-205904-1

Date Collected: 07/13/21 00:00
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.8 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 16:30	DS	TAL PEN

Client Sample ID: TB-ROX-071321-8260-A

Lab Sample ID: 400-205904-2

Date Collected: 07/13/21 00:00
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 08:41	WPD	TAL PEN

Client Sample ID: ROST4PZG-ROX-071321

Lab Sample ID: 400-205904-3

Date Collected: 07/13/21 10:30
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 09:55	WPD	TAL PEN
Total/NA	Prep	3520C			265.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 13:37	S1B	TAL PEN
Total/NA	Prep	3520C			265.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540430	07/21/21 22:39	KJA	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 16:50	DS	TAL PEN

Client Sample ID: TB-ROX-071321-8011-B

Lab Sample ID: 400-205904-4

Date Collected: 07/13/21 00:00
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.7 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 17:52	DS	TAL PEN

Client Sample ID: TB-ROX-071321-8260-B

Lab Sample ID: 400-205904-5

Date Collected: 07/13/21 00:00
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 09:06	WPD	TAL PEN

Client Sample ID: MW27-ROX-071321

Lab Sample ID: 400-205904-6

Date Collected: 07/13/21 09:40
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 14:31	WPD	TAL PEN
Total/NA	Prep	3520C			244.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 14:03	S1B	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: MW27-ROX-071321

Lab Sample ID: 400-205904-6

Date Collected: 07/13/21 09:40
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			244.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540430	07/21/21 23:48	KJA	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 18:12	DS	TAL PEN

Client Sample ID: MW14-ROX-071321

Lab Sample ID: 400-205904-7

Date Collected: 07/13/21 11:20
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 14:57	WPD	TAL PEN
Total/NA	Prep	3520C			243 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 14:29	S1B	TAL PEN
Total/NA	Prep	3520C			243 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540430	07/22/21 00:05	KJA	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 18:53	DS	TAL PEN

Client Sample ID: P66-ROX-071321

Lab Sample ID: 400-205904-8

Date Collected: 07/13/21 12:15
Matrix: Water
Date Received: 07/14/21 09:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	539856	07/19/21 10:44	WPD	TAL PEN
Total/NA	Analysis	8260B	DL	20	5 mL	5 mL	539856	07/19/21 17:33	WPD	TAL PEN
Total/NA	Prep	3520C			250.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 14:55	S1B	TAL PEN
Total/NA	Prep	3520C			250.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540430	07/22/21 00:22	KJA	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 19:13	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-539856/4

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 08:17	WPD	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-540002/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 10:11	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540430	07/21/21 21:30	KJA	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-541070/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 15:08	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-539856/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 07:21	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540002/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 10:36	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			540430	07/21/21 21:47	KJA	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540002/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 12:19	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541070/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 15:28	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-540002/6-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 12:45	S1B	TAL PEN

Client Sample ID: ROST4PZG-ROX-071321

Lab Sample ID: 400-205904-3 MS

Date Collected: 07/13/21 10:30
Date Received: 07/14/21 09:17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 11:59	WPD	TAL PEN
Total/NA	Prep	3520C			267.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 15:47	S1B	TAL PEN
Total/NA	Prep	3520C			267.8 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			540430	07/21/21 22:04	KJA	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 17:11	DS	TAL PEN

Client Sample ID: ROST4PZG-ROX-071321

Lab Sample ID: 400-205904-3 MSD

Date Collected: 07/13/21 10:30
Date Received: 07/14/21 09:17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	539856	07/19/21 12:26	WPD	TAL PEN
Total/NA	Prep	3520C			271 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540203	07/21/21 16:13	S1B	TAL PEN
Total/NA	Prep	3520C			271 mL	1 mL	540002	07/19/21 15:33	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			540430	07/21/21 22:22	KJA	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 17:31	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 539856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205904-2	TB-ROX-071321-8260-A	Total/NA	Water	8260B	
400-205904-3	ROST4PZG-ROX-071321	Total/NA	Water	8260B	
400-205904-5	TB-ROX-071321-8260-B	Total/NA	Water	8260B	
400-205904-6	MW27-ROX-071321	Total/NA	Water	8260B	
400-205904-7	MW14-ROX-071321	Total/NA	Water	8260B	
400-205904-8	P66-ROX-071321	Total/NA	Water	8260B	
400-205904-8 - DL	P66-ROX-071321	Total/NA	Water	8260B	
MB 400-539856/4	Method Blank	Total/NA	Water	8260B	
LCS 400-539856/1002	Lab Control Sample	Total/NA	Water	8260B	
400-205904-3 MS	ROST4PZG-ROX-071321	Total/NA	Water	8260B	
400-205904-3 MSD	ROST4PZG-ROX-071321	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 540002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205904-3	ROST4PZG-ROX-071321	Total/NA	Water	3520C	
400-205904-6	MW27-ROX-071321	Total/NA	Water	3520C	
400-205904-7	MW14-ROX-071321	Total/NA	Water	3520C	
400-205904-8	P66-ROX-071321	Total/NA	Water	3520C	
MB 400-540002/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-540002/5-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-540002/6-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-205904-3 MS	ROST4PZG-ROX-071321	Total/NA	Water	3520C	
400-205904-3 MSD	ROST4PZG-ROX-071321	Total/NA	Water	3520C	

Analysis Batch: 540203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205904-3	ROST4PZG-ROX-071321	Total/NA	Water	8270D	540002
400-205904-6	MW27-ROX-071321	Total/NA	Water	8270D	540002
400-205904-7	MW14-ROX-071321	Total/NA	Water	8270D	540002
400-205904-8	P66-ROX-071321	Total/NA	Water	8270D	540002
MB 400-540002/1-A	Method Blank	Total/NA	Water	8270D	540002
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	8270D	540002
LCS 400-540002/5-A	Lab Control Sample	Total/NA	Water	8270D	540002
LCSD 400-540002/6-A	Lab Control Sample Dup	Total/NA	Water	8270D	540002
400-205904-3 MS	ROST4PZG-ROX-071321	Total/NA	Water	8270D	540002
400-205904-3 MSD	ROST4PZG-ROX-071321	Total/NA	Water	8270D	540002

Analysis Batch: 540430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205904-3	ROST4PZG-ROX-071321	Total/NA	Water	8270D LL	540002
400-205904-6	MW27-ROX-071321	Total/NA	Water	8270D LL	540002
400-205904-7	MW14-ROX-071321	Total/NA	Water	8270D LL	540002
400-205904-8	P66-ROX-071321	Total/NA	Water	8270D LL	540002
MB 400-540002/1-A	Method Blank	Total/NA	Water	8270D LL	540002
LCS 400-540002/2-A	Lab Control Sample	Total/NA	Water	8270D LL	540002
400-205904-3 MS	ROST4PZG-ROX-071321	Total/NA	Water	8270D LL	540002
400-205904-3 MSD	ROST4PZG-ROX-071321	Total/NA	Water	8270D LL	540002

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

GC Semi VOA

Prep Batch: 541070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205904-1	TB-ROX-071321-8011-A	Total/NA	Water	8011	
400-205904-3	ROST4PZG-ROX-071321	Total/NA	Water	8011	
400-205904-4	TB-ROX-071321-8011-B	Total/NA	Water	8011	
400-205904-6	MW27-ROX-071321	Total/NA	Water	8011	
400-205904-7	MW14-ROX-071321	Total/NA	Water	8011	
400-205904-8	P66-ROX-071321	Total/NA	Water	8011	
MB 400-541070/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-541070/2-A	Lab Control Sample	Total/NA	Water	8011	
400-205904-3 MS	ROST4PZG-ROX-071321	Total/NA	Water	8011	
400-205904-3 MSD	ROST4PZG-ROX-071321	Total/NA	Water	8011	

Analysis Batch: 541126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-205904-1	TB-ROX-071321-8011-A	Total/NA	Water	8011	541070
400-205904-3	ROST4PZG-ROX-071321	Total/NA	Water	8011	541070
400-205904-4	TB-ROX-071321-8011-B	Total/NA	Water	8011	541070
400-205904-6	MW27-ROX-071321	Total/NA	Water	8011	541070
400-205904-7	MW14-ROX-071321	Total/NA	Water	8011	541070
400-205904-8	P66-ROX-071321	Total/NA	Water	8011	541070
MB 400-541070/1-A	Method Blank	Total/NA	Water	8011	541070
LCS 400-541070/2-A	Lab Control Sample	Total/NA	Water	8011	541070
400-205904-3 MS	ROST4PZG-ROX-071321	Total/NA	Water	8011	541070
400-205904-3 MSD	ROST4PZG-ROX-071321	Total/NA	Water	8011	541070

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

Lab Sample ID: MB 400-539856/4
Matrix: Water
Analysis Batch: 539856

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/21 08:17	1
Acrolein	ND		20	10	ug/L			07/19/21 08:17	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/21 08:17	1
Benzene	ND		1.0	0.38	ug/L			07/19/21 08:17	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/21 08:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/21 08:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Bromoform	ND		5.0	0.71	ug/L			07/19/21 08:17	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/21 08:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/21 08:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/21 08:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/21 08:17	1
Chloroform	ND		1.0	0.60	ug/L			07/19/21 08:17	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/19/21 08:17	1
Chloromethane	ND		1.0	0.83	ug/L			07/19/21 08:17	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 08:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/21 08:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/21 08:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/21 08:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/21 08:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/21 08:17	1
2-Hexanone	ND		25	3.1	ug/L			07/19/21 08:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/21 08:17	1
Methylene bromide	ND		5.0	0.59	ug/L			07/19/21 08:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/21 08:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/21 08:17	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/19/21 08:17	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/19/21 08:17	1
Naphthalene	ND		1.0	1.0	ug/L			07/19/21 08:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/21 08:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/21 08:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/21 08:17	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/21 08:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/21 08:17	1

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

Lab Sample ID: MB 400-539856/4
Matrix: Water
Analysis Batch: 539856

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/21 08:17	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/21 08:17	1
Styrene	ND		1.0	1.0	ug/L			07/19/21 08:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/21 08:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/19/21 08:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/19/21 08:17	1
Toluene	ND		1.0	0.41	ug/L			07/19/21 08:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/21 08:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/19/21 08:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/21 08:17	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/19/21 08:17	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/19/21 08:17	1
Trichloroethene	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/19/21 08:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/21 08:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/21 08:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/21 08:17	1
Vinyl acetate	ND		25	2.0	ug/L			07/19/21 08:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/21 08:17	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/21 08:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*07/19/21 08:17*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/19/21 08:17*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/19/21 08:17*	*1*

Lab Sample ID: LCS 400-539856/1002
Matrix: Water
Analysis Batch: 539856

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	182		ug/L		91	43 - 160
Acrolein	500	475		ug/L		95	38 - 160
Acrylonitrile	500	463		ug/L		93	64 - 142
Benzene	50.0	43.0		ug/L		86	70 - 130
Bromobenzene	50.0	46.5		ug/L		93	70 - 132
Bromochloromethane	50.0	46.2		ug/L		92	70 - 130
Bromodichloromethane	50.0	44.6		ug/L		89	67 - 133
Bromoform	50.0	46.4		ug/L		93	57 - 140
Bromomethane	50.0	50.8		ug/L		102	10 - 160
2-Butanone (MEK)	200	184		ug/L		92	61 - 145
Carbon disulfide	50.0	40.7		ug/L		81	61 - 137
Carbon tetrachloride	50.0	43.8		ug/L		88	61 - 137
Chlorobenzene	50.0	44.9		ug/L		90	70 - 130
Dibromochloromethane	50.0	44.9		ug/L		90	67 - 135
Chloroethane	50.0	43.5		ug/L		87	55 - 141

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

Lab Sample ID: LCS 400-539856/1002
Matrix: Water
Analysis Batch: 539856

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	34.7		ug/L		69	10 - 160
Chloroform	50.0	42.6		ug/L		85	69 - 130
1-Chlorohexane	50.0	46.6		ug/L		93	69 - 130
Chloromethane	50.0	40.0		ug/L		80	58 - 137
cis-1,2-Dichloroethene	50.0	43.4		ug/L		87	68 - 130
cis-1,3-Dichloropropene	50.0	45.3		ug/L		91	69 - 132
1,2-Dichlorobenzene	50.0	46.7		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	48.1		ug/L		96	70 - 130
1,4-Dichlorobenzene	50.0	46.0		ug/L		92	70 - 130
Dichlorodifluoromethane	50.0	29.2		ug/L		58	41 - 146
1,1-Dichloroethane	50.0	42.3		ug/L		85	70 - 130
1,2-Dichloroethane	50.0	42.7		ug/L		85	69 - 130
1,1-Dichloroethene	50.0	41.0		ug/L		82	63 - 134
1,2-Dichloropropane	50.0	43.9		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	44.6		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	44.3		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	43.5		ug/L		87	70 - 130
Ethylbenzene	50.0	45.2		ug/L		90	70 - 130
Ethyl methacrylate	50.0	45.2		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	52.1		ug/L		104	53 - 140
2-Hexanone	200	178		ug/L		89	65 - 137
Isopropylbenzene	50.0	46.8		ug/L		94	70 - 130
Methylene bromide	50.0	45.8		ug/L		92	70 - 130
Methylene Chloride	50.0	42.2		ug/L		84	66 - 135
4-Methyl-2-pentanone (MIBK)	200	191		ug/L		96	69 - 138
Methyl tert-butyl ether	50.0	44.6		ug/L		89	66 - 130
m-Xylene & p-Xylene	50.0	43.1		ug/L		86	70 - 130
Naphthalene	50.0	41.3		ug/L		83	47 - 149
n-Butylbenzene	50.0	50.9		ug/L		102	67 - 130
N-Propylbenzene	50.0	49.6		ug/L		99	70 - 130
o-Chlorotoluene	50.0	47.8		ug/L		96	70 - 130
o-Xylene	50.0	44.5		ug/L		89	70 - 130
p-Chlorotoluene	50.0	47.7		ug/L		95	70 - 130
p-Isopropyltoluene	50.0	51.1		ug/L		102	65 - 130
sec-Butylbenzene	50.0	49.7		ug/L		99	66 - 130
Styrene	50.0	45.9		ug/L		92	70 - 130
tert-Butylbenzene	50.0	47.6		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.5		ug/L		91	70 - 131
Tetrachloroethene	50.0	42.6		ug/L		85	65 - 130
Toluene	50.0	40.2		ug/L		80	70 - 130
trans-1,2-Dichloroethene	50.0	43.3		ug/L		87	70 - 130
trans-1,3-Dichloropropene	50.0	45.1		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	45.0		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	46.1		ug/L		92	60 - 140
1,1,1-Trichloroethane	50.0	43.0		ug/L		86	68 - 130
1,1,2-Trichloroethane	50.0	45.1		ug/L		90	70 - 130
Trichloroethene	50.0	44.7		ug/L		89	70 - 130
Trichlorofluoromethane	50.0	44.7		ug/L		89	65 - 138

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

Lab Sample ID: LCS 400-539856/1002
Matrix: Water
Analysis Batch: 539856

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	48.3		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	48.3		ug/L		97	69 - 130
Vinyl acetate	100	105		ug/L		105	26 - 160
Vinyl chloride	50.0	41.4		ug/L		83	59 - 136
Xylenes, Total	100	87.6		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 119*
Dibromofluoromethane	*107*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 539856

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	210		ug/L		105	43 - 150
Acrolein	ND		500	463		ug/L		93	38 - 150
Acrylonitrile	ND		500	514		ug/L		103	62 - 149
Benzene	0.46	J	50.0	50.5		ug/L		100	56 - 142
Bromobenzene	ND		50.0	50.1		ug/L		100	59 - 136
Bromochloromethane	ND		50.0	52.5		ug/L		105	64 - 140
Bromodichloromethane	ND		50.0	49.8		ug/L		100	59 - 143
Bromoform	ND		50.0	49.4		ug/L		99	50 - 140
Bromomethane	ND		50.0	54.7		ug/L		109	10 - 150
2-Butanone (MEK)	ND	F1	200	106	F1	ug/L		53	55 - 150
Carbon disulfide	ND		50.0	45.7		ug/L		91	48 - 150
Carbon tetrachloride	ND		50.0	49.0		ug/L		98	55 - 145
Chlorobenzene	ND		50.0	50.6		ug/L		101	64 - 130
Dibromochloromethane	ND		50.0	49.7		ug/L		99	56 - 143
Chloroethane	ND		50.0	43.8		ug/L		88	50 - 150
2-Chloroethyl vinyl ether	ND	F2	50.0	14.8		ug/L		30	10 - 150
Chloroform	ND		50.0	50.7		ug/L		101	60 - 141
1-Chlorohexane	ND		50.0	51.8		ug/L		104	56 - 136
Chloromethane	ND		50.0	38.7		ug/L		77	49 - 148
cis-1,2-Dichloroethene	ND		50.0	49.2		ug/L		98	59 - 143
cis-1,3-Dichloropropene	ND		50.0	52.1		ug/L		104	57 - 140
1,2-Dichlorobenzene	ND		50.0	49.9		ug/L		100	52 - 137
1,3-Dichlorobenzene	ND		50.0	51.1		ug/L		102	54 - 135
1,4-Dichlorobenzene	ND		50.0	49.6		ug/L		99	53 - 135
Dichlorodifluoromethane	ND		50.0	29.6		ug/L		59	16 - 150
1,1-Dichloroethane	ND		50.0	48.4		ug/L		97	61 - 144
1,2-Dichloroethane	ND		50.0	49.3		ug/L		99	60 - 141
1,1-Dichloroethene	ND		50.0	45.8		ug/L		92	54 - 147
1,2-Dichloropropane	ND		50.0	50.3		ug/L		101	66 - 137
1,3-Dichloropropane	ND		50.0	50.0		ug/L		100	66 - 133
2,2-Dichloropropane	ND		50.0	50.7		ug/L		101	42 - 144

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

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 539856

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	49.4		ug/L		99	65 - 136
Ethylbenzene	ND		50.0	50.9		ug/L		102	58 - 131
Ethyl methacrylate	ND		50.0	50.7		ug/L		101	64 - 130
Hexachlorobutadiene	ND		50.0	54.3		ug/L		109	31 - 149
2-Hexanone	ND	F1	200	120	F1	ug/L		60	65 - 140
Isopropylbenzene	ND		50.0	53.0		ug/L		106	56 - 133
Methylene bromide	ND		50.0	52.4		ug/L		105	63 - 138
Methylene Chloride	ND		50.0	49.7		ug/L		99	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	199		ug/L		100	63 - 146
Methyl tert-butyl ether	ND		50.0	49.5		ug/L		99	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.3		ug/L		99	57 - 130
Naphthalene	ND		50.0	45.8		ug/L		92	25 - 150
n-Butylbenzene	ND		50.0	55.3		ug/L		111	41 - 142
N-Propylbenzene	0.75	J	50.0	54.7		ug/L		108	51 - 138
o-Chlorotoluene	ND		50.0	52.2		ug/L		104	53 - 134
o-Xylene	ND		50.0	50.4		ug/L		101	61 - 130
p-Chlorotoluene	ND		50.0	51.6		ug/L		103	54 - 133
p-Isopropyltoluene	ND		50.0	54.8		ug/L		110	48 - 139
sec-Butylbenzene	ND		50.0	54.6		ug/L		109	50 - 138
Styrene	ND		50.0	51.0		ug/L		102	58 - 131
tert-Butylbenzene	ND		50.0	50.1		ug/L		100	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	51.0		ug/L		102	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	51.1		ug/L		102	66 - 135
Tetrachloroethene	ND		50.0	47.1		ug/L		94	52 - 133
Toluene	0.84	J	50.0	46.4		ug/L		91	65 - 130
trans-1,2-Dichloroethene	ND		50.0	48.2		ug/L		96	61 - 143
trans-1,3-Dichloropropene	ND		50.0	49.0		ug/L		98	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	47.4		ug/L		95	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	48.4		ug/L		97	39 - 148
1,1,1-Trichloroethane	ND		50.0	49.6		ug/L		99	57 - 142
1,1,2-Trichloroethane	ND		50.0	50.9		ug/L		102	66 - 131
Trichloroethene	ND		50.0	51.0		ug/L		102	64 - 136
Trichlorofluoromethane	ND		50.0	43.2		ug/L		86	54 - 150
1,2,3-Trichloropropane	ND		50.0	49.7		ug/L		99	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	52.2		ug/L		104	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	51.3		ug/L		103	52 - 135
Vinyl acetate	ND		100	107		ug/L		107	26 - 150
Vinyl chloride	ND		50.0	41.6		ug/L		83	46 - 150
Xylenes, Total	ND		100	99.7		ug/L		100	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

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

Lab Sample ID: 400-205904-3 MSD
Matrix: Water
Analysis Batch: 539856

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		200	213		ug/L		106	43 - 150	1	30
Acrolein	ND		500	469		ug/L		94	38 - 150	1	31
Acrylonitrile	ND		500	512		ug/L		102	62 - 149	0	30
Benzene	0.46	J	50.0	49.7		ug/L		98	56 - 142	2	30
Bromobenzene	ND		50.0	50.2		ug/L		100	59 - 136	0	30
Bromochloromethane	ND		50.0	52.1		ug/L		104	64 - 140	1	30
Bromodichloromethane	ND		50.0	50.3		ug/L		101	59 - 143	1	30
Bromoform	ND		50.0	50.6		ug/L		101	50 - 140	2	30
Bromomethane	ND		50.0	58.1		ug/L		116	10 - 150	6	50
2-Butanone (MEK)	ND	F1	200	108	F1	ug/L		54	55 - 150	2	30
Carbon disulfide	ND		50.0	45.8		ug/L		92	48 - 150	0	30
Carbon tetrachloride	ND		50.0	48.8		ug/L		98	55 - 145	0	30
Chlorobenzene	ND		50.0	49.7		ug/L		99	64 - 130	2	30
Dibromochloromethane	ND		50.0	50.6		ug/L		101	56 - 143	2	30
Chloroethane	ND		50.0	45.5		ug/L		91	50 - 150	4	30
2-Chloroethyl vinyl ether	ND	F2	50.0	5.95	F2	ug/L		12	10 - 150	85	50
Chloroform	ND		50.0	50.1		ug/L		100	60 - 141	1	30
1-Chlorohexane	ND		50.0	50.3		ug/L		101	56 - 136	3	30
Chloromethane	ND		50.0	39.4		ug/L		79	49 - 148	2	31
cis-1,2-Dichloroethene	ND		50.0	50.0		ug/L		100	59 - 143	2	30
cis-1,3-Dichloropropene	ND		50.0	51.5		ug/L		103	57 - 140	1	30
1,2-Dichlorobenzene	ND		50.0	49.8		ug/L		100	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	50.1		ug/L		100	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	47.7		ug/L		95	53 - 135	4	30
Dichlorodifluoromethane	ND		50.0	30.2		ug/L		60	16 - 150	2	31
1,1-Dichloroethane	ND		50.0	48.3		ug/L		97	61 - 144	0	30
1,2-Dichloroethane	ND		50.0	48.6		ug/L		97	60 - 141	1	30
1,1-Dichloroethene	ND		50.0	45.7		ug/L		91	54 - 147	0	30
1,2-Dichloropropane	ND		50.0	50.6		ug/L		101	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	50.9		ug/L		102	66 - 133	2	30
2,2-Dichloropropane	ND		50.0	50.3		ug/L		101	42 - 144	1	31
1,1-Dichloropropene	ND		50.0	49.0		ug/L		98	65 - 136	1	30
Ethylbenzene	ND		50.0	49.7		ug/L		99	58 - 131	2	30
Ethyl methacrylate	ND		50.0	51.6		ug/L		103	64 - 130	2	30
Hexachlorobutadiene	ND		50.0	51.1		ug/L		102	31 - 149	6	36
2-Hexanone	ND	F1	200	120	F1	ug/L		60	65 - 140	0	30
Isopropylbenzene	ND		50.0	51.5		ug/L		103	56 - 133	3	30
Methylene bromide	ND		50.0	51.0		ug/L		102	63 - 138	3	30
Methylene Chloride	ND		50.0	47.8		ug/L		96	60 - 146	4	32
4-Methyl-2-pentanone (MIBK)	ND		200	193		ug/L		97	63 - 146	3	30
Methyl tert-butyl ether	ND		50.0	49.8		ug/L		100	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	48.2		ug/L		96	57 - 130	2	30
Naphthalene	ND		50.0	47.8		ug/L		96	25 - 150	4	30
n-Butylbenzene	ND		50.0	51.5		ug/L		103	41 - 142	7	31
N-Propylbenzene	0.75	J	50.0	53.3		ug/L		105	51 - 138	3	30
o-Chlorotoluene	ND		50.0	50.4		ug/L		101	53 - 134	3	30
o-Xylene	ND		50.0	48.6		ug/L		97	61 - 130	4	30
p-Chlorotoluene	ND		50.0	50.0		ug/L		100	54 - 133	3	30

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

Lab Sample ID: 400-205904-3 MSD
Matrix: Water
Analysis Batch: 539856

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	52.5		ug/L		105	48 - 139	4	30
sec-Butylbenzene	ND		50.0	52.5		ug/L		105	50 - 138	4	30
Styrene	ND		50.0	49.9		ug/L		100	58 - 131	2	30
tert-Butylbenzene	ND		50.0	48.7		ug/L		97	54 - 146	3	30
1,1,1,2-Tetrachloroethane	ND		50.0	50.1		ug/L		100	59 - 137	2	30
1,1,2,2-Tetrachloroethane	ND		50.0	51.2		ug/L		102	66 - 135	0	30
Tetrachloroethene	ND		50.0	46.1		ug/L		92	52 - 133	2	30
Toluene	0.84	J	50.0	45.6		ug/L		90	65 - 130	2	30
trans-1,2-Dichloroethene	ND		50.0	47.9		ug/L		96	61 - 143	1	30
trans-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	53 - 133	3	30
1,2,3-Trichlorobenzene	ND		50.0	49.0		ug/L		98	43 - 145	3	30
1,2,4-Trichlorobenzene	ND		50.0	47.7		ug/L		95	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	48.9		ug/L		98	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	51.3		ug/L		103	66 - 131	1	30
Trichloroethene	ND		50.0	50.5		ug/L		101	64 - 136	1	30
Trichlorofluoromethane	ND		50.0	43.7		ug/L		87	54 - 150	1	30
1,2,3-Trichloropropane	ND		50.0	49.6		ug/L		99	65 - 133	0	30
1,2,4-Trimethylbenzene	ND		50.0	50.2		ug/L		100	50 - 139	4	30
1,3,5-Trimethylbenzene	ND		50.0	50.7		ug/L		101	52 - 135	1	30
Vinyl acetate	ND		100	107		ug/L		107	26 - 150	1	33
Vinyl chloride	ND		50.0	42.2		ug/L		84	46 - 150	1	30
Xylenes, Total	ND		100	96.8		ug/L		97	59 - 130	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
Benzenethiol	ND		10	1.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
Benzoic acid	ND		30	7.3	ug/L		07/19/21 15:33	07/21/21 10:11	1
Benzyl alcohol	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 10:11	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/19/21 15:33	07/21/21 10:11	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/19/21 15:33	07/21/21 10:11	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Chloroaniline	ND		10	3.4	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Chlorophenol	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 10:11	1

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

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Dibenzofuran	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Diethyl phthalate	ND		10	0.24	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/19/21 15:33	07/21/21 10:11	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
1,4-Dioxane	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/19/21 15:33	07/21/21 10:11	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
Hexachloroethane	ND		10	4.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
Indene	ND		10	1.0	ug/L		07/19/21 15:33	07/21/21 10:11	1
Isophorone	ND		10	0.14	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Methylphenol	ND		10	1.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Nitroaniline	ND		10	2.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
3-Nitroaniline	ND		10	1.8	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Nitroaniline	ND		10	1.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
Nitrobenzene	ND		10	0.13	ug/L		07/19/21 15:33	07/21/21 10:11	1
2-Nitrophenol	ND		10	5.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
4-Nitrophenol	ND		10	2.1	ug/L		07/19/21 15:33	07/21/21 10:11	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/19/21 15:33	07/21/21 10:11	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/19/21 15:33	07/21/21 10:11	1
Pentachlorophenol	ND		20	1.4	ug/L		07/19/21 15:33	07/21/21 10:11	1
Phenol	ND		10	2.6	ug/L		07/19/21 15:33	07/21/21 10:11	1
Pyridine	ND		10	3.2	ug/L		07/19/21 15:33	07/21/21 10:11	1
Quinoline	ND		10	4.5	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/19/21 15:33	07/21/21 10:11	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/19/21 15:33	07/21/21 10:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
2-Fluorophenol	*43*		*13 - 113*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Phenol-d5	*62*		*17 - 127*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
Terphenyl-d14	*85*		*44 - 149*	*07/19/21 15:33*	*07/21/21 10:11*	*1*
2,4,6-Tribromophenol	*63*		*26 - 150*	*07/19/21 15:33*	*07/21/21 10:11*	*1*

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

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	107		ug/L		89	21 - 120
Benzoic acid	502	341		ug/L		68	10 - 144
Benzyl alcohol	120	102		ug/L		85	28 - 120
Bis(2-chloroethoxy)methane	120	104		ug/L		87	47 - 120
Bis(2-chloroethyl)ether	120	85.4		ug/L		71	44 - 120
bis (2-chloroisopropyl) ether	120	101		ug/L		84	33 - 121
Bis(2-ethylhexyl) phthalate	120	120		ug/L		100	52 - 147
4-Bromophenyl phenyl ether	120	105		ug/L		87	54 - 122
Butyl benzyl phthalate	120	108		ug/L		90	54 - 133
4-Chloroaniline	120	82.7		ug/L		69	26 - 120
4-Chloro-3-methylphenol	120	106		ug/L		88	48 - 131
2-Chloronaphthalene	120	102		ug/L		85	52 - 121
2-Chlorophenol	120	88.5		ug/L		74	40 - 120
4-Chlorophenyl phenyl ether	120	107		ug/L		89	56 - 125
Dibenz[a,h]acridine	120	115		ug/L		96	31 - 150
Dibenzofuran	120	106		ug/L		89	56 - 122
3,3'-Dichlorobenzidine	160	156		ug/L		97	36 - 132
2,4-Dichlorophenol	120	96.5		ug/L		80	49 - 120
Diethyl phthalate	120	116		ug/L		96	50 - 137
2,4-Dimethylphenol	120	105		ug/L		88	48 - 120
Dimethyl phthalate	120	108		ug/L		90	57 - 124
Di-n-butyl phthalate	120	122		ug/L		102	58 - 126
4,6-Dinitro-ortho-cresol	240	211		ug/L		88	23 - 148
2,4-Dinitrophenol	240	221		ug/L		92	10 - 150
2,4-Dinitrotoluene	120	99.7		ug/L		83	54 - 142
2,6-Dinitrotoluene	120	107		ug/L		89	55 - 130
Di-n-octyl phthalate	120	118		ug/L		98	57 - 138
1,4-Dioxane	120	72.4		ug/L		60	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	106		ug/L		88	45 - 124
Hexachlorobenzene	120	110		ug/L		92	52 - 129
Hexachlorocyclopentadiene	120	81.1		ug/L		68	10 - 134
Hexachloroethane	120	89.7		ug/L		75	20 - 120
Indene	120	108		ug/L		90	49 - 120
Isophorone	120	108		ug/L		90	48 - 120
2-Methylphenol	120	99.8		ug/L		83	46 - 124
3 & 4 Methylphenol	120	102		ug/L		85	45 - 120
2-Nitroaniline	120	98.9		ug/L		82	51 - 145
3-Nitroaniline	120	85.9		ug/L		72	37 - 127
4-Nitroaniline	120	98.5		ug/L		82	36 - 137
Nitrobenzene	120	95.0		ug/L		79	45 - 120
2-Nitrophenol	120	96.1		ug/L		80	40 - 124
4-Nitrophenol	240	192		ug/L		80	23 - 146
N-Nitrosodimethylamine	120	102		ug/L		85	29 - 137
N-Nitrosodi-n-propylamine	120	116		ug/L		97	45 - 120
N-Nitrosodiphenylamine	119	105		ug/L		88	54 - 120
Pentachlorophenol	240	236		ug/L		98	31 - 130
Phenol	120	91.8		ug/L		77	11 - 120
Pyridine	240	152		ug/L		63	16 - 120

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

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	114		ug/L		96	49 - 130
2,4,5-Trichlorophenol	120	96.6		ug/L		81	51 - 136
2,4,6-Trichlorophenol	120	101		ug/L		84	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*67*		*13 - 113*
Nitrobenzene-d5	*87*		*36 - 126*
Phenol-d5	*78*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*85*		*26 - 150*

Lab Sample ID: LCS 400-540002/5-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	76.0		ug/L		63	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*46 - 124*
2-Fluorophenol	*71*		*13 - 113*
Nitrobenzene-d5	*69*		*36 - 126*
Phenol-d5	*77*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*70*		*26 - 150*

Lab Sample ID: LCSD 400-540002/6-A
Matrix: Water
Analysis Batch: 540203

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	83.0		ug/L		69	10 - 120	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*77*		*13 - 113*
Nitrobenzene-d5	*74*		*36 - 126*
Phenol-d5	*83*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*75*		*26 - 150*

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 540203

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		112	89.9		ug/L		80	10 - 120

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

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 540203

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzoic acid	ND		468	488		ug/L		104	10 - 149
Benzyl alcohol	ND		112	92.9		ug/L		83	33 - 120
Bis(2-chloroethoxy)methane	ND		112	89.7		ug/L		80	26 - 120
Bis(2-chloroethyl)ether	ND		112	79.8		ug/L		71	42 - 120
bis (2-chloroisopropyl) ether	ND		112	88.0		ug/L		79	28 - 120
Bis(2-ethylhexyl) phthalate	ND		112	111		ug/L		99	39 - 120
4-Bromophenyl phenyl ether	ND		112	91.3		ug/L		82	40 - 120
Butyl benzyl phthalate	ND		112	97.4		ug/L		87	45 - 120
4-Chloroaniline	ND		112	68.8		ug/L		61	10 - 120
4-Chloro-3-methylphenol	ND		112	90.0		ug/L		80	34 - 120
2-Chloronaphthalene	ND		112	92.4		ug/L		83	39 - 120
2-Chlorophenol	ND		112	82.1		ug/L		73	25 - 120
4-Chlorophenyl phenyl ether	ND		112	97.5		ug/L		87	44 - 120
Dibenz[a,h]acridine	ND		112	97.8		ug/L		88	50 - 150
Dibenzofuran	ND		112	96.7		ug/L		86	25 - 130
3,3'-Dichlorobenzidine	ND		149	128		ug/L		86	10 - 120
2,4-Dichlorophenol	ND		112	88.5		ug/L		79	31 - 120
Diethyl phthalate	ND		112	102		ug/L		91	46 - 120
2,4-Dimethylphenol	ND		112	93.9		ug/L		84	21 - 120
Dimethyl phthalate	ND		112	96.5		ug/L		86	38 - 120
Di-n-butyl phthalate	ND		112	107		ug/L		95	49 - 120
4,6-Dinitro-ortho-cresol	ND		224	172		ug/L		77	25 - 120
2,4-Dinitrophenol	ND		224	210		ug/L		94	15 - 140
2,4-Dinitrotoluene	ND		112	91.3		ug/L		81	53 - 120
2,6-Dinitrotoluene	ND		112	97.4		ug/L		87	43 - 120
Di-n-octyl phthalate	ND		112	101		ug/L		90	35 - 121
1,4-Dioxane	ND		112	62.6		ug/L		56	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		112	91.5		ug/L		82	50 - 150
Hexachlorobenzene	ND		112	92.6		ug/L		83	38 - 122
Hexachlorocyclopentadiene	ND		112	68.4		ug/L		61	10 - 120
Hexachloroethane	ND		112	79.2		ug/L		71	10 - 150
Indene	ND		112	92.9		ug/L		83	50 - 150
Isophorone	ND		112	92.6		ug/L		83	42 - 120
2-Methylphenol	ND		112	90.1		ug/L		80	28 - 120
3 & 4 Methylphenol	ND		112	94.5		ug/L		84	31 - 120
2-Nitroaniline	ND		112	93.5		ug/L		83	45 - 120
3-Nitroaniline	ND		112	81.6		ug/L		73	10 - 130
4-Nitroaniline	ND		112	92.3		ug/L		82	10 - 132
Nitrobenzene	ND		112	82.9		ug/L		74	39 - 120
2-Nitrophenol	ND		112	88.1		ug/L		79	33 - 120
4-Nitrophenol	ND		224	180		ug/L		80	10 - 120
N-Nitrosodimethylamine	ND		112	88.8		ug/L		79	10 - 139
N-Nitrosodi-n-propylamine	ND		112	99.4		ug/L		89	37 - 124
N-Nitrosodiphenylamine	ND		111	92.2		ug/L		83	10 - 150
Pentachlorophenol	ND		224	219		ug/L		98	29 - 130
Phenol	ND		112	87.5		ug/L		78	10 - 150
Pyridine	ND		224	145		ug/L		65	10 - 120
Quinoline	ND	F1	112	55.3	F1	ug/L		49	51 - 120

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

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 540203

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	ND		112	90.0		ug/L		80	34 - 120
2,4,6-Trichlorophenol	ND		112	90.4		ug/L		81	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*65*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*75*		*17 - 127*
Terphenyl-d14	*78*		*44 - 149*
2,4,6-Tribromophenol	*87*		*26 - 150*

Lab Sample ID: 400-205904-3 MSD
Matrix: Water
Analysis Batch: 540203

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		111	91.1		ug/L		82	10 - 120	1	63
Benzoic acid	ND		463	469		ug/L		101	10 - 149	4	49
Benzyl alcohol	ND		111	87.1		ug/L		79	33 - 120	6	37
Bis(2-chloroethoxy)methane	ND		111	83.9		ug/L		76	26 - 120	7	70
Bis(2-chloroethyl)ether	ND		111	74.6		ug/L		67	42 - 120	7	42
bis (2-chloroisopropyl) ether	ND		111	83.7		ug/L		76	28 - 120	5	41
Bis(2-ethylhexyl) phthalate	ND		111	99.3		ug/L		90	39 - 120	11	35
4-Bromophenyl phenyl ether	ND		111	88.2		ug/L		80	40 - 120	4	30
Butyl benzyl phthalate	ND		111	90.2		ug/L		81	45 - 120	8	32
4-Chloroaniline	ND		111	66.9		ug/L		60	10 - 120	3	94
4-Chloro-3-methylphenol	ND		111	85.7		ug/L		77	34 - 120	5	40
2-Chloronaphthalene	ND		111	91.1		ug/L		82	39 - 120	2	29
2-Chlorophenol	ND		111	79.3		ug/L		72	25 - 120	3	42
4-Chlorophenyl phenyl ether	ND		111	92.2		ug/L		83	44 - 120	6	27
Dibenz[a,h]acridine	ND		110	93.3		ug/L		85	50 - 150	5	40
Dibenzofuran	ND		111	92.2		ug/L		83	25 - 130	5	29
3,3'-Dichlorobenzidine	ND		148	126		ug/L		85	10 - 120	2	58
2,4-Dichlorophenol	ND		111	84.4		ug/L		76	31 - 120	5	43
Diethyl phthalate	ND		111	97.0		ug/L		88	46 - 120	5	40
2,4-Dimethylphenol	ND		111	90.0		ug/L		81	21 - 120	4	47
Dimethyl phthalate	ND		111	93.0		ug/L		84	38 - 120	4	36
Di-n-butyl phthalate	ND		111	101		ug/L		91	49 - 120	5	32
4,6-Dinitro-ortho-cresol	ND		221	176		ug/L		79	25 - 120	2	42
2,4-Dinitrophenol	ND		221	210		ug/L		95	15 - 140	0	36
2,4-Dinitrotoluene	ND		111	88.2		ug/L		80	53 - 120	3	28
2,6-Dinitrotoluene	ND		111	93.1		ug/L		84	43 - 120	4	28
Di-n-octyl phthalate	ND		111	100		ug/L		91	35 - 121	0	35
1,4-Dioxane	ND		111	60.8		ug/L		55	50 - 150	3	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		111	88.0		ug/L		79	50 - 150	4	40
Hexachlorobenzene	ND		111	90.0		ug/L		81	38 - 122	3	33
Hexachlorocyclopentadiene	ND		111	65.8		ug/L		59	10 - 120	4	50
Hexachloroethane	ND		111	78.1		ug/L		71	10 - 150	1	41

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

Lab Sample ID: 400-205904-3 MSD
Matrix: Water
Analysis Batch: 540203

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	ND		111	90.4		ug/L		82	50 - 150	3	40
Isophorone	ND		111	86.4		ug/L		78	42 - 120	7	33
2-Methylphenol	ND		111	86.3		ug/L		78	28 - 120	4	47
3 & 4 Methylphenol	ND		111	90.0		ug/L		81	31 - 120	5	47
2-Nitroaniline	ND		111	90.6		ug/L		82	45 - 120	3	33
3-Nitroaniline	ND		111	77.0		ug/L		70	10 - 130	6	39
4-Nitroaniline	ND		111	87.6		ug/L		79	10 - 132	5	50
Nitrobenzene	ND		111	77.7		ug/L		70	39 - 120	7	35
2-Nitrophenol	ND		111	84.6		ug/L		76	33 - 120	4	43
4-Nitrophenol	ND		221	171		ug/L		77	10 - 120	5	82
N-Nitrosodimethylamine	ND		111	89.1		ug/L		80	10 - 139	0	62
N-Nitrosodi-n-propylamine	ND		111	95.5		ug/L		86	37 - 124	4	36
N-Nitrosodiphenylamine	ND		110	88.6		ug/L		81	10 - 150	4	34
Pentachlorophenol	ND		221	208		ug/L		94	29 - 130	5	42
Phenol	ND		111	82.0		ug/L		74	10 - 150	6	52
Pyridine	ND		221	130		ug/L		59	10 - 120	11	55
Quinoline	ND	F1	110	48.9	F1	ug/L		44	51 - 120	12	40
2,4,5-Trichlorophenol	ND		111	87.3		ug/L		79	34 - 120	3	42
2,4,6-Trichlorophenol	ND		111	86.9		ug/L		79	33 - 120	4	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*46 - 124*
2-Fluorophenol	*63*		*13 - 113*
Nitrobenzene-d5	*78*		*36 - 126*
Phenol-d5	*72*		*17 - 127*
Terphenyl-d14	*72*		*44 - 149*
2,4,6-Tribromophenol	*84*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/19/21 15:33	07/21/21 21:30	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/19/21 15:33	07/21/21 21:30	1
Anthracene	ND		0.20	0.032	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/19/21 15:33	07/21/21 21:30	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/19/21 15:33	07/21/21 21:30	1
Chrysene	ND		0.20	0.074	ug/L		07/19/21 15:33	07/21/21 21:30	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/19/21 15:33	07/21/21 21:30	1
Fluoranthene	ND		0.20	0.068	ug/L		07/19/21 15:33	07/21/21 21:30	1
Fluorene	ND		0.20	0.11	ug/L		07/19/21 15:33	07/21/21 21:30	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/19/21 15:33	07/21/21 21:30	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/19/21 15:33	07/21/21 21:30	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-540002/1-A
Matrix: Water
Analysis Batch: 540430

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/19/21 15:33	07/21/21 21:30	1
Phenanthrene	ND		0.20	0.036	ug/L		07/19/21 15:33	07/21/21 21:30	1
Pyrene	ND		0.20	0.040	ug/L		07/19/21 15:33	07/21/21 21:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*15 - 122*	*07/19/21 15:33*	*07/21/21 21:30*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*07/19/21 15:33*	*07/21/21 21:30*	*1*
Terphenyl-d14	*93*		*33 - 138*	*07/19/21 15:33*	*07/21/21 21:30*	*1*

Lab Sample ID: LCS 400-540002/2-A
Matrix: Water
Analysis Batch: 540430

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	92.5		ug/L		77	41 - 120
Acenaphthylene	120	103		ug/L		86	44 - 120
Anthracene	120	99.4		ug/L		83	49 - 120
Benzo[a]anthracene	120	105		ug/L		88	61 - 135
Benzo[a]pyrene	120	110		ug/L		92	52 - 120
Benzo[b]fluoranthene	120	122		ug/L		101	53 - 134
Benzo[g,h,i]perylene	120	112		ug/L		93	47 - 133
Benzo[k]fluoranthene	120	109		ug/L		91	57 - 134
Chrysene	120	97.2		ug/L		81	55 - 122
Dibenz(a,h)anthracene	120	114		ug/L		95	48 - 146
Fluoranthene	120	105		ug/L		88	54 - 128
Fluorene	120	99.7		ug/L		83	45 - 125
Indeno[1,2,3-cd]pyrene	120	98.1		ug/L		82	43 - 142
1-Methylnaphthalene	120	90.4		ug/L		75	41 - 120
2-Methylnaphthalene	120	93.7		ug/L		78	32 - 124
Phenanthrene	120	94.9		ug/L		79	48 - 120
Pyrene	120	103		ug/L		86	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*15 - 122*
Nitrobenzene-d5	*87*		*19 - 130*
Terphenyl-d14	*83*		*33 - 138*

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 540430

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		112	101		ug/L		90	35 - 113
Acenaphthylene	ND		112	99.9		ug/L		89	41 - 118
Anthracene	ND		112	105		ug/L		94	45 - 122
Benzo[a]anthracene	ND		112	113		ug/L		101	55 - 133
Benzo[a]pyrene	ND		112	116		ug/L		103	50 - 108
Benzo[b]fluoranthene	ND		112	120		ug/L		107	50 - 128

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 540430

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	ND		112	111		ug/L		99	46 - 133
Benzo[k]fluoranthene	ND		112	111		ug/L		99	52 - 128
Chrysene	ND		112	106		ug/L		95	52 - 116
Dibenz(a,h)anthracene	ND		112	119		ug/L		107	52 - 143
Fluoranthene	ND		112	110		ug/L		99	32 - 150
Fluorene	ND		112	117		ug/L		104	15 - 150
Indeno[1,2,3-cd]pyrene	ND		112	111		ug/L		99	41 - 141
1-Methylnaphthalene	ND		112	86.1		ug/L		77	10 - 150
2-Methylnaphthalene	ND		112	94.7		ug/L		85	10 - 150
Phenanthrene	ND		112	104		ug/L		93	36 - 125
Pyrene	ND		112	112		ug/L		100	41 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*15 - 122*
Nitrobenzene-d5	*92*		*19 - 130*
Terphenyl-d14	*101*		*33 - 138*

Lab Sample ID: 400-205904-3 MSD
Matrix: Water
Analysis Batch: 540430

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 540002

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		111	85.7		ug/L		77	35 - 113	16	49
Acenaphthylene	ND		111	92.6		ug/L		84	41 - 118	8	48
Anthracene	ND		111	77.5		ug/L		70	45 - 122	31	56
Benzo[a]anthracene	ND		111	91.1		ug/L		82	55 - 133	22	57
Benzo[a]pyrene	ND		111	100		ug/L		90	50 - 108	14	59
Benzo[b]fluoranthene	ND		111	92.5		ug/L		84	50 - 128	26	62
Benzo[g,h,i]perylene	ND		111	93.6		ug/L		85	46 - 133	17	58
Benzo[k]fluoranthene	ND		111	91.7		ug/L		83	52 - 128	19	58
Chrysene	ND		111	84.8		ug/L		77	52 - 116	23	59
Dibenz(a,h)anthracene	ND		111	91.6		ug/L		83	52 - 143	26	60
Fluoranthene	ND		111	85.4		ug/L		77	32 - 150	26	59
Fluorene	ND		111	94.1		ug/L		85	15 - 150	21	49
Indeno[1,2,3-cd]pyrene	ND		111	89.1		ug/L		80	41 - 141	22	58
1-Methylnaphthalene	ND		111	69.9		ug/L		63	10 - 150	21	66
2-Methylnaphthalene	ND		111	71.4		ug/L		64	10 - 150	28	66
Phenanthrene	ND		111	82.8		ug/L		75	36 - 125	23	69
Pyrene	ND		111	83.1		ug/L		75	41 - 127	29	58

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*15 - 122*
Nitrobenzene-d5	*73*		*19 - 130*
Terphenyl-d14	*77*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-541070/1-A
Matrix: Water
Analysis Batch: 541126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 15:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 15:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 15:08*	*1*

Lab Sample ID: LCS 400-541070/2-A
Matrix: Water
Analysis Batch: 541126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541070

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.110		ug/L		109	60 - 140
1,2-Dibromoethane	0.101	0.104		ug/L		104	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*51 - 149*

Lab Sample ID: 400-205904-3 MS
Matrix: Water
Analysis Batch: 541126

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 541070

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.0994	0.112	p	ug/L		112	10 - 150
1,2-Dibromoethane	ND		0.0996	0.0978		ug/L		98	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*	*p*	*51 - 149*

Lab Sample ID: 400-205904-3 MSD
Matrix: Water
Analysis Batch: 541126

Client Sample ID: ROST4PZG-ROX-071321
Prep Type: Total/NA
Prep Batch: 541070

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		0.101	0.116		ug/L		115	10 - 150	4	20
1,2-Dibromoethane	ND		0.101	0.109		ug/L		108	39 - 150	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*	*p*	*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL	
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES	
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES_____		

Print Bill To Contact Name: Wendy Pennington	**PlaNet Site or Project ID** 25278	☐ CHECK IF NO INCIDENT # APPLIES	
PO # 60648474 – 3.2.3F	**GSAP Project ID** USPC/00114/R/02	DATE: 7/13/21	
		PAGE: 1 of 2	

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA | State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; bob.billman@aecom.com; wendy.pennington@aecom.com

AECOM Other ID:

SAMPLER NAME(S) (Print): Brett Howell, Aaron Oliver

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071321-8011-A	7/13/2021	0000	Water	2					2		X		
	TB-ROX-071321-8260-A	7/13/2021	0000	Water	2					2	X			
	ROST4PZG-ROX-071321	7/13/2021	1030	Water	6			2		8	X	X	X	X
	ROST4PZG-ROX-071321-MS	7/13/2021	1030	Water	6			2		8	X	X	X	X
	ROST4PZG-ROX-071321-MSD	7/13/2021	1030	Water	6			2		8	X	X	X	X

400-205904 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature) FEDEX: 517412585658, 949566012783	Date: 7/13/21	Time: 1500
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-14-21	Time: 9:17

CUSTODY SEALS: 1599622, 1599623, 1599626, 1599627

Version: 2Apr21

1.3°, 1.3° IR9

Page 55 of 58

7/28/2021

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/13/21
PO #	**GSAP Project ID**	PAGE: 2 of 2
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Other ID:

TELEPHONE: 314-429-0100 — FAX: 314-429-0462 — Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) _EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071321-8011-B	7/13/2021	0000	Water	2					2		X		
	TB-ROX-071321-8260-B	7/13/2021	0000	Water	2					2	X			
	MW27-ROX-071321	7/13/2021	0940	Water	6			2		8	X	X	X	X
	MW14-ROX-071321	7/13/2021	1120	Water	6			2		8	X	X	X	X
	P66-ROX-071321	7/13/2021	1215	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature) FEDEX: see page 1	Date 7/13/21	Time 1500
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	Received by: (Signature)	Date 7-14-21	Time 9:17

CUSTODY SEALS: see page 1

Version: 2Apr21

1.3c, 1.3c 129

Page 56 of 58

7/28/2021

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-205904-1

Login Number: 205904
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3, 1.3°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-205904-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-206012-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/19/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-071421-8011-A	TB-ROX-071421-8260-A
MW5-ROX-071421	ROST3MW-ROX-071421
MW2-ROX-071421-EB	MW2-ROX-071421
ROST4PZC-ROX-071421	ROST4PZC-ROX-071421-Dup
TB-ROX-071421-8011-B	TB-ROX-071421-8260-B
P74-ROX-071421-EB	P74-ROX-071421
P56-ROX-071421	P57-ROX-071421

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated bis(2-ethylhexyl)phthalate was re-extracted outside extraction time criteria in several samples. Several VOCs and SVOCs were detected in the equipment blanks and VOC method blank. Several VOC and benzenthiol LCS/LCSD recoveries were outside evaluation criteria. The SVOC surrogate for terphenyl-d_{14} was outside criteria in the LCS/LCSD. The SVOC internal standard recovery for phenanthrene-d_{10} was outside criteria in the LCSD. Several samples were diluted to bring VOCs into calibration range of the instrument. The continuing calibration verification for 4,6-dinitro-ortho-cresol was outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, bis(2-ethylhexyl)phthalate was re-extracted 7 days outside analysis extraction time criteria (7 days) in samples P74-ROX-071421 and P57-ROX-071421, and equipment blank P74-ROX-071421-EB, for confirmation. Professional judgement was used to qualify as estimated, however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is

summarized in the following table. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	Qualification
P74-ROX-071421 – RE	SVOCs	bis(2-Ethylhexyl)phthalate	**UJ**
P57-ROX-071421 – RE	SVOCs	bis(2-Ethylhexyl)phthalate	**UJ**

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW2-ROX-071421-EB	VOCs	2-Butanone (MEK)	5.6 µg/L
P74-ROX-071421-EB	VOCs	2-Butanone (MEK)	11 µg/L
P74-ROX-071421-EB	SVOCs	bis(2-Ethylhexyl)phthalate	29 µg/L
P74-ROX-071421-EB	SVOCs	Diethyl phthalate	0.28 µg/L
MB 400-540044/4	VOCs	Methylene chloride	12.6 µg/L

Qualifications due to blank contamination are included in the table below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. bis(2-Ethylhexyl)phthalate in sample P74-ROX-071421 was reported from Run #2, and is qualified in Section 3.0 due to holding time criteria.

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
P74-ROX-071421	SVOCs	Diethyl phthalate	-	**U**

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-540044/1002	VOCs	Acetone	**191**	NA	43-160
LCS 400-540044/1002	VOCs	2-Butanone (MEK)	**186**	NA	61-145
LCS 400-540044/1002	VOCs	Hexachlorobutadiene	**147**	NA	53-140
LCS 400-540400/1002	VOCs	Acetone	**194**	NA	43-160
LCS 400-540400/1002	VOCs	2-Butanone (MEK)	**202**	NA	61-145
LCS/LCSD 400-540128/4-A/5-A	SVOCs	Benzenethiol	**3/3**	3	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-540128/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW5-ROX-071421	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-071421	SVOCs	Benzenethiol	**UJ**
MW2-ROX-071421	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-071421	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-071421-Dup	SVOCs	Benzenethiol	**UJ**
P74-ROX-071421	SVOCs	Benzenethiol	**UJ**
P56-ROX-071421	SVOCs	Benzenethiol	**UJ**
P57-ROX-071421	VOCs	2-Butanone (MEK)	**J**
P57-ROX-071421	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-540128/4-A	SVOCs	Terphenyl-d_{14}	**40**	44-149
LCSD 400-540128/5-A	SVOCs	Terphenyl-d_{14}	**37**	44-149

LCS/LCSDs are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
LCSD 400-540128/5-A	SVOCs	Phenanthrene-d_{10}	**2375278**	1074598	537299-2149196

LCS/LCSDs are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
ROST4PZC-ROX-071421	ROST4PZC-ROX-071421-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for 4,6-dinitro-ortho-cresol was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW5-ROX-071421	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
ROST3MW-ROX-071421	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW2-ROX-071421	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
ROST4PZC-ROX-071421	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
ROST4PZC-ROX-071421-Dup	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P74-ROX-071421	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P56-ROX-071421	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P57-ROX-071421	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-206012-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
7/30/2021 6:29:30 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

Reviewed 8/19/2021
MR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Detection Summary 6
Client Sample Results 9
Definitions 55
Surrogate Summary 56
Method Summary 58
Chronicle 59
QC Association 65
QC Sample Results 68
Chain of Custody 83
Receipt Checklists 85
Certification Summary 86

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Job ID: 400-206012-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-206012-1

Comments
No additional comments.

Receipt
The samples were received on 7/15/2021 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.9° C, 3.2° C and 4.2° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-540044 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-540044 recovered outside control limits for the following analytes: 2-Butanone (MEK), Acetone and Hexachlorobutadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The method blank for analytical batch 400-540044 contained methylene chloride above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071421-8260-A (400-206012-2), MW5-ROX-071421 (400-206012-3), ROST3MW-ROX-071421 (400-206012-4), MW2-ROX-071421-EB (400-206012-5), MW2-ROX-071421 (400-206012-6), ROST4PZC-ROX-071421 (400-206012-7), ROST4PZC-ROX-071421-DUP (400-206012-8), TB-ROX-071421-8260-B (400-206012-10), P74-ROX-071421-EB (400-206012-11), P74-ROX-071421 (400-206012-12), P56-ROX-071421 (400-206012-13) and P57-ROX-071421 (400-206012-14). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-540400 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The following sample MW2-ROX-071421-EB (400-206012-5) and P74-ROX-071421-EB (400-206012-11) contained 2-Butanone (MEK) between the method detection limit and the reporting limit. Reanalysis was performed with concurring results.

Method 8260B: The following samples were diluted due to the abundance of non-target analytes: MW2-ROX-071421 (400-206012-6), ROST4PZC-ROX-071421 (400-206012-7), ROST4PZC-ROX-071421-DUP (400-206012-8) and P56-ROX-071421 (400-206012-13). Elevated reporting limits (RLs) are provided.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-540400 recovered outside control limits for the following analytes: 2-Butanone (MEK) and Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270D: Internal standard (ISTD) response for Phenanthrene-d10 for the following sample was outside acceptance criteria: (LCSD 400-540128/5-A). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-540128 and analytical batch 400-540593 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Job ID: 400-206012-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540593 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-methylphenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: (LCS 400-540128/4-A) and (LCSD 400-540128/5-A). These results have been reported and qualified.

Method 8270D: The following samples were re-prepared outside of preparation holding time due to confirmation of Bis(2-ethylhexyl) phthalate detection: P74-ROX-071421-EB (400-206012-11), P74-ROX-071421 (400-206012-12) and P57-ROX-071421 (400-206012-14).

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-541564 recovered above the upper control limit for Bis(2-ethylhexyl) phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 400-541564/3).

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-541126 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

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

VOA Prep

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-206012-1	TB-ROX-071421-8011-A	Water	07/14/21 00:00	07/15/21 09:20
400-206012-2	TB-ROX-071421-8260-A	Water	07/14/21 00:00	07/15/21 09:20
400-206012-3	MW5-ROX-071421	Water	07/14/21 08:50	07/15/21 09:20
400-206012-4	ROST3MW-ROX-071421	Water	07/14/21 09:40	07/15/21 09:20
400-206012-5	MW2-ROX-071421-EB	Water	07/14/21 10:00	07/15/21 09:20
400-206012-6	MW2-ROX-071421	Water	07/14/21 10:45	07/15/21 09:20
400-206012-7	ROST4PZC-ROX-071421	Water	07/14/21 12:05	07/15/21 09:20
400-206012-8	ROST4PZC-ROX-071421-DUP	Water	07/14/21 12:05	07/15/21 09:20
400-206012-9	TB-ROX-071421-8011-B	Water	07/14/21 00:00	07/15/21 09:20
400-206012-10	TB-ROX-071421-8260-B	Water	07/14/21 00:00	07/15/21 09:20
400-206012-11	P74-ROX-071421-EB	Water	07/14/21 08:15	07/15/21 09:20
400-206012-12	P74-ROX-071421	Water	07/14/21 10:30	07/15/21 09:20
400-206012-13	P56-ROX-071421	Water	07/14/21 11:45	07/15/21 09:20
400-206012-14	P57-ROX-071421	Water	07/14/21 12:30	07/15/21 09:20

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: TB-ROX-071421-8011-A — Lab Sample ID: 400-206012-1

No Detections.

Client Sample ID: TB-ROX-071421-8260-A — Lab Sample ID: 400-206012-2

No Detections.

Client Sample ID: MW5-ROX-071421 — Lab Sample ID: 400-206012-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	4.2		1.0	0.74	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.97	J	1.0	0.63	ug/L	1		8260B	Total/NA
Benzoic acid	32		29	7.0	ug/L	1		8270D	Total/NA
Bis(2-ethylhexyl) phthalate	5.2	J	9.6	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: ROST3MW-ROX-071421 — Lab Sample ID: 400-206012-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	23	J	32	7.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW2-ROX-071421-EB — Lab Sample ID: 400-206012-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	5.6	J *+	25	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: MW2-ROX-071421 — Lab Sample ID: 400-206012-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.4	J	5.0	1.9	ug/L	5		8260B	Total/NA
Ethylbenzene	310		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	63		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	170		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	31		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	96		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	15	J	25	3.0	ug/L	5		8260B	Total/NA
p-Isopropyltoluene	5.9		5.0	3.6	ug/L	5		8260B	Total/NA
sec-Butylbenzene	7.1		5.0	3.5	ug/L	5		8260B	Total/NA
Toluene	5.5		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	46		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	22		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	180		50	8.0	ug/L	5		8260B	Total/NA
1-Methylnaphthalene	7.7		0.20	0.074	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	6.9		0.20	0.060	ug/L	1		8270D LL	Total/NA
4-Chloroaniline	5.9	J	9.9	3.4	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZC-ROX-071421 — Lab Sample ID: 400-206012-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.8	J	5.0	1.9	ug/L	5		8260B	Total/NA
Ethylbenzene	14		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	8.4		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	95		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	79		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	13		5.0	3.5	ug/L	5		8260B	Total/NA
Toluene	6.4		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	20		5.0	4.1	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ROST4PZC-ROX-071421 (Continued)

Lab Sample ID: 400-206012-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	8.9		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	96		50	8.0	ug/L	5		8260B	Total/NA
Acenaphthene	1.8		0.20	0.032	ug/L	1		8270D LL	Total/NA
Anthracene	0.42		0.20	0.032	ug/L	1		8270D LL	Total/NA
Fluorene	1.5		0.20	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	52		0.20	0.074	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	46		0.20	0.060	ug/L	1		8270D LL	Total/NA
Phenanthrene	4.3		0.20	0.036	ug/L	1		8270D LL	Total/NA
Pyrene	0.078	J	0.20	0.040	ug/L	1		8270D LL	Total/NA
Dibenzofuran	1.6	J	10	0.17	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZC-ROX-071421-DUP

Lab Sample ID: 400-206012-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.4	J	5.0	1.9	ug/L	5		8260B	Total/NA
Ethylbenzene	11		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	6.9		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	81		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	67		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	13		5.0	3.5	ug/L	5		8260B	Total/NA
Toluene	6.4		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	18		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	7.8		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	82		50	8.0	ug/L	5		8260B	Total/NA
Acenaphthene	1.8		0.19	0.030	ug/L	1		8270D LL	Total/NA
Anthracene	0.52		0.19	0.030	ug/L	1		8270D LL	Total/NA
Fluorene	1.3		0.19	0.10	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	51		0.19	0.070	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	45		0.19	0.057	ug/L	1		8270D LL	Total/NA
Phenanthrene	4.0		0.19	0.034	ug/L	1		8270D LL	Total/NA
Pyrene	0.049	J	0.19	0.038	ug/L	1		8270D LL	Total/NA
Benzoic acid	24	J	28	6.9	ug/L	1		8270D	Total/NA
Bis(2-ethylhexyl) phthalate	5.1	J	9.5	4.7	ug/L	1		8270D	Total/NA
Dibenzofuran	1.6	J	9.5	0.16	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-071421-8011-B

Lab Sample ID: 400-206012-9

No Detections.

Client Sample ID: TB-ROX-071421-8260-B

Lab Sample ID: 400-206012-10

No Detections.

Client Sample ID: P74-ROX-071421-EB

Lab Sample ID: 400-206012-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	11	J *+	25	2.6	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	29		9.4	4.7	ug/L	1		8270D	Total/NA
Diethyl phthalate	0.28	J	9.4	0.22	ug/L	1		8270D	Total/NA

Client Sample ID: P74-ROX-071421

Lab Sample ID: 400-206012-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	20		10	5.2	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: P74-ROX-071421 (Continued)

Lab Sample ID: 400-206012-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	~~0.29~~	~~J~~ U	10	0.25	ug/L	1		8270D	Total/NA

Client Sample ID: P56-ROX-071421

Lab Sample ID: 400-206012-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	5.2		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	16		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	55		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	9.2		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	19		5.0	3.5	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	23		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	6.3		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	57		50	8.0	ug/L	5		8260B	Total/NA
Acenaphthene	0.44		0.20	0.032	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	11		0.20	0.074	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	11		0.20	0.060	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.74		0.20	0.036	ug/L	1		8270D LL	Total/NA

Client Sample ID: P57-ROX-071421

Lab Sample ID: 400-206012-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	180		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	9.5	J *+ J	25	2.6	ug/L	1		8260B	Total/NA
Ethylbenzene	2.2		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	27		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	2.3	J	5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	44		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	3.6		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	30		1.0	0.69	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.2		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	5.9		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	6.1		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	6.2		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	2.5	J	10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.29		0.21	0.033	ug/L	1		8270D LL	Total/NA
Fluorene	0.40		0.21	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	14		0.21	0.076	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	18		0.21	0.062	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.24		0.21	0.037	ug/L	1		8270D LL	Total/NA
Bis(2-ethylhexyl) phthalate	13		10	5.1	ug/L	1		8270D	Total/NA
Dibenzofuran	0.52	J	10	0.18	ug/L	1		8270D	Total/NA
Phenol	17		10	2.7	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-071421-8011-A
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 19:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*07/27/21 10:34*	*07/27/21 19:34*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: TB-ROX-071421-8260-A
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/20/21 14:54	1
Acrolein	ND		20	10	ug/L			07/20/21 14:54	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 14:54	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 14:54	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 14:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 14:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 14:54	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 14:54	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/20/21 14:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 14:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 14:54	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 14:54	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 14:54	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 14:54	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 14:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 14:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 14:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 14:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 14:54	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/20/21 14:54	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 14:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 14:54	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 14:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/21 14:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 14:54	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/21 14:54	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 14:54	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 14:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 14:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 14:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 14:54	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 14:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 14:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 14:54	1

Client Sample ID: TB-ROX-071421-8260-A
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 14:54	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 14:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/21 14:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 14:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 14:54	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 14:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 14:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 14:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 14:54	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 14:54	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 14:54	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 14:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 14:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 14:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 14:54	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 14:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 14:54	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/20/21 14:54*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/20/21 14:54*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/20/21 14:54*	*1*

Client Sample ID: MW5-ROX-071421
Date Collected: 07/14/21 08:50
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/20/21 19:31	1
Acrolein	ND		20	10	ug/L			07/20/21 19:31	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 19:31	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 19:31	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 19:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 19:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 19:31	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 19:31	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/20/21 19:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 19:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 19:31	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 19:31	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 19:31	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 19:31	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 19:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 19:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 19:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 19:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 19:31	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/20/21 19:31	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 19:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 19:31	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 19:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/21 19:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 19:31	1
Methyl tert-butyl ether	4.2		1.0	0.74	ug/L			07/20/21 19:31	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 19:31	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 19:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 19:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 19:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 19:31	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 19:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 19:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 19:31	1

Client Sample ID: MW5-ROX-071421
Date Collected: 07/14/21 08:50
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 19:31	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 19:31	1
tert-Butylbenzene	0.97	J	1.0	0.63	ug/L			07/20/21 19:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 19:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 19:31	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 19:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 19:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 19:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 19:31	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 19:31	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 19:31	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 19:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 19:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 19:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 19:31	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 19:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 19:31	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/20/21 19:31*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/20/21 19:31*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/20/21 19:31*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		07/20/21 13:41	07/22/21 20:53	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/20/21 13:41	07/22/21 20:53	1
Anthracene	ND		0.19	0.031	ug/L		07/20/21 13:41	07/22/21 20:53	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/20/21 13:41	07/22/21 20:53	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/20/21 13:41	07/22/21 20:53	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		07/20/21 13:41	07/22/21 20:53	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/20/21 13:41	07/22/21 20:53	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		07/20/21 13:41	07/22/21 20:53	1
Chrysene	ND		0.19	0.071	ug/L		07/20/21 13:41	07/22/21 20:53	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/20/21 13:41	07/22/21 20:53	1
Fluoranthene	ND		0.19	0.065	ug/L		07/20/21 13:41	07/22/21 20:53	1
Fluorene	ND		0.19	0.11	ug/L		07/20/21 13:41	07/22/21 20:53	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/20/21 13:41	07/22/21 20:53	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		07/20/21 13:41	07/22/21 20:53	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		07/20/21 13:41	07/22/21 20:53	1
Phenanthrene	ND		0.19	0.035	ug/L		07/20/21 13:41	07/22/21 20:53	1
Pyrene	ND		0.19	0.038	ug/L		07/20/21 13:41	07/22/21 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*15 - 122*	*07/20/21 13:41*	*07/22/21 20:53*	*1*
Nitrobenzene-d5	*82*		*19 - 130*	*07/20/21 13:41*	*07/22/21 20:53*	*1*

Client Sample ID: MW5-ROX-071421
Date Collected: 07/14/21 08:50
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	81		33 - 138	07/20/21 13:41	07/22/21 20:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		07/20/21 13:41	07/23/21 12:03	1
Benzenethiol	ND	*- UJ	9.6	1.6	ug/L		07/20/21 13:41	07/23/21 12:03	1
Benzoic acid	**32**		29	7.0	ug/L		07/20/21 13:41	07/23/21 12:03	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/20/21 13:41	07/23/21 12:03	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		07/20/21 13:41	07/23/21 12:03	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		07/20/21 13:41	07/23/21 12:03	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		07/20/21 13:41	07/23/21 12:03	1
Bis(2-ethylhexyl) phthalate	**5.2**	J	9.6	4.8	ug/L		07/20/21 13:41	07/23/21 12:03	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		07/20/21 13:41	07/23/21 12:03	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		07/20/21 13:41	07/23/21 12:03	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/20/21 13:41	07/23/21 12:03	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/20/21 13:41	07/23/21 12:03	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		07/20/21 13:41	07/23/21 12:03	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/20/21 13:41	07/23/21 12:03	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/20/21 13:41	07/23/21 12:03	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:03	1
Dibenzofuran	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:03	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		07/20/21 13:41	07/23/21 12:03	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/20/21 13:41	07/23/21 12:03	1
Diethyl phthalate	ND		9.6	0.23	ug/L		07/20/21 13:41	07/23/21 12:03	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/20/21 13:41	07/23/21 12:03	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:03	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/20/21 13:41	07/23/21 12:03	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.5	ug/L		07/20/21 13:41	07/23/21 12:03	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/20/21 13:41	07/23/21 12:03	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/20/21 13:41	07/23/21 12:03	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/20/21 13:41	07/23/21 12:03	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:03	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:03	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:03	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/20/21 13:41	07/23/21 12:03	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/20/21 13:41	07/23/21 12:03	1
Indene	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:03	1
Isophorone	ND		9.6	0.13	ug/L		07/20/21 13:41	07/23/21 12:03	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/20/21 13:41	07/23/21 12:03	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/20/21 13:41	07/23/21 12:03	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/20/21 13:41	07/23/21 12:03	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/20/21 13:41	07/23/21 12:03	1
4-Nitroaniline	ND		9.6	1.4	ug/L		07/20/21 13:41	07/23/21 12:03	1
Nitrobenzene	ND		9.6	0.12	ug/L		07/20/21 13:41	07/23/21 12:03	1
2-Nitrophenol	ND		9.6	5.0	ug/L		07/20/21 13:41	07/23/21 12:03	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/20/21 13:41	07/23/21 12:03	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/20/21 13:41	07/23/21 12:03	1

Client Sample ID: MW5-ROX-071421
Date Collected: 07/14/21 08:50
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/20/21 13:41	07/23/21 12:03	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		07/20/21 13:41	07/23/21 12:03	1
Pentachlorophenol	ND		19	1.3	ug/L		07/20/21 13:41	07/23/21 12:03	1
Phenol	ND		9.6	2.5	ug/L		07/20/21 13:41	07/23/21 12:03	1
Pyridine	ND		9.6	3.1	ug/L		07/20/21 13:41	07/23/21 12:03	1
Quinoline	ND		9.6	4.3	ug/L		07/20/21 13:41	07/23/21 12:03	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/20/21 13:41	07/23/21 12:03	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/20/21 13:41	07/23/21 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*46 - 124*	*07/20/21 13:41*	*07/23/21 12:03*	*1*
2-Fluorophenol	*60*		*13 - 113*	*07/20/21 13:41*	*07/23/21 12:03*	*1*
Nitrobenzene-d5	*78*		*36 - 126*	*07/20/21 13:41*	*07/23/21 12:03*	*1*
Phenol-d5	*78*		*17 - 127*	*07/20/21 13:41*	*07/23/21 12:03*	*1*
Terphenyl-d14	*93*		*44 - 149*	*07/20/21 13:41*	*07/23/21 12:03*	*1*
2,4,6-Tribromophenol	*90*		*26 - 150*	*07/20/21 13:41*	*07/23/21 12:03*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 19:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 19:54*	*1*

Client Sample ID: ROST3MW-ROX-071421
Date Collected: 07/14/21 09:40
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/20/21 19:59	1
Acrolein	ND		20	10	ug/L			07/20/21 19:59	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 19:59	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 19:59	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 19:59	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 19:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 19:59	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 19:59	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/20/21 19:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 19:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 19:59	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 19:59	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 19:59	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 19:59	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 19:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 19:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 19:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 19:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 19:59	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/20/21 19:59	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 19:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 19:59	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 19:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/21 19:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 19:59	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/21 19:59	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 19:59	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 19:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 19:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 19:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 19:59	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 19:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 19:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 19:59	1

Client Sample ID: ROST3MW-ROX-071421
Date Collected: 07/14/21 09:40
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 19:59	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 19:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/21 19:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 19:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 19:59	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 19:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 19:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 19:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 19:59	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 19:59	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 19:59	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 19:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 19:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 19:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 19:59	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 19:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 19:59	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*72 - 119*		*07/20/21 19:59*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/20/21 19:59*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/20/21 19:59*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.034	ug/L		07/20/21 13:41	07/22/21 21:10	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/20/21 13:41	07/22/21 21:10	1
Anthracene	ND		0.21	0.034	ug/L		07/20/21 13:41	07/22/21 21:10	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/20/21 13:41	07/22/21 21:10	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		07/20/21 13:41	07/22/21 21:10	1
Benzo[b]fluoranthene	ND		0.21	0.036	ug/L		07/20/21 13:41	07/22/21 21:10	1
Benzo[g,h,i]perylene	ND		0.21	0.14	ug/L		07/20/21 13:41	07/22/21 21:10	1
Benzo[k]fluoranthene	ND		0.21	0.11	ug/L		07/20/21 13:41	07/22/21 21:10	1
Chrysene	ND		0.21	0.078	ug/L		07/20/21 13:41	07/22/21 21:10	1
Dibenz(a,h)anthracene	ND		0.21	0.053	ug/L		07/20/21 13:41	07/22/21 21:10	1
Fluoranthene	ND		0.21	0.072	ug/L		07/20/21 13:41	07/22/21 21:10	1
Fluorene	ND		0.21	0.12	ug/L		07/20/21 13:41	07/22/21 21:10	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/20/21 13:41	07/22/21 21:10	1
1-Methylnaphthalene	ND		0.21	0.078	ug/L		07/20/21 13:41	07/22/21 21:10	1
2-Methylnaphthalene	ND		0.21	0.063	ug/L		07/20/21 13:41	07/22/21 21:10	1
Phenanthrene	ND		0.21	0.038	ug/L		07/20/21 13:41	07/22/21 21:10	1
Pyrene	ND		0.21	0.042	ug/L		07/20/21 13:41	07/22/21 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*15 - 122*	*07/20/21 13:41*	*07/22/21 21:10*	*1*
Nitrobenzene-d5	*81*		*19 - 130*	*07/20/21 13:41*	*07/22/21 21:10*	*1*

Client Sample ID: ROST3MW-ROX-071421
Date Collected: 07/14/21 09:40
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	88		33 - 138	07/20/21 13:41	07/22/21 21:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.0	ug/L		07/20/21 13:41	07/23/21 12:29	1
Benzenethiol	ND	*- UJ	11	1.8	ug/L		07/20/21 13:41	07/23/21 12:29	1
Benzoic acid	23	J	32	7.7	ug/L		07/20/21 13:41	07/23/21 12:29	1
Benzyl alcohol	ND		11	2.1	ug/L		07/20/21 13:41	07/23/21 12:29	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		07/20/21 13:41	07/23/21 12:29	1
Bis(2-chloroethyl)ether	ND		11	2.8	ug/L		07/20/21 13:41	07/23/21 12:29	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		07/20/21 13:41	07/23/21 12:29	1
Bis(2-ethylhexyl) phthalate	ND		11	5.3	ug/L		07/20/21 13:41	07/23/21 12:29	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		07/20/21 13:41	07/23/21 12:29	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		07/20/21 13:41	07/23/21 12:29	1
4-Chloroaniline	ND		11	3.6	ug/L		07/20/21 13:41	07/23/21 12:29	1
4-Chloro-3-methylphenol	ND		11	4.0	ug/L		07/20/21 13:41	07/23/21 12:29	1
2-Chloronaphthalene	ND		11	0.15	ug/L		07/20/21 13:41	07/23/21 12:29	1
2-Chlorophenol	ND		11	2.3	ug/L		07/20/21 13:41	07/23/21 12:29	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		07/20/21 13:41	07/23/21 12:29	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		07/20/21 13:41	07/23/21 12:29	1
Dibenzofuran	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 12:29	1
3,3'-Dichlorobenzidine	ND		11	2.7	ug/L		07/20/21 13:41	07/23/21 12:29	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		07/20/21 13:41	07/23/21 12:29	1
Diethyl phthalate	ND		11	0.25	ug/L		07/20/21 13:41	07/23/21 12:29	1
2,4-Dimethylphenol	ND		11	3.7	ug/L		07/20/21 13:41	07/23/21 12:29	1
Dimethyl phthalate	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 12:29	1
Di-n-butyl phthalate	ND		11	2.8	ug/L		07/20/21 13:41	07/23/21 12:29	1
4,6-Dinitro-ortho-cresol	ND	UJ	11	1.7	ug/L		07/20/21 13:41	07/23/21 12:29	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		07/20/21 13:41	07/23/21 12:29	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		07/20/21 13:41	07/23/21 12:29	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		07/20/21 13:41	07/23/21 12:29	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 12:29	1
1,4-Dioxane	ND		11	1.1	ug/L		07/20/21 13:41	07/23/21 12:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/20/21 13:41	07/23/21 12:29	1
Hexachlorobenzene	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 12:29	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/21 13:41	07/23/21 12:29	1
Hexachloroethane	ND		11	4.4	ug/L		07/20/21 13:41	07/23/21 12:29	1
Indene	ND		11	1.1	ug/L		07/20/21 13:41	07/23/21 12:29	1
Isophorone	ND		11	0.15	ug/L		07/20/21 13:41	07/23/21 12:29	1
2-Methylphenol	ND		11	1.9	ug/L		07/20/21 13:41	07/23/21 12:29	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		07/20/21 13:41	07/23/21 12:29	1
2-Nitroaniline	ND		11	2.3	ug/L		07/20/21 13:41	07/23/21 12:29	1
3-Nitroaniline	ND		11	1.9	ug/L		07/20/21 13:41	07/23/21 12:29	1
4-Nitroaniline	ND		11	1.6	ug/L		07/20/21 13:41	07/23/21 12:29	1
Nitrobenzene	ND		11	0.14	ug/L		07/20/21 13:41	07/23/21 12:29	1
2-Nitrophenol	ND		11	5.5	ug/L		07/20/21 13:41	07/23/21 12:29	1
4-Nitrophenol	ND		11	2.2	ug/L		07/20/21 13:41	07/23/21 12:29	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		07/20/21 13:41	07/23/21 12:29	1

Client Sample ID: ROST3MW-ROX-071421
Date Collected: 07/14/21 09:40
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	3.5	ug/L		07/20/21 13:41	07/23/21 12:29	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		07/20/21 13:41	07/23/21 12:29	1
Pentachlorophenol	ND		21	1.5	ug/L		07/20/21 13:41	07/23/21 12:29	1
Phenol	ND		11	2.7	ug/L		07/20/21 13:41	07/23/21 12:29	1
Pyridine	ND		11	3.4	ug/L		07/20/21 13:41	07/23/21 12:29	1
Quinoline	ND		11	4.7	ug/L		07/20/21 13:41	07/23/21 12:29	1
2,4,5-Trichlorophenol	ND		11	3.9	ug/L		07/20/21 13:41	07/23/21 12:29	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		07/20/21 13:41	07/23/21 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*46 - 124*	*07/20/21 13:41*	*07/23/21 12:29*	*1*
2-Fluorophenol	*84*		*13 - 113*	*07/20/21 13:41*	*07/23/21 12:29*	*1*
Nitrobenzene-d5	*80*		*36 - 126*	*07/20/21 13:41*	*07/23/21 12:29*	*1*
Phenol-d5	*88*		*17 - 127*	*07/20/21 13:41*	*07/23/21 12:29*	*1*
Terphenyl-d14	*89*		*44 - 149*	*07/20/21 13:41*	*07/23/21 12:29*	*1*
2,4,6-Tribromophenol	*87*		*26 - 150*	*07/20/21 13:41*	*07/23/21 12:29*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 20:15	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 20:15*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: MW2-ROX-071421-EB
Date Collected: 07/14/21 10:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/20/21 17:40	1
Acrolein	ND		20	10	ug/L			07/20/21 17:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 17:40	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 17:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 17:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 17:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 17:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 17:40	1
2-Butanone (MEK)	5.6	J *+	25	2.6	ug/L			07/20/21 17:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 17:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 17:40	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 17:40	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 17:40	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 17:40	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 17:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 17:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 17:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 17:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 17:40	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/20/21 17:40	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 17:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 17:40	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 17:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/21 17:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 17:40	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/21 17:40	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 17:40	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 17:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 17:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 17:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 17:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 17:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 17:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 17:40	1

Client Sample ID: MW2-ROX-071421-EB
Date Collected: 07/14/21 10:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 17:40	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 17:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/21 17:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 17:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 17:40	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 17:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 17:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 17:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 17:40	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 17:40	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 17:40	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 17:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 17:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 17:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 17:40	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 17:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 17:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/20/21 17:40*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/20/21 17:40*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*07/20/21 17:40*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		07/20/21 13:41	07/22/21 21:27	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/20/21 13:41	07/22/21 21:27	1
Anthracene	ND		0.19	0.031	ug/L		07/20/21 13:41	07/22/21 21:27	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/20/21 13:41	07/22/21 21:27	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/20/21 13:41	07/22/21 21:27	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		07/20/21 13:41	07/22/21 21:27	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/20/21 13:41	07/22/21 21:27	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		07/20/21 13:41	07/22/21 21:27	1
Chrysene	ND		0.19	0.071	ug/L		07/20/21 13:41	07/22/21 21:27	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/20/21 13:41	07/22/21 21:27	1
Fluoranthene	ND		0.19	0.065	ug/L		07/20/21 13:41	07/22/21 21:27	1
Fluorene	ND		0.19	0.11	ug/L		07/20/21 13:41	07/22/21 21:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/20/21 13:41	07/22/21 21:27	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		07/20/21 13:41	07/22/21 21:27	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		07/20/21 13:41	07/22/21 21:27	1
Phenanthrene	ND		0.19	0.035	ug/L		07/20/21 13:41	07/22/21 21:27	1
Pyrene	ND		0.19	0.038	ug/L		07/20/21 13:41	07/22/21 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*15 - 122*	*07/20/21 13:41*	*07/22/21 21:27*	*1*
Nitrobenzene-d5	*67*		*19 - 130*	*07/20/21 13:41*	*07/22/21 21:27*	*1*

Client Sample ID: MW2-ROX-071421-EB
Date Collected: 07/14/21 10:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	76		33 - 138	07/20/21 13:41	07/22/21 21:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		07/20/21 13:41	07/23/21 12:55	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		07/20/21 13:41	07/23/21 12:55	1
Benzoic acid	ND		29	7.0	ug/L		07/20/21 13:41	07/23/21 12:55	1
Benzyl alcohol	ND		9.6	1.9	ug/L		07/20/21 13:41	07/23/21 12:55	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		07/20/21 13:41	07/23/21 12:55	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		07/20/21 13:41	07/23/21 12:55	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		07/20/21 13:41	07/23/21 12:55	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		07/20/21 13:41	07/23/21 12:55	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		07/20/21 13:41	07/23/21 12:55	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		07/20/21 13:41	07/23/21 12:55	1
4-Chloroaniline	ND		9.6	3.3	ug/L		07/20/21 13:41	07/23/21 12:55	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		07/20/21 13:41	07/23/21 12:55	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		07/20/21 13:41	07/23/21 12:55	1
2-Chlorophenol	ND		9.6	2.1	ug/L		07/20/21 13:41	07/23/21 12:55	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		07/20/21 13:41	07/23/21 12:55	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:55	1
Dibenzofuran	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:55	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		07/20/21 13:41	07/23/21 12:55	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		07/20/21 13:41	07/23/21 12:55	1
Diethyl phthalate	ND		9.6	0.23	ug/L		07/20/21 13:41	07/23/21 12:55	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		07/20/21 13:41	07/23/21 12:55	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:55	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		07/20/21 13:41	07/23/21 12:55	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		07/20/21 13:41	07/23/21 12:55	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/20/21 13:41	07/23/21 12:55	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		07/20/21 13:41	07/23/21 12:55	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		07/20/21 13:41	07/23/21 12:55	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:55	1
1,4-Dioxane	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:55	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		07/20/21 13:41	07/23/21 12:55	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/20/21 13:41	07/23/21 12:55	1
Hexachloroethane	ND		9.6	4.0	ug/L		07/20/21 13:41	07/23/21 12:55	1
Indene	ND		9.6	0.96	ug/L		07/20/21 13:41	07/23/21 12:55	1
Isophorone	ND		9.6	0.13	ug/L		07/20/21 13:41	07/23/21 12:55	1
2-Methylphenol	ND		9.6	1.7	ug/L		07/20/21 13:41	07/23/21 12:55	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/20/21 13:41	07/23/21 12:55	1
2-Nitroaniline	ND		9.6	2.1	ug/L		07/20/21 13:41	07/23/21 12:55	1
3-Nitroaniline	ND		9.6	1.7	ug/L		07/20/21 13:41	07/23/21 12:55	1
4-Nitroaniline	ND		9.6	1.4	ug/L		07/20/21 13:41	07/23/21 12:55	1
Nitrobenzene	ND		9.6	0.12	ug/L		07/20/21 13:41	07/23/21 12:55	1
2-Nitrophenol	ND		9.6	5.0	ug/L		07/20/21 13:41	07/23/21 12:55	1
4-Nitrophenol	ND		9.6	2.0	ug/L		07/20/21 13:41	07/23/21 12:55	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		07/20/21 13:41	07/23/21 12:55	1

Client Sample ID: MW2-ROX-071421-EB
Date Collected: 07/14/21 10:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		07/20/21 13:41	07/23/21 12:55	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		07/20/21 13:41	07/23/21 12:55	1
Pentachlorophenol	ND		19	1.3	ug/L		07/20/21 13:41	07/23/21 12:55	1
Phenol	ND		9.6	2.5	ug/L		07/20/21 13:41	07/23/21 12:55	1
Pyridine	ND		9.6	3.1	ug/L		07/20/21 13:41	07/23/21 12:55	1
Quinoline	ND		9.6	4.3	ug/L		07/20/21 13:41	07/23/21 12:55	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		07/20/21 13:41	07/23/21 12:55	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/20/21 13:41	07/23/21 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*07/20/21 13:41*	*07/23/21 12:55*	*1*
2-Fluorophenol	*58*		*13 - 113*	*07/20/21 13:41*	*07/23/21 12:55*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*07/20/21 13:41*	*07/23/21 12:55*	*1*
Phenol-d5	*74*		*17 - 127*	*07/20/21 13:41*	*07/23/21 12:55*	*1*
Terphenyl-d14	*84*		*44 - 149*	*07/20/21 13:41*	*07/23/21 12:55*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*07/20/21 13:41*	*07/23/21 12:55*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/27/21 10:34	07/27/21 20:35	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/27/21 10:34	07/27/21 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*07/27/21 10:34*	*07/27/21 20:35*	*1*

Client Sample ID: MW2-ROX-071421
Date Collected: 07/14/21 10:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	130	50	ug/L			07/22/21 11:53	5
Acrolein	ND		100	50	ug/L			07/22/21 11:53	5
Acrylonitrile	ND		50	14	ug/L			07/22/21 11:53	5
Benzene	**2.4**	**J**	5.0	1.9	ug/L			07/22/21 11:53	5
Bromobenzene	ND		5.0	2.7	ug/L			07/22/21 11:53	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/22/21 11:53	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Bromoform	ND		25	3.6	ug/L			07/22/21 11:53	5
Bromomethane	ND		5.0	4.9	ug/L			07/22/21 11:53	5
2-Butanone (MEK)	ND	*+	130	13	ug/L			07/22/21 11:53	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Chlorobenzene	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Dibromochloromethane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Chloroethane	ND		5.0	3.8	ug/L			07/22/21 11:53	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/22/21 11:53	5
Chloroform	ND		5.0	3.0	ug/L			07/22/21 11:53	5
1-Chlorohexane	ND		5.0	3.5	ug/L			07/22/21 11:53	5
Chloromethane	ND		5.0	4.2	ug/L			07/22/21 11:53	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 11:53	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 11:53	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/22/21 11:53	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/22/21 11:53	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/22/21 11:53	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/22/21 11:53	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 11:53	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Ethylbenzene	**310**		5.0	2.5	ug/L			07/22/21 11:53	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/22/21 11:53	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/22/21 11:53	5
2-Hexanone	ND		130	16	ug/L			07/22/21 11:53	5
Isopropylbenzene	**63**		5.0	2.7	ug/L			07/22/21 11:53	5
Methylene bromide	ND		25	3.0	ug/L			07/22/21 11:53	5
Methylene Chloride	ND		25	15	ug/L			07/22/21 11:53	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/22/21 11:53	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			07/22/21 11:53	5
m-Xylene & p-Xylene	**170**		25	8.0	ug/L			07/22/21 11:53	5
Naphthalene	**31**		5.0	5.0	ug/L			07/22/21 11:53	5
n-Butylbenzene	ND		5.0	3.8	ug/L			07/22/21 11:53	5
N-Propylbenzene	**96**		5.0	3.5	ug/L			07/22/21 11:53	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/22/21 11:53	5
o-Xylene	**15**	**J**	25	3.0	ug/L			07/22/21 11:53	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/22/21 11:53	5
p-Isopropyltoluene	**5.9**		5.0	3.6	ug/L			07/22/21 11:53	5

Client Sample ID: MW2-ROX-071421
Date Collected: 07/14/21 10:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**7.1**		5.0	3.5	ug/L			07/22/21 11:53	5
Styrene	ND		5.0	5.0	ug/L			07/22/21 11:53	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/22/21 11:53	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			07/22/21 11:53	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Tetrachloroethene	ND		5.0	2.9	ug/L			07/22/21 11:53	5
Toluene	**5.5**		5.0	2.1	ug/L			07/22/21 11:53	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 11:53	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 11:53	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			07/22/21 11:53	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/22/21 11:53	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			07/22/21 11:53	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			07/22/21 11:53	5
Trichloroethene	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			07/22/21 11:53	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/22/21 11:53	5
1,2,4-Trimethylbenzene	**46**		5.0	4.1	ug/L			07/22/21 11:53	5
1,3,5-Trimethylbenzene	**22**		5.0	2.8	ug/L			07/22/21 11:53	5
Vinyl acetate	ND		130	10	ug/L			07/22/21 11:53	5
Vinyl chloride	ND		5.0	2.5	ug/L			07/22/21 11:53	5
Xylenes, Total	**180**		50	8.0	ug/L			07/22/21 11:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/22/21 11:53*	*5*
Dibromofluoromethane	*102*		*75 - 126*		*07/22/21 11:53*	*5*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/22/21 11:53*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/21/21 07:51	07/22/21 21:45	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/21/21 07:51	07/22/21 21:45	1
Anthracene	ND		0.20	0.032	ug/L		07/21/21 07:51	07/22/21 21:45	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/21/21 07:51	07/22/21 21:45	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/21/21 07:51	07/22/21 21:45	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/21/21 07:51	07/22/21 21:45	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/21/21 07:51	07/22/21 21:45	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		07/21/21 07:51	07/22/21 21:45	1
Chrysene	ND		0.20	0.074	ug/L		07/21/21 07:51	07/22/21 21:45	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/21/21 07:51	07/22/21 21:45	1
Fluoranthene	ND		0.20	0.068	ug/L		07/21/21 07:51	07/22/21 21:45	1
Fluorene	ND		0.20	0.11	ug/L		07/21/21 07:51	07/22/21 21:45	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/21/21 07:51	07/22/21 21:45	1
1-Methylnaphthalene	**7.7**		0.20	0.074	ug/L		07/21/21 07:51	07/22/21 21:45	1
2-Methylnaphthalene	**6.9**		0.20	0.060	ug/L		07/21/21 07:51	07/22/21 21:45	1
Phenanthrene	ND		0.20	0.036	ug/L		07/21/21 07:51	07/22/21 21:45	1
Pyrene	ND		0.20	0.040	ug/L		07/21/21 07:51	07/22/21 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*15 - 122*	*07/21/21 07:51*	*07/22/21 21:45*	*1*
Nitrobenzene-d5	*81*		*19 - 130*	*07/21/21 07:51*	*07/22/21 21:45*	*1*

Client Sample ID: MW2-ROX-071421
Date Collected: 07/14/21 10:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	84		33 - 138	07/21/21 07:51	07/22/21 21:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		07/21/21 07:51	07/23/21 13:21	1
Benzenethiol	ND	*- UJ	9.9	1.7	ug/L		07/21/21 07:51	07/23/21 13:21	1
Benzoic acid	ND		30	7.3	ug/L		07/21/21 07:51	07/23/21 13:21	1
Benzyl alcohol	ND		9.9	2.0	ug/L		07/21/21 07:51	07/23/21 13:21	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		07/21/21 07:51	07/23/21 13:21	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		07/21/21 07:51	07/23/21 13:21	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		07/21/21 07:51	07/23/21 13:21	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		07/21/21 07:51	07/23/21 13:21	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		07/21/21 07:51	07/23/21 13:21	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		07/21/21 07:51	07/23/21 13:21	1
4-Chloroaniline	5.9	J	9.9	3.4	ug/L		07/21/21 07:51	07/23/21 13:21	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		07/21/21 07:51	07/23/21 13:21	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		07/21/21 07:51	07/23/21 13:21	1
2-Chlorophenol	ND		9.9	2.2	ug/L		07/21/21 07:51	07/23/21 13:21	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		07/21/21 07:51	07/23/21 13:21	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		07/21/21 07:51	07/23/21 13:21	1
Dibenzofuran	ND		9.9	0.17	ug/L		07/21/21 07:51	07/23/21 13:21	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		07/21/21 07:51	07/23/21 13:21	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		07/21/21 07:51	07/23/21 13:21	1
Diethyl phthalate	ND		9.9	0.24	ug/L		07/21/21 07:51	07/23/21 13:21	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		07/21/21 07:51	07/23/21 13:21	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		07/21/21 07:51	07/23/21 13:21	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		07/21/21 07:51	07/23/21 13:21	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.9	1.6	ug/L		07/21/21 07:51	07/23/21 13:21	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/21/21 07:51	07/23/21 13:21	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/21 07:51	07/23/21 13:21	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		07/21/21 07:51	07/23/21 13:21	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		07/21/21 07:51	07/23/21 13:21	1
1,4-Dioxane	ND		9.9	0.99	ug/L		07/21/21 07:51	07/23/21 13:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		07/21/21 07:51	07/23/21 13:21	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		07/21/21 07:51	07/23/21 13:21	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/21/21 07:51	07/23/21 13:21	1
Hexachloroethane	ND		9.9	4.2	ug/L		07/21/21 07:51	07/23/21 13:21	1
Indene	ND		9.9	0.99	ug/L		07/21/21 07:51	07/23/21 13:21	1
Isophorone	ND		9.9	0.14	ug/L		07/21/21 07:51	07/23/21 13:21	1
2-Methylphenol	ND		9.9	1.8	ug/L		07/21/21 07:51	07/23/21 13:21	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/21/21 07:51	07/23/21 13:21	1
2-Nitroaniline	ND		9.9	2.2	ug/L		07/21/21 07:51	07/23/21 13:21	1
3-Nitroaniline	ND		9.9	1.8	ug/L		07/21/21 07:51	07/23/21 13:21	1
4-Nitroaniline	ND		9.9	1.5	ug/L		07/21/21 07:51	07/23/21 13:21	1
Nitrobenzene	ND		9.9	0.13	ug/L		07/21/21 07:51	07/23/21 13:21	1
2-Nitrophenol	ND		9.9	5.2	ug/L		07/21/21 07:51	07/23/21 13:21	1
4-Nitrophenol	ND		9.9	2.1	ug/L		07/21/21 07:51	07/23/21 13:21	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		07/21/21 07:51	07/23/21 13:21	1

Client Sample ID: MW2-ROX-071421
Date Collected: 07/14/21 10:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		07/21/21 07:51	07/23/21 13:21	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		07/21/21 07:51	07/23/21 13:21	1
Pentachlorophenol	ND		20	1.4	ug/L		07/21/21 07:51	07/23/21 13:21	1
Phenol	ND		9.9	2.6	ug/L		07/21/21 07:51	07/23/21 13:21	1
Pyridine	ND		9.9	3.2	ug/L		07/21/21 07:51	07/23/21 13:21	1
Quinoline	ND		9.9	4.5	ug/L		07/21/21 07:51	07/23/21 13:21	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		07/21/21 07:51	07/23/21 13:21	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/21/21 07:51	07/23/21 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*46 - 124*	*07/21/21 07:51*	*07/23/21 13:21*	*1*
2-Fluorophenol	*38*		*13 - 113*	*07/21/21 07:51*	*07/23/21 13:21*	*1*
Nitrobenzene-d5	*87*		*36 - 126*	*07/21/21 07:51*	*07/23/21 13:21*	*1*
Phenol-d5	*66*		*17 - 127*	*07/21/21 07:51*	*07/23/21 13:21*	*1*
Terphenyl-d14	*90*		*44 - 149*	*07/21/21 07:51*	*07/23/21 13:21*	*1*
2,4,6-Tribromophenol	*92*		*26 - 150*	*07/21/21 07:51*	*07/23/21 13:21*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/27/21 10:34	07/27/21 20:55	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/27/21 10:34	07/27/21 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 20:55*	*1*

Client Sample ID: ROST4PZC-ROX-071421
Date Collected: 07/14/21 12:05
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	130	50	ug/L			07/22/21 12:20	5
Acrolein	ND		100	50	ug/L			07/22/21 12:20	5
Acrylonitrile	ND		50	14	ug/L			07/22/21 12:20	5
Benzene	2.8	J	5.0	1.9	ug/L			07/22/21 12:20	5
Bromobenzene	ND		5.0	2.7	ug/L			07/22/21 12:20	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/22/21 12:20	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Bromoform	ND		25	3.6	ug/L			07/22/21 12:20	5
Bromomethane	ND		5.0	4.9	ug/L			07/22/21 12:20	5
2-Butanone (MEK)	ND	*+	130	13	ug/L			07/22/21 12:20	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Chlorobenzene	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Dibromochloromethane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Chloroethane	ND		5.0	3.8	ug/L			07/22/21 12:20	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/22/21 12:20	5
Chloroform	ND		5.0	3.0	ug/L			07/22/21 12:20	5
1-Chlorohexane	ND		5.0	3.5	ug/L			07/22/21 12:20	5
Chloromethane	ND		5.0	4.2	ug/L			07/22/21 12:20	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:20	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 12:20	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/22/21 12:20	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/22/21 12:20	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/22/21 12:20	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/22/21 12:20	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:20	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Ethylbenzene	14		5.0	2.5	ug/L			07/22/21 12:20	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/22/21 12:20	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/22/21 12:20	5
2-Hexanone	ND		130	16	ug/L			07/22/21 12:20	5
Isopropylbenzene	8.4		5.0	2.7	ug/L			07/22/21 12:20	5
Methylene bromide	ND		25	3.0	ug/L			07/22/21 12:20	5
Methylene Chloride	ND		25	15	ug/L			07/22/21 12:20	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/22/21 12:20	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			07/22/21 12:20	5
m-Xylene & p-Xylene	95		25	8.0	ug/L			07/22/21 12:20	5
Naphthalene	79		5.0	5.0	ug/L			07/22/21 12:20	5
n-Butylbenzene	ND		5.0	3.8	ug/L			07/22/21 12:20	5
N-Propylbenzene	13		5.0	3.5	ug/L			07/22/21 12:20	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/22/21 12:20	5
o-Xylene	ND		25	3.0	ug/L			07/22/21 12:20	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/22/21 12:20	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			07/22/21 12:20	5

Client Sample ID: ROST4PZC-ROX-071421
Date Collected: 07/14/21 12:05
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			07/22/21 12:20	5
Styrene	ND		5.0	5.0	ug/L			07/22/21 12:20	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/22/21 12:20	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			07/22/21 12:20	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Tetrachloroethene	ND		5.0	2.9	ug/L			07/22/21 12:20	5
Toluene	6.4		5.0	2.1	ug/L			07/22/21 12:20	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:20	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 12:20	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			07/22/21 12:20	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/22/21 12:20	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			07/22/21 12:20	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			07/22/21 12:20	5
Trichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			07/22/21 12:20	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/22/21 12:20	5
1,2,4-Trimethylbenzene	20		5.0	4.1	ug/L			07/22/21 12:20	5
1,3,5-Trimethylbenzene	8.9		5.0	2.8	ug/L			07/22/21 12:20	5
Vinyl acetate	ND		130	10	ug/L			07/22/21 12:20	5
Vinyl chloride	ND		5.0	2.5	ug/L			07/22/21 12:20	5
Xylenes, Total	96		50	8.0	ug/L			07/22/21 12:20	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/22/21 12:20*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*07/22/21 12:20*	*5*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/22/21 12:20*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.8		0.20	0.032	ug/L		07/20/21 13:41	07/22/21 22:02	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/20/21 13:41	07/22/21 22:02	1
Anthracene	0.42		0.20	0.032	ug/L		07/20/21 13:41	07/22/21 22:02	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/20/21 13:41	07/22/21 22:02	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/20/21 13:41	07/22/21 22:02	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/20/21 13:41	07/22/21 22:02	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/20/21 13:41	07/22/21 22:02	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/20/21 13:41	07/22/21 22:02	1
Chrysene	ND		0.20	0.074	ug/L		07/20/21 13:41	07/22/21 22:02	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/20/21 13:41	07/22/21 22:02	1
Fluoranthene	ND		0.20	0.068	ug/L		07/20/21 13:41	07/22/21 22:02	1
Fluorene	1.5		0.20	0.11	ug/L		07/20/21 13:41	07/22/21 22:02	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/20/21 13:41	07/22/21 22:02	1
1-Methylnaphthalene	52		0.20	0.074	ug/L		07/20/21 13:41	07/22/21 22:02	1
2-Methylnaphthalene	46		0.20	0.060	ug/L		07/20/21 13:41	07/22/21 22:02	1
Phenanthrene	4.3		0.20	0.036	ug/L		07/20/21 13:41	07/22/21 22:02	1
Pyrene	0.078	J	0.20	0.040	ug/L		07/20/21 13:41	07/22/21 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*15 - 122*	*07/20/21 13:41*	*07/22/21 22:02*	*1*
Nitrobenzene-d5	*85*		*19 - 130*	*07/20/21 13:41*	*07/22/21 22:02*	*1*

Client Sample ID: ROST4PZC-ROX-071421
Date Collected: 07/14/21 12:05
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	90		33 - 138	07/20/21 13:41	07/22/21 22:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 13:47	1
Benzenethiol	ND	*- UJ	10	1.7	ug/L		07/20/21 13:41	07/23/21 13:47	1
Benzoic acid	ND		30	7.3	ug/L		07/20/21 13:41	07/23/21 13:47	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/21 13:41	07/23/21 13:47	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 13:47	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/21 13:41	07/23/21 13:47	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/21 13:41	07/23/21 13:47	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/21 13:41	07/23/21 13:47	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/21 13:41	07/23/21 13:47	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 13:47	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 13:47	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 13:47	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
Dibenzofuran	1.6	J	10	0.17	ug/L		07/20/21 13:41	07/23/21 13:47	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/21 13:41	07/23/21 13:47	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/21 13:41	07/23/21 13:47	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 13:47	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 13:47	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 13:47	1
4,6-Dinitro-ortho-cresol	ND	UJ	10	1.6	ug/L		07/20/21 13:41	07/23/21 13:47	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/21 13:41	07/23/21 13:47	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 13:47	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 13:47	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 13:47	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 13:47	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/21 13:41	07/23/21 13:47	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/21 13:41	07/23/21 13:47	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 13:47	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 13:47	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/21 13:41	07/23/21 13:47	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/21 13:41	07/23/21 13:47	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 13:47	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/21 13:41	07/23/21 13:47	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/21 13:41	07/23/21 13:47	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/23/21 13:47	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/21 13:41	07/23/21 13:47	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 13:47	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 13:47	1

Client Sample ID: ROST4PZC-ROX-071421
Date Collected: 07/14/21 12:05
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/21 13:41	07/23/21 13:47	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 13:47	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/21 13:41	07/23/21 13:47	1
Phenol	ND		10	2.6	ug/L		07/20/21 13:41	07/23/21 13:47	1
Pyridine	ND		10	3.2	ug/L		07/20/21 13:41	07/23/21 13:47	1
Quinoline	ND		10	4.5	ug/L		07/20/21 13:41	07/23/21 13:47	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/21 13:41	07/23/21 13:47	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*46 - 124*	*07/20/21 13:41*	*07/23/21 13:47*	*1*
2-Fluorophenol	*42*		*13 - 113*	*07/20/21 13:41*	*07/23/21 13:47*	*1*
Nitrobenzene-d5	*82*		*36 - 126*	*07/20/21 13:41*	*07/23/21 13:47*	*1*
Phenol-d5	*72*		*17 - 127*	*07/20/21 13:41*	*07/23/21 13:47*	*1*
Terphenyl-d14	*99*		*44 - 149*	*07/20/21 13:41*	*07/23/21 13:47*	*1*
2,4,6-Tribromophenol	*91*		*26 - 150*	*07/20/21 13:41*	*07/23/21 13:47*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/27/21 10:34	07/27/21 21:15	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 21:15*	*1*

Client Sample ID: ROST4PZC-ROX-071421-DUP
Date Collected: 07/14/21 12:05
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	130	50	ug/L			07/22/21 12:43	5
Acrolein	ND		100	50	ug/L			07/22/21 12:43	5
Acrylonitrile	ND		50	14	ug/L			07/22/21 12:43	5
Benzene	**2.4**	J	5.0	1.9	ug/L			07/22/21 12:43	5
Bromobenzene	ND		5.0	2.7	ug/L			07/22/21 12:43	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/22/21 12:43	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Bromoform	ND		25	3.6	ug/L			07/22/21 12:43	5
Bromomethane	ND		5.0	4.9	ug/L			07/22/21 12:43	5
2-Butanone (MEK)	ND	*+	130	13	ug/L			07/22/21 12:43	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Chlorobenzene	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Dibromochloromethane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Chloroethane	ND		5.0	3.8	ug/L			07/22/21 12:43	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/22/21 12:43	5
Chloroform	ND		5.0	3.0	ug/L			07/22/21 12:43	5
1-Chlorohexane	ND		5.0	3.5	ug/L			07/22/21 12:43	5
Chloromethane	ND		5.0	4.2	ug/L			07/22/21 12:43	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:43	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 12:43	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/22/21 12:43	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/22/21 12:43	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/22/21 12:43	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/22/21 12:43	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:43	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Ethylbenzene	**11**		5.0	2.5	ug/L			07/22/21 12:43	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/22/21 12:43	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/22/21 12:43	5
2-Hexanone	ND		130	16	ug/L			07/22/21 12:43	5
Isopropylbenzene	**6.9**		5.0	2.7	ug/L			07/22/21 12:43	5
Methylene bromide	ND		25	3.0	ug/L			07/22/21 12:43	5
Methylene Chloride	ND		25	15	ug/L			07/22/21 12:43	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/22/21 12:43	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			07/22/21 12:43	5
m-Xylene & p-Xylene	**81**		25	8.0	ug/L			07/22/21 12:43	5
Naphthalene	**67**		5.0	5.0	ug/L			07/22/21 12:43	5
n-Butylbenzene	ND		5.0	3.8	ug/L			07/22/21 12:43	5
N-Propylbenzene	**13**		5.0	3.5	ug/L			07/22/21 12:43	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/22/21 12:43	5
o-Xylene	ND		25	3.0	ug/L			07/22/21 12:43	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/22/21 12:43	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			07/22/21 12:43	5

Client Sample ID: ROST4PZC-ROX-071421-DUP

Lab Sample ID: 400-206012-8

Date Collected: 07/14/21 12:05
Matrix: Water
Date Received: 07/15/21 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			07/22/21 12:43	5
Styrene	ND		5.0	5.0	ug/L			07/22/21 12:43	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/22/21 12:43	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			07/22/21 12:43	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Tetrachloroethene	ND		5.0	2.9	ug/L			07/22/21 12:43	5
Toluene	**6.4**		5.0	2.1	ug/L			07/22/21 12:43	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:43	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 12:43	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			07/22/21 12:43	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/22/21 12:43	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			07/22/21 12:43	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			07/22/21 12:43	5
Trichloroethene	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			07/22/21 12:43	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/22/21 12:43	5
1,2,4-Trimethylbenzene	**18**		5.0	4.1	ug/L			07/22/21 12:43	5
1,3,5-Trimethylbenzene	**7.8**		5.0	2.8	ug/L			07/22/21 12:43	5
Vinyl acetate	ND		130	10	ug/L			07/22/21 12:43	5
Vinyl chloride	ND		5.0	2.5	ug/L			07/22/21 12:43	5
Xylenes, Total	**82**		50	8.0	ug/L			07/22/21 12:43	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/22/21 12:43*	*5*
Dibromofluoromethane	*102*		*75 - 126*		*07/22/21 12:43*	*5*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/22/21 12:43*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.8**		0.19	0.030	ug/L		07/20/21 13:41	07/22/21 22:19	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/20/21 13:41	07/22/21 22:19	1
Anthracene	**0.52**		0.19	0.030	ug/L		07/20/21 13:41	07/22/21 22:19	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/20/21 13:41	07/22/21 22:19	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/20/21 13:41	07/22/21 22:19	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/20/21 13:41	07/22/21 22:19	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/20/21 13:41	07/22/21 22:19	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/20/21 13:41	07/22/21 22:19	1
Chrysene	ND		0.19	0.070	ug/L		07/20/21 13:41	07/22/21 22:19	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/20/21 13:41	07/22/21 22:19	1
Fluoranthene	ND		0.19	0.064	ug/L		07/20/21 13:41	07/22/21 22:19	1
Fluorene	**1.3**		0.19	0.10	ug/L		07/20/21 13:41	07/22/21 22:19	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/20/21 13:41	07/22/21 22:19	1
1-Methylnaphthalene	**51**		0.19	0.070	ug/L		07/20/21 13:41	07/22/21 22:19	1
2-Methylnaphthalene	**45**		0.19	0.057	ug/L		07/20/21 13:41	07/22/21 22:19	1
Phenanthrene	**4.0**		0.19	0.034	ug/L		07/20/21 13:41	07/22/21 22:19	1
Pyrene	**0.049**	J	0.19	0.038	ug/L		07/20/21 13:41	07/22/21 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*15 - 122*	*07/20/21 13:41*	*07/22/21 22:19*	*1*
Nitrobenzene-d5	*82*		*19 - 130*	*07/20/21 13:41*	*07/22/21 22:19*	*1*

Client Sample ID: ROST4PZC-ROX-071421-DUP
Date Collected: 07/14/21 12:05
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-8
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	86		33 - 138	07/20/21 13:41	07/22/21 22:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/20/21 13:41	07/23/21 14:13	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		07/20/21 13:41	07/23/21 14:13	1
Benzoic acid	**24**	J	28	6.9	ug/L		07/20/21 13:41	07/23/21 14:13	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/20/21 13:41	07/23/21 14:13	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/20/21 13:41	07/23/21 14:13	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/20/21 13:41	07/23/21 14:13	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/20/21 13:41	07/23/21 14:13	1
Bis(2-ethylhexyl) phthalate	**5.1**	J	9.5	4.7	ug/L		07/20/21 13:41	07/23/21 14:13	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/20/21 13:41	07/23/21 14:13	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/20/21 13:41	07/23/21 14:13	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/20/21 13:41	07/23/21 14:13	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/20/21 13:41	07/23/21 14:13	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/20/21 13:41	07/23/21 14:13	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/20/21 13:41	07/23/21 14:13	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/20/21 13:41	07/23/21 14:13	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 14:13	1
Dibenzofuran	**1.6**	J	9.5	0.16	ug/L		07/20/21 13:41	07/23/21 14:13	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		07/20/21 13:41	07/23/21 14:13	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		07/20/21 13:41	07/23/21 14:13	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/20/21 13:41	07/23/21 14:13	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 14:13	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 14:13	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/20/21 13:41	07/23/21 14:13	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.5	1.5	ug/L		07/20/21 13:41	07/23/21 14:13	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/20/21 13:41	07/23/21 14:13	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/20/21 13:41	07/23/21 14:13	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/20/21 13:41	07/23/21 14:13	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 14:13	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 14:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 14:13	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 14:13	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/20/21 13:41	07/23/21 14:13	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/20/21 13:41	07/23/21 14:13	1
Indene	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 14:13	1
Isophorone	ND		9.5	0.13	ug/L		07/20/21 13:41	07/23/21 14:13	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/20/21 13:41	07/23/21 14:13	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/20/21 13:41	07/23/21 14:13	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/20/21 13:41	07/23/21 14:13	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/20/21 13:41	07/23/21 14:13	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/20/21 13:41	07/23/21 14:13	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/20/21 13:41	07/23/21 14:13	1
2-Nitrophenol	ND		9.5	4.9	ug/L		07/20/21 13:41	07/23/21 14:13	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/20/21 13:41	07/23/21 14:13	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 14:13	1

Client Sample ID: ROST4PZC-ROX-071421-DUP
Date Collected: 07/14/21 12:05
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/20/21 13:41	07/23/21 14:13	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/20/21 13:41	07/23/21 14:13	1
Pentachlorophenol	ND		19	1.3	ug/L		07/20/21 13:41	07/23/21 14:13	1
Phenol	ND		9.5	2.5	ug/L		07/20/21 13:41	07/23/21 14:13	1
Pyridine	ND		9.5	3.0	ug/L		07/20/21 13:41	07/23/21 14:13	1
Quinoline	ND		9.5	4.3	ug/L		07/20/21 13:41	07/23/21 14:13	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/20/21 13:41	07/23/21 14:13	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*46 - 124*	*07/20/21 13:41*	*07/23/21 14:13*	*1*
2-Fluorophenol	*24*		*13 - 113*	*07/20/21 13:41*	*07/23/21 14:13*	*1*
Nitrobenzene-d5	*78*		*36 - 126*	*07/20/21 13:41*	*07/23/21 14:13*	*1*
Phenol-d5	*55*		*17 - 127*	*07/20/21 13:41*	*07/23/21 14:13*	*1*
Terphenyl-d14	*94*		*44 - 149*	*07/20/21 13:41*	*07/23/21 14:13*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*07/20/21 13:41*	*07/23/21 14:13*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/27/21 10:34	07/27/21 21:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 21:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 21:36*	*1*

Client Sample ID: TB-ROX-071421-8011-B
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-9
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 21:56	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/27/21 10:34*	*07/27/21 21:56*	*1*

Client Sample ID: TB-ROX-071421-8260-B
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/20/21 15:22	1
Acrolein	ND		20	10	ug/L			07/20/21 15:22	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 15:22	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 15:22	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 15:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 15:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 15:22	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 15:22	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/20/21 15:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 15:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 15:22	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 15:22	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 15:22	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 15:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 15:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 15:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 15:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 15:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 15:22	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/20/21 15:22	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 15:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 15:22	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 15:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/21 15:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 15:22	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/21 15:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 15:22	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 15:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 15:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 15:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 15:22	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 15:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 15:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 15:22	1

Client Sample ID: TB-ROX-071421-8260-B
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 15:22	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 15:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/21 15:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 15:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 15:22	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 15:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 15:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 15:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 15:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 15:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 15:22	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 15:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 15:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 15:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 15:22	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 15:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 15:22	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*72 - 119*		*07/20/21 15:22*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/20/21 15:22*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/20/21 15:22*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: P74-ROX-071421-EB
Date Collected: 07/14/21 08:15
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/20/21 18:08	1
Acrolein	ND		20	10	ug/L			07/20/21 18:08	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 18:08	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 18:08	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 18:08	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 18:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 18:08	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 18:08	1
2-Butanone (MEK)	11	J *+	25	2.6	ug/L			07/20/21 18:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 18:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 18:08	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 18:08	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 18:08	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 18:08	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 18:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 18:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 18:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 18:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 18:08	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/20/21 18:08	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 18:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 18:08	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 18:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/21 18:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 18:08	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/21 18:08	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 18:08	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 18:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 18:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 18:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 18:08	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 18:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 18:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 18:08	1

Client Sample ID: P74-ROX-071421-EB
Date Collected: 07/14/21 08:15
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 18:08	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 18:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/21 18:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 18:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 18:08	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 18:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 18:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 18:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 18:08	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 18:08	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 18:08	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 18:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 18:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 18:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 18:08	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 18:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 18:08	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/20/21 18:08*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/20/21 18:08*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/20/21 18:08*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/20/21 13:41	07/22/21 22:37	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/20/21 13:41	07/22/21 22:37	1
Anthracene	ND		0.19	0.030	ug/L		07/20/21 13:41	07/22/21 22:37	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		07/20/21 13:41	07/22/21 22:37	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		07/20/21 13:41	07/22/21 22:37	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/20/21 13:41	07/22/21 22:37	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/20/21 13:41	07/22/21 22:37	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		07/20/21 13:41	07/22/21 22:37	1
Chrysene	ND		0.19	0.069	ug/L		07/20/21 13:41	07/22/21 22:37	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/20/21 13:41	07/22/21 22:37	1
Fluoranthene	ND		0.19	0.064	ug/L		07/20/21 13:41	07/22/21 22:37	1
Fluorene	ND		0.19	0.10	ug/L		07/20/21 13:41	07/22/21 22:37	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		07/20/21 13:41	07/22/21 22:37	1
1-Methylnaphthalene	ND		0.19	0.069	ug/L		07/20/21 13:41	07/22/21 22:37	1
2-Methylnaphthalene	ND		0.19	0.056	ug/L		07/20/21 13:41	07/22/21 22:37	1
Phenanthrene	ND		0.19	0.034	ug/L		07/20/21 13:41	07/22/21 22:37	1
Pyrene	ND		0.19	0.037	ug/L		07/20/21 13:41	07/22/21 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*15 - 122*	*07/20/21 13:41*	*07/22/21 22:37*	*1*
Nitrobenzene-d5	*85*		*19 - 130*	*07/20/21 13:41*	*07/22/21 22:37*	*1*

Client Sample ID: P74-ROX-071421-EB
Date Collected: 07/14/21 08:15
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*94*		*33 - 138*	*07/20/21 13:41*	*07/22/21 22:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		07/20/21 13:41	07/23/21 14:39	1
Benzenethiol	ND		9.4	1.6	ug/L		07/20/21 13:41	07/23/21 14:39	1
Benzoic acid	ND		28	6.8	ug/L		07/20/21 13:41	07/23/21 14:39	1
Benzyl alcohol	ND		9.4	1.9	ug/L		07/20/21 13:41	07/23/21 14:39	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		07/20/21 13:41	07/23/21 14:39	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		07/20/21 13:41	07/23/21 14:39	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		07/20/21 13:41	07/23/21 14:39	1
Bis(2-ethylhexyl) phthalate	29		9.4	4.7	ug/L		07/20/21 13:41	07/23/21 14:39	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		07/20/21 13:41	07/23/21 14:39	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		07/20/21 13:41	07/23/21 14:39	1
4-Chloroaniline	ND		9.4	3.2	ug/L		07/20/21 13:41	07/23/21 14:39	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		07/20/21 13:41	07/23/21 14:39	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		07/20/21 13:41	07/23/21 14:39	1
2-Chlorophenol	ND		9.4	2.1	ug/L		07/20/21 13:41	07/23/21 14:39	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		07/20/21 13:41	07/23/21 14:39	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		07/20/21 13:41	07/23/21 14:39	1
Dibenzofuran	ND		9.4	0.16	ug/L		07/20/21 13:41	07/23/21 14:39	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		07/20/21 13:41	07/23/21 14:39	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		07/20/21 13:41	07/23/21 14:39	1
Diethyl phthalate	0.28	J	9.4	0.22	ug/L		07/20/21 13:41	07/23/21 14:39	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		07/20/21 13:41	07/23/21 14:39	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		07/20/21 13:41	07/23/21 14:39	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		07/20/21 13:41	07/23/21 14:39	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		07/20/21 13:41	07/23/21 14:39	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/20/21 13:41	07/23/21 14:39	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		07/20/21 13:41	07/23/21 14:39	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		07/20/21 13:41	07/23/21 14:39	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		07/20/21 13:41	07/23/21 14:39	1
1,4-Dioxane	ND		9.4	0.94	ug/L		07/20/21 13:41	07/23/21 14:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		07/20/21 13:41	07/23/21 14:39	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		07/20/21 13:41	07/23/21 14:39	1
Hexachlorocyclopentadiene	ND		19	2.4	ug/L		07/20/21 13:41	07/23/21 14:39	1
Hexachloroethane	ND		9.4	3.9	ug/L		07/20/21 13:41	07/23/21 14:39	1
Indene	ND		9.4	0.94	ug/L		07/20/21 13:41	07/23/21 14:39	1
Isophorone	ND		9.4	0.13	ug/L		07/20/21 13:41	07/23/21 14:39	1
2-Methylphenol	ND		9.4	1.7	ug/L		07/20/21 13:41	07/23/21 14:39	1
3 & 4 Methylphenol	ND		19	0.36	ug/L		07/20/21 13:41	07/23/21 14:39	1
2-Nitroaniline	ND		9.4	2.1	ug/L		07/20/21 13:41	07/23/21 14:39	1
3-Nitroaniline	ND		9.4	1.7	ug/L		07/20/21 13:41	07/23/21 14:39	1
4-Nitroaniline	ND		9.4	1.4	ug/L		07/20/21 13:41	07/23/21 14:39	1
Nitrobenzene	ND		9.4	0.12	ug/L		07/20/21 13:41	07/23/21 14:39	1
2-Nitrophenol	ND		9.4	4.9	ug/L		07/20/21 13:41	07/23/21 14:39	1
4-Nitrophenol	ND		9.4	2.0	ug/L		07/20/21 13:41	07/23/21 14:39	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		07/20/21 13:41	07/23/21 14:39	1

Client Sample ID: P74-ROX-071421-EB

Lab Sample ID: 400-206012-11

Date Collected: 07/14/21 08:15
Matrix: Water
Date Received: 07/15/21 09:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		07/20/21 13:41	07/23/21 14:39	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		07/20/21 13:41	07/23/21 14:39	1
Pentachlorophenol	ND		19	1.3	ug/L		07/20/21 13:41	07/23/21 14:39	1
Phenol	ND		9.4	2.4	ug/L		07/20/21 13:41	07/23/21 14:39	1
Pyridine	ND		9.4	3.0	ug/L		07/20/21 13:41	07/23/21 14:39	1
Quinoline	ND		9.4	4.2	ug/L		07/20/21 13:41	07/23/21 14:39	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		07/20/21 13:41	07/23/21 14:39	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		07/20/21 13:41	07/23/21 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*46 - 124*	*07/20/21 13:41*	*07/23/21 14:39*	*1*
2-Fluorophenol	*76*		*13 - 113*	*07/20/21 13:41*	*07/23/21 14:39*	*1*
Nitrobenzene-d5	*84*		*36 - 126*	*07/20/21 13:41*	*07/23/21 14:39*	*1*
Phenol-d5	*90*		*17 - 127*	*07/20/21 13:41*	*07/23/21 14:39*	*1*
Terphenyl-d14	*97*		*44 - 149*	*07/20/21 13:41*	*07/23/21 14:39*	*1*
2,4,6-Tribromophenol	*86*		*26 - 150*	*07/20/21 13:41*	*07/23/21 14:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	9.2	4.6	ug/L		07/28/21 11:07	07/30/21 12:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*46 - 124*	*07/28/21 11:07*	*07/30/21 12:50*	*1*
2-Fluorophenol	*63*		*13 - 113*	*07/28/21 11:07*	*07/30/21 12:50*	*1*
Nitrobenzene-d5	*76*		*36 - 126*	*07/28/21 11:07*	*07/30/21 12:50*	*1*
Phenol-d5	*75*		*17 - 127*	*07/28/21 11:07*	*07/30/21 12:50*	*1*
Terphenyl-d14	*89*		*44 - 149*	*07/28/21 11:07*	*07/30/21 12:50*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*07/28/21 11:07*	*07/30/21 12:50*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 22:36	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 22:36*	*1*

Client Sample ID: P74-ROX-071421
Date Collected: 07/14/21 10:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/20/21 20:26	1
Acrolein	ND		20	10	ug/L			07/20/21 20:26	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 20:26	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 20:26	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 20:26	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 20:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 20:26	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 20:26	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/20/21 20:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 20:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 20:26	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 20:26	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 20:26	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 20:26	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 20:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 20:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 20:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 20:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 20:26	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/20/21 20:26	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 20:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 20:26	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 20:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/20/21 20:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 20:26	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/21 20:26	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 20:26	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 20:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 20:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 20:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 20:26	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 20:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 20:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 20:26	1

Client Sample ID: P74-ROX-071421
Date Collected: 07/14/21 10:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 20:26	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 20:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/21 20:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 20:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 20:26	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 20:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 20:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 20:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 20:26	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 20:26	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 20:26	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 20:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 20:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 20:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 20:26	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 20:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 20:26	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/20/21 20:26*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/20/21 20:26*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*07/20/21 20:26*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/22/21 22:54	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/20/21 13:41	07/22/21 22:54	1
Anthracene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/22/21 22:54	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/20/21 13:41	07/22/21 22:54	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		07/20/21 13:41	07/22/21 22:54	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/20/21 13:41	07/22/21 22:54	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/20/21 13:41	07/22/21 22:54	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/20/21 13:41	07/22/21 22:54	1
Chrysene	ND		0.21	0.077	ug/L		07/20/21 13:41	07/22/21 22:54	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/20/21 13:41	07/22/21 22:54	1
Fluoranthene	ND		0.21	0.071	ug/L		07/20/21 13:41	07/22/21 22:54	1
Fluorene	ND		0.21	0.11	ug/L		07/20/21 13:41	07/22/21 22:54	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/20/21 13:41	07/22/21 22:54	1
1-Methylnaphthalene	ND		0.21	0.077	ug/L		07/20/21 13:41	07/22/21 22:54	1
2-Methylnaphthalene	ND		0.21	0.062	ug/L		07/20/21 13:41	07/22/21 22:54	1
Phenanthrene	ND		0.21	0.037	ug/L		07/20/21 13:41	07/22/21 22:54	1
Pyrene	ND		0.21	0.042	ug/L		07/20/21 13:41	07/22/21 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*15 - 122*	*07/20/21 13:41*	*07/22/21 22:54*	*1*
Nitrobenzene-d5	*83*		*19 - 130*	*07/20/21 13:41*	*07/22/21 22:54*	*1*

Client Sample ID: P74-ROX-071421
Date Collected: 07/14/21 10:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*33 - 138*	*07/20/21 13:41*	*07/22/21 22:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 15:06	1
Benzenethiol	ND	U	10	1.8	ug/L		07/20/21 13:41	07/23/21 15:06	1
Benzoic acid	ND		31	7.6	ug/L		07/20/21 13:41	07/23/21 15:06	1
Benzyl alcohol	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 15:06	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 15:06	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 15:06	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 15:06	1
Bis(2-ethylhexyl) phthalate	20		10	5.2	ug/L		07/20/21 13:41	07/23/21 15:06	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/20/21 13:41	07/23/21 15:06	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/20/21 13:41	07/23/21 15:06	1
4-Chloroaniline	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 15:06	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 15:06	1
2-Chloronaphthalene	ND		10	0.15	ug/L		07/20/21 13:41	07/23/21 15:06	1
2-Chlorophenol	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 15:06	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 15:06	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:06	1
Dibenzofuran	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:06	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 15:06	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/20/21 13:41	07/23/21 15:06	1
Diethyl phthalate	~~0.29~~ J	U	10	0.25	ug/L		07/20/21 13:41	07/23/21 15:06	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 15:06	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:06	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 15:06	1
4,6-Dinitro-ortho-cresol	ND	U	10	1.7	ug/L		07/20/21 13:41	07/23/21 15:06	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/20/21 13:41	07/23/21 15:06	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 15:06	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 15:06	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:06	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:06	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:06	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/21 13:41	07/23/21 15:06	1
Hexachloroethane	ND		10	4.4	ug/L		07/20/21 13:41	07/23/21 15:06	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:06	1
Isophorone	ND		10	0.15	ug/L		07/20/21 13:41	07/23/21 15:06	1
2-Methylphenol	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 15:06	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/20/21 13:41	07/23/21 15:06	1
2-Nitroaniline	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 15:06	1
3-Nitroaniline	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 15:06	1
4-Nitroaniline	ND		10	1.6	ug/L		07/20/21 13:41	07/23/21 15:06	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/23/21 15:06	1
2-Nitrophenol	ND		10	5.4	ug/L		07/20/21 13:41	07/23/21 15:06	1
4-Nitrophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 15:06	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 15:06	1

Client Sample ID: P74-ROX-071421
Date Collected: 07/14/21 10:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/20/21 13:41	07/23/21 15:06	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/20/21 13:41	07/23/21 15:06	1
Pentachlorophenol	ND		21	1.5	ug/L		07/20/21 13:41	07/23/21 15:06	1
Phenol	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 15:06	1
Pyridine	ND		10	3.3	ug/L		07/20/21 13:41	07/23/21 15:06	1
Quinoline	ND		10	4.7	ug/L		07/20/21 13:41	07/23/21 15:06	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 15:06	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*46 - 124*	*07/20/21 13:41*	*07/23/21 15:06*	*1*
2-Fluorophenol	*55*		*13 - 113*	*07/20/21 13:41*	*07/23/21 15:06*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*07/20/21 13:41*	*07/23/21 15:06*	*1*
Phenol-d5	*79*		*17 - 127*	*07/20/21 13:41*	*07/23/21 15:06*	*1*
Terphenyl-d14	*86*		*44 - 149*	*07/20/21 13:41*	*07/23/21 15:06*	*1*
2,4,6-Tribromophenol	*86*		*26 - 150*	*07/20/21 13:41*	*07/23/21 15:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	10	5.1	ug/L		07/28/21 11:07	07/30/21 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*46 - 124*	*07/28/21 11:07*	*07/30/21 13:16*	*1*
2-Fluorophenol	*76*		*13 - 113*	*07/28/21 11:07*	*07/30/21 13:16*	*1*
Nitrobenzene-d5	*75*		*36 - 126*	*07/28/21 11:07*	*07/30/21 13:16*	*1*
Phenol-d5	*80*		*17 - 127*	*07/28/21 11:07*	*07/30/21 13:16*	*1*
Terphenyl-d14	*90*		*44 - 149*	*07/28/21 11:07*	*07/30/21 13:16*	*1*
2,4,6-Tribromophenol	*83*		*26 - 150*	*07/28/21 11:07*	*07/30/21 13:16*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 22:57	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 22:57*	*1*

Client Sample ID: P56-ROX-071421
Date Collected: 07/14/21 11:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	130	50	ug/L			07/22/21 13:06	5
Acrolein	ND		100	50	ug/L			07/22/21 13:06	5
Acrylonitrile	ND		50	14	ug/L			07/22/21 13:06	5
Benzene	ND		5.0	1.9	ug/L			07/22/21 13:06	5
Bromobenzene	ND		5.0	2.7	ug/L			07/22/21 13:06	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/22/21 13:06	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Bromoform	ND		25	3.6	ug/L			07/22/21 13:06	5
Bromomethane	ND		5.0	4.9	ug/L			07/22/21 13:06	5
2-Butanone (MEK)	ND	*+	130	13	ug/L			07/22/21 13:06	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Chlorobenzene	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Dibromochloromethane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Chloroethane	ND		5.0	3.8	ug/L			07/22/21 13:06	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/22/21 13:06	5
Chloroform	ND		5.0	3.0	ug/L			07/22/21 13:06	5
1-Chlorohexane	ND		5.0	3.5	ug/L			07/22/21 13:06	5
Chloromethane	ND		5.0	4.2	ug/L			07/22/21 13:06	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 13:06	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 13:06	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/22/21 13:06	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/22/21 13:06	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/22/21 13:06	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/22/21 13:06	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 13:06	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Ethylbenzene	**5.2**		5.0	2.5	ug/L			07/22/21 13:06	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/22/21 13:06	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/22/21 13:06	5
2-Hexanone	ND		130	16	ug/L			07/22/21 13:06	5
Isopropylbenzene	**16**		5.0	2.7	ug/L			07/22/21 13:06	5
Methylene bromide	ND		25	3.0	ug/L			07/22/21 13:06	5
Methylene Chloride	ND		25	15	ug/L			07/22/21 13:06	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/22/21 13:06	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			07/22/21 13:06	5
m-Xylene & p-Xylene	**55**		25	8.0	ug/L			07/22/21 13:06	5
Naphthalene	**9.2**		5.0	5.0	ug/L			07/22/21 13:06	5
n-Butylbenzene	ND		5.0	3.8	ug/L			07/22/21 13:06	5
N-Propylbenzene	**19**		5.0	3.5	ug/L			07/22/21 13:06	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/22/21 13:06	5
o-Xylene	ND		25	3.0	ug/L			07/22/21 13:06	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/22/21 13:06	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			07/22/21 13:06	5

Client Sample ID: P56-ROX-071421
Date Collected: 07/14/21 11:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			07/22/21 13:06	5
Styrene	ND		5.0	5.0	ug/L			07/22/21 13:06	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/22/21 13:06	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			07/22/21 13:06	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Tetrachloroethene	ND		5.0	2.9	ug/L			07/22/21 13:06	5
Toluene	ND		5.0	2.1	ug/L			07/22/21 13:06	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/22/21 13:06	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			07/22/21 13:06	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			07/22/21 13:06	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/22/21 13:06	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			07/22/21 13:06	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			07/22/21 13:06	5
Trichloroethene	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			07/22/21 13:06	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/22/21 13:06	5
1,2,4-Trimethylbenzene	**23**		5.0	4.1	ug/L			07/22/21 13:06	5
1,3,5-Trimethylbenzene	**6.3**		5.0	2.8	ug/L			07/22/21 13:06	5
Vinyl acetate	ND		130	10	ug/L			07/22/21 13:06	5
Vinyl chloride	ND		5.0	2.5	ug/L			07/22/21 13:06	5
Xylenes, Total	**57**		50	8.0	ug/L			07/22/21 13:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/22/21 13:06*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*07/22/21 13:06*	*5*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/22/21 13:06*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.44**		0.20	0.032	ug/L		07/20/21 13:41	07/22/21 23:11	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/20/21 13:41	07/22/21 23:11	1
Anthracene	ND		0.20	0.032	ug/L		07/20/21 13:41	07/22/21 23:11	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/20/21 13:41	07/22/21 23:11	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/20/21 13:41	07/22/21 23:11	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/20/21 13:41	07/22/21 23:11	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/20/21 13:41	07/22/21 23:11	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/20/21 13:41	07/22/21 23:11	1
Chrysene	ND		0.20	0.074	ug/L		07/20/21 13:41	07/22/21 23:11	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/20/21 13:41	07/22/21 23:11	1
Fluoranthene	ND		0.20	0.068	ug/L		07/20/21 13:41	07/22/21 23:11	1
Fluorene	ND		0.20	0.11	ug/L		07/20/21 13:41	07/22/21 23:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/20/21 13:41	07/22/21 23:11	1
1-Methylnaphthalene	**11**		0.20	0.074	ug/L		07/20/21 13:41	07/22/21 23:11	1
2-Methylnaphthalene	**11**		0.20	0.060	ug/L		07/20/21 13:41	07/22/21 23:11	1
Phenanthrene	**0.74**		0.20	0.036	ug/L		07/20/21 13:41	07/22/21 23:11	1
Pyrene	ND		0.20	0.040	ug/L		07/20/21 13:41	07/22/21 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*15 - 122*	*07/20/21 13:41*	*07/22/21 23:11*	*1*
Nitrobenzene-d5	*113*		*19 - 130*	*07/20/21 13:41*	*07/22/21 23:11*	*1*

Client Sample ID: P56-ROX-071421
Date Collected: 07/14/21 11:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	95		33 - 138	07/20/21 13:41	07/22/21 23:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 15:32	1
Benzenethiol	ND	*	10	1.7	ug/L		07/20/21 13:41	07/23/21 15:32	1
Benzoic acid	ND		30	7.3	ug/L		07/20/21 13:41	07/23/21 15:32	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/21 13:41	07/23/21 15:32	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 15:32	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/21 13:41	07/23/21 15:32	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/21 13:41	07/23/21 15:32	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/21 13:41	07/23/21 15:32	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/21 13:41	07/23/21 15:32	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 15:32	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 15:32	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 15:32	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 15:32	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/21 13:41	07/23/21 15:32	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/21 13:41	07/23/21 15:32	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 15:32	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 15:32	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 15:32	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/21 13:41	07/23/21 15:32	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/21 13:41	07/23/21 15:32	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 15:32	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 15:32	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 15:32	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 15:32	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/21 13:41	07/23/21 15:32	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/21 13:41	07/23/21 15:32	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:32	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 15:32	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/21 13:41	07/23/21 15:32	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/21 13:41	07/23/21 15:32	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 15:32	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/21 13:41	07/23/21 15:32	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/21 13:41	07/23/21 15:32	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/23/21 15:32	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/21 13:41	07/23/21 15:32	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 15:32	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 15:32	1

Client Sample ID: P56-ROX-071421
Date Collected: 07/14/21 11:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/21 13:41	07/23/21 15:32	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:32	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/21 13:41	07/23/21 15:32	1
Phenol	ND		10	2.6	ug/L		07/20/21 13:41	07/23/21 15:32	1
Pyridine	ND		10	3.2	ug/L		07/20/21 13:41	07/23/21 15:32	1
Quinoline	ND		10	4.5	ug/L		07/20/21 13:41	07/23/21 15:32	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/21 13:41	07/23/21 15:32	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*46 - 124*	*07/20/21 13:41*	*07/23/21 15:32*	*1*
2-Fluorophenol	*72*		*13 - 113*	*07/20/21 13:41*	*07/23/21 15:32*	*1*
Nitrobenzene-d5	*98*		*36 - 126*	*07/20/21 13:41*	*07/23/21 15:32*	*1*
Phenol-d5	*91*		*17 - 127*	*07/20/21 13:41*	*07/23/21 15:32*	*1*
Terphenyl-d14	*89*		*44 - 149*	*07/20/21 13:41*	*07/23/21 15:32*	*1*
2,4,6-Tribromophenol	*106*		*26 - 150*	*07/20/21 13:41*	*07/23/21 15:32*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 23:17	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 23:17*	*1*

Client Sample ID: P57-ROX-071421
Date Collected: 07/14/21 12:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/22/21 10:58	1
Acrolein	ND		20	10	ug/L			07/22/21 10:58	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 10:58	1
Benzene	**180**		1.0	0.38	ug/L			07/22/21 10:58	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 10:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 10:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 10:58	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 10:58	1
2-Butanone (MEK)	**9.5**	J *+ J	25	2.6	ug/L			07/22/21 10:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 10:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/21 10:58	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 10:58	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 10:58	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 10:58	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 10:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 10:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 10:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 10:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 10:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 10:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 10:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Ethylbenzene	**2.2**		1.0	0.50	ug/L			07/22/21 10:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 10:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 10:58	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 10:58	1
Isopropylbenzene	**27**		1.0	0.53	ug/L			07/22/21 10:58	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 10:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 10:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 10:58	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/22/21 10:58	1
m-Xylene & p-Xylene	**2.3**	J	5.0	1.6	ug/L			07/22/21 10:58	1
Naphthalene	**44**		1.0	1.0	ug/L			07/22/21 10:58	1
n-Butylbenzene	**3.6**		1.0	0.76	ug/L			07/22/21 10:58	1
N-Propylbenzene	**30**		1.0	0.69	ug/L			07/22/21 10:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 10:58	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/21 10:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 10:58	1
p-Isopropyltoluene	**1.2**		1.0	0.71	ug/L			07/22/21 10:58	1

Client Sample ID: P57-ROX-071421
Date Collected: 07/14/21 12:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	5.9		1.0	0.70	ug/L			07/22/21 10:58	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 10:58	1
tert-Butylbenzene	6.1		1.0	0.63	ug/L			07/22/21 10:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 10:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 10:58	1
Toluene	6.2		1.0	0.41	ug/L			07/22/21 10:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 10:58	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 10:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 10:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 10:58	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 10:58	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 10:58	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 10:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/21 10:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/21 10:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/21 10:58	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 10:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 10:58	1
Xylenes, Total	2.5	J	10	1.6	ug/L			07/22/21 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/22/21 10:58*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/22/21 10:58*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/22/21 10:58*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.29		0.21	0.033	ug/L		07/20/21 13:41	07/22/21 23:28	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/20/21 13:41	07/22/21 23:28	1
Anthracene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/22/21 23:28	1
Benzo[a]anthracene	ND		0.21	0.047	ug/L		07/20/21 13:41	07/22/21 23:28	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/20/21 13:41	07/22/21 23:28	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/20/21 13:41	07/22/21 23:28	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/20/21 13:41	07/22/21 23:28	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/20/21 13:41	07/22/21 23:28	1
Chrysene	ND		0.21	0.076	ug/L		07/20/21 13:41	07/22/21 23:28	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		07/20/21 13:41	07/22/21 23:28	1
Fluoranthene	ND		0.21	0.070	ug/L		07/20/21 13:41	07/22/21 23:28	1
Fluorene	0.40		0.21	0.11	ug/L		07/20/21 13:41	07/22/21 23:28	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.044	ug/L		07/20/21 13:41	07/22/21 23:28	1
1-Methylnaphthalene	14		0.21	0.076	ug/L		07/20/21 13:41	07/22/21 23:28	1
2-Methylnaphthalene	18		0.21	0.062	ug/L		07/20/21 13:41	07/22/21 23:28	1
Phenanthrene	0.24		0.21	0.037	ug/L		07/20/21 13:41	07/22/21 23:28	1
Pyrene	ND		0.21	0.041	ug/L		07/20/21 13:41	07/22/21 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*15 - 122*	*07/20/21 13:41*	*07/22/21 23:28*	*1*
Nitrobenzene-d5	*69*		*19 - 130*	*07/20/21 13:41*	*07/22/21 23:28*	*1*

Client Sample ID: P57-ROX-071421
Date Collected: 07/14/21 12:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-14
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	78		33 - 138	07/20/21 13:41	07/22/21 23:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 15:58	1
Benzenethiol	ND	UJ	10	1.8	ug/L		07/20/21 13:41	07/23/21 15:58	1
Benzoic acid	ND		31	7.5	ug/L		07/20/21 13:41	07/23/21 15:58	1
Benzyl alcohol	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 15:58	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/21 13:41	07/23/21 15:58	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 15:58	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/21 13:41	07/23/21 15:58	1
Bis(2-ethylhexyl) phthalate	13		10	5.1	ug/L		07/20/21 13:41	07/23/21 15:58	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/20/21 13:41	07/23/21 15:58	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/20/21 13:41	07/23/21 15:58	1
4-Chloroaniline	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 15:58	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 15:58	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 15:58	1
2-Chlorophenol	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 15:58	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 15:58	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:58	1
Dibenzofuran	0.52	J	10	0.18	ug/L		07/20/21 13:41	07/23/21 15:58	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 15:58	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/20/21 13:41	07/23/21 15:58	1
Diethyl phthalate	ND		10	0.25	ug/L		07/20/21 13:41	07/23/21 15:58	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 15:58	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:58	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 15:58	1
4,6-Dinitro-ortho-cresol	ND	UJ	10	1.6	ug/L		07/20/21 13:41	07/23/21 15:58	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/20/21 13:41	07/23/21 15:58	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 15:58	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 15:58	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:58	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:58	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 15:58	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/21 13:41	07/23/21 15:58	1
Hexachloroethane	ND		10	4.3	ug/L		07/20/21 13:41	07/23/21 15:58	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 15:58	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 15:58	1
2-Methylphenol	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 15:58	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/20/21 13:41	07/23/21 15:58	1
2-Nitroaniline	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 15:58	1
3-Nitroaniline	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 15:58	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/21 13:41	07/23/21 15:58	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/23/21 15:58	1
2-Nitrophenol	ND		10	5.4	ug/L		07/20/21 13:41	07/23/21 15:58	1
4-Nitrophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 15:58	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 15:58	1

Client Sample ID: P57-ROX-071421
Date Collected: 07/14/21 12:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/20/21 13:41	07/23/21 15:58	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/20/21 13:41	07/23/21 15:58	1
Pentachlorophenol	ND		21	1.4	ug/L		07/20/21 13:41	07/23/21 15:58	1
Phenol	17		10	2.7	ug/L		07/20/21 13:41	07/23/21 15:58	1
Pyridine	ND		10	3.3	ug/L		07/20/21 13:41	07/23/21 15:58	1
Quinoline	ND		10	4.6	ug/L		07/20/21 13:41	07/23/21 15:58	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 15:58	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*46 - 124*	*07/20/21 13:41*	*07/23/21 15:58*	*1*
2-Fluorophenol	*47*		*13 - 113*	*07/20/21 13:41*	*07/23/21 15:58*	*1*
Nitrobenzene-d5	*74*		*36 - 126*	*07/20/21 13:41*	*07/23/21 15:58*	*1*
Phenol-d5	*73*		*17 - 127*	*07/20/21 13:41*	*07/23/21 15:58*	*1*
Terphenyl-d14	*84*		*44 - 149*	*07/20/21 13:41*	*07/23/21 15:58*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*07/20/21 13:41*	*07/23/21 15:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	11	5.4	ug/L		07/28/21 11:07	07/30/21 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*46 - 124*	*07/28/21 11:07*	*07/30/21 13:42*	*1*
2-Fluorophenol	*41*		*13 - 113*	*07/28/21 11:07*	*07/30/21 13:42*	*1*
Nitrobenzene-d5	*76*		*36 - 126*	*07/28/21 11:07*	*07/30/21 13:42*	*1*
Phenol-d5	*57*		*17 - 127*	*07/28/21 11:07*	*07/30/21 13:42*	*1*
Terphenyl-d14	*63*		*44 - 149*	*07/28/21 11:07*	*07/30/21 13:42*	*1*
2,4,6-Tribromophenol	*90*		*26 - 150*	*07/28/21 11:07*	*07/30/21 13:42*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 23:37	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 23:37*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc. Job ID: 400-206012-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-206012-2	TB-ROX-071421-8260-A	79	102	102
400-206012-3	MW5-ROX-071421	79	102	103
400-206012-4	ROST3MW-ROX-071421	82	104	101
400-206012-5	MW2-ROX-071421-EB	77	104	104
400-206012-6	MW2-ROX-071421	77	102	98
400-206012-7	ROST4PZC-ROX-071421	77	101	98
400-206012-8	ROST4PZC-ROX-071421-DUP	76	102	99
400-206012-10	TB-ROX-071421-8260-B	80	103	103
400-206012-11	P74-ROX-071421-EB	76	103	102
400-206012-12	P74-ROX-071421	78	102	104
400-206012-13	P56-ROX-071421	79	101	100
400-206012-14	P57-ROX-071421	79	104	99
LCS 400-540044/1002	Lab Control Sample	81	96	104
LCS 400-540400/1002	Lab Control Sample	79	100	100
MB 400-540044/4	Method Blank	77	99	103
MB 400-540400/4	Method Blank	78	104	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-206012-3	MW5-ROX-071421	97	60	78	78	93	90
400-206012-4	ROST3MW-ROX-071421	95	84	80	88	89	87
400-206012-5	MW2-ROX-071421-EB	86	58	71	74	84	74
400-206012-6	MW2-ROX-071421	100	38	87	66	90	92
400-206012-7	ROST4PZC-ROX-071421	99	42	82	72	99	91
400-206012-8	ROST4PZC-ROX-071421-DUP	94	24	78	55	94	80
400-206012-11	P74-ROX-071421-EB	100	76	84	90	97	86
400-206012-11 - RE	P74-ROX-071421-EB	90	63	76	75	89	85
400-206012-12	P74-ROX-071421	96	55	79	79	86	86
400-206012-12 - RE	P74-ROX-071421	90	76	75	80	90	83
400-206012-13	P56-ROX-071421	103	72	98	91	89	106
400-206012-14	P57-ROX-071421	87	47	74	73	84	88
400-206012-14 - RE	P57-ROX-071421	89	41	76	57	63	90
LCS 400-540128/2-A	Lab Control Sample	109	83	106	97	95	105
LCS 400-540128/4-A	Lab Control Sample	50	34	43	43	40 S1-	41
LCS 400-541252/2-A	Lab Control Sample	84	40	75	55	69	82
LCSD 400-540128/3-A	Lab Control Sample Dup	110	75	104	97	92	108
LCSD 400-540128/5-A	Lab Control Sample Dup	47	36	41	43	37 S1-	41
LCSD 400-541252/3-A	Lab Control Sample Dup	80	69	71	71	73	86
MB 400-540128/1-A	Method Blank	65	23	55	40	52	46
MB 400-541252/1-A	Method Blank	81	28	64	51	71	63

Surrogate Legend

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-206012-1
Project/Site: ROXANA QUARTERLY GW

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-206012-3	MW5-ROX-071421	90	82	81
400-206012-4	ROST3MW-ROX-071421	82	81	88
400-206012-5	MW2-ROX-071421-EB	67	67	76
400-206012-6	MW2-ROX-071421	81	81	84
400-206012-7	ROST4PZC-ROX-071421	80	85	90
400-206012-8	ROST4PZC-ROX-071421-DUP	66	82	86
400-206012-11	P74-ROX-071421-EB	86	85	94
400-206012-12	P74-ROX-071421	92	83	92
400-206012-13	P56-ROX-071421	85	113	95
400-206012-14	P57-ROX-071421	72	69	78
LCS 400-540128/2-A	Lab Control Sample	83	96	82
LCSD 400-540128/3-A	Lab Control Sample Dup	88	88	83
MB 400-540128/1-A	Method Blank	88	83	90

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-206012-1	TB-ROX-071421-8011-A	98
400-206012-3	MW5-ROX-071421	93 p
400-206012-4	ROST3MW-ROX-071421	94 p
400-206012-5	MW2-ROX-071421-EB	89
400-206012-6	MW2-ROX-071421	91 p
400-206012-7	ROST4PZC-ROX-071421	90 p
400-206012-8	ROST4PZC-ROX-071421-DUP	95 p
400-206012-9	TB-ROX-071421-8011-B	92
400-206012-11	P74-ROX-071421-EB	89 p
400-206012-12	P74-ROX-071421	94 p
400-206012-13	P56-ROX-071421	76 p
400-206012-14	P57-ROX-071421	95 p
LCS 400-541070/2-A	Lab Control Sample	101
MB 400-541070/1-A	Method Blank	86 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: TB-ROX-071421-8011-A

Lab Sample ID: 400-206012-1
Matrix: Water
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.4 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 19:34	DS	TAL PEN

Client Sample ID: TB-ROX-071421-8260-A

Lab Sample ID: 400-206012-2
Matrix: Water
Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 14:54	SAB	TAL PEN

Client Sample ID: MW5-ROX-071421

Lab Sample ID: 400-206012-3
Matrix: Water
Date Collected: 07/14/21 08:50
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 19:31	SAB	TAL PEN
Total/NA	Prep	3520C			260.6 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 12:03	S1B	TAL PEN
Total/NA	Prep	3520C			260.6 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 20:53	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 19:54	DS	TAL PEN

Client Sample ID: ROST3MW-ROX-071421

Lab Sample ID: 400-206012-4
Matrix: Water
Date Collected: 07/14/21 09:40
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 19:59	SAB	TAL PEN
Total/NA	Prep	3520C			237.4 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 12:29	S1B	TAL PEN
Total/NA	Prep	3520C			237.4 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 21:10	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 20:15	DS	TAL PEN

Client Sample ID: MW2-ROX-071421-EB

Lab Sample ID: 400-206012-5
Matrix: Water
Date Collected: 07/14/21 10:00
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 17:40	SAB	TAL PEN
Total/NA	Prep	3520C			260.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 12:55	S1B	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: MW2-ROX-071421-EB

Lab Sample ID: 400-206012-5
Date Collected: 07/14/21 10:00
Matrix: Water
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			260.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 21:27	PP1	TAL PEN
Total/NA	Prep	8011			33.6 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 20:35	DS	TAL PEN

Client Sample ID: MW2-ROX-071421

Lab Sample ID: 400-206012-6
Date Collected: 07/14/21 10:45
Matrix: Water
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	540400	07/22/21 11:53	WPD	TAL PEN
Total/NA	Prep	3520C			251.6 mL	1 mL	540128	07/21/21 07:51	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 13:21	S1B	TAL PEN
Total/NA	Prep	3520C			251.6 mL	1 mL	540128	07/21/21 07:51	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 21:45	PP1	TAL PEN
Total/NA	Prep	8011			33.2 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 20:55	DS	TAL PEN

Client Sample ID: ROST4PZC-ROX-071421

Lab Sample ID: 400-206012-7
Date Collected: 07/14/21 12:05
Matrix: Water
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	540400	07/22/21 12:20	WPD	TAL PEN
Total/NA	Prep	3520C			248.6 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 13:47	S1B	TAL PEN
Total/NA	Prep	3520C			248.6 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 22:02	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 21:15	DS	TAL PEN

Client Sample ID: ROST4PZC-ROX-071421-DUP

Lab Sample ID: 400-206012-8
Date Collected: 07/14/21 12:05
Matrix: Water
Date Received: 07/15/21 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	540400	07/22/21 12:43	WPD	TAL PEN
Total/NA	Prep	3520C			263.6 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 14:13	S1B	TAL PEN
Total/NA	Prep	3520C			263.6 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 22:19	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 21:36	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: TB-ROX-071421-8011-B

Lab Sample ID: 400-206012-9

Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.6 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 21:56	DS	TAL PEN

Client Sample ID: TB-ROX-071421-8260-B

Lab Sample ID: 400-206012-10

Date Collected: 07/14/21 00:00
Date Received: 07/15/21 09:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 15:22	SAB	TAL PEN

Client Sample ID: P74-ROX-071421-EB

Lab Sample ID: 400-206012-11

Date Collected: 07/14/21 08:15
Date Received: 07/15/21 09:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 18:08	SAB	TAL PEN
Total/NA	Prep	3520C	RE		270.4 mL	1 mL	541252	07/28/21 11:07	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			541576	07/30/21 12:50	KJA	TAL PEN
Total/NA	Prep	3520C			267.2 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 14:39	S1B	TAL PEN
Total/NA	Prep	3520C			267.2 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 22:37	PP1	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 22:36	DS	TAL PEN

Client Sample ID: P74-ROX-071421

Lab Sample ID: 400-206012-12

Date Collected: 07/14/21 10:30
Date Received: 07/15/21 09:20

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 20:26	SAB	TAL PEN
Total/NA	Prep	3520C	RE		245 mL	1 mL	541252	07/28/21 11:07	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			541576	07/30/21 13:16	KJA	TAL PEN
Total/NA	Prep	3520C			240.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 15:06	S1B	TAL PEN
Total/NA	Prep	3520C			240.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 22:54	PP1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 22:57	DS	TAL PEN

Client Sample ID: P56-ROX-071421

Date Collected: 07/14/21 11:45
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	540400	07/22/21 13:06	WPD	TAL PEN
Total/NA	Prep	3520C			249.2 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 15:32	S1B	TAL PEN
Total/NA	Prep	3520C			249.2 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 23:11	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 23:17	DS	TAL PEN

Client Sample ID: P57-ROX-071421

Date Collected: 07/14/21 12:30
Date Received: 07/15/21 09:20

Lab Sample ID: 400-206012-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 10:58	WPD	TAL PEN
Total/NA	Prep	3520C	RE		233.4 mL	1 mL	541252	07/28/21 11:07	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			541576	07/30/21 13:42	KJA	TAL PEN
Total/NA	Prep	3520C			242.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 15:58	S1B	TAL PEN
Total/NA	Prep	3520C			242.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 23:28	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 23:37	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-540044/4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 13:03	SAB	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-540128/1-A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 09:53	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 20:01	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-540400/4
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 08:15	WPD	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-541070/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 15:08	DS	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-541252/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	541252	07/28/21 11:06	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541564	07/30/21 14:04	KJA	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540044/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540044	07/20/21 12:02	SAB	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540128/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 18:01	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D LL		5			540521	07/22/21 20:18	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540128/4-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 11:11	S1B	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540400/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 07:19	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541070/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541070	07/27/21 10:34	DS	TAL PEN
Total/NA	Analysis	8011		1			541126	07/27/21 15:28	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541252/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	541252	07/28/21 11:06	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541564	07/30/21 14:31	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-540128/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 18:28	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D LL		5			540521	07/22/21 20:36	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-540128/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 11:37	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-541252/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	541252	07/28/21 11:06	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541564	07/30/21 14:58	KJA	TAL PEN

Laboratory References:
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 540044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-2	TB-ROX-071421-8260-A	Total/NA	Water	8260B	
400-206012-3	MW5-ROX-071421	Total/NA	Water	8260B	
400-206012-4	ROST3MW-ROX-071421	Total/NA	Water	8260B	
400-206012-5	MW2-ROX-071421-EB	Total/NA	Water	8260B	
400-206012-10	TB-ROX-071421-8260-B	Total/NA	Water	8260B	
400-206012-11	P74-ROX-071421-EB	Total/NA	Water	8260B	
400-206012-12	P74-ROX-071421	Total/NA	Water	8260B	
MB 400-540044/4	Method Blank	Total/NA	Water	8260B	
LCS 400-540044/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 540400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-6	MW2-ROX-071421	Total/NA	Water	8260B	
400-206012-7	ROST4PZC-ROX-071421	Total/NA	Water	8260B	
400-206012-8	ROST4PZC-ROX-071421-DUP	Total/NA	Water	8260B	
400-206012-13	P56-ROX-071421	Total/NA	Water	8260B	
400-206012-14	P57-ROX-071421	Total/NA	Water	8260B	
MB 400-540400/4	Method Blank	Total/NA	Water	8260B	
LCS 400-540400/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 540128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-3	MW5-ROX-071421	Total/NA	Water	3520C	
400-206012-4	ROST3MW-ROX-071421	Total/NA	Water	3520C	
400-206012-5	MW2-ROX-071421-EB	Total/NA	Water	3520C	
400-206012-6	MW2-ROX-071421	Total/NA	Water	3520C	
400-206012-7	ROST4PZC-ROX-071421	Total/NA	Water	3520C	
400-206012-8	ROST4PZC-ROX-071421-DUP	Total/NA	Water	3520C	
400-206012-11	P74-ROX-071421-EB	Total/NA	Water	3520C	
400-206012-12	P74-ROX-071421	Total/NA	Water	3520C	
400-206012-13	P56-ROX-071421	Total/NA	Water	3520C	
400-206012-14	P57-ROX-071421	Total/NA	Water	3520C	
MB 400-540128/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-540128/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-540128/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-540128/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-540128/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 540521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-3	MW5-ROX-071421	Total/NA	Water	8270D LL	540128
400-206012-4	ROST3MW-ROX-071421	Total/NA	Water	8270D LL	540128
400-206012-5	MW2-ROX-071421-EB	Total/NA	Water	8270D LL	540128
400-206012-6	MW2-ROX-071421	Total/NA	Water	8270D LL	540128
400-206012-7	ROST4PZC-ROX-071421	Total/NA	Water	8270D LL	540128
400-206012-8	ROST4PZC-ROX-071421-DUP	Total/NA	Water	8270D LL	540128
400-206012-11	P74-ROX-071421-EB	Total/NA	Water	8270D LL	540128
400-206012-12	P74-ROX-071421	Total/NA	Water	8270D LL	540128
400-206012-13	P56-ROX-071421	Total/NA	Water	8270D LL	540128

GC/MS Semi VOA (Continued)

Analysis Batch: 540521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-14	P57-ROX-071421	Total/NA	Water	8270D LL	540128
MB 400-540128/1-A	Method Blank	Total/NA	Water	8270D LL	540128
LCS 400-540128/2-A	Lab Control Sample	Total/NA	Water	8270D LL	540128
LCSD 400-540128/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	540128

Analysis Batch: 540593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-3	MW5-ROX-071421	Total/NA	Water	8270D	540128
400-206012-4	ROST3MW-ROX-071421	Total/NA	Water	8270D	540128
400-206012-5	MW2-ROX-071421-EB	Total/NA	Water	8270D	540128
400-206012-6	MW2-ROX-071421	Total/NA	Water	8270D	540128
400-206012-7	ROST4PZC-ROX-071421	Total/NA	Water	8270D	540128
400-206012-8	ROST4PZC-ROX-071421-DUP	Total/NA	Water	8270D	540128
400-206012-11	P74-ROX-071421-EB	Total/NA	Water	8270D	540128
400-206012-12	P74-ROX-071421	Total/NA	Water	8270D	540128
400-206012-13	P56-ROX-071421	Total/NA	Water	8270D	540128
400-206012-14	P57-ROX-071421	Total/NA	Water	8270D	540128
MB 400-540128/1-A	Method Blank	Total/NA	Water	8270D	540128
LCS 400-540128/4-A	Lab Control Sample	Total/NA	Water	8270D	540128
LCSD 400-540128/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	540128

Analysis Batch: 540930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-540128/2-A	Lab Control Sample	Total/NA	Water	8270D	540128
LCSD 400-540128/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	540128

Prep Batch: 541252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-11 - RE	P74-ROX-071421-EB	Total/NA	Water	3520C	
400-206012-12 - RE	P74-ROX-071421	Total/NA	Water	3520C	
400-206012-14 - RE	P57-ROX-071421	Total/NA	Water	3520C	
MB 400-541252/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-541252/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-541252/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 541564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-541252/1-A	Method Blank	Total/NA	Water	8270D	541252
LCS 400-541252/2-A	Lab Control Sample	Total/NA	Water	8270D	541252
LCSD 400-541252/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	541252

Analysis Batch: 541576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-11 - RE	P74-ROX-071421-EB	Total/NA	Water	8270D	541252
400-206012-12 - RE	P74-ROX-071421	Total/NA	Water	8270D	541252
400-206012-14 - RE	P57-ROX-071421	Total/NA	Water	8270D	541252

GC Semi VOA

Prep Batch: 541070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-1	TB-ROX-071421-8011-A	Total/NA	Water	8011	
400-206012-3	MW5-ROX-071421	Total/NA	Water	8011	
400-206012-4	ROST3MW-ROX-071421	Total/NA	Water	8011	
400-206012-5	MW2-ROX-071421-EB	Total/NA	Water	8011	
400-206012-6	MW2-ROX-071421	Total/NA	Water	8011	
400-206012-7	ROST4PZC-ROX-071421	Total/NA	Water	8011	
400-206012-8	ROST4PZC-ROX-071421-DUP	Total/NA	Water	8011	
400-206012-9	TB-ROX-071421-8011-B	Total/NA	Water	8011	
400-206012-11	P74-ROX-071421-EB	Total/NA	Water	8011	
400-206012-12	P74-ROX-071421	Total/NA	Water	8011	
400-206012-13	P56-ROX-071421	Total/NA	Water	8011	
400-206012-14	P57-ROX-071421	Total/NA	Water	8011	
MB 400-541070/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-541070/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 541126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206012-1	TB-ROX-071421-8011-A	Total/NA	Water	8011	541070
400-206012-3	MW5-ROX-071421	Total/NA	Water	8011	541070
400-206012-4	ROST3MW-ROX-071421	Total/NA	Water	8011	541070
400-206012-5	MW2-ROX-071421-EB	Total/NA	Water	8011	541070
400-206012-6	MW2-ROX-071421	Total/NA	Water	8011	541070
400-206012-7	ROST4PZC-ROX-071421	Total/NA	Water	8011	541070
400-206012-8	ROST4PZC-ROX-071421-DUP	Total/NA	Water	8011	541070
400-206012-9	TB-ROX-071421-8011-B	Total/NA	Water	8011	541070
400-206012-11	P74-ROX-071421-EB	Total/NA	Water	8011	541070
400-206012-12	P74-ROX-071421	Total/NA	Water	8011	541070
400-206012-13	P56-ROX-071421	Total/NA	Water	8011	541070
400-206012-14	P57-ROX-071421	Total/NA	Water	8011	541070
MB 400-541070/1-A	Method Blank	Total/NA	Water	8011	541070
LCS 400-541070/2-A	Lab Control Sample	Total/NA	Water	8011	541070

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

Lab Sample ID: MB 400-540044/4
Matrix: Water
Analysis Batch: 540044

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/20/21 13:03	1
Acrolein	ND		20	10	ug/L			07/20/21 13:03	1
Acrylonitrile	ND		10	2.8	ug/L			07/20/21 13:03	1
Benzene	ND		1.0	0.38	ug/L			07/20/21 13:03	1
Bromobenzene	ND		1.0	0.54	ug/L			07/20/21 13:03	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/20/21 13:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Bromoform	ND		5.0	0.71	ug/L			07/20/21 13:03	1
Bromomethane	ND		1.0	0.98	ug/L			07/20/21 13:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/20/21 13:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Chloroethane	ND		1.0	0.76	ug/L			07/20/21 13:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/20/21 13:03	1
Chloroform	ND		1.0	0.60	ug/L			07/20/21 13:03	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/20/21 13:03	1
Chloromethane	ND		1.0	0.83	ug/L			07/20/21 13:03	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 13:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/20/21 13:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/20/21 13:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/20/21 13:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/20/21 13:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/20/21 13:03	1
2-Hexanone	ND		25	3.1	ug/L			07/20/21 13:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/20/21 13:03	1
Methylene bromide	ND		5.0	0.59	ug/L			07/20/21 13:03	1
Methylene Chloride	12.6		5.0	3.0	ug/L			07/20/21 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/20/21 13:03	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/20/21 13:03	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/20/21 13:03	1
Naphthalene	ND		1.0	1.0	ug/L			07/20/21 13:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/20/21 13:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/20/21 13:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/20/21 13:03	1
o-Xylene	ND		5.0	0.60	ug/L			07/20/21 13:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/20/21 13:03	1

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

Lab Sample ID: MB 400-540044/4
Matrix: Water
Analysis Batch: 540044

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/20/21 13:03	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/20/21 13:03	1
Styrene	ND		1.0	1.0	ug/L			07/20/21 13:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/20/21 13:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/20/21 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/20/21 13:03	1
Toluene	ND		1.0	0.41	ug/L			07/20/21 13:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/20/21 13:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/20/21 13:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/20/21 13:03	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/20/21 13:03	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/20/21 13:03	1
Trichloroethene	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/20/21 13:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/20/21 13:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/20/21 13:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/20/21 13:03	1
Vinyl acetate	ND		25	2.0	ug/L			07/20/21 13:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/20/21 13:03	1
Xylenes, Total	ND		10	1.6	ug/L			07/20/21 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/20/21 13:03*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/20/21 13:03*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/20/21 13:03*	*1*

Lab Sample ID: LCS 400-540044/1002
Matrix: Water
Analysis Batch: 540044

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	381	*+	ug/L		191	43 - 160
Acrolein	500	494		ug/L		99	38 - 160
Acrylonitrile	500	373		ug/L		75	64 - 142
Benzene	50.0	53.6		ug/L		107	70 - 130
Bromobenzene	50.0	57.0		ug/L		114	70 - 132
Bromochloromethane	50.0	52.3		ug/L		105	70 - 130
Bromodichloromethane	50.0	48.1		ug/L		96	67 - 133
Bromoform	50.0	50.4		ug/L		101	57 - 140
Bromomethane	50.0	53.9		ug/L		108	10 - 160
2-Butanone (MEK)	200	372	*+	ug/L		186	61 - 145
Carbon disulfide	50.0	52.3		ug/L		105	61 - 137
Carbon tetrachloride	50.0	48.7		ug/L		97	61 - 137
Chlorobenzene	50.0	55.0		ug/L		110	70 - 130
Dibromochloromethane	50.0	50.5		ug/L		101	67 - 135
Chloroethane	50.0	46.9		ug/L		94	55 - 141

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

Lab Sample ID: LCS 400-540044/1002
Matrix: Water
Analysis Batch: 540044

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	25.1		ug/L		50	10 - 160
Chloroform	50.0	50.3		ug/L		101	69 - 130
1-Chlorohexane	50.0	44.0		ug/L		88	69 - 130
Chloromethane	50.0	30.2		ug/L		60	58 - 137
cis-1,2-Dichloroethene	50.0	51.7		ug/L		103	68 - 130
cis-1,3-Dichloropropene	50.0	51.9		ug/L		104	69 - 132
1,2-Dichlorobenzene	50.0	56.6		ug/L		113	67 - 130
1,3-Dichlorobenzene	50.0	62.0		ug/L		124	70 - 130
1,4-Dichlorobenzene	50.0	62.2		ug/L		124	70 - 130
Dichlorodifluoromethane	50.0	27.8		ug/L		56	41 - 146
1,1-Dichloroethane	50.0	46.4		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	40.4		ug/L		81	69 - 130
1,1-Dichloroethene	50.0	51.4		ug/L		103	63 - 134
1,2-Dichloropropane	50.0	45.7		ug/L		91	70 - 130
1,3-Dichloropropane	50.0	51.4		ug/L		103	70 - 130
2,2-Dichloropropane	50.0	49.0		ug/L		98	52 - 135
1,1-Dichloropropene	50.0	51.8		ug/L		104	70 - 130
Ethylbenzene	50.0	53.8		ug/L		108	70 - 130
Ethyl methacrylate	50.0	52.9		ug/L		106	68 - 130
Hexachlorobutadiene	50.0	73.5	*+	ug/L		147	53 - 140
2-Hexanone	200	241		ug/L		120	65 - 137
Isopropylbenzene	50.0	55.6		ug/L		111	70 - 130
Methylene bromide	50.0	50.5		ug/L		101	70 - 130
Methylene Chloride	50.0	67.4		ug/L		135	66 - 135
4-Methyl-2-pentanone (MIBK)	200	173		ug/L		86	69 - 138
Methyl tert-butyl ether	50.0	52.5		ug/L		105	66 - 130
m-Xylene & p-Xylene	50.0	51.7		ug/L		103	70 - 130
Naphthalene	50.0	50.2		ug/L		100	47 - 149
n-Butylbenzene	50.0	53.8		ug/L		108	67 - 130
N-Propylbenzene	50.0	55.2		ug/L		110	70 - 130
o-Chlorotoluene	50.0	51.2		ug/L		102	70 - 130
o-Xylene	50.0	51.7		ug/L		103	70 - 130
p-Chlorotoluene	50.0	49.3		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	54.4		ug/L		109	65 - 130
sec-Butylbenzene	50.0	52.8		ug/L		106	66 - 130
Styrene	50.0	51.7		ug/L		103	70 - 130
tert-Butylbenzene	50.0	50.5		ug/L		101	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.6		ug/L		111	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.9		ug/L		96	70 - 131
Tetrachloroethene	50.0	61.9		ug/L		124	65 - 130
Toluene	50.0	52.6		ug/L		105	70 - 130
trans-1,2-Dichloroethene	50.0	52.7		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	48.9		ug/L		98	63 - 130
1,2,3-Trichlorobenzene	50.0	65.1		ug/L		130	60 - 138
1,2,4-Trichlorobenzene	50.0	65.4		ug/L		131	60 - 140
1,1,1-Trichloroethane	50.0	46.3		ug/L		93	68 - 130
1,1,2-Trichloroethane	50.0	51.6		ug/L		103	70 - 130
Trichloroethene	50.0	59.9		ug/L		120	70 - 130
Trichlorofluoromethane	50.0	43.6		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-540044/1002
Matrix: Water
Analysis Batch: 540044

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	44.1		ug/L		88	70 - 130
1,2,4-Trimethylbenzene	50.0	49.8		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	50.0	50.0		ug/L		100	69 - 130
Vinyl acetate	100	118		ug/L		118	26 - 160
Vinyl chloride	50.0	42.1		ug/L		84	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*72 - 119*
Dibromofluoromethane	*96*		*75 - 126*
Toluene-d8 (Surr)	*104*		*64 - 132*

Lab Sample ID: MB 400-540400/4
Matrix: Water
Analysis Batch: 540400

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/22/21 08:15	1
Acrolein	ND		20	10	ug/L			07/22/21 08:15	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 08:15	1
Benzene	ND		1.0	0.38	ug/L			07/22/21 08:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 08:15	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 08:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 08:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 08:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/22/21 08:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 08:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/21 08:15	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 08:15	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 08:15	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 08:15	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 08:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 08:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 08:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 08:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:15	1

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

Lab Sample ID: MB 400-540400/4
Matrix: Water
Analysis Batch: 540400

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 08:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 08:15	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 08:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/22/21 08:15	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 08:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 08:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 08:15	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/22/21 08:15	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/22/21 08:15	1
Naphthalene	ND		1.0	1.0	ug/L			07/22/21 08:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/21 08:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/21 08:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 08:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/21 08:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 08:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/21 08:15	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/22/21 08:15	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 08:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/21 08:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 08:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 08:15	1
Toluene	ND		1.0	0.41	ug/L			07/22/21 08:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 08:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 08:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 08:15	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 08:15	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 08:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/21 08:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/21 08:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/21 08:15	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 08:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/21 08:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/22/21 08:15*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/22/21 08:15*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/22/21 08:15*	*1*

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

Lab Sample ID: LCS 400-540400/1002
Matrix: Water
Analysis Batch: 540400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	387	*+	ug/L		194	43 - 160
Acrolein	500	571		ug/L		114	38 - 160
Acrylonitrile	500	383		ug/L		77	64 - 142
Benzene	50.0	49.9		ug/L		100	70 - 130
Bromobenzene	50.0	50.4		ug/L		101	70 - 132
Bromochloromethane	50.0	52.2		ug/L		104	70 - 130
Bromodichloromethane	50.0	44.3		ug/L		89	67 - 133
Bromoform	50.0	46.9		ug/L		94	57 - 140
Bromomethane	50.0	61.4		ug/L		123	10 - 160
2-Butanone (MEK)	200	404	*+	ug/L		202	61 - 145
Carbon disulfide	50.0	50.4		ug/L		101	61 - 137
Carbon tetrachloride	50.0	45.1		ug/L		90	61 - 137
Chlorobenzene	50.0	49.9		ug/L		100	70 - 130
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
Chloroethane	50.0	48.9		ug/L		98	55 - 141
2-Chloroethyl vinyl ether	50.0	27.6		ug/L		55	10 - 160
Chloroform	50.0	45.7		ug/L		91	69 - 130
1-Chlorohexane	50.0	38.7		ug/L		77	69 - 130
Chloromethane	50.0	30.4		ug/L		61	58 - 137
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	49.6		ug/L		99	69 - 132
1,2-Dichlorobenzene	50.0	50.9		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	54.4		ug/L		109	70 - 130
1,4-Dichlorobenzene	50.0	53.8		ug/L		108	70 - 130
Dichlorodifluoromethane	50.0	27.2		ug/L		54	41 - 146
1,1-Dichloroethane	50.0	43.5		ug/L		87	70 - 130
1,2-Dichloroethane	50.0	39.3		ug/L		79	69 - 130
1,1-Dichloroethene	50.0	48.3		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	44.0		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	46.5		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	44.5		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	48.2		ug/L		96	70 - 130
Ethylbenzene	50.0	46.8		ug/L		94	70 - 130
Ethyl methacrylate	50.0	49.9		ug/L		100	68 - 130
Hexachlorobutadiene	50.0	64.8		ug/L		130	53 - 140
2-Hexanone	200	244		ug/L		122	65 - 137
Isopropylbenzene	50.0	48.3		ug/L		97	70 - 130
Methylene bromide	50.0	49.3		ug/L		99	70 - 130
Methylene Chloride	50.0	52.5		ug/L		105	66 - 135
4-Methyl-2-pentanone (MIBK)	200	169		ug/L		84	69 - 138
Methyl tert-butyl ether	50.0	52.1		ug/L		104	66 - 130
m-Xylene & p-Xylene	50.0	45.6		ug/L		91	70 - 130
Naphthalene	50.0	47.5		ug/L		95	47 - 149
n-Butylbenzene	50.0	45.6		ug/L		91	67 - 130
N-Propylbenzene	50.0	47.4		ug/L		95	70 - 130
o-Chlorotoluene	50.0	43.4		ug/L		87	70 - 130
o-Xylene	50.0	45.3		ug/L		91	70 - 130
p-Chlorotoluene	50.0	42.4		ug/L		85	70 - 130

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

Lab Sample ID: LCS 400-540400/1002
Matrix: Water
Analysis Batch: 540400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	46.3		ug/L		93	65 - 130
sec-Butylbenzene	50.0	44.0		ug/L		88	66 - 130
Styrene	50.0	46.7		ug/L		93	70 - 130
tert-Butylbenzene	50.0	41.8		ug/L		84	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.8		ug/L		100	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.1		ug/L		88	70 - 131
Tetrachloroethene	50.0	54.6		ug/L		109	65 - 130
Toluene	50.0	45.9		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	44.9		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	60.2		ug/L		120	60 - 138
1,2,4-Trichlorobenzene	50.0	59.1		ug/L		118	60 - 140
1,1,1-Trichloroethane	50.0	42.7		ug/L		85	68 - 130
1,1,2-Trichloroethane	50.0	47.2		ug/L		94	70 - 130
Trichloroethene	50.0	55.6		ug/L		111	70 - 130
Trichlorofluoromethane	50.0	45.6		ug/L		91	65 - 138
1,2,3-Trichloropropane	50.0	42.9		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	42.4		ug/L		85	70 - 130
1,3,5-Trimethylbenzene	50.0	42.4		ug/L		85	69 - 130
Vinyl acetate	100	133		ug/L		133	26 - 160
Vinyl chloride	50.0	43.0		ug/L		86	59 - 136
Xylenes, Total	100	90.9		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: MB 400-540128/1-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
Benzenethiol	ND		10	1.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
Benzoic acid	ND		30	7.3	ug/L		07/20/21 13:40	07/23/21 09:53	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/21 13:40	07/23/21 09:53	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/21 13:40	07/23/21 09:53	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/21 13:40	07/23/21 09:53	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/21 13:40	07/23/21 09:53	1

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

Lab Sample ID: MB 400-540128/1-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:40	07/23/21 09:53	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
Indene	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/21 13:40	07/23/21 09:53	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/21 13:40	07/23/21 09:53	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/21 13:40	07/23/21 09:53	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/21 13:40	07/23/21 09:53	1
Phenol	ND		10	2.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
Pyridine	ND		10	3.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
Quinoline	ND		10	4.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/21 13:40	07/23/21 09:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*46 - 124*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
2-Fluorophenol	*23*		*13 - 113*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
Nitrobenzene-d5	*55*		*36 - 126*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
Phenol-d5	*40*		*17 - 127*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
Terphenyl-d14	*52*		*44 - 149*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
2,4,6-Tribromophenol	*46*		*26 - 150*	*07/20/21 13:40*	*07/23/21 09:53*	*1*

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

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	127		ug/L		106	21 - 120
Benzoic acid	502	565		ug/L		113	10 - 144
Benzyl alcohol	120	124		ug/L		103	28 - 120
Bis(2-chloroethoxy)methane	120	122		ug/L		102	47 - 120
Bis(2-chloroethyl)ether	120	121		ug/L		101	44 - 120
bis (2-chloroisopropyl) ether	120	122		ug/L		102	33 - 121
Bis(2-ethylhexyl) phthalate	120	144		ug/L		120	52 - 147
4-Bromophenyl phenyl ether	120	135		ug/L		113	54 - 122
Butyl benzyl phthalate	120	127		ug/L		106	54 - 133
4-Chloroaniline	120	112		ug/L		94	26 - 120
4-Chloro-3-methylphenol	120	126		ug/L		105	48 - 131
2-Chloronaphthalene	120	125		ug/L		104	52 - 121
2-Chlorophenol	120	108		ug/L		90	40 - 120
4-Chlorophenyl phenyl ether	120	132		ug/L		110	56 - 125
Dibenz[a,h]acridine	120	158		ug/L		132	31 - 150
Dibenzofuran	120	130		ug/L		108	56 - 122
3,3'-Dichlorobenzidine	160	201		ug/L		126	36 - 132
2,4-Dichlorophenol	120	117		ug/L		98	49 - 120
Diethyl phthalate	120	134		ug/L		111	50 - 137
2,4-Dimethylphenol	120	129		ug/L		107	48 - 120
Dimethyl phthalate	120	132		ug/L		110	57 - 124
Di-n-butyl phthalate	120	137		ug/L		114	58 - 126
4,6-Dinitro-ortho-cresol	240	243		ug/L		101	23 - 148
2,4-Dinitrophenol	240	277		ug/L		116	10 - 150
2,4-Dinitrotoluene	120	132		ug/L		110	54 - 142
2,6-Dinitrotoluene	120	134		ug/L		112	55 - 130
Di-n-octyl phthalate	120	154		ug/L		128	57 - 138
1,4-Dioxane	120	88.0		ug/L		73	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	134		ug/L		111	45 - 124
Hexachlorobenzene	120	130		ug/L		109	52 - 129
Hexachlorocyclopentadiene	120	102		ug/L		85	10 - 134
Hexachloroethane	120	110		ug/L		91	20 - 120
Indene	120	127		ug/L		106	49 - 120
Isophorone	120	126		ug/L		105	48 - 120
2-Methylphenol	120	124		ug/L		103	46 - 124
3 & 4 Methylphenol	120	127		ug/L		106	45 - 120
2-Nitroaniline	120	135		ug/L		112	51 - 145
3-Nitroaniline	120	121		ug/L		101	37 - 127
4-Nitroaniline	120	135		ug/L		113	36 - 137
Nitrobenzene	120	116		ug/L		96	45 - 120
2-Nitrophenol	120	120		ug/L		100	40 - 124
4-Nitrophenol	240	232		ug/L		97	23 - 146
N-Nitrosodimethylamine	120	118		ug/L		99	29 - 137
N-Nitrosodi-n-propylamine	120	137		ug/L		114	45 - 120
N-Nitrosodiphenylamine	119	137		ug/L		115	54 - 120
Pentachlorophenol	240	262		ug/L		109	31 - 130
Phenol	120	116		ug/L		96	11 - 120
Pyridine	240	203		ug/L		85	16 - 120

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

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	141		ug/L		118	49 - 130
2,4,5-Trichlorophenol	120	121		ug/L		101	51 - 136
2,4,6-Trichlorophenol	120	119		ug/L		99	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*109*		*46 - 124*
2-Fluorophenol	*83*		*13 - 113*
Nitrobenzene-d5	*106*		*36 - 126*
Phenol-d5	*97*		*17 - 127*
Terphenyl-d14	*95*		*44 - 149*
2,4,6-Tribromophenol	*105*		*26 - 150*

Lab Sample ID: LCS 400-540128/4-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	3.91	J *-	ug/L		3	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*46 - 124*
2-Fluorophenol	*34*		*13 - 113*
Nitrobenzene-d5	*43*		*36 - 126*
Phenol-d5	*43*		*17 - 127*
Terphenyl-d14	*40*	*S1-*	*44 - 149*
2,4,6-Tribromophenol	*41*		*26 - 150*

Lab Sample ID: LCSD 400-540128/3-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	143		ug/L		119	21 - 120	12	30
Benzoic acid	502	527		ug/L		105	10 - 144	7	30
Benzyl alcohol	120	124		ug/L		103	28 - 120	0	30
Bis(2-chloroethoxy)methane	120	124		ug/L		103	47 - 120	2	30
Bis(2-chloroethyl)ether	120	105		ug/L		88	44 - 120	14	30
bis (2-chloroisopropyl) ether	120	120		ug/L		100	33 - 121	1	30
Bis(2-ethylhexyl) phthalate	120	140		ug/L		116	52 - 147	3	30
4-Bromophenyl phenyl ether	120	129		ug/L		107	54 - 122	5	30
Butyl benzyl phthalate	120	126		ug/L		105	54 - 133	1	30
4-Chloroaniline	120	108		ug/L		90	26 - 120	4	30
4-Chloro-3-methylphenol	120	129		ug/L		108	48 - 131	2	30
2-Chloronaphthalene	120	127		ug/L		106	52 - 121	1	30
2-Chlorophenol	120	107		ug/L		89	40 - 120	1	30
4-Chlorophenyl phenyl ether	120	133		ug/L		111	56 - 125	1	30
Dibenz[a,h]acridine	120	146		ug/L		122	31 - 150	8	30
Dibenzofuran	120	132		ug/L		110	56 - 122	1	30

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

Lab Sample ID: LCSD 400-540128/3-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	160	197		ug/L		123	36 - 132	2	30
2,4-Dichlorophenol	120	120		ug/L		100	49 - 120	3	30
Diethyl phthalate	120	135		ug/L		112	50 - 137	1	30
2,4-Dimethylphenol	120	129		ug/L		107	48 - 120	0	30
Dimethyl phthalate	120	133		ug/L		111	57 - 124	1	30
Di-n-butyl phthalate	120	137		ug/L		114	58 - 126	0	30
4,6-Dinitro-ortho-cresol	240	245		ug/L		102	23 - 148	1	30
2,4-Dinitrophenol	240	284		ug/L		118	10 - 150	2	30
2,4-Dinitrotoluene	120	134		ug/L		112	54 - 142	2	30
2,6-Dinitrotoluene	120	135		ug/L		113	55 - 130	1	30
Di-n-octyl phthalate	120	150		ug/L		125	57 - 138	2	30
1,4-Dioxane	120	87.3		ug/L		73	31 - 120	1	30
1,2-Diphenylhydrazine (as Azobenzene)	120	130		ug/L		108	45 - 124	3	30
Hexachlorobenzene	120	128		ug/L		107	52 - 129	2	30
Hexachlorocyclopentadiene	120	111		ug/L		93	10 - 134	8	30
Hexachloroethane	120	107		ug/L		89	20 - 120	3	30
Indene	120	126		ug/L		105	49 - 120	0	30
Isophorone	120	125		ug/L		105	48 - 120	0	30
2-Methylphenol	120	125		ug/L		105	46 - 124	1	30
3 & 4 Methylphenol	120	127		ug/L		106	45 - 120	0	30
2-Nitroaniline	120	135		ug/L		112	51 - 145	0	30
3-Nitroaniline	120	119		ug/L		99	37 - 127	2	30
4-Nitroaniline	120	134		ug/L		112	36 - 137	1	30
Nitrobenzene	120	117		ug/L		97	45 - 120	1	30
2-Nitrophenol	120	124		ug/L		104	40 - 124	4	30
4-Nitrophenol	240	233		ug/L		97	23 - 146	0	30
N-Nitrosodimethylamine	120	117		ug/L		97	29 - 137	1	30
N-Nitrosodi-n-propylamine	120	136		ug/L		114	45 - 120	0	30
N-Nitrosodiphenylamine	119	130		ug/L		109	54 - 120	5	30
Pentachlorophenol	240	259		ug/L		108	31 - 130	1	30
Phenol	120	116		ug/L		97	11 - 120	1	30
Pyridine	240	201		ug/L		84	16 - 120	1	30
Quinoline	120	141		ug/L		118	49 - 130	0	30
2,4,5-Trichlorophenol	120	123		ug/L		103	51 - 136	2	30
2,4,6-Trichlorophenol	120	123		ug/L		103	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*110*		*46 - 124*
2-Fluorophenol	*75*		*13 - 113*
Nitrobenzene-d5	*104*		*36 - 126*
Phenol-d5	*97*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*108*		*26 - 150*

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

Lab Sample ID: LCSD 400-540128/5-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol			120	4.04	J *-	ug/L		3	10 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*47*		*46 - 124*
2-Fluorophenol	*36*		*13 - 113*
Nitrobenzene-d5	*41*		*36 - 126*
Phenol-d5	*43*		*17 - 127*
Terphenyl-d14	*37*	*S1-*	*44 - 149*
2,4,6-Tribromophenol	*41*		*26 - 150*

Lab Sample ID: MB 400-541252/1-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541252

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/28/21 11:06	07/30/21 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*46 - 124*	*07/28/21 11:06*	*07/30/21 14:04*	*1*
2-Fluorophenol	*28*		*13 - 113*	*07/28/21 11:06*	*07/30/21 14:04*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*07/28/21 11:06*	*07/30/21 14:04*	*1*
Phenol-d5	*51*		*17 - 127*	*07/28/21 11:06*	*07/30/21 14:04*	*1*
Terphenyl-d14	*71*		*44 - 149*	*07/28/21 11:06*	*07/30/21 14:04*	*1*
2,4,6-Tribromophenol	*63*		*26 - 150*	*07/28/21 11:06*	*07/30/21 14:04*	*1*

Lab Sample ID: LCS 400-541252/2-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541252

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate			120	108		ug/L		90	52 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*46 - 124*
2-Fluorophenol	*40*		*13 - 113*
Nitrobenzene-d5	*75*		*36 - 126*
Phenol-d5	*55*		*17 - 127*
Terphenyl-d14	*69*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Lab Sample ID: LCSD 400-541252/3-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541252

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate			120	118		ug/L		99	52 - 147	9	30

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

Lab Sample ID: LCSD 400-541252/3-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541252

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	80		46 - 124
2-Fluorophenol	69		13 - 113
Nitrobenzene-d5	71		36 - 126
Phenol-d5	71		17 - 127
Terphenyl-d14	73		44 - 149
2,4,6-Tribromophenol	86		26 - 150

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-540128/1-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/20/21 13:40	07/22/21 20:01	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/20/21 13:40	07/22/21 20:01	1
Anthracene	ND		0.20	0.032	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/20/21 13:40	07/22/21 20:01	1
Chrysene	ND		0.20	0.074	ug/L		07/20/21 13:40	07/22/21 20:01	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/20/21 13:40	07/22/21 20:01	1
Fluoranthene	ND		0.20	0.068	ug/L		07/20/21 13:40	07/22/21 20:01	1
Fluorene	ND		0.20	0.11	ug/L		07/20/21 13:40	07/22/21 20:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/20/21 13:40	07/22/21 20:01	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/20/21 13:40	07/22/21 20:01	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/20/21 13:40	07/22/21 20:01	1
Phenanthrene	ND		0.20	0.036	ug/L		07/20/21 13:40	07/22/21 20:01	1
Pyrene	ND		0.20	0.040	ug/L		07/20/21 13:40	07/22/21 20:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	88		15 - 122	07/20/21 13:40	07/22/21 20:01	1
Nitrobenzene-d5	83		19 - 130	07/20/21 13:40	07/22/21 20:01	1
Terphenyl-d14	90		33 - 138	07/20/21 13:40	07/22/21 20:01	1

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	98.1		ug/L		82	41 - 120
Acenaphthylene	120	103		ug/L		86	44 - 120
Anthracene	120	110		ug/L		92	49 - 120
Benzo[a]anthracene	120	107		ug/L		89	61 - 135
Benzo[a]pyrene	120	119		ug/L		99	52 - 120
Benzo[b]fluoranthene	120	129		ug/L		107	53 - 134

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[g,h,i]perylene	120	102		ug/L		85	47 - 133
Benzo[k]fluoranthene	120	118		ug/L		98	57 - 134
Chrysene	120	100		ug/L		83	55 - 122
Dibenz(a,h)anthracene	120	113		ug/L		95	48 - 146
Fluoranthene	120	108		ug/L		90	54 - 128
Fluorene	120	110		ug/L		92	45 - 125
Indeno[1,2,3-cd]pyrene	120	103		ug/L		85	43 - 142
1-Methylnaphthalene	120	96.3		ug/L		80	41 - 120
2-Methylnaphthalene	120	103		ug/L		86	32 - 124
Phenanthrene	120	112		ug/L		93	48 - 120
Pyrene	120	100		ug/L		84	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*15 - 122*
Nitrobenzene-d5	*96*		*19 - 130*
Terphenyl-d14	*82*		*33 - 138*

Lab Sample ID: LCSD 400-540128/3-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	104		ug/L		86	41 - 120	6	56
Acenaphthylene	120	112		ug/L		94	44 - 120	9	56
Anthracene	120	94.5		ug/L		79	49 - 120	15	51
Benzo[a]anthracene	120	98.6		ug/L		82	61 - 135	8	49
Benzo[a]pyrene	120	110		ug/L		92	52 - 120	8	50
Benzo[b]fluoranthene	120	114		ug/L		95	53 - 134	12	54
Benzo[g,h,i]perylene	120	97.4		ug/L		81	47 - 133	5	50
Benzo[k]fluoranthene	120	97.0		ug/L		81	57 - 134	19	52
Chrysene	120	105		ug/L		87	55 - 122	4	50
Dibenz(a,h)anthracene	120	100		ug/L		84	48 - 146	12	50
Fluoranthene	120	104		ug/L		87	54 - 128	4	52
Fluorene	120	117		ug/L		97	45 - 125	6	56
Indeno[1,2,3-cd]pyrene	120	99.0		ug/L		82	43 - 142	4	51
1-Methylnaphthalene	120	95.7		ug/L		80	41 - 120	1	55
2-Methylnaphthalene	120	101		ug/L		85	32 - 124	1	57
Phenanthrene	120	101		ug/L		84	48 - 120	10	56
Pyrene	120	88.7		ug/L		74	48 - 132	12	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*88*		*19 - 130*
Terphenyl-d14	*83*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-541070/1-A
Matrix: Water
Analysis Batch: 541126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541070

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/27/21 10:34	07/27/21 15:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/27/21 10:34	07/27/21 15:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*	*p*	*51 - 149*	*07/27/21 10:34*	*07/27/21 15:08*	*1*

Lab Sample ID: LCS 400-541070/2-A
Matrix: Water
Analysis Batch: 541126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541070

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.110		ug/L		109	60 - 140
1,2-Dibromoethane	0.101	0.104		ug/L		104	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/14/21
PO #	GSAP Project ID	PAGE: 1 of 2
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F
E DF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington
PHONE NO: 314-802-1171; 314-449-2913; 314-802-1122
E MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com
AECOM Other ID:
SAMPLER NAME(S) (Print): Tony Jones, Aaron Oliver
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

400-206012 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071421-8011-A	7/14/2021	0000	Water	2					2		X		
	TB-ROX-071421-8260-A	7/14/2021	0000	Water	2					2	X			
	MW5-ROX-071421	7/14/2021	0850	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-071421	7/14/2021	0940	Water	6			2		8	X	X	X	X
	MW2-ROX-071421-EB	7/14/2021	1000	Water	6			2		8	X	X	X	X
	MW2-ROX-071421	7/14/2021	1045	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-071421	7/14/2021	1205	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-071421-Dup	7/14/2021	1205	Water	6			2		8	X	X	X	X

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	FEDEX: 949566012794, 949566012809 949566012810	7/14/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-15-21	Time: 9:20

CUSTODY SEALS: 1013806, 1013807, 1013808, 1013809, 1013810, 10138011

2.9°, 4.2°, 3.2° IR8

Version: 2Apr21

Page 69 of 96

7/30/2021

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL	
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES	
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES		

Print Bill To Contact Name:	Wendy Pennington
PO #	60648474 – 3.2.3F
PlaNet Site or Project ID	25278
GSAP Project ID	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/14/21

PAGE: 2 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Other ID

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071421-8011-B	7/14/2021	0000	Water	2					2		X		
	TB-ROX-071421-8260-B	7/14/2021	0000	Water	2					2	X			
	P74-ROX-071421-EB	7/14/2021	0815	Water	6			2		8	X	X	X	X
	P74-ROX-071421	7/14/2021	1030	Water	6			2		8	X	X	X	X
	P56-ROX-071421	7/14/2021	1145	Water	6			2		8	X	X	X	X
	P57-ROX-071421	7/14/2021	1230	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	FEDEX: see page 1	7/14/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date 7-15-21	Time 9:20

CUSTODY SEALS: see page 1

2.9c, 4.2c, 3.2c IRB

Version: 2Apr21

Page 84 of 86

7/30/2021

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-206012-1

Login Number: 206012
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9°C, 4.2°C, 3.2°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206012-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-206046-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/20/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-071521-8011-A	TB-ROX-071521-8260-A
MW28-ROX-071521	ROST4PZE-ROX-071521
MW22-ROX-071521	MW22-ROX-071521-Dup
TB-ROX-071521-8011-B	TB-ROX-071521-8260-B
P93A-ROX-071521	P93A-ROX-071521-Dup
T12-ROX-071521	P59-ROX-071521

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated methylene chloride was detected in the method blank. Several VOC and benzenthiol LCS/LCSD recoveries were outside evaluation criteria. The SVOC surrogate for terphenyl-d_{14} was outside criteria in the LCS/LCSD. Several VOC MS/MSD recoveries were outside evaluation criteria in samples MW28-ROX-071521 and P93A-ROX-071521. The SVOC internal standard recovery for phenanthrene-d_{10} was outside criteria in the LCSD. Several samples were diluted to bring VOCs into calibration range of the instrument. The continuing calibration verification for 4,6-dinitro-ortho-cresol was outside acceptance criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form indicated the COC initially incorrectly identified field duplicate pair P93A-ROX-071521/P93A-ROX-071521-Dup; AECOM issued a corrected COC on July 19, 2021. No qualification of data was required.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MB 400-541380/4	VOCs	Methylene chloride	6.68 µg/L

Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. No qualification of data was required.

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-540400/1002	VOCs	Acetone	**194**	NA	43-160
LCS 400-540400/1002	VOCs	2-Butanone (MEK)	**202**	NA	61-145
LCS 400-540597/1002	VOCs	Acetone	**213**	NA	43-160
LCS 400-540597/1002	VOCs	2-Butanone (MEK)	**219**	NA	61-145
LCS 400-541380/1002	VOCs	Acetone	**216**	NA	43-160
LCS 400-541380/1002	VOCs	1-Cyclohexane	**141**	NA	69-130
LCS 400-541380/1002	VOCs	2-Hexanone	**186**	NA	65-137
LCS/LCSD 400-540128/4-A/5-A	SVOCs	Benzenethiol	**3/3**	3	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-540128/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW28-ROX-071521	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-071521	SVOCs	Benzenethiol	**UJ**
MW22-ROX-071521	SVOCs	Benzenethiol	**UJ**
MW22-ROX-071521-Dup	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-071421-Dup	SVOCs	Benzenethiol	**UJ**
P93A-ROX-071521	SVOCs	Benzenethiol	**UJ**
P93A-ROX-071521-Dup	SVOCs	Benzenethiol	**UJ**
T12-ROX-071521	SVOCs	Benzenethiol	**UJ**
P59-ROX-071521	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-540128/4-A	SVOCs	Terphenyl-d_{14}	**40**	44-149
LCSD 400-540128/5-A	SVOCs	Terphenyl-d_{14}	**37**	44-149

LCS/LCSDs are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

Yes, although not requested, samples MW28-ROX-071521 and P93A-ROX-071521 were spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW28-ROX-071521	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW28-ROX-071521	VOCs	1,2,3-Trichloropropane	81/**54**	**40**	65-133/30
P93A-ROX-071521	VOCs	Acetone	101/**40**	**86**	43-150/30
P93A-ROX-071521	VOCs	Acrolein	121/45	**92**	38-150/31
P93A-ROX-071521	VOCs	Acrylonitrile	120/**47**	**87**	62-149/30
P93A-ROX-071521	VOCs	Benzene	70/**22**	**34**	56-142/30
P93A-ROX-071521	VOCs	Bromobenzene	87/**33**	**91**	59-136/30
P93A-ROX-071521	VOCs	Bromochloromethane	91/**35**	**88**	64-140/30
P93A-ROX-071521	VOCs	Bromodichloromethane	78/**30**	**89**	59-143/30
P93A-ROX-071521	VOCs	Bromoform	88/**33**	**92**	50-140/30
P93A-ROX-071521	VOCs	Bromomethane	74/25	**98**	10-150/50
P93A-ROX-071521	VOCs	2-Butanone (MEK)	89/**37**	**83**	55-150/30
P93A-ROX-071521	VOCs	Carbon disulfide	77/**25**	**102**	48-150/30
P93A-ROX-071521	VOCs	Carbon tetrachloride	74/**26**	**96**	55-145/30

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P93A-ROX-071521	VOCs	Chlorobenzene	88/**33**	**92**	64-130/30
P93A-ROX-071521	VOCs	Dibromochloromethane	89/**33**	**91**	56-143/30
P93A-ROX-071521	VOCs	Chloroethane	78/**21**	**115**	50-150/30
P93A-ROX-071521	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
P93A-ROX-071521	VOCs	Chloroform	80/**31**	**88**	60-141/30
P93A-ROX-071521	VOCs	1-Chlorohexane	94/**34**	**95**	56-136/30
P93A-ROX-071521	VOCs	Chloromethane	86/**20**	**124**	49-148/31
P93A-ROX-071521	VOCs	cis-1,2-Dichloroethene	93/**35**	**91**	59-143/30
P93A-ROX-071521	VOCs	cis-1,3-Dichloropropene	78/**29**	**91**	57-140/30
P93A-ROX-071521	VOCs	1,2-Dichlorobenzene	85/**31**	**93**	52-137/30
P93A-ROX-071521	VOCs	1,3-Dichlorobenzene	81/**30**	**93**	54-135/30
P93A-ROX-071521	VOCs	1,4-Dichlorobenzene	81/**29**	**94**	53-135/30
P93A-ROX-071521	VOCs	Dichlorodifluoromethane	59/**12**	**133**	16-150/31
P93A-ROX-071521	VOCs	1,1-Dichloroethane	91/**34**	**90**	61-144/30
P93A-ROX-071521	VOCs	1,2-Dichloroethane	96/**40**	**83**	60-141/30
P93A-ROX-071521	VOCs	1,1-Dichloroethene	78/**27**	**98**	54-147/30
P93A-ROX-071521	VOCs	1,2-Dichloropropane	92/**36**	**88**	66-137/30
P93A-ROX-071521	VOCs	1,3-Dichloropropane	92/**36**	**88**	66-133/30
P93A-ROX-071521	VOCs	2,2-Dichloropropane	59/**22**	**92**	42-144/31
P93A-ROX-071521	VOCs	1,1-Dichloropropene	80/**28**	**95**	65-136/30
P93A-ROX-071521	VOCs	Ethylbenzene	79/**29**	**94**	58-131/30
P93A-ROX-071521	VOCs	Ethyl methacrylate	90/**35**	**88**	64-130/30
P93A-ROX-071521	VOCs	Hexachlorobutadiene	75/**25**	**101**	31-149/36
P93A-ROX-071521	VOCs	2-Hexanone	122/**48**	**88**	65-140/30
P93A-ROX-071521	VOCs	Isopropylbenzene	79/**27**	**97**	56-133/30

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P93A-ROX-071521	VOCs	Methylene bromide	86/**35**	**85**	63-138/30
P93A-ROX-071521	VOCs	Methylene Chloride	92/**38**	**83**	60-146/32
P93A-ROX-071521	VOCs	4-Methyl-2-pentanone (MIBK)	116/**48**	**84**	63-146/30
P93A-ROX-071521	VOCs	Methyl tert-butyl ether	82/**33**	**86**	59-137/30
P93A-ROX-071521	VOCs	m,p-Xylene	77/**27**	**96**	57-130/30
P93A-ROX-071521	VOCs	Naphthalene	90/36	**87**	25-150/30
P93A-ROX-071521	VOCs	n-Butylbenzene	73/**30**	**84**	41-142/31
P93A-ROX-071521	VOCs	n-Propylbenzene	76/**26**	**99**	51-138/30
P93A-ROX-071521	VOCs	o-Chlorotoluene	79/**33**	**81**	53-134/30
P93A-ROX-071521	VOCs	o-Xylene	79/**29**	**27**	61-130/30
P93A-ROX-071521	VOCs	p-Chlorotoluene	77/**27**	**96**	54-133/30
P93A-ROX-071521	VOCs	p-Isopropyltoluene	77/**25**	**102**	48-139/30
P93A-ROX-071521	VOCs	sec-Butylbenzene	77/**25**	**101**	50-138/30
P93A-ROX-071521	VOCs	Styrene	81/**30**	**93**	58-131/30
P93A-ROX-071521	VOCs	tert-Butylbenzene	76/**27**	**95**	54-146/30
P93A-ROX-071521	VOCs	1,1,1,2-Tetrachloroethane	84/**31**	**92**	59-137/30
P93A-ROX-071521	VOCs	1,1,2,2-Tetrachloroethane	99/**40**	**85**	66-135/30
P93A-ROX-071521	VOCs	Tetrachloroethene	77/**28**	**94**	52-133/30
P93A-ROX-071521	VOCs	Toluene	81/**30**	**92**	65-130/30
P93A-ROX-071521	VOCs	trans-1,2-Dichloroethene	82/**30**	**93**	61-143/30
P93A-ROX-071521	VOCs	trans-1,3-Dichloropropene	79/**29**	**93**	53-133/30
P93A-ROX-071521	VOCs	1,2,3-Trichlorobenzene	89/**34**	**89**	43-145/30
P93A-ROX-071521	VOCs	1,2,4-Trichlorobenzene	84/**31**	**93**	39-148/30
P93A-ROX-071521	VOCs	1,1,1-Trichloroethane	74/**27**	**92**	57-142/30
P93A-ROX-071521	VOCs	1,1,2-Trichloroethane	91/**36**	**87**	66-131/30

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P93A-ROX-071521	VOCs	Trichloroethene	86/**32**	**93**	64-136/30
P93A-ROX-071521	VOCs	Trichlorofluoromethane	72/**18**	**119**	54-150/30
P93A-ROX-071521	VOCs	1,2,3-Trichloropropane	104/**42**	**85**	65-133/30
P93A-ROX-071521	VOCs	1,2,4-Trimethylbenzene	80/**27**	**98**	50-139/30
P93A-ROX-071521	VOCs	1,3,5-Trimethylbenzene	80/**28**	**97**	52-135/30
P93A-ROX-071521	VOCs	Vinyl acetate	89/34	**90**	26-150/33
P93A-ROX-071521	VOCs	Vinyl chloride	78/**18**	**125**	46-150/30
P93A-ROX-071521	VOCs	Xylenes, total	78/**28**	**94**	59-130/30

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW28-ROX-071521	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW28-ROX-071521	VOCs	1,2,3-Trichloropropane	**UJ**
P93A-ROX-071521	VOCs	Acetone	**UJ**
P93A-ROX-071521	VOCs	Acrylonitrile	**UJ**
P93A-ROX-071521	VOCs	Benzene	**UJ**
P93A-ROX-071521	VOCs	Bromobenzene	**UJ**
P93A-ROX-071521	VOCs	Bromochloromethane	**UJ**
P93A-ROX-071521	VOCs	Bromodichloromethane	**UJ**
P93A-ROX-071521	VOCs	Bromoform	**UJ**
P93A-ROX-071521	VOCs	2-Butanone (MEK)	**UJ**
P93A-ROX-071521	VOCs	Carbon disulfide	**UJ**
P93A-ROX-071521	VOCs	Carbon tetrachloride	**UJ**
P93A-ROX-071521	VOCs	Chlorobenzene	**UJ**
P93A-ROX-071521	VOCs	Dibromochloromethane	**UJ**
P93A-ROX-071521	VOCs	Chloroethane	**UJ**
P93A-ROX-071521	VOCs	2-Chloroethyl vinyl ether	**UJ**
P93A-ROX-071521	VOCs	Chloroform	**UJ**
P93A-ROX-071521	VOCs	1-Chlorohexane	**UJ**
P93A-ROX-071521	VOCs	Chloromethane	**UJ**
P93A-ROX-071521	VOCs	cis-1,2-Dichloroethene	**UJ**
P93A-ROX-071521	VOCs	cis-1,3-Dichloropropene	**UJ**
P93A-ROX-071521	VOCs	1,2-Dichlorobenzene	**UJ**
P93A-ROX-071521	VOCs	1,3-Dichlorobenzene	**UJ**

Sample ID	Parameter	Analyte	Qualification
P93A-ROX-071521	VOCs	1,4-Dichlorobenzene	UJ
P93A-ROX-071521	VOCs	Dichlorodifluoromethane	UJ
P93A-ROX-071521	VOCs	1,1-Dichloroethane	UJ
P93A-ROX-071521	VOCs	1,2-Dichloroethane	UJ
P93A-ROX-071521	VOCs	1,1-Dichloroethene	UJ
P93A-ROX-071521	VOCs	1,2-Dichloropropane	UJ
P93A-ROX-071521	VOCs	1,3-Dichloropropane	UJ
P93A-ROX-071521	VOCs	2,2-Dichloropropane	UJ
P93A-ROX-071521	VOCs	1,1-Dichloropropene	UJ
P93A-ROX-071521	VOCs	Ethylbenzene	UJ
P93A-ROX-071521	VOCs	Ethyl methacrylate	UJ
P93A-ROX-071521	VOCs	Hexachlorobutadiene	UJ
P93A-ROX-071521	VOCs	2-Hexanone	UJ
P93A-ROX-071521	VOCs	Isopropylbenzene	UJ
P93A-ROX-071521	VOCs	Methylene bromide	UJ
P93A-ROX-071521	VOCs	Methylene Chloride	UJ
P93A-ROX-071521	VOCs	4-Methyl-2-pentanone (MIBK)	UJ
P93A-ROX-071521	VOCs	Methyl tert-butyl ether	UJ
P93A-ROX-071521	VOCs	m,p-Xylene	UJ
P93A-ROX-071521	VOCs	n-Butylbenzene	UJ
P93A-ROX-071521	VOCs	n-Propylbenzene	UJ
P93A-ROX-071521	VOCs	o-Chlorotoluene	UJ
P93A-ROX-071521	VOCs	o-Xylene	UJ
P93A-ROX-071521	VOCs	p-Chlorotoluene	UJ
P93A-ROX-071521	VOCs	p-Isopropyltoluene	UJ
P93A-ROX-071521	VOCs	sec-Butylbenzene	UJ
P93A-ROX-071521	VOCs	Styrene	UJ
P93A-ROX-071521	VOCs	tert-Butylbenzene	UJ
P93A-ROX-071521	VOCs	1,1,1,2-Tetrachloroethane	UJ
P93A-ROX-071521	VOCs	1,1,2,2-Tetrachloroethane	UJ
P93A-ROX-071521	VOCs	Tetrachloroethene	UJ
P93A-ROX-071521	VOCs	Toluene	UJ
P93A-ROX-071521	VOCs	trans-1,2-Dichloroethene	UJ
P93A-ROX-071521	VOCs	trans-1,3-Dichloropropene	UJ
P93A-ROX-071521	VOCs	1,2,3-Trichlorobenzene	UJ
P93A-ROX-071521	VOCs	1,2,4-Trichlorobenzene	UJ
P93A-ROX-071521	VOCs	1,1,1-Trichloroethane	UJ
P93A-ROX-071521	VOCs	1,1,2-Trichloroethane	UJ
P93A-ROX-071521	VOCs	Trichloroethene	UJ
P93A-ROX-071521	VOCs	Trichlorofluoromethane	UJ
P93A-ROX-071521	VOCs	1,2,3-Trichloropropane	UJ
P93A-ROX-071521	VOCs	1,2,4-Trimethylbenzene	UJ
P93A-ROX-071521	VOCs	1,3,5-Trimethylbenzene	UJ
P93A-ROX-071521	VOCs	Vinyl chloride	UJ
P93A-ROX-071521	VOCs	Xylenes, total	UJ

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
LCSD 400-540128/5-A	SVOCs	Phenanthrene-d_{10}	**2375278**	1074598	537299-2149196

LCS/LCSDs are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P93A-ROX-071521	P93A-ROX-071521-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for 4,6-dinitro-ortho-cresol was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW22-ROX-071521	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
MW22-ROX-071521-Dup	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P93A-ROX-071521	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P93A-ROX-071521-Dup	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
T12-ROX-071521	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-206046-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
7/30/2021 7:43:19 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

Reviewed 8/20/2021 MR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 6
Detection Summary 7
Client Sample Results 10
Definitions 48
Surrogate Summary 49
Method Summary 51
Chronicle 52
QC Association 59
QC Sample Results 62
Chain of Custody 87
Receipt Checklists 92
Certification Summary 93

Job ID: 400-206046-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-206046-1

Comments
No additional comments.

Receipt
The samples were received on 7/16/2021 9:47 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 3.2° C.

Receipt Exceptions

COC has sample ID as P93C, containers label P93A. P93A-ROX-071521 (400-206046-9) and P93A-ROX-071521-DUP (400-206046-10)

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-540400 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071521-8260-A (400-206046-2), MW28-ROX-071521 (400-206046-3), ROST4PZE-ROX-071521 (400-206046-4), MW22-ROX-071521 (400-206046-5), MW22-ROX-071521-DUP (400-206046-6), TB-ROX-071521-8260-B (400-206046-8), P93A-ROX-071521 (400-206046-9), P93A-ROX-071521-DUP (400-206046-10), T12-ROX-071521 (400-206046-11), P59-ROX-071521 (400-206046-12). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 400-540400 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-540400 was outside control limits. Sample matrix interference is suspected.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-540400 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-540400 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-540400 recovered outside control limits for the following analytes: 2-Butanone (MEK) and Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: ROST4PZE-ROX-071521 (400-206046-4) and T12-ROX-071521 (400-206046-11), P59-ROX-071521 (400-206046-12). Elevated reporting limits (RLs) are provided.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-540597 recovered above the upper control limit for Acetone and 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-540597 recovered outside control limits for the following analytes: Acetone and 2-Butanone (MEK). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 400-206046-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-541380 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-541380 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-541380 recovered above the upper control limit for 2-Hexanone and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-541380 recovered outside control limits for the following analytes: 1-Chlorohexane, 2-Hexanone and Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The method blank for analytical batch 400-541380 contained Methylene Chloride above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 400-541380 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-541380 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

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

GC/MS Semi VOA

Method 8270D: Internal standard (ISTD) response for Phenanthrene-d10 for the following sample was outside acceptance criteria: (LCSD 400-540128/5-A). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-540128 and analytical batch 400-540593 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540593 recovered outside acceptance criteria, low biased, for 4,6-Dinitro-2-methylphenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: (LCS 400-540128/4-A) and (LCSD 400-540128/5-A). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540930 recovered above the upper control limit for Quinoline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-541352 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Job ID: 400-206046-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-206046-1	TB-ROX-071521-8011-A	Water	07/15/21 00:00	07/16/21 09:47
400-206046-2	TB-ROX-071521-8260-A	Water	07/15/21 00:00	07/16/21 09:47
400-206046-3	MW28-ROX-071521	Water	07/15/21 09:10	07/16/21 09:47
400-206046-4	ROST4PZE-ROX-071521	Water	07/15/21 10:15	07/16/21 09:47
400-206046-5	MW22-ROX-071521	Water	07/15/21 11:30	07/16/21 09:47
400-206046-6	MW22-ROX-071521-DUP	Water	07/15/21 11:30	07/16/21 09:47
400-206046-7	TB-ROX-071521-8011-B	Water	07/15/21 00:00	07/16/21 09:47
400-206046-8	TB-ROX-071521-8260-B	Water	07/15/21 00:00	07/16/21 09:47
400-206046-9	P93A-ROX-071521	Water	07/15/21 09:40	07/16/21 09:47
400-206046-10	P93A-ROX-071521-DUP	Water	07/15/21 09:40	07/16/21 09:47
400-206046-11	T12-ROX-071521	Water	07/15/21 10:45	07/16/21 09:47
400-206046-12	P59-ROX-071521	Water	07/15/21 11:45	07/16/21 09:47

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: TB-ROX-071521-8011-A

Lab Sample ID: 400-206046-1

No Detections.

Client Sample ID: TB-ROX-071521-8260-A

Lab Sample ID: 400-206046-2

No Detections.

Client Sample ID: MW28-ROX-071521

Lab Sample ID: 400-206046-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.6		1.0	0.38	ug/L	1		8260B	Total/NA
Isopropylbenzene	1.0		1.0	0.53	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	73		1.0	0.74	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.3		1.0	0.70	ug/L	1		8260B	Total/NA
Benzoic acid	24	J	30	7.3	ug/L	1		8270D	Total/NA
Butyl benzyl phthalate	0.55	J	10	0.19	ug/L	1		8270D	Total/NA
Dibenz[a,h]acridine	2.5	J	10	1.0	ug/L	1		8270D	Total/NA
Di-n-octyl phthalate	2.5	J	10	0.17	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZE-ROX-071521

Lab Sample ID: 400-206046-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	60		2.0	0.76	ug/L	2		8260B	Total/NA
Ethylbenzene	380		2.0	1.0	ug/L	2		8260B	Total/NA
Isopropylbenzene	15		2.0	1.1	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene	420		10	3.2	ug/L	2		8260B	Total/NA
Naphthalene	130		2.0	2.0	ug/L	2		8260B	Total/NA
N-Propylbenzene	27		2.0	1.4	ug/L	2		8260B	Total/NA
o-Xylene	55		10	1.2	ug/L	2		8260B	Total/NA
sec-Butylbenzene	1.7	J	2.0	1.4	ug/L	2		8260B	Total/NA
Toluene	33		2.0	0.82	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene	150		2.0	1.6	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene	29		2.0	1.1	ug/L	2		8260B	Total/NA
Xylenes, Total	470		20	3.2	ug/L	2		8260B	Total/NA
Acenaphthene	1.7		0.19	0.031	ug/L	1		8270D LL	Total/NA
Acenaphthylene	0.26		0.19	0.043	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.074	J	0.19	0.066	ug/L	1		8270D LL	Total/NA
Fluorene	1.6		0.19	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	55		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	69		0.19	0.058	ug/L	1		8270D LL	Total/NA
Phenanthrene	5.6		0.19	0.035	ug/L	1		8270D LL	Total/NA
Pyrene	0.17	J	0.19	0.039	ug/L	1		8270D LL	Total/NA
Dibenzofuran	2.0	J	9.7	0.16	ug/L	1		8270D	Total/NA
2,4-Dimethylphenol	4.4	J	9.7	3.4	ug/L	1		8270D	Total/NA

Client Sample ID: MW22-ROX-071521

Lab Sample ID: 400-206046-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.71	J	1.0	0.38	ug/L	1		8260B	Total/NA
Ethylbenzene	10		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	4.3		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	13		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	7.5		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	6.4		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	1.6	J	5.0	0.60	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW22-ROX-071521 (Continued)

Lab Sample ID: 400-206046-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
p-Isopropyltoluene	0.81	J	1.0	0.71	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.95	J	1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	0.82	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	43		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	6.7		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	15		10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	1.5		0.19	0.070	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	1.1		0.19	0.057	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW22-ROX-071521-DUP

Lab Sample ID: 400-206046-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	11		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	5.0		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	16		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	9.1		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	8.1		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	1.9	J	5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.0		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	0.81	J	1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.66	J	1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	0.85	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	51		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	8.5		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	18		10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	1.5		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	1.2		0.19	0.057	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	0.58	J	9.5	0.23	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-071521-8011-B

Lab Sample ID: 400-206046-7

No Detections.

Client Sample ID: TB-ROX-071521-8260-B

Lab Sample ID: 400-206046-8

No Detections.

Client Sample ID: P93A-ROX-071521

Lab Sample ID: 400-206046-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	48	F1 F2	1.0	0.38	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.15	J	0.21	0.077	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.11	J	0.21	0.062	ug/L	1		8270D LL	Total/NA
Pyrene	0.046	J	0.21	0.041	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	1.0	J	10	0.25	ug/L	1		8270D	Total/NA
Phenol	3.5	J	10	2.7	ug/L	1		8270D	Total/NA

Client Sample ID: P93A-ROX-071521-DUP

Lab Sample ID: 400-206046-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	57		1.0	0.38	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.18	J	0.21	0.077	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.083	J	0.21	0.062	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.043	J	0.21	0.037	ug/L	1		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: T12-ROX-071521

Lab Sample ID: 400-206046-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2200		20	7.6	ug/L	20		8260B	Total/NA
Ethylbenzene	28		20	10	ug/L	20		8260B	Total/NA
m-Xylene & p-Xylene	170		100	32	ug/L	20		8260B	Total/NA
Naphthalene	31		20	20	ug/L	20		8260B	Total/NA
Toluene	64		20	8.2	ug/L	20		8260B	Total/NA
1,2,4-Trimethylbenzene	20		20	16	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene	14	J	20	11	ug/L	20		8260B	Total/NA
Xylenes, Total	180	J	200	32	ug/L	20		8260B	Total/NA
Acenaphthene	0.15	J	0.21	0.034	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	1.7		0.21	0.078	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.26		0.21	0.063	ug/L	1		8270D LL	Total/NA
2,4-Dimethylphenol	7.5	J	11	3.7	ug/L	1		8270D	Total/NA
Indene	3.5	J	11	1.1	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.8	J	21	0.41	ug/L	1		8270D	Total/NA
Phenol	230		11	2.7	ug/L	1		8270D	Total/NA

Client Sample ID: P59-ROX-071521

Lab Sample ID: 400-206046-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3400		20	7.6	ug/L	20		8260B	Total/NA
Ethylbenzene	300		20	10	ug/L	20		8260B	Total/NA
Isopropylbenzene	48		20	11	ug/L	20		8260B	Total/NA
m-Xylene & p-Xylene	290		100	32	ug/L	20		8260B	Total/NA
Naphthalene	150		20	20	ug/L	20		8260B	Total/NA
N-Propylbenzene	70		20	14	ug/L	20		8260B	Total/NA
o-Xylene	13	J	100	12	ug/L	20		8260B	Total/NA
Toluene	150		20	8.2	ug/L	20		8260B	Total/NA
1,2,4-Trimethylbenzene	140		20	16	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene	53		20	11	ug/L	20		8260B	Total/NA
Xylenes, Total	310		200	32	ug/L	20		8260B	Total/NA
Benzo[a]anthracene	0.12	J	0.21	0.047	ug/L	1		8270D LL	Total/NA
Chrysene	0.10	J	0.21	0.076	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	13		0.21	0.076	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	19		0.21	0.062	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.82		0.21	0.037	ug/L	1		8270D LL	Total/NA
Pyrene	0.30		0.21	0.041	ug/L	1		8270D LL	Total/NA
Benzoic acid	47		31	7.5	ug/L	1		8270D	Total/NA
2,4-Dimethylphenol	4.3	J	10	3.6	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.8	J	21	0.40	ug/L	1		8270D	Total/NA
Phenol	69		10	2.7	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: TB-ROX-071521-8011-A
Date Collected: 07/15/21 00:00
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/28/21 22:01	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/28/21 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*07/28/21 13:09*	*07/28/21 22:01*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: TB-ROX-071521-8260-A
Date Collected: 07/15/21 00:00
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/22/21 08:37	1
Acrolein	ND		20	10	ug/L			07/22/21 08:37	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 08:37	1
Benzene	ND		1.0	0.38	ug/L			07/22/21 08:37	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 08:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 08:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 08:37	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 08:37	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/22/21 08:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 08:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/21 08:37	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 08:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 08:37	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 08:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 08:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 08:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 08:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 08:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 08:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 08:37	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 08:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/22/21 08:37	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 08:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 08:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 08:37	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/22/21 08:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/22/21 08:37	1
Naphthalene	ND		1.0	1.0	ug/L			07/22/21 08:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/21 08:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/21 08:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 08:37	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/21 08:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 08:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/21 08:37	1

Client Sample ID: TB-ROX-071521-8260-A
Date Collected: 07/15/21 00:00
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/22/21 08:37	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 08:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/21 08:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 08:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 08:37	1
Toluene	ND		1.0	0.41	ug/L			07/22/21 08:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 08:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 08:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 08:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 08:37	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 08:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/21 08:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/21 08:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/21 08:37	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 08:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 08:37	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/21 08:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*72 - 119*		*07/22/21 08:37*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/22/21 08:37*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/22/21 08:37*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: MW28-ROX-071521
Date Collected: 07/15/21 09:10
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/22/21 09:23	1
Acrolein	ND		20	10	ug/L			07/22/21 09:23	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 09:23	1
Benzene	6.6		1.0	0.38	ug/L			07/22/21 09:23	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 09:23	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 09:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 09:23	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 09:23	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/22/21 09:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 09:23	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			07/22/21 09:23	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 09:23	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 09:23	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 09:23	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 09:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 09:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 09:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 09:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 09:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 09:23	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 09:23	1
Isopropylbenzene	1.0		1.0	0.53	ug/L			07/22/21 09:23	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 09:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 09:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 09:23	1
Methyl tert-butyl ether	73		1.0	0.74	ug/L			07/22/21 09:23	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/22/21 09:23	1
Naphthalene	ND		1.0	1.0	ug/L			07/22/21 09:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/21 09:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/21 09:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 09:23	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/21 09:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 09:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/21 09:23	1

Client Sample ID: MW28-ROX-071521
Date Collected: 07/15/21 09:10
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	2.3		1.0	0.70	ug/L			07/22/21 09:23	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 09:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/21 09:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 09:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 09:23	1
Toluene	ND		1.0	0.41	ug/L			07/22/21 09:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 09:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 09:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 09:23	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:23	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 09:23	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 09:23	1
1,2,3-Trichloropropane	ND	F2 F1 UJ	5.0	0.84	ug/L			07/22/21 09:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/21 09:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/21 09:23	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 09:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 09:23	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/21 09:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/22/21 09:23*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/22/21 09:23*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/22/21 09:23*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/20/21 13:41	07/22/21 23:46	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/20/21 13:41	07/22/21 23:46	1
Anthracene	ND		0.20	0.032	ug/L		07/20/21 13:41	07/22/21 23:46	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/20/21 13:41	07/22/21 23:46	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/20/21 13:41	07/22/21 23:46	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/20/21 13:41	07/22/21 23:46	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/20/21 13:41	07/22/21 23:46	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/20/21 13:41	07/22/21 23:46	1
Chrysene	ND		0.20	0.074	ug/L		07/20/21 13:41	07/22/21 23:46	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/20/21 13:41	07/22/21 23:46	1
Fluoranthene	ND		0.20	0.068	ug/L		07/20/21 13:41	07/22/21 23:46	1
Fluorene	ND		0.20	0.11	ug/L		07/20/21 13:41	07/22/21 23:46	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/20/21 13:41	07/22/21 23:46	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/20/21 13:41	07/22/21 23:46	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/20/21 13:41	07/22/21 23:46	1
Phenanthrene	ND		0.20	0.036	ug/L		07/20/21 13:41	07/22/21 23:46	1
Pyrene	ND		0.20	0.040	ug/L		07/20/21 13:41	07/22/21 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*15 - 122*	*07/20/21 13:41*	*07/22/21 23:46*	*1*
Nitrobenzene-d5	*74*		*19 - 130*	*07/20/21 13:41*	*07/22/21 23:46*	*1*

Client Sample ID: MW28-ROX-071521
Date Collected: 07/15/21 09:10
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*33 - 138*	*07/20/21 13:41*	*07/22/21 23:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/21 13:41	07/26/21 18:54	1
Benzenethiol	ND	UJ	10	1.7	ug/L		07/20/21 13:41	07/26/21 18:54	1
Benzoic acid	**24**	J	30	7.3	ug/L		07/20/21 13:41	07/26/21 18:54	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/21 13:41	07/26/21 18:54	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/21 13:41	07/26/21 18:54	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/21 13:41	07/26/21 18:54	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/21 13:41	07/26/21 18:54	1
Butyl benzyl phthalate	**0.55**	J	10	0.19	ug/L		07/20/21 13:41	07/26/21 18:54	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/21 13:41	07/26/21 18:54	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/21 13:41	07/26/21 18:54	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:41	07/26/21 18:54	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/26/21 18:54	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
Dibenz[a,h]acridine	**2.5**	J	10	1.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/21 13:41	07/26/21 18:54	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/21 13:41	07/26/21 18:54	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/21 13:41	07/26/21 18:54	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/21 13:41	07/26/21 18:54	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/21 13:41	07/26/21 18:54	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/21 13:41	07/26/21 18:54	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/21 13:41	07/26/21 18:54	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/21 13:41	07/26/21 18:54	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/26/21 18:54	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/26/21 18:54	1
Di-n-octyl phthalate	**2.5**	J	10	0.17	ug/L		07/20/21 13:41	07/26/21 18:54	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/21 13:41	07/26/21 18:54	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/21 13:41	07/26/21 18:54	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/21 13:41	07/26/21 18:54	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/26/21 18:54	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:41	07/26/21 18:54	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/21 13:41	07/26/21 18:54	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/21 13:41	07/26/21 18:54	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/21 13:41	07/26/21 18:54	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/21 13:41	07/26/21 18:54	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/21 13:41	07/26/21 18:54	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/26/21 18:54	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/21 13:41	07/26/21 18:54	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/21 13:41	07/26/21 18:54	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/21 13:41	07/26/21 18:54	1

Client Sample ID: MW28-ROX-071521
Date Collected: 07/15/21 09:10
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/21 13:41	07/26/21 18:54	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/21 13:41	07/26/21 18:54	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/21 13:41	07/26/21 18:54	1
Phenol	ND		10	2.6	ug/L		07/20/21 13:41	07/26/21 18:54	1
Pyridine	ND		10	3.2	ug/L		07/20/21 13:41	07/26/21 18:54	1
Quinoline	ND		10	4.5	ug/L		07/20/21 13:41	07/26/21 18:54	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/21 13:41	07/26/21 18:54	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/21 13:41	07/26/21 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*46 - 124*	*07/20/21 13:41*	*07/26/21 18:54*	*1*
2-Fluorophenol	*32*		*13 - 113*	*07/20/21 13:41*	*07/26/21 18:54*	*1*
Nitrobenzene-d5	*83*		*36 - 126*	*07/20/21 13:41*	*07/26/21 18:54*	*1*
Phenol-d5	*62*		*17 - 127*	*07/20/21 13:41*	*07/26/21 18:54*	*1*
Terphenyl-d14	*91*		*44 - 149*	*07/20/21 13:41*	*07/26/21 18:54*	*1*
2,4,6-Tribromophenol	*86*		*26 - 150*	*07/20/21 13:41*	*07/26/21 18:54*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/28/21 22:22	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/28/21 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*	*p*	*51 - 149*	*07/28/21 13:09*	*07/28/21 22:22*	*1*

Client Sample ID: ROST4PZE-ROX-071521
Date Collected: 07/15/21 10:15
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50	20	ug/L			07/22/21 11:26	2
Acrolein	ND		40	20	ug/L			07/22/21 11:26	2
Acrylonitrile	ND		20	5.6	ug/L			07/22/21 11:26	2
Benzene	**60**		2.0	0.76	ug/L			07/22/21 11:26	2
Bromobenzene	ND		2.0	1.1	ug/L			07/22/21 11:26	2
Bromochloromethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Bromoform	ND		10	1.4	ug/L			07/22/21 11:26	2
Bromomethane	ND		2.0	2.0	ug/L			07/22/21 11:26	2
2-Butanone (MEK)	ND	*+	50	5.2	ug/L			07/22/21 11:26	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Carbon tetrachloride	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Chlorobenzene	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Dibromochloromethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Chloroethane	ND		2.0	1.5	ug/L			07/22/21 11:26	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/22/21 11:26	2
Chloroform	ND		2.0	1.2	ug/L			07/22/21 11:26	2
1-Chlorohexane	ND		2.0	1.4	ug/L			07/22/21 11:26	2
Chloromethane	ND		2.0	1.7	ug/L			07/22/21 11:26	2
cis-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/22/21 11:26	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/22/21 11:26	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/22/21 11:26	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/22/21 11:26	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/22/21 11:26	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,2-Dichloroethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Ethylbenzene	**380**		2.0	1.0	ug/L			07/22/21 11:26	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/22/21 11:26	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/22/21 11:26	2
2-Hexanone	ND		50	6.2	ug/L			07/22/21 11:26	2
Isopropylbenzene	**15**		2.0	1.1	ug/L			07/22/21 11:26	2
Methylene bromide	ND		10	1.2	ug/L			07/22/21 11:26	2
Methylene Chloride	ND		10	6.0	ug/L			07/22/21 11:26	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/22/21 11:26	2
Methyl tert-butyl ether	ND		2.0	1.5	ug/L			07/22/21 11:26	2
m-Xylene & p-Xylene	**420**		10	3.2	ug/L			07/22/21 11:26	2
Naphthalene	**130**		2.0	2.0	ug/L			07/22/21 11:26	2
n-Butylbenzene	ND		2.0	1.5	ug/L			07/22/21 11:26	2
N-Propylbenzene	**27**		2.0	1.4	ug/L			07/22/21 11:26	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/22/21 11:26	2
o-Xylene	**55**		10	1.2	ug/L			07/22/21 11:26	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/22/21 11:26	2
p-Isopropyltoluene	ND		2.0	1.4	ug/L			07/22/21 11:26	2

Client Sample ID: ROST4PZE-ROX-071521

Date Collected: 07/15/21 10:15
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**1.7**	J	2.0	1.4	ug/L			07/22/21 11:26	2
Styrene	ND		2.0	2.0	ug/L			07/22/21 11:26	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			07/22/21 11:26	2
1,1,1,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Tetrachloroethene	ND		2.0	1.2	ug/L			07/22/21 11:26	2
Toluene	**33**		2.0	0.82	ug/L			07/22/21 11:26	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/22/21 11:26	2
trans-1,3-Dichloropropene	ND		10	1.0	ug/L			07/22/21 11:26	2
1,2,3-Trichlorobenzene	ND		2.0	1.4	ug/L			07/22/21 11:26	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/22/21 11:26	2
1,1,1-Trichloroethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,1,2-Trichloroethane	ND		10	1.0	ug/L			07/22/21 11:26	2
Trichloroethene	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			07/22/21 11:26	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/22/21 11:26	2
1,2,4-Trimethylbenzene	**150**		2.0	1.6	ug/L			07/22/21 11:26	2
1,3,5-Trimethylbenzene	**29**		2.0	1.1	ug/L			07/22/21 11:26	2
Vinyl acetate	ND		50	4.0	ug/L			07/22/21 11:26	2
Vinyl chloride	ND		2.0	1.0	ug/L			07/22/21 11:26	2
Xylenes, Total	**470**		20	3.2	ug/L			07/22/21 11:26	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/22/21 11:26*	*2*
Dibromofluoromethane	*102*		*75 - 126*		*07/22/21 11:26*	*2*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/22/21 11:26*	*2*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.7**		0.19	0.031	ug/L		07/20/21 13:41	07/23/21 00:03	1
Acenaphthylene	**0.26**		0.19	0.043	ug/L		07/20/21 13:41	07/23/21 00:03	1
Anthracene	ND		0.19	0.031	ug/L		07/20/21 13:41	07/23/21 00:03	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/20/21 13:41	07/23/21 00:03	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		07/20/21 13:41	07/23/21 00:03	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		07/20/21 13:41	07/23/21 00:03	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		07/20/21 13:41	07/23/21 00:03	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		07/20/21 13:41	07/23/21 00:03	1
Chrysene	ND		0.19	0.071	ug/L		07/20/21 13:41	07/23/21 00:03	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/20/21 13:41	07/23/21 00:03	1
Fluoranthene	**0.074**	J	0.19	0.066	ug/L		07/20/21 13:41	07/23/21 00:03	1
Fluorene	**1.6**		0.19	0.11	ug/L		07/20/21 13:41	07/23/21 00:03	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		07/20/21 13:41	07/23/21 00:03	1
1-Methylnaphthalene	**55**		0.19	0.071	ug/L		07/20/21 13:41	07/23/21 00:03	1
2-Methylnaphthalene	**69**		0.19	0.058	ug/L		07/20/21 13:41	07/23/21 00:03	1
Phenanthrene	**5.6**		0.19	0.035	ug/L		07/20/21 13:41	07/23/21 00:03	1
Pyrene	**0.17**	J	0.19	0.039	ug/L		07/20/21 13:41	07/23/21 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*15 - 122*	*07/20/21 13:41*	*07/23/21 00:03*	*1*
Nitrobenzene-d5	*79*		*19 - 130*	*07/20/21 13:41*	*07/23/21 00:03*	*1*

Client Sample ID: ROST4PZE-ROX-071521
Date Collected: 07/15/21 10:15
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	75		33 - 138	07/20/21 13:41	07/23/21 00:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		07/20/21 13:41	07/26/21 19:20	1
Benzenethiol	ND	UJ	9.7	1.6	ug/L		07/20/21 13:41	07/26/21 19:20	1
Benzoic acid	ND		29	7.0	ug/L		07/20/21 13:41	07/26/21 19:20	1
Benzyl alcohol	ND		9.7	1.9	ug/L		07/20/21 13:41	07/26/21 19:20	1
Bis(2-chloroethoxy)methane	ND		9.7	0.15	ug/L		07/20/21 13:41	07/26/21 19:20	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		07/20/21 13:41	07/26/21 19:20	1
bis (2-chloroisopropyl) ether	ND		9.7	0.15	ug/L		07/20/21 13:41	07/26/21 19:20	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		07/20/21 13:41	07/26/21 19:20	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		07/20/21 13:41	07/26/21 19:20	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		07/20/21 13:41	07/26/21 19:20	1
4-Chloroaniline	ND		9.7	3.3	ug/L		07/20/21 13:41	07/26/21 19:20	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		07/20/21 13:41	07/26/21 19:20	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		07/20/21 13:41	07/26/21 19:20	1
2-Chlorophenol	ND		9.7	2.1	ug/L		07/20/21 13:41	07/26/21 19:20	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		07/20/21 13:41	07/26/21 19:20	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		07/20/21 13:41	07/26/21 19:20	1
Dibenzofuran	**2.0**	J	9.7	0.16	ug/L		07/20/21 13:41	07/26/21 19:20	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		07/20/21 13:41	07/26/21 19:20	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		07/20/21 13:41	07/26/21 19:20	1
Diethyl phthalate	ND		9.7	0.23	ug/L		07/20/21 13:41	07/26/21 19:20	1
2,4-Dimethylphenol	**4.4**	J	9.7	3.4	ug/L		07/20/21 13:41	07/26/21 19:20	1
Dimethyl phthalate	ND		9.7	0.16	ug/L		07/20/21 13:41	07/26/21 19:20	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		07/20/21 13:41	07/26/21 19:20	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.5	ug/L		07/20/21 13:41	07/26/21 19:20	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		07/20/21 13:41	07/26/21 19:20	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		07/20/21 13:41	07/26/21 19:20	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		07/20/21 13:41	07/26/21 19:20	1
Di-n-octyl phthalate	ND		9.7	0.16	ug/L		07/20/21 13:41	07/26/21 19:20	1
1,4-Dioxane	ND		9.7	0.97	ug/L		07/20/21 13:41	07/26/21 19:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		07/20/21 13:41	07/26/21 19:20	1
Hexachlorobenzene	ND		9.7	0.16	ug/L		07/20/21 13:41	07/26/21 19:20	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/20/21 13:41	07/26/21 19:20	1
Hexachloroethane	ND		9.7	4.1	ug/L		07/20/21 13:41	07/26/21 19:20	1
Indene	ND		9.7	0.97	ug/L		07/20/21 13:41	07/26/21 19:20	1
Isophorone	ND		9.7	0.14	ug/L		07/20/21 13:41	07/26/21 19:20	1
2-Methylphenol	ND		9.7	1.7	ug/L		07/20/21 13:41	07/26/21 19:20	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		07/20/21 13:41	07/26/21 19:20	1
2-Nitroaniline	ND		9.7	2.1	ug/L		07/20/21 13:41	07/26/21 19:20	1
3-Nitroaniline	ND		9.7	1.7	ug/L		07/20/21 13:41	07/26/21 19:20	1
4-Nitroaniline	ND		9.7	1.4	ug/L		07/20/21 13:41	07/26/21 19:20	1
Nitrobenzene	ND		9.7	0.13	ug/L		07/20/21 13:41	07/26/21 19:20	1
2-Nitrophenol	ND		9.7	5.0	ug/L		07/20/21 13:41	07/26/21 19:20	1
4-Nitrophenol	ND		9.7	2.0	ug/L		07/20/21 13:41	07/26/21 19:20	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		07/20/21 13:41	07/26/21 19:20	1

Client Sample ID: ROST4PZE-ROX-071521
Date Collected: 07/15/21 10:15
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		07/20/21 13:41	07/26/21 19:20	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		07/20/21 13:41	07/26/21 19:20	1
Pentachlorophenol	ND		19	1.4	ug/L		07/20/21 13:41	07/26/21 19:20	1
Phenol	ND		9.7	2.5	ug/L		07/20/21 13:41	07/26/21 19:20	1
Pyridine	ND		9.7	3.1	ug/L		07/20/21 13:41	07/26/21 19:20	1
Quinoline	ND		9.7	4.3	ug/L		07/20/21 13:41	07/26/21 19:20	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		07/20/21 13:41	07/26/21 19:20	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/20/21 13:41	07/26/21 19:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*46 - 124*	*07/20/21 13:41*	*07/26/21 19:20*	*1*
2-Fluorophenol	*54*		*13 - 113*	*07/20/21 13:41*	*07/26/21 19:20*	*1*
Nitrobenzene-d5	*82*		*36 - 126*	*07/20/21 13:41*	*07/26/21 19:20*	*1*
Phenol-d5	*78*		*17 - 127*	*07/20/21 13:41*	*07/26/21 19:20*	*1*
Terphenyl-d14	*87*		*44 - 149*	*07/20/21 13:41*	*07/26/21 19:20*	*1*
2,4,6-Tribromophenol	*96*		*26 - 150*	*07/20/21 13:41*	*07/26/21 19:20*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/28/21 22:42	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/28/21 22:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*	*p*	*51 - 149*	*07/28/21 13:09*	*07/28/21 22:42*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: MW22-ROX-071521
Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/22/21 09:46	1
Acrolein	ND		20	10	ug/L			07/22/21 09:46	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 09:46	1
Benzene	**0.71**	**J**	1.0	0.38	ug/L			07/22/21 09:46	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 09:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 09:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 09:46	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 09:46	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/22/21 09:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 09:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/21 09:46	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 09:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 09:46	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 09:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 09:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 09:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 09:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 09:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 09:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Ethylbenzene	**10**		1.0	0.50	ug/L			07/22/21 09:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 09:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 09:46	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 09:46	1
Isopropylbenzene	**4.3**		1.0	0.53	ug/L			07/22/21 09:46	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 09:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 09:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 09:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/22/21 09:46	1
m-Xylene & p-Xylene	**13**		5.0	1.6	ug/L			07/22/21 09:46	1
Naphthalene	**7.5**		1.0	1.0	ug/L			07/22/21 09:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/21 09:46	1
N-Propylbenzene	**6.4**		1.0	0.69	ug/L			07/22/21 09:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 09:46	1
o-Xylene	**1.6**	**J**	5.0	0.60	ug/L			07/22/21 09:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 09:46	1
p-Isopropyltoluene	**0.81**	**J**	1.0	0.71	ug/L			07/22/21 09:46	1

Client Sample ID: MW22-ROX-071521
Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/22/21 09:46	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 09:46	1
tert-Butylbenzene	**0.95**	J	1.0	0.63	ug/L			07/22/21 09:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 09:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 09:46	1
Toluene	**0.82**	J	1.0	0.41	ug/L			07/22/21 09:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 09:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 09:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 09:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 09:46	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 09:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/21 09:46	1
1,2,4-Trimethylbenzene	**43**		1.0	0.82	ug/L			07/22/21 09:46	1
1,3,5-Trimethylbenzene	**6.7**		1.0	0.56	ug/L			07/22/21 09:46	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 09:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 09:46	1
Xylenes, Total	**15**		10	1.6	ug/L			07/22/21 09:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*72 - 119*		*07/22/21 09:46*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/22/21 09:46*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/22/21 09:46*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/20/21 13:41	07/23/21 00:20	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/20/21 13:41	07/23/21 00:20	1
Anthracene	ND		0.19	0.030	ug/L		07/20/21 13:41	07/23/21 00:20	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/20/21 13:41	07/23/21 00:20	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/20/21 13:41	07/23/21 00:20	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/20/21 13:41	07/23/21 00:20	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/20/21 13:41	07/23/21 00:20	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/20/21 13:41	07/23/21 00:20	1
Chrysene	ND		0.19	0.070	ug/L		07/20/21 13:41	07/23/21 00:20	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/20/21 13:41	07/23/21 00:20	1
Fluoranthene	ND		0.19	0.064	ug/L		07/20/21 13:41	07/23/21 00:20	1
Fluorene	ND		0.19	0.10	ug/L		07/20/21 13:41	07/23/21 00:20	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/20/21 13:41	07/23/21 00:20	1
1-Methylnaphthalene	**1.5**		0.19	0.070	ug/L		07/20/21 13:41	07/23/21 00:20	1
2-Methylnaphthalene	**1.1**		0.19	0.057	ug/L		07/20/21 13:41	07/23/21 00:20	1
Phenanthrene	ND		0.19	0.034	ug/L		07/20/21 13:41	07/23/21 00:20	1
Pyrene	ND		0.19	0.038	ug/L		07/20/21 13:41	07/23/21 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*15 - 122*	*07/20/21 13:41*	*07/23/21 00:20*	*1*
Nitrobenzene-d5	*75*		*19 - 130*	*07/20/21 13:41*	*07/23/21 00:20*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: MW22-ROX-071521
Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	83		33 - 138	07/20/21 13:41	07/23/21 00:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/20/21 13:41	07/23/21 17:17	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		07/20/21 13:41	07/23/21 17:17	1
Benzoic acid	ND		28	6.9	ug/L		07/20/21 13:41	07/23/21 17:17	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/20/21 13:41	07/23/21 17:17	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/20/21 13:41	07/23/21 17:17	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/20/21 13:41	07/23/21 17:17	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/20/21 13:41	07/23/21 17:17	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		07/20/21 13:41	07/23/21 17:17	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/20/21 13:41	07/23/21 17:17	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/20/21 13:41	07/23/21 17:17	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/20/21 13:41	07/23/21 17:17	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/20/21 13:41	07/23/21 17:17	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/20/21 13:41	07/23/21 17:17	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/20/21 13:41	07/23/21 17:17	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/20/21 13:41	07/23/21 17:17	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:17	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:17	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		07/20/21 13:41	07/23/21 17:17	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		07/20/21 13:41	07/23/21 17:17	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/20/21 13:41	07/23/21 17:17	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 17:17	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:17	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/20/21 13:41	07/23/21 17:17	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.5	1.5	ug/L		07/20/21 13:41	07/23/21 17:17	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		07/20/21 13:41	07/23/21 17:17	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/20/21 13:41	07/23/21 17:17	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/20/21 13:41	07/23/21 17:17	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:17	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:17	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:17	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/20/21 13:41	07/23/21 17:17	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/20/21 13:41	07/23/21 17:17	1
Indene	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:17	1
Isophorone	ND		9.5	0.13	ug/L		07/20/21 13:41	07/23/21 17:17	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/20/21 13:41	07/23/21 17:17	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/20/21 13:41	07/23/21 17:17	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/20/21 13:41	07/23/21 17:17	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/20/21 13:41	07/23/21 17:17	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/20/21 13:41	07/23/21 17:17	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/20/21 13:41	07/23/21 17:17	1
2-Nitrophenol	ND		9.5	4.9	ug/L		07/20/21 13:41	07/23/21 17:17	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/20/21 13:41	07/23/21 17:17	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 17:17	1

Client Sample ID: MW22-ROX-071521
Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/20/21 13:41	07/23/21 17:17	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/20/21 13:41	07/23/21 17:17	1
Pentachlorophenol	ND		19	1.3	ug/L		07/20/21 13:41	07/23/21 17:17	1
Phenol	ND		9.5	2.5	ug/L		07/20/21 13:41	07/23/21 17:17	1
Pyridine	ND		9.5	3.0	ug/L		07/20/21 13:41	07/23/21 17:17	1
Quinoline	ND		9.5	4.3	ug/L		07/20/21 13:41	07/23/21 17:17	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/20/21 13:41	07/23/21 17:17	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*46 - 124*	*07/20/21 13:41*	*07/23/21 17:17*	*1*
2-Fluorophenol	*69*		*13 - 113*	*07/20/21 13:41*	*07/23/21 17:17*	*1*
Nitrobenzene-d5	*77*		*36 - 126*	*07/20/21 13:41*	*07/23/21 17:17*	*1*
Phenol-d5	*83*		*17 - 127*	*07/20/21 13:41*	*07/23/21 17:17*	*1*
Terphenyl-d14	*90*		*44 - 149*	*07/20/21 13:41*	*07/23/21 17:17*	*1*
2,4,6-Tribromophenol	*94*		*26 - 150*	*07/20/21 13:41*	*07/23/21 17:17*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/28/21 23:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/28/21 23:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*	*p*	*51 - 149*	*07/28/21 13:09*	*07/28/21 23:02*	*1*

Client Sample ID: MW22-ROX-071521-DUP
Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/22/21 15:26	1
Acrolein	ND		20	10	ug/L			07/22/21 15:26	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 15:26	1
Benzene	ND		1.0	0.38	ug/L			07/22/21 15:26	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 15:26	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 15:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 15:26	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 15:26	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/22/21 15:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 15:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/21 15:26	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 15:26	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 15:26	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 15:26	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 15:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 15:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 15:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 15:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 15:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 15:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 15:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Ethylbenzene	**11**		1.0	0.50	ug/L			07/22/21 15:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 15:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 15:26	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 15:26	1
Isopropylbenzene	**5.0**		1.0	0.53	ug/L			07/22/21 15:26	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 15:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 15:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 15:26	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/22/21 15:26	1
m-Xylene & p-Xylene	**16**		5.0	1.6	ug/L			07/22/21 15:26	1
Naphthalene	**9.1**		1.0	1.0	ug/L			07/22/21 15:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/21 15:26	1
N-Propylbenzene	**8.1**		1.0	0.69	ug/L			07/22/21 15:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 15:26	1
o-Xylene	**1.9**	J	5.0	0.60	ug/L			07/22/21 15:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 15:26	1
p-Isopropyltoluene	**1.0**		1.0	0.71	ug/L			07/22/21 15:26	1

Client Sample ID: MW22-ROX-071521-DUP

Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.81	J	1.0	0.70	ug/L			07/22/21 15:26	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 15:26	1
tert-Butylbenzene	0.66	J	1.0	0.63	ug/L			07/22/21 15:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 15:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 15:26	1
Toluene	0.85	J	1.0	0.41	ug/L			07/22/21 15:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 15:26	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 15:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 15:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 15:26	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 15:26	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 15:26	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 15:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/21 15:26	1
1,2,4-Trimethylbenzene	51		1.0	0.82	ug/L			07/22/21 15:26	1
1,3,5-Trimethylbenzene	8.5		1.0	0.56	ug/L			07/22/21 15:26	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 15:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 15:26	1
Xylenes, Total	18		10	1.6	ug/L			07/22/21 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*72 - 119*		*07/22/21 15:26*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/22/21 15:26*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/22/21 15:26*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		07/20/21 13:41	07/23/21 00:37	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/20/21 13:41	07/23/21 00:37	1
Anthracene	ND		0.19	0.031	ug/L		07/20/21 13:41	07/23/21 00:37	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/20/21 13:41	07/23/21 00:37	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/20/21 13:41	07/23/21 00:37	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/20/21 13:41	07/23/21 00:37	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/20/21 13:41	07/23/21 00:37	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/20/21 13:41	07/23/21 00:37	1
Chrysene	ND		0.19	0.071	ug/L		07/20/21 13:41	07/23/21 00:37	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/20/21 13:41	07/23/21 00:37	1
Fluoranthene	ND		0.19	0.065	ug/L		07/20/21 13:41	07/23/21 00:37	1
Fluorene	ND		0.19	0.10	ug/L		07/20/21 13:41	07/23/21 00:37	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/20/21 13:41	07/23/21 00:37	1
1-Methylnaphthalene	1.5		0.19	0.071	ug/L		07/20/21 13:41	07/23/21 00:37	1
2-Methylnaphthalene	1.2		0.19	0.057	ug/L		07/20/21 13:41	07/23/21 00:37	1
Phenanthrene	ND		0.19	0.034	ug/L		07/20/21 13:41	07/23/21 00:37	1
Pyrene	ND		0.19	0.038	ug/L		07/20/21 13:41	07/23/21 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*15 - 122*	*07/20/21 13:41*	*07/23/21 00:37*	*1*
Nitrobenzene-d5	*78*		*19 - 130*	*07/20/21 13:41*	*07/23/21 00:37*	*1*

Client Sample ID: MW22-ROX-071521-DUP
Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*77*		*33 - 138*	*07/20/21 13:41*	*07/23/21 00:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/20/21 13:41	07/23/21 17:43	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		07/20/21 13:41	07/23/21 17:43	1
Benzoic acid	ND		29	7.0	ug/L		07/20/21 13:41	07/23/21 17:43	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/20/21 13:41	07/23/21 17:43	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/20/21 13:41	07/23/21 17:43	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		07/20/21 13:41	07/23/21 17:43	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/20/21 13:41	07/23/21 17:43	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/20/21 13:41	07/23/21 17:43	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/20/21 13:41	07/23/21 17:43	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/20/21 13:41	07/23/21 17:43	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/20/21 13:41	07/23/21 17:43	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/20/21 13:41	07/23/21 17:43	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/20/21 13:41	07/23/21 17:43	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/20/21 13:41	07/23/21 17:43	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/20/21 13:41	07/23/21 17:43	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:43	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:43	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		07/20/21 13:41	07/23/21 17:43	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/20/21 13:41	07/23/21 17:43	1
Diethyl phthalate	**0.58**	J	9.5	0.23	ug/L		07/20/21 13:41	07/23/21 17:43	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 17:43	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:43	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/20/21 13:41	07/23/21 17:43	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.5	1.5	ug/L		07/20/21 13:41	07/23/21 17:43	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/20/21 13:41	07/23/21 17:43	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/20/21 13:41	07/23/21 17:43	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/20/21 13:41	07/23/21 17:43	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:43	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:43	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/20/21 13:41	07/23/21 17:43	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/20/21 13:41	07/23/21 17:43	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/20/21 13:41	07/23/21 17:43	1
Indene	ND		9.5	0.95	ug/L		07/20/21 13:41	07/23/21 17:43	1
Isophorone	ND		9.5	0.13	ug/L		07/20/21 13:41	07/23/21 17:43	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/20/21 13:41	07/23/21 17:43	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/20/21 13:41	07/23/21 17:43	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/20/21 13:41	07/23/21 17:43	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/20/21 13:41	07/23/21 17:43	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/20/21 13:41	07/23/21 17:43	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/20/21 13:41	07/23/21 17:43	1
2-Nitrophenol	ND		9.5	5.0	ug/L		07/20/21 13:41	07/23/21 17:43	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/20/21 13:41	07/23/21 17:43	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 17:43	1

Client Sample ID: MW22-ROX-071521-DUP
Date Collected: 07/15/21 11:30
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/20/21 13:41	07/23/21 17:43	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/20/21 13:41	07/23/21 17:43	1
Pentachlorophenol	ND		19	1.3	ug/L		07/20/21 13:41	07/23/21 17:43	1
Phenol	ND		9.5	2.5	ug/L		07/20/21 13:41	07/23/21 17:43	1
Pyridine	ND		9.5	3.1	ug/L		07/20/21 13:41	07/23/21 17:43	1
Quinoline	ND		9.5	4.3	ug/L		07/20/21 13:41	07/23/21 17:43	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/20/21 13:41	07/23/21 17:43	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/20/21 13:41	07/23/21 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*46 - 124*	*07/20/21 13:41*	*07/23/21 17:43*	*1*
2-Fluorophenol	*73*		*13 - 113*	*07/20/21 13:41*	*07/23/21 17:43*	*1*
Nitrobenzene-d5	*83*		*36 - 126*	*07/20/21 13:41*	*07/23/21 17:43*	*1*
Phenol-d5	*91*		*17 - 127*	*07/20/21 13:41*	*07/23/21 17:43*	*1*
Terphenyl-d14	*91*		*44 - 149*	*07/20/21 13:41*	*07/23/21 17:43*	*1*
2,4,6-Tribromophenol	*100*		*26 - 150*	*07/20/21 13:41*	*07/23/21 17:43*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/28/21 23:23	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/28/21 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*	*p*	*51 - 149*	*07/28/21 13:09*	*07/28/21 23:23*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: TB-ROX-071521-8011-B
Date Collected: 07/15/21 00:00
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-7
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/28/21 23:43	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/28/21 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*07/28/21 13:09*	*07/28/21 23:43*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: TB-ROX-071521-8260-B
Date Collected: 07/15/21 00:00
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/22/21 09:00	1
Acrolein	ND		20	10	ug/L			07/22/21 09:00	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 09:00	1
Benzene	ND		1.0	0.38	ug/L			07/22/21 09:00	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 09:00	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 09:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 09:00	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 09:00	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/22/21 09:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 09:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/21 09:00	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 09:00	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 09:00	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 09:00	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 09:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 09:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 09:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 09:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 09:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 09:00	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 09:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/22/21 09:00	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 09:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 09:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 09:00	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/22/21 09:00	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/22/21 09:00	1
Naphthalene	ND		1.0	1.0	ug/L			07/22/21 09:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/21 09:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/21 09:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 09:00	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/21 09:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 09:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/21 09:00	1

Client Sample ID: TB-ROX-071521-8260-B
Date Collected: 07/15/21 00:00
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/22/21 09:00	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 09:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/21 09:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 09:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 09:00	1
Toluene	ND		1.0	0.41	ug/L			07/22/21 09:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 09:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 09:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 09:00	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 09:00	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 09:00	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 09:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/21 09:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/21 09:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/21 09:00	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 09:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 09:00	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/21 09:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*72 - 119*		*07/22/21 09:00*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/22/21 09:00*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/22/21 09:00*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: P93A-ROX-071521
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+ F1 F2 UJ	25	10	ug/L			07/29/21 16:31	1
Acrolein	ND	F2	20	10	ug/L			07/29/21 16:31	1
Acrylonitrile	ND	F1 F2 UJ	10	2.8	ug/L			07/29/21 16:31	1
Benzene	48	F1 F2 UJ	1.0	0.38	ug/L			07/29/21 16:31	1
Bromobenzene	ND	F1 F2 UJ	1.0	0.54	ug/L			07/29/21 16:31	1
Bromochloromethane	ND	F1 F2 UJ	1.0	0.52	ug/L			07/29/21 16:31	1
Bromodichloromethane	ND	F1 F2 UJ	1.0	0.50	ug/L			07/29/21 16:31	1
Bromoform	ND	F1 F2 UJ	5.0	0.71	ug/L			07/29/21 16:31	1
Bromomethane	ND	F2	1.0	0.98	ug/L			07/29/21 16:31	1
2-Butanone (MEK)	ND	F1 F2 UJ	25	2.6	ug/L			07/29/21 16:31	1
Carbon disulfide	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Carbon tetrachloride	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Chlorobenzene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Dibromochloromethane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Chloroethane	ND	F1 F2	1.0	0.76	ug/L			07/29/21 16:31	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			07/29/21 16:31	1
Chloroform	ND	F1 F2	1.0	0.60	ug/L			07/29/21 16:31	1
1-Chlorohexane	ND	*+ F1 F2	1.0	0.70	ug/L			07/29/21 16:31	1
Chloromethane	ND	F1 F2	1.0	0.83	ug/L			07/29/21 16:31	1
cis-1,2-Dichloroethene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
cis-1,3-Dichloropropene	ND	F1 F2	5.0	0.50	ug/L			07/29/21 16:31	1
1,2-Dichlorobenzene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
1,3-Dichlorobenzene	ND	F1 F2	1.0	0.54	ug/L			07/29/21 16:31	1
1,4-Dichlorobenzene	ND	F1 F2	1.0	0.64	ug/L			07/29/21 16:31	1
Dichlorodifluoromethane	ND	F1 F2	1.0	0.85	ug/L			07/29/21 16:31	1
1,1-Dichloroethane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
1,2-Dichloroethane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
1,1-Dichloroethene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
1,2-Dichloropropane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
1,3-Dichloropropane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
2,2-Dichloropropane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
1,1-Dichloropropene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Ethylbenzene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Ethyl methacrylate	ND	F1 F2	1.0	0.60	ug/L			07/29/21 16:31	1
Hexachlorobutadiene	ND	F1 F2	5.0	0.90	ug/L			07/29/21 16:31	1
2-Hexanone	ND	*+ F1 F2	25	3.1	ug/L			07/29/21 16:31	1
Isopropylbenzene	ND	F1 F2	1.0	0.53	ug/L			07/29/21 16:31	1
Methylene bromide	ND	F1 F2	5.0	0.59	ug/L			07/29/21 16:31	1
Methylene Chloride	ND	F1 F2	5.0	3.0	ug/L			07/29/21 16:31	1
4-Methyl-2-pentanone (MIBK)	ND	F1 F2	25	1.8	ug/L			07/29/21 16:31	1
Methyl tert-butyl ether	ND	F1 F2	1.0	0.74	ug/L			07/29/21 16:31	1
m-Xylene & p-Xylene	ND	F1 F2	5.0	1.6	ug/L			07/29/21 16:31	1
Naphthalene	ND	F2	1.0	1.0	ug/L			07/29/21 16:31	1
n-Butylbenzene	ND	F1 F2 UJ	1.0	0.76	ug/L			07/29/21 16:31	1
N-Propylbenzene	ND	F1 F2	1.0	0.69	ug/L			07/29/21 16:31	1
o-Chlorotoluene	ND	F1 F2	1.0	0.57	ug/L			07/29/21 16:31	1
o-Xylene	ND	F1 F2	5.0	0.60	ug/L			07/29/21 16:31	1
p-Chlorotoluene	ND	F1 F2	1.0	0.56	ug/L			07/29/21 16:31	1
p-Isopropyltoluene	ND	F1 F2	1.0	0.71	ug/L			07/29/21 16:31	1

Client Sample ID: P93A-ROX-071521

Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND	F1 F2	1.0	0.70	ug/L			07/29/21 16:31	1
Styrene	ND	F1 F2	1.0	1.0	ug/L			07/29/21 16:31	1
tert-Butylbenzene	ND	F1 F2	1.0	0.63	ug/L			07/29/21 16:31	1
1,1,1,2-Tetrachloroethane	ND	F1 F2	1.0	0.52	ug/L			07/29/21 16:31	1
1,1,2,2-Tetrachloroethane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Tetrachloroethene	ND	F1 F2	1.0	0.58	ug/L			07/29/21 16:31	1
Toluene	ND	F1 F2	1.0	0.41	ug/L			07/29/21 16:31	1
trans-1,2-Dichloroethene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
trans-1,3-Dichloropropene	ND	F1 F2	5.0	0.50	ug/L			07/29/21 16:31	1
1,2,3-Trichlorobenzene	ND	F1 F2	1.0	0.70	ug/L			07/29/21 16:31	1
1,2,4-Trichlorobenzene	ND	F1 F2	1.0	0.82	ug/L			07/29/21 16:31	1
1,1,1-Trichloroethane	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
1,1,2-Trichloroethane	ND	F1 F2	5.0	0.50	ug/L			07/29/21 16:31	1
Trichloroethene	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Trichlorofluoromethane	ND	F1 F2	1.0	0.52	ug/L			07/29/21 16:31	1
1,2,3-Trichloropropane	ND	F1 F2	5.0	0.84	ug/L			07/29/21 16:31	1
1,2,4-Trimethylbenzene	ND	F1 F2	1.0	0.82	ug/L			07/29/21 16:31	1
1,3,5-Trimethylbenzene	ND	F1 F2	1.0	0.56	ug/L			07/29/21 16:31	1
Vinyl acetate	ND	F2	25	2.0	ug/L			07/29/21 16:31	1
Vinyl chloride	ND	F1 F2	1.0	0.50	ug/L			07/29/21 16:31	1
Xylenes, Total	ND	F1 F2	10	1.6	ug/L			07/29/21 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*07/29/21 16:31*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/29/21 16:31*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*07/29/21 16:31*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/23/21 14:25	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/20/21 13:41	07/23/21 14:25	1
Anthracene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/23/21 14:25	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/20/21 13:41	07/23/21 14:25	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/20/21 13:41	07/23/21 14:25	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/20/21 13:41	07/23/21 14:25	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/20/21 13:41	07/23/21 14:25	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/20/21 13:41	07/23/21 14:25	1
Chrysene	ND		0.21	0.077	ug/L		07/20/21 13:41	07/23/21 14:25	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/20/21 13:41	07/23/21 14:25	1
Fluoranthene	ND		0.21	0.070	ug/L		07/20/21 13:41	07/23/21 14:25	1
Fluorene	ND		0.21	0.11	ug/L		07/20/21 13:41	07/23/21 14:25	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/20/21 13:41	07/23/21 14:25	1
1-Methylnaphthalene	0.15	J	0.21	0.077	ug/L		07/20/21 13:41	07/23/21 14:25	1
2-Methylnaphthalene	0.11	J	0.21	0.062	ug/L		07/20/21 13:41	07/23/21 14:25	1
Phenanthrene	ND		0.21	0.037	ug/L		07/20/21 13:41	07/23/21 14:25	1
Pyrene	0.046	J	0.21	0.041	ug/L		07/20/21 13:41	07/23/21 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*15 - 122*	*07/20/21 13:41*	*07/23/21 14:25*	*1*
Nitrobenzene-d5	*82*		*19 - 130*	*07/20/21 13:41*	*07/23/21 14:25*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: P93A-ROX-071521
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*33 - 138*	*07/20/21 13:41*	*07/23/21 14:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 18:10	1
Benzenethiol	ND	*- UJ	10	1.8	ug/L		07/20/21 13:41	07/23/21 18:10	1
Benzoic acid	ND		31	7.6	ug/L		07/20/21 13:41	07/23/21 18:10	1
Benzyl alcohol	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 18:10	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 18:10	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 18:10	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 18:10	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/20/21 13:41	07/23/21 18:10	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/20/21 13:41	07/23/21 18:10	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/20/21 13:41	07/23/21 18:10	1
4-Chloroaniline	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 18:10	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 18:10	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 18:10	1
2-Chlorophenol	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 18:10	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 18:10	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:10	1
Dibenzofuran	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:10	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 18:10	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/20/21 13:41	07/23/21 18:10	1
Diethyl phthalate	1.0	J	10	0.25	ug/L		07/20/21 13:41	07/23/21 18:10	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 18:10	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:10	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 18:10	1
4,6-Dinitro-ortho-cresol	ND	UJ	10	1.7	ug/L		07/20/21 13:41	07/23/21 18:10	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/20/21 13:41	07/23/21 18:10	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 18:10	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 18:10	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:10	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:10	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:10	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/21 13:41	07/23/21 18:10	1
Hexachloroethane	ND		10	4.3	ug/L		07/20/21 13:41	07/23/21 18:10	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:10	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 18:10	1
2-Methylphenol	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 18:10	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/20/21 13:41	07/23/21 18:10	1
2-Nitroaniline	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 18:10	1
3-Nitroaniline	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 18:10	1
4-Nitroaniline	ND		10	1.6	ug/L		07/20/21 13:41	07/23/21 18:10	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/23/21 18:10	1
2-Nitrophenol	ND		10	5.4	ug/L		07/20/21 13:41	07/23/21 18:10	1
4-Nitrophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 18:10	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 18:10	1

Client Sample ID: P93A-ROX-071521
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/20/21 13:41	07/23/21 18:10	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/20/21 13:41	07/23/21 18:10	1
Pentachlorophenol	ND		21	1.4	ug/L		07/20/21 13:41	07/23/21 18:10	1
Phenol	3.5	J	10	2.7	ug/L		07/20/21 13:41	07/23/21 18:10	1
Pyridine	ND		10	3.3	ug/L		07/20/21 13:41	07/23/21 18:10	1
Quinoline	ND		10	4.7	ug/L		07/20/21 13:41	07/23/21 18:10	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 18:10	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*46 - 124*	*07/20/21 13:41*	*07/23/21 18:10*	*1*
2-Fluorophenol	*81*		*13 - 113*	*07/20/21 13:41*	*07/23/21 18:10*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*07/20/21 13:41*	*07/23/21 18:10*	*1*
Phenol-d5	*90*		*17 - 127*	*07/20/21 13:41*	*07/23/21 18:10*	*1*
Terphenyl-d14	*96*		*44 - 149*	*07/20/21 13:41*	*07/23/21 18:10*	*1*
2,4,6-Tribromophenol	*91*		*26 - 150*	*07/20/21 13:41*	*07/23/21 18:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/29/21 00:23	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/29/21 00:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*	*p*	*51 - 149*	*07/28/21 13:09*	*07/29/21 00:23*	*1*

Client Sample ID: P93A-ROX-071521-DUP
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/29/21 17:52	1
Acrolein	ND		20	10	ug/L			07/29/21 17:52	1
Acrylonitrile	ND		10	2.8	ug/L			07/29/21 17:52	1
Benzene	**57**		1.0	0.38	ug/L			07/29/21 17:52	1
Bromobenzene	ND		1.0	0.54	ug/L			07/29/21 17:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/29/21 17:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Bromoform	ND		5.0	0.71	ug/L			07/29/21 17:52	1
Bromomethane	ND		1.0	0.98	ug/L			07/29/21 17:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/29/21 17:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Chloroethane	ND		1.0	0.76	ug/L			07/29/21 17:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/29/21 17:52	1
Chloroform	ND		1.0	0.60	ug/L			07/29/21 17:52	1
1-Chlorohexane	ND	*+	1.0	0.70	ug/L			07/29/21 17:52	1
Chloromethane	ND		1.0	0.83	ug/L			07/29/21 17:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/29/21 17:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/29/21 17:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/29/21 17:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/29/21 17:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/29/21 17:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/29/21 17:52	1
2-Hexanone	ND	*+	25	3.1	ug/L			07/29/21 17:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/29/21 17:52	1
Methylene bromide	ND		5.0	0.59	ug/L			07/29/21 17:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/29/21 17:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/29/21 17:52	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/29/21 17:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/29/21 17:52	1
Naphthalene	ND		1.0	1.0	ug/L			07/29/21 17:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/29/21 17:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/21 17:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/29/21 17:52	1
o-Xylene	ND		5.0	0.60	ug/L			07/29/21 17:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/29/21 17:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/29/21 17:52	1

Client Sample ID: P93A-ROX-071521-DUP
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/29/21 17:52	1
Styrene	ND		1.0	1.0	ug/L			07/29/21 17:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/29/21 17:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/29/21 17:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/29/21 17:52	1
Toluene	ND		1.0	0.41	ug/L			07/29/21 17:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/29/21 17:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/29/21 17:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/29/21 17:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/29/21 17:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/29/21 17:52	1
Trichloroethene	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/29/21 17:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/29/21 17:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/29/21 17:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/29/21 17:52	1
Vinyl acetate	ND		25	2.0	ug/L			07/29/21 17:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/29/21 17:52	1
Xylenes, Total	ND		10	1.6	ug/L			07/29/21 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*07/29/21 17:52*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/29/21 17:52*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/29/21 17:52*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/23/21 15:26	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/20/21 13:41	07/23/21 15:26	1
Anthracene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/23/21 15:26	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/20/21 13:41	07/23/21 15:26	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/20/21 13:41	07/23/21 15:26	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/20/21 13:41	07/23/21 15:26	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/20/21 13:41	07/23/21 15:26	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/20/21 13:41	07/23/21 15:26	1
Chrysene	ND		0.21	0.077	ug/L		07/20/21 13:41	07/23/21 15:26	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/20/21 13:41	07/23/21 15:26	1
Fluoranthene	ND		0.21	0.070	ug/L		07/20/21 13:41	07/23/21 15:26	1
Fluorene	ND		0.21	0.11	ug/L		07/20/21 13:41	07/23/21 15:26	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.044	ug/L		07/20/21 13:41	07/23/21 15:26	1
1-Methylnaphthalene	**0.18**	**J**	0.21	0.077	ug/L		07/20/21 13:41	07/23/21 15:26	1
2-Methylnaphthalene	**0.083**	**J**	0.21	0.062	ug/L		07/20/21 13:41	07/23/21 15:26	1
Phenanthrene	**0.043**	**J**	0.21	0.037	ug/L		07/20/21 13:41	07/23/21 15:26	1
Pyrene	ND		0.21	0.041	ug/L		07/20/21 13:41	07/23/21 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*15 - 122*	*07/20/21 13:41*	*07/23/21 15:26*	*1*
Nitrobenzene-d5	*89*		*19 - 130*	*07/20/21 13:41*	*07/23/21 15:26*	*1*

Client Sample ID: P93A-ROX-071521-DUP
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*33 - 138*	*07/20/21 13:41*	*07/23/21 15:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 18:36	1
Benzenethiol	ND	*- UJ	10	1.8	ug/L		07/20/21 13:41	07/23/21 18:36	1
Benzoic acid	ND		31	7.5	ug/L		07/20/21 13:41	07/23/21 18:36	1
Benzyl alcohol	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 18:36	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 18:36	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 18:36	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/20/21 13:41	07/23/21 18:36	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/20/21 13:41	07/23/21 18:36	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/20/21 13:41	07/23/21 18:36	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/20/21 13:41	07/23/21 18:36	1
4-Chloroaniline	ND		10	3.5	ug/L		07/20/21 13:41	07/23/21 18:36	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/20/21 13:41	07/23/21 18:36	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 18:36	1
2-Chlorophenol	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 18:36	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/20/21 13:41	07/23/21 18:36	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:36	1
Dibenzofuran	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:36	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 18:36	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/20/21 13:41	07/23/21 18:36	1
Diethyl phthalate	ND		10	0.25	ug/L		07/20/21 13:41	07/23/21 18:36	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 18:36	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:36	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/20/21 13:41	07/23/21 18:36	1
4,6-Dinitro-ortho-cresol	ND	UJ	10	1.7	ug/L		07/20/21 13:41	07/23/21 18:36	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/20/21 13:41	07/23/21 18:36	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 18:36	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/20/21 13:41	07/23/21 18:36	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:36	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:36	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/20/21 13:41	07/23/21 18:36	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/21 13:41	07/23/21 18:36	1
Hexachloroethane	ND		10	4.3	ug/L		07/20/21 13:41	07/23/21 18:36	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/23/21 18:36	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:41	07/23/21 18:36	1
2-Methylphenol	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 18:36	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/20/21 13:41	07/23/21 18:36	1
2-Nitroaniline	ND		10	2.3	ug/L		07/20/21 13:41	07/23/21 18:36	1
3-Nitroaniline	ND		10	1.9	ug/L		07/20/21 13:41	07/23/21 18:36	1
4-Nitroaniline	ND		10	1.6	ug/L		07/20/21 13:41	07/23/21 18:36	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/23/21 18:36	1
2-Nitrophenol	ND		10	5.4	ug/L		07/20/21 13:41	07/23/21 18:36	1
4-Nitrophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/23/21 18:36	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 18:36	1

Client Sample ID: P93A-ROX-071521-DUP
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/20/21 13:41	07/23/21 18:36	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/20/21 13:41	07/23/21 18:36	1
Pentachlorophenol	ND		21	1.4	ug/L		07/20/21 13:41	07/23/21 18:36	1
Phenol	ND		10	2.7	ug/L		07/20/21 13:41	07/23/21 18:36	1
Pyridine	ND		10	3.3	ug/L		07/20/21 13:41	07/23/21 18:36	1
Quinoline	ND		10	4.7	ug/L		07/20/21 13:41	07/23/21 18:36	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/20/21 13:41	07/23/21 18:36	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/20/21 13:41	07/23/21 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*46 - 124*	*07/20/21 13:41*	*07/23/21 18:36*	*1*
2-Fluorophenol	*65*		*13 - 113*	*07/20/21 13:41*	*07/23/21 18:36*	*1*
Nitrobenzene-d5	*83*		*36 - 126*	*07/20/21 13:41*	*07/23/21 18:36*	*1*
Phenol-d5	*87*		*17 - 127*	*07/20/21 13:41*	*07/23/21 18:36*	*1*
Terphenyl-d14	*97*		*44 - 149*	*07/20/21 13:41*	*07/23/21 18:36*	*1*
2,4,6-Tribromophenol	*93*		*26 - 150*	*07/20/21 13:41*	*07/23/21 18:36*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/29/21 00:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/29/21 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*	*p*	*51 - 149*	*07/28/21 13:09*	*07/29/21 00:44*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: T12-ROX-071521
Date Collected: 07/15/21 10:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	500	200	ug/L			07/22/21 13:29	20
Acrolein	ND		400	200	ug/L			07/22/21 13:29	20
Acrylonitrile	ND		200	56	ug/L			07/22/21 13:29	20
Benzene	**2200**		20	7.6	ug/L			07/22/21 13:29	20
Bromobenzene	ND		20	11	ug/L			07/22/21 13:29	20
Bromochloromethane	ND		20	10	ug/L			07/22/21 13:29	20
Bromodichloromethane	ND		20	10	ug/L			07/22/21 13:29	20
Bromoform	ND		100	14	ug/L			07/22/21 13:29	20
Bromomethane	ND		20	20	ug/L			07/22/21 13:29	20
2-Butanone (MEK)	ND	*+	500	52	ug/L			07/22/21 13:29	20
Carbon disulfide	ND		20	10	ug/L			07/22/21 13:29	20
Carbon tetrachloride	ND		20	10	ug/L			07/22/21 13:29	20
Chlorobenzene	ND		20	10	ug/L			07/22/21 13:29	20
Dibromochloromethane	ND		20	10	ug/L			07/22/21 13:29	20
Chloroethane	ND		20	15	ug/L			07/22/21 13:29	20
2-Chloroethyl vinyl ether	ND		100	40	ug/L			07/22/21 13:29	20
Chloroform	ND		20	12	ug/L			07/22/21 13:29	20
1-Chlorohexane	ND		20	14	ug/L			07/22/21 13:29	20
Chloromethane	ND		20	17	ug/L			07/22/21 13:29	20
cis-1,2-Dichloroethene	ND		20	10	ug/L			07/22/21 13:29	20
cis-1,3-Dichloropropene	ND		100	10	ug/L			07/22/21 13:29	20
1,2-Dichlorobenzene	ND		20	10	ug/L			07/22/21 13:29	20
1,3-Dichlorobenzene	ND		20	11	ug/L			07/22/21 13:29	20
1,4-Dichlorobenzene	ND		20	13	ug/L			07/22/21 13:29	20
Dichlorodifluoromethane	ND		20	17	ug/L			07/22/21 13:29	20
1,1-Dichloroethane	ND		20	10	ug/L			07/22/21 13:29	20
1,2-Dichloroethane	ND		20	10	ug/L			07/22/21 13:29	20
1,1-Dichloroethene	ND		20	10	ug/L			07/22/21 13:29	20
1,2-Dichloropropane	ND		20	10	ug/L			07/22/21 13:29	20
1,3-Dichloropropane	ND		20	10	ug/L			07/22/21 13:29	20
2,2-Dichloropropane	ND		20	10	ug/L			07/22/21 13:29	20
1,1-Dichloropropene	ND		20	10	ug/L			07/22/21 13:29	20
Ethylbenzene	**28**		20	10	ug/L			07/22/21 13:29	20
Ethyl methacrylate	ND		20	12	ug/L			07/22/21 13:29	20
Hexachlorobutadiene	ND		100	18	ug/L			07/22/21 13:29	20
2-Hexanone	ND		500	62	ug/L			07/22/21 13:29	20
Isopropylbenzene	ND		20	11	ug/L			07/22/21 13:29	20
Methylene bromide	ND		100	12	ug/L			07/22/21 13:29	20
Methylene Chloride	ND		100	60	ug/L			07/22/21 13:29	20
4-Methyl-2-pentanone (MIBK)	ND		500	36	ug/L			07/22/21 13:29	20
Methyl tert-butyl ether	ND		20	15	ug/L			07/22/21 13:29	20
m-Xylene & p-Xylene	**170**		100	32	ug/L			07/22/21 13:29	20
Naphthalene	**31**		20	20	ug/L			07/22/21 13:29	20
n-Butylbenzene	ND		20	15	ug/L			07/22/21 13:29	20
N-Propylbenzene	ND		20	14	ug/L			07/22/21 13:29	20
o-Chlorotoluene	ND		20	11	ug/L			07/22/21 13:29	20
o-Xylene	ND		100	12	ug/L			07/22/21 13:29	20
p-Chlorotoluene	ND		20	11	ug/L			07/22/21 13:29	20
p-Isopropyltoluene	ND		20	14	ug/L			07/22/21 13:29	20

Client Sample ID: T12-ROX-071521
Date Collected: 07/15/21 10:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		20	14	ug/L			07/22/21 13:29	20
Styrene	ND		20	20	ug/L			07/22/21 13:29	20
tert-Butylbenzene	ND		20	13	ug/L			07/22/21 13:29	20
1,1,1,2-Tetrachloroethane	ND		20	10	ug/L			07/22/21 13:29	20
1,1,2,2-Tetrachloroethane	ND		20	10	ug/L			07/22/21 13:29	20
Tetrachloroethene	ND		20	12	ug/L			07/22/21 13:29	20
Toluene	64		20	8.2	ug/L			07/22/21 13:29	20
trans-1,2-Dichloroethene	ND		20	10	ug/L			07/22/21 13:29	20
trans-1,3-Dichloropropene	ND		100	10	ug/L			07/22/21 13:29	20
1,2,3-Trichlorobenzene	ND		20	14	ug/L			07/22/21 13:29	20
1,2,4-Trichlorobenzene	ND		20	16	ug/L			07/22/21 13:29	20
1,1,1-Trichloroethane	ND		20	10	ug/L			07/22/21 13:29	20
1,1,2-Trichloroethane	ND		100	10	ug/L			07/22/21 13:29	20
Trichloroethene	ND		20	10	ug/L			07/22/21 13:29	20
Trichlorofluoromethane	ND		20	10	ug/L			07/22/21 13:29	20
1,2,3-Trichloropropane	ND		100	17	ug/L			07/22/21 13:29	20
1,2,4-Trimethylbenzene	20		20	16	ug/L			07/22/21 13:29	20
1,3,5-Trimethylbenzene	14	J	20	11	ug/L			07/22/21 13:29	20
Vinyl acetate	ND		500	40	ug/L			07/22/21 13:29	20
Vinyl chloride	ND		20	10	ug/L			07/22/21 13:29	20
Xylenes, Total	180	J	200	32	ug/L			07/22/21 13:29	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/22/21 13:29*	*20*
Dibromofluoromethane	*105*		*75 - 126*		*07/22/21 13:29*	*20*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/22/21 13:29*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.15	J	0.21	0.034	ug/L		07/20/21 13:41	07/23/21 15:43	1
Acenaphthylene	ND		0.21	0.048	ug/L		07/20/21 13:41	07/23/21 15:43	1
Anthracene	ND		0.21	0.034	ug/L		07/20/21 13:41	07/23/21 15:43	1
Benzo[a]anthracene	ND		0.21	0.049	ug/L		07/20/21 13:41	07/23/21 15:43	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		07/20/21 13:41	07/23/21 15:43	1
Benzo[b]fluoranthene	ND		0.21	0.036	ug/L		07/20/21 13:41	07/23/21 15:43	1
Benzo[g,h,i]perylene	ND		0.21	0.14	ug/L		07/20/21 13:41	07/23/21 15:43	1
Benzo[k]fluoranthene	ND		0.21	0.11	ug/L		07/20/21 13:41	07/23/21 15:43	1
Chrysene	ND		0.21	0.078	ug/L		07/20/21 13:41	07/23/21 15:43	1
Dibenz(a,h)anthracene	ND		0.21	0.053	ug/L		07/20/21 13:41	07/23/21 15:43	1
Fluoranthene	ND		0.21	0.072	ug/L		07/20/21 13:41	07/23/21 15:43	1
Fluorene	ND		0.21	0.12	ug/L		07/20/21 13:41	07/23/21 15:43	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/20/21 13:41	07/23/21 15:43	1
1-Methylnaphthalene	1.7		0.21	0.078	ug/L		07/20/21 13:41	07/23/21 15:43	1
2-Methylnaphthalene	0.26		0.21	0.063	ug/L		07/20/21 13:41	07/23/21 15:43	1
Phenanthrene	ND		0.21	0.038	ug/L		07/20/21 13:41	07/23/21 15:43	1
Pyrene	ND		0.21	0.042	ug/L		07/20/21 13:41	07/23/21 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*15 - 122*	*07/20/21 13:41*	*07/23/21 15:43*	*1*
Nitrobenzene-d5	*89*		*19 - 130*	*07/20/21 13:41*	*07/23/21 15:43*	*1*

Client Sample ID: T12-ROX-071521
Date Collected: 07/15/21 10:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*33 - 138*	*07/20/21 13:41*	*07/23/21 15:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	4.0	ug/L		07/20/21 13:41	07/23/21 19:02	1
Benzenethiol	ND	*- UJ	11	1.8	ug/L		07/20/21 13:41	07/23/21 19:02	1
Benzoic acid	ND		32	7.7	ug/L		07/20/21 13:41	07/23/21 19:02	1
Benzyl alcohol	ND		11	2.1	ug/L		07/20/21 13:41	07/23/21 19:02	1
Bis(2-chloroethoxy)methane	ND		11	0.17	ug/L		07/20/21 13:41	07/23/21 19:02	1
Bis(2-chloroethyl)ether	ND		11	2.9	ug/L		07/20/21 13:41	07/23/21 19:02	1
bis (2-chloroisopropyl) ether	ND		11	0.17	ug/L		07/20/21 13:41	07/23/21 19:02	1
Bis(2-ethylhexyl) phthalate	ND		11	5.3	ug/L		07/20/21 13:41	07/23/21 19:02	1
4-Bromophenyl phenyl ether	ND		11	0.21	ug/L		07/20/21 13:41	07/23/21 19:02	1
Butyl benzyl phthalate	ND		11	0.20	ug/L		07/20/21 13:41	07/23/21 19:02	1
4-Chloroaniline	ND		11	3.6	ug/L		07/20/21 13:41	07/23/21 19:02	1
4-Chloro-3-methylphenol	ND		11	4.0	ug/L		07/20/21 13:41	07/23/21 19:02	1
2-Chloronaphthalene	ND		11	0.15	ug/L		07/20/21 13:41	07/23/21 19:02	1
2-Chlorophenol	ND		11	2.3	ug/L		07/20/21 13:41	07/23/21 19:02	1
4-Chlorophenyl phenyl ether	ND		11	2.1	ug/L		07/20/21 13:41	07/23/21 19:02	1
Dibenz[a,h]acridine	ND		11	1.1	ug/L		07/20/21 13:41	07/23/21 19:02	1
Dibenzofuran	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 19:02	1
3,3'-Dichlorobenzidine	ND		11	2.7	ug/L		07/20/21 13:41	07/23/21 19:02	1
2,4-Dichlorophenol	ND		11	3.2	ug/L		07/20/21 13:41	07/23/21 19:02	1
Diethyl phthalate	ND		11	0.25	ug/L		07/20/21 13:41	07/23/21 19:02	1
2,4-Dimethylphenol	**7.5**	J	11	3.7	ug/L		07/20/21 13:41	07/23/21 19:02	1
Dimethyl phthalate	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 19:02	1
Di-n-butyl phthalate	ND		11	2.9	ug/L		07/20/21 13:41	07/23/21 19:02	1
4,6-Dinitro-ortho-cresol	ND	UJ	11	1.7	ug/L		07/20/21 13:41	07/23/21 19:02	1
2,4-Dinitrophenol	ND		32	3.6	ug/L		07/20/21 13:41	07/23/21 19:02	1
2,4-Dinitrotoluene	ND		11	2.0	ug/L		07/20/21 13:41	07/23/21 19:02	1
2,6-Dinitrotoluene	ND		11	2.0	ug/L		07/20/21 13:41	07/23/21 19:02	1
Di-n-octyl phthalate	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 19:02	1
1,4-Dioxane	ND		11	1.1	ug/L		07/20/21 13:41	07/23/21 19:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	1.1	ug/L		07/20/21 13:41	07/23/21 19:02	1
Hexachlorobenzene	ND		11	0.18	ug/L		07/20/21 13:41	07/23/21 19:02	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/21 13:41	07/23/21 19:02	1
Hexachloroethane	ND		11	4.4	ug/L		07/20/21 13:41	07/23/21 19:02	1
Indene	**3.5**	J	11	1.1	ug/L		07/20/21 13:41	07/23/21 19:02	1
Isophorone	ND		11	0.15	ug/L		07/20/21 13:41	07/23/21 19:02	1
2-Methylphenol	ND		11	1.9	ug/L		07/20/21 13:41	07/23/21 19:02	1
3 & 4 Methylphenol	**1.8**	J	21	0.41	ug/L		07/20/21 13:41	07/23/21 19:02	1
2-Nitroaniline	ND		11	2.3	ug/L		07/20/21 13:41	07/23/21 19:02	1
3-Nitroaniline	ND		11	1.9	ug/L		07/20/21 13:41	07/23/21 19:02	1
4-Nitroaniline	ND		11	1.6	ug/L		07/20/21 13:41	07/23/21 19:02	1
Nitrobenzene	ND		11	0.14	ug/L		07/20/21 13:41	07/23/21 19:02	1
2-Nitrophenol	ND		11	5.5	ug/L		07/20/21 13:41	07/23/21 19:02	1
4-Nitrophenol	ND		11	2.2	ug/L		07/20/21 13:41	07/23/21 19:02	1
N-Nitrosodimethylamine	ND		11	3.7	ug/L		07/20/21 13:41	07/23/21 19:02	1

Client Sample ID: T12-ROX-071521
Date Collected: 07/15/21 10:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		11	3.5	ug/L		07/20/21 13:41	07/23/21 19:02	1
N-Nitrosodiphenylamine	ND		11	0.19	ug/L		07/20/21 13:41	07/23/21 19:02	1
Pentachlorophenol	ND		21	1.5	ug/L		07/20/21 13:41	07/23/21 19:02	1
Phenol	230		11	2.7	ug/L		07/20/21 13:41	07/23/21 19:02	1
Pyridine	ND		11	3.4	ug/L		07/20/21 13:41	07/23/21 19:02	1
Quinoline	ND		11	4.8	ug/L		07/20/21 13:41	07/23/21 19:02	1
2,4,5-Trichlorophenol	ND		11	3.9	ug/L		07/20/21 13:41	07/23/21 19:02	1
2,4,6-Trichlorophenol	ND		11	3.7	ug/L		07/20/21 13:41	07/23/21 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*46 - 124*	*07/20/21 13:41*	*07/23/21 19:02*	*1*
2-Fluorophenol	*77*		*13 - 113*	*07/20/21 13:41*	*07/23/21 19:02*	*1*
Nitrobenzene-d5	*85*		*36 - 126*	*07/20/21 13:41*	*07/23/21 19:02*	*1*
Phenol-d5	*93*		*17 - 127*	*07/20/21 13:41*	*07/23/21 19:02*	*1*
Terphenyl-d14	*96*		*44 - 149*	*07/20/21 13:41*	*07/23/21 19:02*	*1*
2,4,6-Tribromophenol	*105*		*26 - 150*	*07/20/21 13:41*	*07/23/21 19:02*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/28/21 13:09	07/29/21 01:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/29/21 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*	*p*	*51 - 149*	*07/28/21 13:09*	*07/29/21 01:04*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: P59-ROX-071521
Date Collected: 07/15/21 11:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	500	200	ug/L			07/23/21 18:28	20
Acrolein	ND		400	200	ug/L			07/23/21 18:28	20
Acrylonitrile	ND		200	56	ug/L			07/23/21 18:28	20
Benzene	**3400**		20	7.6	ug/L			07/23/21 18:28	20
Bromobenzene	ND		20	11	ug/L			07/23/21 18:28	20
Bromochloromethane	ND		20	10	ug/L			07/23/21 18:28	20
Bromodichloromethane	ND		20	10	ug/L			07/23/21 18:28	20
Bromoform	ND		100	14	ug/L			07/23/21 18:28	20
Bromomethane	ND		20	20	ug/L			07/23/21 18:28	20
2-Butanone (MEK)	ND	*+	500	52	ug/L			07/23/21 18:28	20
Carbon disulfide	ND		20	10	ug/L			07/23/21 18:28	20
Carbon tetrachloride	ND		20	10	ug/L			07/23/21 18:28	20
Chlorobenzene	ND		20	10	ug/L			07/23/21 18:28	20
Dibromochloromethane	ND		20	10	ug/L			07/23/21 18:28	20
Chloroethane	ND		20	15	ug/L			07/23/21 18:28	20
2-Chloroethyl vinyl ether	ND		100	40	ug/L			07/23/21 18:28	20
Chloroform	ND		20	12	ug/L			07/23/21 18:28	20
1-Chlorohexane	ND		20	14	ug/L			07/23/21 18:28	20
Chloromethane	ND		20	17	ug/L			07/23/21 18:28	20
cis-1,2-Dichloroethene	ND		20	10	ug/L			07/23/21 18:28	20
cis-1,3-Dichloropropene	ND		100	10	ug/L			07/23/21 18:28	20
1,2-Dichlorobenzene	ND		20	10	ug/L			07/23/21 18:28	20
1,3-Dichlorobenzene	ND		20	11	ug/L			07/23/21 18:28	20
1,4-Dichlorobenzene	ND		20	13	ug/L			07/23/21 18:28	20
Dichlorodifluoromethane	ND		20	17	ug/L			07/23/21 18:28	20
1,1-Dichloroethane	ND		20	10	ug/L			07/23/21 18:28	20
1,2-Dichloroethane	ND		20	10	ug/L			07/23/21 18:28	20
1,1-Dichloroethene	ND		20	10	ug/L			07/23/21 18:28	20
1,2-Dichloropropane	ND		20	10	ug/L			07/23/21 18:28	20
1,3-Dichloropropane	ND		20	10	ug/L			07/23/21 18:28	20
2,2-Dichloropropane	ND		20	10	ug/L			07/23/21 18:28	20
1,1-Dichloropropene	ND		20	10	ug/L			07/23/21 18:28	20
Ethylbenzene	**300**		20	10	ug/L			07/23/21 18:28	20
Ethyl methacrylate	ND		20	12	ug/L			07/23/21 18:28	20
Hexachlorobutadiene	ND		100	18	ug/L			07/23/21 18:28	20
2-Hexanone	ND		500	62	ug/L			07/23/21 18:28	20
Isopropylbenzene	**48**		20	11	ug/L			07/23/21 18:28	20
Methylene bromide	ND		100	12	ug/L			07/23/21 18:28	20
Methylene Chloride	ND		100	60	ug/L			07/23/21 18:28	20
4-Methyl-2-pentanone (MIBK)	ND		500	36	ug/L			07/23/21 18:28	20
Methyl tert-butyl ether	ND		20	15	ug/L			07/23/21 18:28	20
m-Xylene & p-Xylene	**290**		100	32	ug/L			07/23/21 18:28	20
Naphthalene	**150**		20	20	ug/L			07/23/21 18:28	20
n-Butylbenzene	ND		20	15	ug/L			07/23/21 18:28	20
N-Propylbenzene	**70**		20	14	ug/L			07/23/21 18:28	20
o-Chlorotoluene	ND		20	11	ug/L			07/23/21 18:28	20
o-Xylene	**13**	J	100	12	ug/L			07/23/21 18:28	20
p-Chlorotoluene	ND		20	11	ug/L			07/23/21 18:28	20
p-Isopropyltoluene	ND		20	14	ug/L			07/23/21 18:28	20

Client Sample ID: P59-ROX-071521
Date Collected: 07/15/21 11:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		20	14	ug/L			07/23/21 18:28	20
Styrene	ND		20	20	ug/L			07/23/21 18:28	20
tert-Butylbenzene	ND		20	13	ug/L			07/23/21 18:28	20
1,1,1,2-Tetrachloroethane	ND		20	10	ug/L			07/23/21 18:28	20
1,1,2,2-Tetrachloroethane	ND		20	10	ug/L			07/23/21 18:28	20
Tetrachloroethene	ND		20	12	ug/L			07/23/21 18:28	20
Toluene	**150**		20	8.2	ug/L			07/23/21 18:28	20
trans-1,2-Dichloroethene	ND		20	10	ug/L			07/23/21 18:28	20
trans-1,3-Dichloropropene	ND		100	10	ug/L			07/23/21 18:28	20
1,2,3-Trichlorobenzene	ND		20	14	ug/L			07/23/21 18:28	20
1,2,4-Trichlorobenzene	ND		20	16	ug/L			07/23/21 18:28	20
1,1,1-Trichloroethane	ND		20	10	ug/L			07/23/21 18:28	20
1,1,2-Trichloroethane	ND		100	10	ug/L			07/23/21 18:28	20
Trichloroethene	ND		20	10	ug/L			07/23/21 18:28	20
Trichlorofluoromethane	ND		20	10	ug/L			07/23/21 18:28	20
1,2,3-Trichloropropane	ND		100	17	ug/L			07/23/21 18:28	20
1,2,4-Trimethylbenzene	**140**		20	16	ug/L			07/23/21 18:28	20
1,3,5-Trimethylbenzene	**53**		20	11	ug/L			07/23/21 18:28	20
Vinyl acetate	ND		500	40	ug/L			07/23/21 18:28	20
Vinyl chloride	ND		20	10	ug/L			07/23/21 18:28	20
Xylenes, Total	**310**		200	32	ug/L			07/23/21 18:28	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/23/21 18:28*	*20*
Dibromofluoromethane	*109*		*75 - 126*		*07/23/21 18:28*	*20*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/23/21 18:28*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/26/21 15:39	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/20/21 13:41	07/26/21 15:39	1
Anthracene	ND		0.21	0.033	ug/L		07/20/21 13:41	07/26/21 15:39	1
Benzo[a]anthracene	**0.12**	J	0.21	0.047	ug/L		07/20/21 13:41	07/26/21 15:39	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/20/21 13:41	07/26/21 15:39	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/20/21 13:41	07/26/21 15:39	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/20/21 13:41	07/26/21 15:39	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/20/21 13:41	07/26/21 15:39	1
Chrysene	**0.10**	J	0.21	0.076	ug/L		07/20/21 13:41	07/26/21 15:39	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		07/20/21 13:41	07/26/21 15:39	1
Fluoranthene	ND		0.21	0.070	ug/L		07/20/21 13:41	07/26/21 15:39	1
Fluorene	ND		0.21	0.11	ug/L		07/20/21 13:41	07/26/21 15:39	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.044	ug/L		07/20/21 13:41	07/26/21 15:39	1
1-Methylnaphthalene	**13**		0.21	0.076	ug/L		07/20/21 13:41	07/26/21 15:39	1
2-Methylnaphthalene	**19**		0.21	0.062	ug/L		07/20/21 13:41	07/26/21 15:39	1
Phenanthrene	**0.82**		0.21	0.037	ug/L		07/20/21 13:41	07/26/21 15:39	1
Pyrene	**0.30**		0.21	0.041	ug/L		07/20/21 13:41	07/26/21 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*15 - 122*	*07/20/21 13:41*	*07/26/21 15:39*	*1*
Nitrobenzene-d5	*92*		*19 - 130*	*07/20/21 13:41*	*07/26/21 15:39*	*1*

Client Sample ID: P59-ROX-071521
Date Collected: 07/15/21 11:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	90		33 - 138	07/20/21 13:41	07/26/21 15:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/20/21 13:41	07/26/21 19:46	1
Benzenethiol	ND	*- UJ	10	1.7	ug/L		07/20/21 13:41	07/26/21 19:46	1
Benzoic acid	**47**		31	7.5	ug/L		07/20/21 13:41	07/26/21 19:46	1
Benzyl alcohol	ND		10	2.1	ug/L		07/20/21 13:41	07/26/21 19:46	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/21 13:41	07/26/21 19:46	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		07/20/21 13:41	07/26/21 19:46	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/21 13:41	07/26/21 19:46	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/20/21 13:41	07/26/21 19:46	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/20/21 13:41	07/26/21 19:46	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/21 13:41	07/26/21 19:46	1
4-Chloroaniline	ND		10	3.5	ug/L		07/20/21 13:41	07/26/21 19:46	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/20/21 13:41	07/26/21 19:46	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:41	07/26/21 19:46	1
2-Chlorophenol	ND		10	2.3	ug/L		07/20/21 13:41	07/26/21 19:46	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/20/21 13:41	07/26/21 19:46	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:41	07/26/21 19:46	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/21 13:41	07/26/21 19:46	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/20/21 13:41	07/26/21 19:46	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/20/21 13:41	07/26/21 19:46	1
Diethyl phthalate	ND		10	0.25	ug/L		07/20/21 13:41	07/26/21 19:46	1
2,4-Dimethylphenol	**4.3**	J	10	3.6	ug/L		07/20/21 13:41	07/26/21 19:46	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/21 13:41	07/26/21 19:46	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/20/21 13:41	07/26/21 19:46	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/21 13:41	07/26/21 19:46	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/20/21 13:41	07/26/21 19:46	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/26/21 19:46	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:41	07/26/21 19:46	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/21 13:41	07/26/21 19:46	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:41	07/26/21 19:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:41	07/26/21 19:46	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/21 13:41	07/26/21 19:46	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/20/21 13:41	07/26/21 19:46	1
Hexachloroethane	ND		10	4.3	ug/L		07/20/21 13:41	07/26/21 19:46	1
Indene	ND		10	1.0	ug/L		07/20/21 13:41	07/26/21 19:46	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:41	07/26/21 19:46	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/21 13:41	07/26/21 19:46	1
3 & 4 Methylphenol	**1.8**	J	21	0.40	ug/L		07/20/21 13:41	07/26/21 19:46	1
2-Nitroaniline	ND		10	2.3	ug/L		07/20/21 13:41	07/26/21 19:46	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/21 13:41	07/26/21 19:46	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/21 13:41	07/26/21 19:46	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:41	07/26/21 19:46	1
2-Nitrophenol	ND		10	5.3	ug/L		07/20/21 13:41	07/26/21 19:46	1
4-Nitrophenol	ND		10	2.2	ug/L		07/20/21 13:41	07/26/21 19:46	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/20/21 13:41	07/26/21 19:46	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Client Sample ID: P59-ROX-071521
Date Collected: 07/15/21 11:45
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/20/21 13:41	07/26/21 19:46	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/21 13:41	07/26/21 19:46	1
Pentachlorophenol	ND		21	1.4	ug/L		07/20/21 13:41	07/26/21 19:46	1
Phenol	69		10	2.7	ug/L		07/20/21 13:41	07/26/21 19:46	1
Pyridine	ND		10	3.3	ug/L		07/20/21 13:41	07/26/21 19:46	1
Quinoline	ND		10	4.6	ug/L		07/20/21 13:41	07/26/21 19:46	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/20/21 13:41	07/26/21 19:46	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/20/21 13:41	07/26/21 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*46 - 124*	*07/20/21 13:41*	*07/26/21 19:46*	*1*
2-Fluorophenol	*62*		*13 - 113*	*07/20/21 13:41*	*07/26/21 19:46*	*1*
Nitrobenzene-d5	*83*		*36 - 126*	*07/20/21 13:41*	*07/26/21 19:46*	*1*
Phenol-d5	*84*		*17 - 127*	*07/20/21 13:41*	*07/26/21 19:46*	*1*
Terphenyl-d14	*84*		*44 - 149*	*07/20/21 13:41*	*07/26/21 19:46*	*1*
2,4,6-Tribromophenol	*105*		*26 - 150*	*07/20/21 13:41*	*07/26/21 19:46*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/28/21 13:21	07/29/21 02:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:21	07/29/21 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*	*p*	*51 - 149*	*07/28/21 13:21*	*07/29/21 02:24*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-206046-2	TB-ROX-071521-8260-A	75	101	101
400-206046-3	MW28-ROX-071521	78	102	100
400-206046-3 MS	MW28-ROX-071521	80	100	102
400-206046-3 MSD	MW28-ROX-071521	80	100	101
400-206046-4	ROST4PZE-ROX-071521	79	102	99
400-206046-5	MW22-ROX-071521	81	103	101
400-206046-6	MW22-ROX-071521-DUP	81	103	100
400-206046-8	TB-ROX-071521-8260-B	80	103	101
400-206046-9	P93A-ROX-071521	95	103	105
400-206046-9 MS	P93A-ROX-071521	97	103	103
400-206046-9 MSD	P93A-ROX-071521	97	103	104
400-206046-10	P93A-ROX-071521-DUP	96	101	103
400-206046-11	T12-ROX-071521	76	105	97
400-206046-12	P59-ROX-071521	79	109	99
LCS 400-540400/1002	Lab Control Sample	79	100	100
LCS 400-540597/1002	Lab Control Sample	82	99	100
LCS 400-541380/1002	Lab Control Sample	97	102	105
MB 400-540400/4	Method Blank	78	104	101
MB 400-540597/4	Method Blank	77	104	99
MB 400-541380/4	Method Blank	94	102	105

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-206046-3	MW28-ROX-071521	95	32	83	62	91	86
400-206046-4	ROST4PZE-ROX-071521	96	54	82	78	87	96
400-206046-5	MW22-ROX-071521	94	69	77	83	90	94
400-206046-6	MW22-ROX-071521-DUP	99	73	83	91	91	100
400-206046-9	P93A-ROX-071521	96	81	79	90	96	91
400-206046-10	P93A-ROX-071521-DUP	101	65	83	87	97	93
400-206046-11	T12-ROX-071521	104	77	85	93	96	105
400-206046-12	P59-ROX-071521	96	62	83	84	84	105
LCS 400-540128/2-A	Lab Control Sample	109	83	106	97	95	105
LCS 400-540128/4-A	Lab Control Sample	50	34	43	43	40 S1-	41
LCSD 400-540128/3-A	Lab Control Sample Dup	110	75	104	97	92	108
LCSD 400-540128/5-A	Lab Control Sample Dup	47	36	41	43	37 S1-	41
MB 400-540128/1-A	Method Blank	65	23	55	40	52	46

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-206046-3	MW28-ROX-071521	79	74	74
400-206046-4	ROST4PZE-ROX-071521	69	79	75
400-206046-5	MW22-ROX-071521	78	75	83
400-206046-6	MW22-ROX-071521-DUP	79	78	77
400-206046-9	P93A-ROX-071521	91	82	79
400-206046-10	P93A-ROX-071521-DUP	94	89	82
400-206046-11	T12-ROX-071521	82	89	81
400-206046-12	P59-ROX-071521	93	92	90
LCS 400-540128/2-A	Lab Control Sample	83	96	82
LCSD 400-540128/3-A	Lab Control Sample Dup	88	88	83
MB 400-540128/1-A	Method Blank	88	83	90

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-206046-1	TB-ROX-071521-8011-A	89
400-206046-3	MW28-ROX-071521	100 p
400-206046-4	ROST4PZE-ROX-071521	101 p
400-206046-5	MW22-ROX-071521	89 p
400-206046-6	MW22-ROX-071521-DUP	79 p
400-206046-7	TB-ROX-071521-8011-B	106
400-206046-9	P93A-ROX-071521	103 p
400-206046-10	P93A-ROX-071521-DUP	105 p
400-206046-11	T12-ROX-071521	106 p
400-206046-12	P59-ROX-071521	95 p
LCS 400-541296/2-A	Lab Control Sample	109
LCS 400-541301/2-A	Lab Control Sample	124
LCSD 400-541296/3-A	Lab Control Sample Dup	109
LCSD 400-541301/3-A	Lab Control Sample Dup	116
MB 400-541296/1-A	Method Blank	93 p
MB 400-541301/1-A	Method Blank	103

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206046-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-071521-8011-A

Lab Sample ID: 400-206046-1

Date Collected: 07/15/21 00:00
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.8 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 22:01	DS	TAL PEN

Client Sample ID: TB-ROX-071521-8260-A

Lab Sample ID: 400-206046-2

Date Collected: 07/15/21 00:00
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 08:37	WPD	TAL PEN

Client Sample ID: MW28-ROX-071521

Lab Sample ID: 400-206046-3

Date Collected: 07/15/21 09:10
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 09:23	WPD	TAL PEN
Total/NA	Prep	3520C			251 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 18:54	S1B	TAL PEN
Total/NA	Prep	3520C			251 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 23:46	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 22:22	DS	TAL PEN

Client Sample ID: ROST4PZE-ROX-071521

Lab Sample ID: 400-206046-4

Date Collected: 07/15/21 10:15
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	540400	07/22/21 11:26	WPD	TAL PEN
Total/NA	Prep	3520C			259 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 19:20	S1B	TAL PEN
Total/NA	Prep	3520C			259 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/23/21 00:03	PP1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 22:42	DS	TAL PEN

Client Sample ID: MW22-ROX-071521

Lab Sample ID: 400-206046-5

Date Collected: 07/15/21 11:30
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 09:46	WPD	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 17:17	S1B	TAL PEN

Client Sample ID: MW22-ROX-071521

Lab Sample ID: 400-206046-5

Date Collected: 07/15/21 11:30
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			263.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/23/21 00:20	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 23:02	DS	TAL PEN

Client Sample ID: MW22-ROX-071521-DUP

Lab Sample ID: 400-206046-6

Date Collected: 07/15/21 11:30
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 15:26	WPD	TAL PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 17:43	S1B	TAL PEN
Total/NA	Prep	3520C			262.2 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/23/21 00:37	PP1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 23:23	DS	TAL PEN

Client Sample ID: TB-ROX-071521-8011-B

Lab Sample ID: 400-206046-7

Date Collected: 07/15/21 00:00
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 23:43	DS	TAL PEN

Client Sample ID: TB-ROX-071521-8260-B

Lab Sample ID: 400-206046-8

Date Collected: 07/15/21 00:00
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 09:00	WPD	TAL PEN

Client Sample ID: P93A-ROX-071521

Lab Sample ID: 400-206046-9

Date Collected: 07/15/21 09:40
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541380	07/29/21 16:31	BPO	TAL PEN
Total/NA	Prep	3520C			241.4 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 18:10	S1B	TAL PEN
Total/NA	Prep	3520C			241.4 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540635	07/23/21 14:25	KJA	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/29/21 00:23	DS	TAL PEN

Client Sample ID: P93A-ROX-071521-DUP

Lab Sample ID: 400-206046-10

Date Collected: 07/15/21 09:40
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541380	07/29/21 17:52	BPO	TAL PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 18:36	S1B	TAL PEN
Total/NA	Prep	3520C			241.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540635	07/23/21 15:26	KJA	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/29/21 00:44	DS	TAL PEN

Client Sample ID: T12-ROX-071521

Lab Sample ID: 400-206046-11

Date Collected: 07/15/21 10:45
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	540400	07/22/21 13:29	WPD	TAL PEN
Total/NA	Prep	3520C			236.4 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 19:02	S1B	TAL PEN
Total/NA	Prep	3520C			236.4 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540635	07/23/21 15:43	KJA	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/29/21 01:04	DS	TAL PEN

Client Sample ID: P59-ROX-071521

Lab Sample ID: 400-206046-12

Date Collected: 07/15/21 11:45
Matrix: Water
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	5 mL	5 mL	540597	07/23/21 18:28	WPD	TAL PEN
Total/NA	Prep	3520C			243.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 19:46	S1B	TAL PEN
Total/NA	Prep	3520C			243.8 mL	1 mL	540128	07/20/21 13:41	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 15:39	PP1	TAL PEN
Total/NA	Prep	8011			34.2 mL	35 mL	541301	07/28/21 13:21	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/29/21 02:24	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-540128/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 09:53	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D LL		1			540521	07/22/21 20:01	PP1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-540400/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 08:15	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-540597/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 08:21	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-541296/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 16:55	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-541301/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541301	07/28/21 13:21	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/29/21 01:24	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-541380/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541380	07/29/21 16:05	BPO	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 18:01	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D LL		5			540521	07/22/21 20:18	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-540128/4-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 11:11	S1B	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-540400/1002

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 07:19	WPD	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-540597/1002

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 07:27	WPD	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-541296/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 17:15	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-541301/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541301	07/28/21 13:21	DS	TAL PEN
Total/NA	Analysis	8011		1			541486	07/29/21 15:05	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-541380/1002

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541380	07/29/21 14:58	BPO	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-540128/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 18:28	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D LL		5			540521	07/22/21 20:36	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-540128/5-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540128	07/20/21 13:40	HMW	TAL PEN
Total/NA	Analysis	8270D		1			540593	07/23/21 11:37	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-541296/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541296	07/28/21 13:09	DS	TAL PEN
Total/NA	Analysis	8011		1			541352	07/28/21 17:36	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-541301/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541301	07/28/21 13:21	DS	TAL PEN
Total/NA	Analysis	8011		1			541486	07/29/21 15:25	DS	TAL PEN

Client Sample ID: MW28-ROX-071521 — **Lab Sample ID: 400-206046-3 MS**
Date Collected: 07/15/21 09:10 — **Matrix: Water**
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 14:17	WPD	TAL PEN

Client Sample ID: MW28-ROX-071521 — **Lab Sample ID: 400-206046-3 MSD**
Date Collected: 07/15/21 09:10 — **Matrix: Water**
Date Received: 07/16/21 09:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540400	07/22/21 14:40	WPD	TAL PEN

Client Sample ID: P93A-ROX-071521
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-9 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541380	07/29/21 18:19	BPO	TAL PEN

Client Sample ID: P93A-ROX-071521
Date Collected: 07/15/21 09:40
Date Received: 07/16/21 09:47

Lab Sample ID: 400-206046-9 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541380	07/29/21 18:45	BPO	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 540400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-2	TB-ROX-071521-8260-A	Total/NA	Water	8260B	
400-206046-3	MW28-ROX-071521	Total/NA	Water	8260B	
400-206046-4	ROST4PZE-ROX-071521	Total/NA	Water	8260B	
400-206046-5	MW22-ROX-071521	Total/NA	Water	8260B	
400-206046-6	MW22-ROX-071521-DUP	Total/NA	Water	8260B	
400-206046-8	TB-ROX-071521-8260-B	Total/NA	Water	8260B	
400-206046-11	T12-ROX-071521	Total/NA	Water	8260B	
MB 400-540400/4	Method Blank	Total/NA	Water	8260B	
LCS 400-540400/1002	Lab Control Sample	Total/NA	Water	8260B	
400-206046-3 MS	MW28-ROX-071521	Total/NA	Water	8260B	
400-206046-3 MSD	MW28-ROX-071521	Total/NA	Water	8260B	

Analysis Batch: 540597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-12	P59-ROX-071521	Total/NA	Water	8260B	
MB 400-540597/4	Method Blank	Total/NA	Water	8260B	
LCS 400-540597/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 541380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-9	P93A-ROX-071521	Total/NA	Water	8260B	
400-206046-10	P93A-ROX-071521-DUP	Total/NA	Water	8260B	
MB 400-541380/4	Method Blank	Total/NA	Water	8260B	
LCS 400-541380/1002	Lab Control Sample	Total/NA	Water	8260B	
400-206046-9 MS	P93A-ROX-071521	Total/NA	Water	8260B	
400-206046-9 MSD	P93A-ROX-071521	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 540128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-3	MW28-ROX-071521	Total/NA	Water	3520C	
400-206046-4	ROST4PZE-ROX-071521	Total/NA	Water	3520C	
400-206046-5	MW22-ROX-071521	Total/NA	Water	3520C	
400-206046-6	MW22-ROX-071521-DUP	Total/NA	Water	3520C	
400-206046-9	P93A-ROX-071521	Total/NA	Water	3520C	
400-206046-10	P93A-ROX-071521-DUP	Total/NA	Water	3520C	
400-206046-11	T12-ROX-071521	Total/NA	Water	3520C	
400-206046-12	P59-ROX-071521	Total/NA	Water	3520C	
MB 400-540128/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-540128/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-540128/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-540128/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-540128/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 540521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-3	MW28-ROX-071521	Total/NA	Water	8270D LL	540128
400-206046-4	ROST4PZE-ROX-071521	Total/NA	Water	8270D LL	540128
400-206046-5	MW22-ROX-071521	Total/NA	Water	8270D LL	540128
400-206046-6	MW22-ROX-071521-DUP	Total/NA	Water	8270D LL	540128

GC/MS Semi VOA (Continued)

Analysis Batch: 540521 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-540128/1-A	Method Blank	Total/NA	Water	8270D LL	540128
LCS 400-540128/2-A	Lab Control Sample	Total/NA	Water	8270D LL	540128
LCSD 400-540128/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	540128

Analysis Batch: 540593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-5	MW22-ROX-071521	Total/NA	Water	8270D	540128
400-206046-6	MW22-ROX-071521-DUP	Total/NA	Water	8270D	540128
400-206046-9	P93A-ROX-071521	Total/NA	Water	8270D	540128
400-206046-10	P93A-ROX-071521-DUP	Total/NA	Water	8270D	540128
400-206046-11	T12-ROX-071521	Total/NA	Water	8270D	540128
MB 400-540128/1-A	Method Blank	Total/NA	Water	8270D	540128
LCS 400-540128/4-A	Lab Control Sample	Total/NA	Water	8270D	540128
LCSD 400-540128/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	540128

Analysis Batch: 540635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-9	P93A-ROX-071521	Total/NA	Water	8270D LL	540128
400-206046-10	P93A-ROX-071521-DUP	Total/NA	Water	8270D LL	540128
400-206046-11	T12-ROX-071521	Total/NA	Water	8270D LL	540128

Analysis Batch: 540930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-3	MW28-ROX-071521	Total/NA	Water	8270D	540128
400-206046-4	ROST4PZE-ROX-071521	Total/NA	Water	8270D	540128
400-206046-12	P59-ROX-071521	Total/NA	Water	8270D	540128
LCS 400-540128/2-A	Lab Control Sample	Total/NA	Water	8270D	540128
LCSD 400-540128/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	540128

Analysis Batch: 540955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-12	P59-ROX-071521	Total/NA	Water	8270D LL	540128

GC Semi VOA

Prep Batch: 541296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-1	TB-ROX-071521-8011-A	Total/NA	Water	8011	
400-206046-3	MW28-ROX-071521	Total/NA	Water	8011	
400-206046-4	ROST4PZE-ROX-071521	Total/NA	Water	8011	
400-206046-5	MW22-ROX-071521	Total/NA	Water	8011	
400-206046-6	MW22-ROX-071521-DUP	Total/NA	Water	8011	
400-206046-7	TB-ROX-071521-8011-B	Total/NA	Water	8011	
400-206046-9	P93A-ROX-071521	Total/NA	Water	8011	
400-206046-10	P93A-ROX-071521-DUP	Total/NA	Water	8011	
400-206046-11	T12-ROX-071521	Total/NA	Water	8011	
MB 400-541296/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-541296/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-541296/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

GC Semi VOA

Prep Batch: 541301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-12	P59-ROX-071521	Total/NA	Water	8011	
MB 400-541301/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-541301/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-541301/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 541352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206046-1	TB-ROX-071521-8011-A	Total/NA	Water	8011	541296
400-206046-3	MW28-ROX-071521	Total/NA	Water	8011	541296
400-206046-4	ROST4PZE-ROX-071521	Total/NA	Water	8011	541296
400-206046-5	MW22-ROX-071521	Total/NA	Water	8011	541296
400-206046-6	MW22-ROX-071521-DUP	Total/NA	Water	8011	541296
400-206046-7	TB-ROX-071521-8011-B	Total/NA	Water	8011	541296
400-206046-9	P93A-ROX-071521	Total/NA	Water	8011	541296
400-206046-10	P93A-ROX-071521-DUP	Total/NA	Water	8011	541296
400-206046-11	T12-ROX-071521	Total/NA	Water	8011	541296
400-206046-12	P59-ROX-071521	Total/NA	Water	8011	541301
MB 400-541296/1-A	Method Blank	Total/NA	Water	8011	541296
MB 400-541301/1-A	Method Blank	Total/NA	Water	8011	541301
LCS 400-541296/2-A	Lab Control Sample	Total/NA	Water	8011	541296
LCSD 400-541296/3-A	Lab Control Sample Dup	Total/NA	Water	8011	541296

Analysis Batch: 541486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-541301/2-A	Lab Control Sample	Total/NA	Water	8011	541301
LCSD 400-541301/3-A	Lab Control Sample Dup	Total/NA	Water	8011	541301

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

Lab Sample ID: MB 400-540400/4
Matrix: Water
Analysis Batch: 540400

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/22/21 08:15	1
Acrolein	ND		20	10	ug/L			07/22/21 08:15	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/21 08:15	1
Benzene	ND		1.0	0.38	ug/L			07/22/21 08:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/21 08:15	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/21 08:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Bromoform	ND		5.0	0.71	ug/L			07/22/21 08:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/21 08:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/22/21 08:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/21 08:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/21 08:15	1
Chloroform	ND		1.0	0.60	ug/L			07/22/21 08:15	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/22/21 08:15	1
Chloromethane	ND		1.0	0.83	ug/L			07/22/21 08:15	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 08:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/21 08:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/21 08:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/21 08:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/21 08:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/21 08:15	1
2-Hexanone	ND		25	3.1	ug/L			07/22/21 08:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/22/21 08:15	1
Methylene bromide	ND		5.0	0.59	ug/L			07/22/21 08:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/21 08:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/21 08:15	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/22/21 08:15	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/22/21 08:15	1
Naphthalene	ND		1.0	1.0	ug/L			07/22/21 08:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/21 08:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/21 08:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/21 08:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/21 08:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/21 08:15	1

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

Lab Sample ID: MB 400-540400/4
Matrix: Water
Analysis Batch: 540400

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/21 08:15	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/22/21 08:15	1
Styrene	ND		1.0	1.0	ug/L			07/22/21 08:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/21 08:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/22/21 08:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/22/21 08:15	1
Toluene	ND		1.0	0.41	ug/L			07/22/21 08:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/21 08:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/22/21 08:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/21 08:15	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/22/21 08:15	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/22/21 08:15	1
Trichloroethene	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/22/21 08:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/21 08:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/21 08:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/21 08:15	1
Vinyl acetate	ND		25	2.0	ug/L			07/22/21 08:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/21 08:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/21 08:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/22/21 08:15*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/22/21 08:15*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*07/22/21 08:15*	*1*

Lab Sample ID: LCS 400-540400/1002
Matrix: Water
Analysis Batch: 540400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	387	*+	ug/L		194	43 - 160
Acrolein	500	571		ug/L		114	38 - 160
Acrylonitrile	500	383		ug/L		77	64 - 142
Benzene	50.0	49.9		ug/L		100	70 - 130
Bromobenzene	50.0	50.4		ug/L		101	70 - 132
Bromochloromethane	50.0	52.2		ug/L		104	70 - 130
Bromodichloromethane	50.0	44.3		ug/L		89	67 - 133
Bromoform	50.0	46.9		ug/L		94	57 - 140
Bromomethane	50.0	61.4		ug/L		123	10 - 160
2-Butanone (MEK)	200	404	*+	ug/L		202	61 - 145
Carbon disulfide	50.0	50.4		ug/L		101	61 - 137
Carbon tetrachloride	50.0	45.1		ug/L		90	61 - 137
Chlorobenzene	50.0	49.9		ug/L		100	70 - 130
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
Chloroethane	50.0	48.9		ug/L		98	55 - 141

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

Lab Sample ID: LCS 400-540400/1002
Matrix: Water
Analysis Batch: 540400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	27.6		ug/L		55	10 - 160
Chloroform	50.0	45.7		ug/L		91	69 - 130
1-Chlorohexane	50.0	38.7		ug/L		77	69 - 130
Chloromethane	50.0	30.4		ug/L		61	58 - 137
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	49.6		ug/L		99	69 - 132
1,2-Dichlorobenzene	50.0	50.9		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	54.4		ug/L		109	70 - 130
1,4-Dichlorobenzene	50.0	53.8		ug/L		108	70 - 130
Dichlorodifluoromethane	50.0	27.2		ug/L		54	41 - 146
1,1-Dichloroethane	50.0	43.5		ug/L		87	70 - 130
1,2-Dichloroethane	50.0	39.3		ug/L		79	69 - 130
1,1-Dichloroethene	50.0	48.3		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	44.0		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	46.5		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	44.5		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	48.2		ug/L		96	70 - 130
Ethylbenzene	50.0	46.8		ug/L		94	70 - 130
Ethyl methacrylate	50.0	49.9		ug/L		100	68 - 130
Hexachlorobutadiene	50.0	64.8		ug/L		130	53 - 140
2-Hexanone	200	244		ug/L		122	65 - 137
Isopropylbenzene	50.0	48.3		ug/L		97	70 - 130
Methylene bromide	50.0	49.3		ug/L		99	70 - 130
Methylene Chloride	50.0	52.5		ug/L		105	66 - 135
4-Methyl-2-pentanone (MIBK)	200	169		ug/L		84	69 - 138
Methyl tert-butyl ether	50.0	52.1		ug/L		104	66 - 130
m-Xylene & p-Xylene	50.0	45.6		ug/L		91	70 - 130
Naphthalene	50.0	47.5		ug/L		95	47 - 149
n-Butylbenzene	50.0	45.6		ug/L		91	67 - 130
N-Propylbenzene	50.0	47.4		ug/L		95	70 - 130
o-Chlorotoluene	50.0	43.4		ug/L		87	70 - 130
o-Xylene	50.0	45.3		ug/L		91	70 - 130
p-Chlorotoluene	50.0	42.4		ug/L		85	70 - 130
p-Isopropyltoluene	50.0	46.3		ug/L		93	65 - 130
sec-Butylbenzene	50.0	44.0		ug/L		88	66 - 130
Styrene	50.0	46.7		ug/L		93	70 - 130
tert-Butylbenzene	50.0	41.8		ug/L		84	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.8		ug/L		100	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.1		ug/L		88	70 - 131
Tetrachloroethene	50.0	54.6		ug/L		109	65 - 130
Toluene	50.0	45.9		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	44.9		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	60.2		ug/L		120	60 - 138
1,2,4-Trichlorobenzene	50.0	59.1		ug/L		118	60 - 140
1,1,1-Trichloroethane	50.0	42.7		ug/L		85	68 - 130
1,1,2-Trichloroethane	50.0	47.2		ug/L		94	70 - 130
Trichloroethene	50.0	55.6		ug/L		111	70 - 130
Trichlorofluoromethane	50.0	45.6		ug/L		91	65 - 138

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

Lab Sample ID: LCS 400-540400/1002
Matrix: Water
Analysis Batch: 540400

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	42.9		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	42.4		ug/L		85	70 - 130
1,3,5-Trimethylbenzene	50.0	42.4		ug/L		85	69 - 130
Vinyl acetate	100	133		ug/L		133	26 - 160
Vinyl chloride	50.0	43.0		ug/L		86	59 - 136
Xylenes, Total	100	90.9		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-206046-3 MS
Matrix: Water
Analysis Batch: 540400

Client Sample ID: MW28-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*+	200	181		ug/L		91	43 - 150
Acrolein	ND		500	533		ug/L		107	38 - 150
Acrylonitrile	ND		500	383		ug/L		77	62 - 149
Benzene	6.6		50.0	53.0		ug/L		93	56 - 142
Bromobenzene	ND		50.0	45.2		ug/L		90	59 - 136
Bromochloromethane	ND		50.0	50.3		ug/L		101	64 - 140
Bromodichloromethane	ND		50.0	41.8		ug/L		84	59 - 143
Bromoform	ND		50.0	44.9		ug/L		90	50 - 140
Bromomethane	ND		50.0	48.0		ug/L		96	10 - 150
2-Butanone (MEK)	ND	*+	200	203		ug/L		102	55 - 150
Carbon disulfide	ND		50.0	47.1		ug/L		94	48 - 150
Carbon tetrachloride	ND		50.0	41.0		ug/L		82	55 - 145
Chlorobenzene	ND		50.0	45.5		ug/L		91	64 - 130
Dibromochloromethane	ND		50.0	44.1		ug/L		88	56 - 143
Chloroethane	ND		50.0	43.2		ug/L		86	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	44.8		ug/L		90	60 - 141
1-Chlorohexane	ND		50.0	34.8		ug/L		70	56 - 136
Chloromethane	ND		50.0	26.7		ug/L		53	49 - 148
cis-1,2-Dichloroethene	ND		50.0	46.9		ug/L		94	59 - 143
cis-1,3-Dichloropropene	ND		50.0	45.2		ug/L		90	57 - 140
1,2-Dichlorobenzene	ND		50.0	45.8		ug/L		92	52 - 137
1,3-Dichlorobenzene	ND		50.0	46.1		ug/L		92	54 - 135
1,4-Dichlorobenzene	ND		50.0	47.1		ug/L		94	53 - 135
Dichlorodifluoromethane	ND		50.0	24.1		ug/L		48	16 - 150
1,1-Dichloroethane	ND		50.0	40.3		ug/L		81	61 - 144
1,2-Dichloroethane	ND		50.0	37.6		ug/L		75	60 - 141
1,1-Dichloroethene	ND		50.0	46.4		ug/L		93	54 - 147
1,2-Dichloropropane	ND		50.0	42.2		ug/L		84	66 - 137
1,3-Dichloropropane	ND		50.0	45.7		ug/L		91	66 - 133
2,2-Dichloropropane	ND		50.0	41.7		ug/L		83	42 - 144

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

Lab Sample ID: 400-206046-3 MS
Matrix: Water
Analysis Batch: 540400

Client Sample ID: MW28-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	43.8		ug/L		88	65 - 136
Ethylbenzene	ND		50.0	41.9		ug/L		84	58 - 131
Ethyl methacrylate	ND		50.0	49.9		ug/L		100	64 - 130
Hexachlorobutadiene	ND		50.0	48.1		ug/L		96	31 - 149
2-Hexanone	ND		200	148		ug/L		74	65 - 140
Isopropylbenzene	1.0		50.0	44.3		ug/L		87	56 - 133
Methylene bromide	ND		50.0	47.6		ug/L		95	63 - 138
Methylene Chloride	ND		50.0	50.1		ug/L		100	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	155		ug/L		77	63 - 146
Methyl tert-butyl ether	73		50.0	125		ug/L		103	59 - 137
m-Xylene & p-Xylene	ND		50.0	42.0		ug/L		84	57 - 130
Naphthalene	ND		50.0	45.7		ug/L		91	25 - 150
n-Butylbenzene	ND		50.0	38.7		ug/L		77	41 - 142
N-Propylbenzene	ND		50.0	39.8		ug/L		80	51 - 138
o-Chlorotoluene	ND		50.0	38.4		ug/L		77	53 - 134
o-Xylene	ND		50.0	41.4		ug/L		83	61 - 130
p-Chlorotoluene	ND		50.0	37.6		ug/L		75	54 - 133
p-Isopropyltoluene	ND		50.0	40.3		ug/L		81	48 - 139
sec-Butylbenzene	2.3		50.0	40.2		ug/L		76	50 - 138
Styrene	ND		50.0	41.2		ug/L		82	58 - 131
tert-Butylbenzene	ND		50.0	38.7		ug/L		77	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	45.1		ug/L		90	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	44.3		ug/L		89	66 - 135
Tetrachloroethene	ND		50.0	44.2		ug/L		88	52 - 133
Toluene	ND		50.0	41.9		ug/L		84	65 - 130
trans-1,2-Dichloroethene	ND		50.0	47.1		ug/L		94	61 - 143
trans-1,3-Dichloropropene	ND		50.0	42.1		ug/L		84	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	51.3		ug/L		103	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	49.2		ug/L		98	39 - 148
1,1,1-Trichloroethane	ND		50.0	41.0		ug/L		82	57 - 142
1,1,2-Trichloroethane	ND		50.0	46.4		ug/L		93	66 - 131
Trichloroethene	ND		50.0	49.2		ug/L		98	64 - 136
Trichlorofluoromethane	ND		50.0	42.3		ug/L		85	54 - 150
1,2,3-Trichloropropane	ND	F2 F1	50.0	40.6		ug/L		81	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	37.3		ug/L		75	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	38.1		ug/L		76	52 - 135
Vinyl acetate	ND		100	130		ug/L		130	26 - 150
Vinyl chloride	ND		50.0	38.8		ug/L		78	46 - 150
Xylenes, Total	ND		100	83.4		ug/L		83	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

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

Lab Sample ID: 400-206046-3 MSD
Matrix: Water
Analysis Batch: 540400

Client Sample ID: MW28-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*+	200	204		ug/L		102	43 - 150	12	30
Acrolein	ND		500	616		ug/L		123	38 - 150	14	31
Acrylonitrile	ND		500	448		ug/L		90	62 - 149	16	30
Benzene	6.6		50.0	62.8		ug/L		112	56 - 142	17	30
Bromobenzene	ND		50.0	53.3		ug/L		107	59 - 136	16	30
Bromochloromethane	ND		50.0	56.9		ug/L		114	64 - 140	12	30
Bromodichloromethane	ND		50.0	50.6		ug/L		101	59 - 143	19	30
Bromoform	ND		50.0	52.4		ug/L		105	50 - 140	15	30
Bromomethane	ND		50.0	56.9		ug/L		114	10 - 150	17	50
2-Butanone (MEK)	ND	*+	200	254		ug/L		127	55 - 150	22	30
Carbon disulfide	ND		50.0	56.4		ug/L		113	48 - 150	18	30
Carbon tetrachloride	ND		50.0	48.9		ug/L		98	55 - 145	18	30
Chlorobenzene	ND		50.0	53.3		ug/L		107	64 - 130	16	30
Dibromochloromethane	ND		50.0	51.9		ug/L		104	56 - 143	16	30
Chloroethane	ND		50.0	52.2		ug/L		104	50 - 150	19	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	53.1		ug/L		106	60 - 141	17	30
1-Chlorohexane	ND		50.0	41.2		ug/L		82	56 - 136	17	30
Chloromethane	ND		50.0	31.1		ug/L		62	49 - 148	15	31
cis-1,2-Dichloroethene	ND		50.0	54.6		ug/L		109	59 - 143	15	30
cis-1,3-Dichloropropene	ND		50.0	54.6		ug/L		109	57 - 140	19	30
1,2-Dichlorobenzene	ND		50.0	53.7		ug/L		107	52 - 137	16	30
1,3-Dichlorobenzene	ND		50.0	55.7		ug/L		111	54 - 135	19	30
1,4-Dichlorobenzene	ND		50.0	56.7		ug/L		113	53 - 135	19	30
Dichlorodifluoromethane	ND		50.0	28.0		ug/L		56	16 - 150	15	31
1,1-Dichloroethane	ND		50.0	47.2		ug/L		94	61 - 144	16	30
1,2-Dichloroethane	ND		50.0	45.4		ug/L		91	60 - 141	19	30
1,1-Dichloroethene	ND		50.0	55.2		ug/L		110	54 - 147	17	30
1,2-Dichloropropane	ND		50.0	50.0		ug/L		100	66 - 137	17	30
1,3-Dichloropropane	ND		50.0	54.2		ug/L		108	66 - 133	17	30
2,2-Dichloropropane	ND		50.0	49.6		ug/L		99	42 - 144	17	31
1,1-Dichloropropene	ND		50.0	52.7		ug/L		105	65 - 136	18	30
Ethylbenzene	ND		50.0	50.8		ug/L		102	58 - 131	19	30
Ethyl methacrylate	ND		50.0	57.5		ug/L		115	64 - 130	14	30
Hexachlorobutadiene	ND		50.0	59.1		ug/L		118	31 - 149	21	36
2-Hexanone	ND		200	172		ug/L		86	65 - 140	15	30
Isopropylbenzene	1.0		50.0	51.9		ug/L		102	56 - 133	16	30
Methylene bromide	ND		50.0	53.9		ug/L		108	63 - 138	12	30
Methylene Chloride	ND		50.0	60.7		ug/L		121	60 - 146	19	32
4-Methyl-2-pentanone (MIBK)	ND		200	184		ug/L		92	63 - 146	17	30
Methyl tert-butyl ether	73		50.0	133		ug/L		120	59 - 137	7	30
m-Xylene & p-Xylene	ND		50.0	48.3		ug/L		97	57 - 130	14	30
Naphthalene	ND		50.0	53.9		ug/L		108	25 - 150	16	30
n-Butylbenzene	ND		50.0	45.4		ug/L		91	41 - 142	16	31
N-Propylbenzene	ND		50.0	48.2		ug/L		96	51 - 138	19	30
o-Chlorotoluene	ND		50.0	44.9		ug/L		90	53 - 134	16	30
o-Xylene	ND		50.0	50.5		ug/L		101	61 - 130	20	30
p-Chlorotoluene	ND		50.0	44.0		ug/L		88	54 - 133	16	30

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

Lab Sample ID: 400-206046-3 MSD
Matrix: Water
Analysis Batch: 540400

Client Sample ID: MW28-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	48.5		ug/L		97	48 - 139	18	30
sec-Butylbenzene	2.3		50.0	48.0		ug/L		91	50 - 138	18	30
Styrene	ND		50.0	50.3		ug/L		101	58 - 131	20	30
tert-Butylbenzene	ND		50.0	45.9		ug/L		92	54 - 146	17	30
1,1,1,2-Tetrachloroethane	ND		50.0	53.8		ug/L		108	59 - 137	17	30
1,1,2,2-Tetrachloroethane	ND		50.0	50.8		ug/L		102	66 - 135	14	30
Tetrachloroethene	ND		50.0	52.9		ug/L		106	52 - 133	18	30
Toluene	ND		50.0	51.0		ug/L		102	65 - 130	20	30
trans-1,2-Dichloroethene	ND		50.0	55.0		ug/L		110	61 - 143	16	30
trans-1,3-Dichloropropene	ND		50.0	49.7		ug/L		99	53 - 133	17	30
1,2,3-Trichlorobenzene	ND		50.0	62.1		ug/L		124	43 - 145	19	30
1,2,4-Trichlorobenzene	ND		50.0	58.8		ug/L		118	39 - 148	18	30
1,1,1-Trichloroethane	ND		50.0	48.4		ug/L		97	57 - 142	16	30
1,1,2-Trichloroethane	ND		50.0	53.0		ug/L		106	66 - 131	13	30
Trichloroethene	ND		50.0	58.9		ug/L		118	64 - 136	18	30
Trichlorofluoromethane	ND		50.0	48.6		ug/L		97	54 - 150	14	30
1,2,3-Trichloropropane	ND	F2 F1	50.0	27.0	F1 F2	ug/L		54	65 - 133	40	30
1,2,4-Trimethylbenzene	ND		50.0	44.6		ug/L		89	50 - 139	18	30
1,3,5-Trimethylbenzene	ND		50.0	45.3		ug/L		91	52 - 135	17	30
Vinyl acetate	ND		100	148		ug/L		148	26 - 150	13	33
Vinyl chloride	ND		50.0	44.5		ug/L		89	46 - 150	14	30
Xylenes, Total	ND		100	98.8		ug/L		99	59 - 130	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: MB 400-540597/4
Matrix: Water
Analysis Batch: 540597

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/23/21 08:21	1
Acrolein	ND		20	10	ug/L			07/23/21 08:21	1
Acrylonitrile	ND		10	2.8	ug/L			07/23/21 08:21	1
Benzene	ND		1.0	0.38	ug/L			07/23/21 08:21	1
Bromobenzene	ND		1.0	0.54	ug/L			07/23/21 08:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/23/21 08:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Bromoform	ND		5.0	0.71	ug/L			07/23/21 08:21	1
Bromomethane	ND		1.0	0.98	ug/L			07/23/21 08:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/23/21 08:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Chloroethane	ND		1.0	0.76	ug/L			07/23/21 08:21	1

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

Lab Sample ID: MB 400-540597/4
Matrix: Water
Analysis Batch: 540597

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/23/21 08:21	1
Chloroform	ND		1.0	0.60	ug/L			07/23/21 08:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/23/21 08:21	1
Chloromethane	ND		1.0	0.83	ug/L			07/23/21 08:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 08:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/23/21 08:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/23/21 08:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/23/21 08:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/23/21 08:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/23/21 08:21	1
2-Hexanone	ND		25	3.1	ug/L			07/23/21 08:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/23/21 08:21	1
Methylene bromide	ND		5.0	0.59	ug/L			07/23/21 08:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/23/21 08:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/23/21 08:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/23/21 08:21	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/23/21 08:21	1
Naphthalene	ND		1.0	1.0	ug/L			07/23/21 08:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/23/21 08:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/23/21 08:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/23/21 08:21	1
o-Xylene	ND		5.0	0.60	ug/L			07/23/21 08:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/23/21 08:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/23/21 08:21	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/23/21 08:21	1
Styrene	ND		1.0	1.0	ug/L			07/23/21 08:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/23/21 08:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/23/21 08:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/23/21 08:21	1
Toluene	ND		1.0	0.41	ug/L			07/23/21 08:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 08:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/23/21 08:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/23/21 08:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/23/21 08:21	1
Trichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/23/21 08:21	1

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

Lab Sample ID: MB 400-540597/4
Matrix: Water
Analysis Batch: 540597

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/23/21 08:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/23/21 08:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/23/21 08:21	1
Vinyl acetate	ND		25	2.0	ug/L			07/23/21 08:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Xylenes, Total	ND		10	1.6	ug/L			07/23/21 08:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/23/21 08:21*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/23/21 08:21*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/23/21 08:21*	*1*

Lab Sample ID: LCS 400-540597/1002
Matrix: Water
Analysis Batch: 540597

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	427	*+	ug/L		213	43 - 160
Acrolein	500	586		ug/L		117	38 - 160
Acrylonitrile	500	410		ug/L		82	64 - 142
Benzene	50.0	51.1		ug/L		102	70 - 130
Bromobenzene	50.0	52.2		ug/L		104	70 - 132
Bromochloromethane	50.0	52.2		ug/L		104	70 - 130
Bromodichloromethane	50.0	46.3		ug/L		93	67 - 133
Bromoform	50.0	50.8		ug/L		102	57 - 140
Bromomethane	50.0	57.6		ug/L		115	10 - 160
2-Butanone (MEK)	200	438	*+	ug/L		219	61 - 145
Carbon disulfide	50.0	51.5		ug/L		103	61 - 137
Carbon tetrachloride	50.0	46.4		ug/L		93	61 - 137
Chlorobenzene	50.0	50.2		ug/L		100	70 - 130
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
Chloroethane	50.0	48.8		ug/L		98	55 - 141
2-Chloroethyl vinyl ether	50.0	31.2		ug/L		62	10 - 160
Chloroform	50.0	47.1		ug/L		94	69 - 130
1-Chlorohexane	50.0	38.6		ug/L		77	69 - 130
Chloromethane	50.0	29.6		ug/L		59	58 - 137
cis-1,2-Dichloroethene	50.0	49.9		ug/L		100	68 - 130
cis-1,3-Dichloropropene	50.0	50.7		ug/L		101	69 - 132
1,2-Dichlorobenzene	50.0	52.7		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	55.7		ug/L		111	70 - 130
1,4-Dichlorobenzene	50.0	56.2		ug/L		112	70 - 130
Dichlorodifluoromethane	50.0	27.4		ug/L		55	41 - 146
1,1-Dichloroethane	50.0	44.8		ug/L		90	70 - 130
1,2-Dichloroethane	50.0	40.1		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	49.8		ug/L		100	63 - 134
1,2-Dichloropropane	50.0	44.6		ug/L		89	70 - 130
1,3-Dichloropropane	50.0	48.8		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	46.2		ug/L		92	52 - 135

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

Lab Sample ID: LCS 400-540597/1002
Matrix: Water
Analysis Batch: 540597

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	48.7		ug/L		97	70 - 130
Ethylbenzene	50.0	47.7		ug/L		95	70 - 130
Ethyl methacrylate	50.0	52.3		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	67.2		ug/L		134	53 - 140
2-Hexanone	200	261		ug/L		130	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	50.1		ug/L		100	70 - 130
Methylene Chloride	50.0	53.1		ug/L		106	66 - 135
4-Methyl-2-pentanone (MIBK)	200	184		ug/L		92	69 - 138
Methyl tert-butyl ether	50.0	54.1		ug/L		108	66 - 130
m-Xylene & p-Xylene	50.0	46.8		ug/L		94	70 - 130
Naphthalene	50.0	51.2		ug/L		102	47 - 149
n-Butylbenzene	50.0	47.0		ug/L		94	67 - 130
N-Propylbenzene	50.0	49.8		ug/L		100	70 - 130
o-Chlorotoluene	50.0	45.3		ug/L		91	70 - 130
o-Xylene	50.0	46.3		ug/L		93	70 - 130
p-Chlorotoluene	50.0	44.1		ug/L		88	70 - 130
p-Isopropyltoluene	50.0	48.9		ug/L		98	65 - 130
sec-Butylbenzene	50.0	46.4		ug/L		93	66 - 130
Styrene	50.0	47.2		ug/L		94	70 - 130
tert-Butylbenzene	50.0	43.1		ug/L		86	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.5		ug/L		95	70 - 131
Tetrachloroethene	50.0	52.6		ug/L		105	65 - 130
Toluene	50.0	46.7		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	50.6		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	46.5		ug/L		93	63 - 130
1,2,3-Trichlorobenzene	50.0	61.8		ug/L		124	60 - 138
1,2,4-Trichlorobenzene	50.0	61.2		ug/L		122	60 - 140
1,1,1-Trichloroethane	50.0	44.2		ug/L		88	68 - 130
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	70 - 130
Trichloroethene	50.0	55.1		ug/L		110	70 - 130
Trichlorofluoromethane	50.0	45.4		ug/L		91	65 - 138
1,2,3-Trichloropropane	50.0	45.5		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	50.0	44.3		ug/L		89	70 - 130
1,3,5-Trimethylbenzene	50.0	44.1		ug/L		88	69 - 130
Vinyl acetate	100	134		ug/L		134	26 - 160
Vinyl chloride	50.0	42.1		ug/L		84	59 - 136
Xylenes, Total	100	93.1		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*72 - 119*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: MB 400-541380/4
Matrix: Water
Analysis Batch: 541380

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/29/21 16:05	1
Acrolein	ND		20	10	ug/L			07/29/21 16:05	1
Acrylonitrile	ND		10	2.8	ug/L			07/29/21 16:05	1
Benzene	ND		1.0	0.38	ug/L			07/29/21 16:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/29/21 16:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/29/21 16:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Bromoform	ND		5.0	0.71	ug/L			07/29/21 16:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/29/21 16:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/29/21 16:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/29/21 16:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/29/21 16:05	1
Chloroform	ND		1.0	0.60	ug/L			07/29/21 16:05	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/29/21 16:05	1
Chloromethane	ND		1.0	0.83	ug/L			07/29/21 16:05	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/29/21 16:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/29/21 16:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/29/21 16:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/29/21 16:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/29/21 16:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/29/21 16:05	1
2-Hexanone	ND		25	3.1	ug/L			07/29/21 16:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/29/21 16:05	1
Methylene bromide	ND		5.0	0.59	ug/L			07/29/21 16:05	1
Methylene Chloride	6.68		5.0	3.0	ug/L			07/29/21 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/29/21 16:05	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/29/21 16:05	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/29/21 16:05	1
Naphthalene	ND		1.0	1.0	ug/L			07/29/21 16:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/29/21 16:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/21 16:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/29/21 16:05	1
o-Xylene	ND		5.0	0.60	ug/L			07/29/21 16:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/29/21 16:05	1

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

Lab Sample ID: MB 400-541380/4
Matrix: Water
Analysis Batch: 541380

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/29/21 16:05	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/29/21 16:05	1
Styrene	ND		1.0	1.0	ug/L			07/29/21 16:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/29/21 16:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/29/21 16:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/29/21 16:05	1
Toluene	ND		1.0	0.41	ug/L			07/29/21 16:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/29/21 16:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/29/21 16:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/29/21 16:05	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/29/21 16:05	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/29/21 16:05	1
Trichloroethene	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/29/21 16:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/29/21 16:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/29/21 16:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/29/21 16:05	1
Vinyl acetate	ND		25	2.0	ug/L			07/29/21 16:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/29/21 16:05	1
Xylenes, Total	ND		10	1.6	ug/L			07/29/21 16:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*07/29/21 16:05*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/29/21 16:05*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*07/29/21 16:05*	*1*

Lab Sample ID: LCS 400-541380/1002
Matrix: Water
Analysis Batch: 541380

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	431	*+	ug/L		216	43 - 160
Acrolein	500	611		ug/L		122	38 - 160
Acrylonitrile	500	586		ug/L		117	64 - 142
Benzene	50.0	49.3		ug/L		99	70 - 130
Bromobenzene	50.0	56.8		ug/L		114	70 - 132
Bromochloromethane	50.0	52.0		ug/L		104	70 - 130
Bromodichloromethane	50.0	47.6		ug/L		95	67 - 133
Bromoform	50.0	49.2		ug/L		98	57 - 140
Bromomethane	50.0	42.2		ug/L		84	10 - 160
2-Butanone (MEK)	200	283		ug/L		141	61 - 145
Carbon disulfide	50.0	48.1		ug/L		96	61 - 137
Carbon tetrachloride	50.0	48.0		ug/L		96	61 - 137
Chlorobenzene	50.0	57.6		ug/L		115	70 - 130
Dibromochloromethane	50.0	52.5		ug/L		105	67 - 135
Chloroethane	50.0	46.4		ug/L		93	55 - 141

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

Lab Sample ID: LCS 400-541380/1002
Matrix: Water
Analysis Batch: 541380

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	38.2		ug/L		76	10 - 160
Chloroform	50.0	48.3		ug/L		97	69 - 130
1-Chlorohexane	50.0	70.4	*+	ug/L		141	69 - 130
Chloromethane	50.0	53.2		ug/L		106	58 - 137
cis-1,2-Dichloroethene	50.0	55.3		ug/L		111	68 - 130
cis-1,3-Dichloropropene	50.0	47.4		ug/L		95	69 - 132
1,2-Dichlorobenzene	50.0	56.8		ug/L		114	67 - 130
1,3-Dichlorobenzene	50.0	58.3		ug/L		117	70 - 130
1,4-Dichlorobenzene	50.0	57.7		ug/L		115	70 - 130
Dichlorodifluoromethane	50.0	37.3		ug/L		75	41 - 146
1,1-Dichloroethane	50.0	55.3		ug/L		111	70 - 130
1,2-Dichloroethane	50.0	52.4		ug/L		105	69 - 130
1,1-Dichloroethene	50.0	48.3		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	55.5		ug/L		111	70 - 130
1,3-Dichloropropane	50.0	51.3		ug/L		103	70 - 130
2,2-Dichloropropane	50.0	37.0		ug/L		74	52 - 135
1,1-Dichloropropene	50.0	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	54.8		ug/L		110	70 - 130
Ethyl methacrylate	50.0	46.2		ug/L		92	68 - 130
Hexachlorobutadiene	50.0	66.4		ug/L		133	53 - 140
2-Hexanone	200	371	*+	ug/L		186	65 - 137
Isopropylbenzene	50.0	56.6		ug/L		113	70 - 130
Methylene bromide	50.0	48.7		ug/L		97	70 - 130
Methylene Chloride	50.0	50.2		ug/L		100	66 - 135
4-Methyl-2-pentanone (MIBK)	200	251		ug/L		126	69 - 138
Methyl tert-butyl ether	50.0	42.9		ug/L		86	66 - 130
m-Xylene & p-Xylene	50.0	54.5		ug/L		109	70 - 130
Naphthalene	50.0	50.5		ug/L		101	47 - 149
n-Butylbenzene	50.0	58.5		ug/L		117	67 - 130
N-Propylbenzene	50.0	57.8		ug/L		116	70 - 130
o-Chlorotoluene	50.0	55.4		ug/L		111	70 - 130
o-Xylene	50.0	54.0		ug/L		108	70 - 130
p-Chlorotoluene	50.0	56.6		ug/L		113	70 - 130
p-Isopropyltoluene	50.0	60.7		ug/L		121	65 - 130
sec-Butylbenzene	50.0	59.0		ug/L		118	66 - 130
Styrene	50.0	54.9		ug/L		110	70 - 130
tert-Butylbenzene	50.0	55.7		ug/L		111	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.0		ug/L		106	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	70 - 131
Tetrachloroethene	50.0	55.4		ug/L		111	65 - 130
Toluene	50.0	52.9		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	50.3		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	46.9		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	59.3		ug/L		119	60 - 138
1,2,4-Trichlorobenzene	50.0	59.3		ug/L		119	60 - 140
1,1,1-Trichloroethane	50.0	46.2		ug/L		92	68 - 130
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	70 - 130
Trichloroethene	50.0	55.3		ug/L		111	70 - 130
Trichlorofluoromethane	50.0	45.0		ug/L		90	65 - 138

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

Lab Sample ID: LCS 400-541380/1002
Matrix: Water
Analysis Batch: 541380

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	52.7		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	58.5		ug/L		117	70 - 130
1,3,5-Trimethylbenzene	50.0	58.6		ug/L		117	69 - 130
Vinyl acetate	100	89.8		ug/L		90	26 - 160
Vinyl chloride	50.0	49.1		ug/L		98	59 - 136
Xylenes, Total	100	109		ug/L		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 119*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*105*		*64 - 132*

Lab Sample ID: 400-206046-9 MS
Matrix: Water
Analysis Batch: 541380

Client Sample ID: P93A-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*+ F1 F2	200	201		ug/L		101	43 - 150
Acrolein	ND	F2	500	607		ug/L		121	38 - 150
Acrylonitrile	ND	F1 F2	500	598		ug/L		120	62 - 149
Benzene	48	F1 F2	50.0	83.0		ug/L		70	56 - 142
Bromobenzene	ND	F1 F2	50.0	43.7		ug/L		87	59 - 136
Bromochloromethane	ND	F1 F2	50.0	45.3		ug/L		91	64 - 140
Bromodichloromethane	ND	F1 F2	50.0	39.1		ug/L		78	59 - 143
Bromoform	ND	F1 F2	50.0	44.1		ug/L		88	50 - 140
Bromomethane	ND	F2	50.0	37.0		ug/L		74	10 - 150
2-Butanone (MEK)	ND	F1 F2	200	178		ug/L		89	55 - 150
Carbon disulfide	ND	F1 F2	50.0	38.6		ug/L		77	48 - 150
Carbon tetrachloride	ND	F1 F2	50.0	36.8		ug/L		74	55 - 145
Chlorobenzene	ND	F1 F2	50.0	44.1		ug/L		88	64 - 130
Dibromochloromethane	ND	F1 F2	50.0	44.4		ug/L		89	56 - 143
Chloroethane	ND	F1 F2	50.0	38.9		ug/L		78	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND	F1 F2	50.0	39.9		ug/L		80	60 - 141
1-Chlorohexane	ND	*+ F1 F2	50.0	47.2		ug/L		94	56 - 136
Chloromethane	ND	F1 F2	50.0	43.0		ug/L		86	49 - 148
cis-1,2-Dichloroethene	ND	F1 F2	50.0	46.5		ug/L		93	59 - 143
cis-1,3-Dichloropropene	ND	F1 F2	50.0	38.9		ug/L		78	57 - 140
1,2-Dichlorobenzene	ND	F1 F2	50.0	42.5		ug/L		85	52 - 137
1,3-Dichlorobenzene	ND	F1 F2	50.0	40.6		ug/L		81	54 - 135
1,4-Dichlorobenzene	ND	F1 F2	50.0	40.7		ug/L		81	53 - 135
Dichlorodifluoromethane	ND	F1 F2	50.0	29.7		ug/L		59	16 - 150
1,1-Dichloroethane	ND	F1 F2	50.0	45.3		ug/L		91	61 - 144
1,2-Dichloroethane	ND	F1 F2	50.0	48.0		ug/L		96	60 - 141
1,1-Dichloroethene	ND	F1 F2	50.0	38.8		ug/L		78	54 - 147
1,2-Dichloropropane	ND	F1 F2	50.0	46.1		ug/L		92	66 - 137
1,3-Dichloropropane	ND	F1 F2	50.0	45.8		ug/L		92	66 - 133
2,2-Dichloropropane	ND	F1 F2	50.0	29.3		ug/L		59	42 - 144

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

Lab Sample ID: 400-206046-9 MS
Matrix: Water
Analysis Batch: 541380

Client Sample ID: P93A-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND	F1 F2	50.0	39.9		ug/L		80	65 - 136
Ethylbenzene	ND	F1 F2	50.0	39.5		ug/L		79	58 - 131
Ethyl methacrylate	ND	F1 F2	50.0	45.0		ug/L		90	64 - 130
Hexachlorobutadiene	ND	F1 F2	50.0	37.6		ug/L		75	31 - 149
2-Hexanone	ND	*+ F1 F2	200	245		ug/L		122	65 - 140
Isopropylbenzene	ND	F1 F2	50.0	39.5		ug/L		79	56 - 133
Methylene bromide	ND	F1 F2	50.0	43.1		ug/L		86	63 - 138
Methylene Chloride	ND	F1 F2	50.0	45.8		ug/L		92	60 - 146
4-Methyl-2-pentanone (MIBK)	ND	F1 F2	200	232		ug/L		116	63 - 146
Methyl tert-butyl ether	ND	F1 F2	50.0	41.1		ug/L		82	59 - 137
m-Xylene & p-Xylene	ND	F1 F2	50.0	38.7		ug/L		77	57 - 130
Naphthalene	ND	F2	50.0	45.1		ug/L		90	25 - 150
n-Butylbenzene	ND	F1 F2	50.0	36.5		ug/L		73	41 - 142
N-Propylbenzene	ND	F1 F2	50.0	38.2		ug/L		76	51 - 138
o-Chlorotoluene	ND	F1 F2	50.0	39.4		ug/L		79	53 - 134
o-Xylene	ND	F1 F2	50.0	39.5		ug/L		79	61 - 130
p-Chlorotoluene	ND	F1 F2	50.0	38.7		ug/L		77	54 - 133
p-Isopropyltoluene	ND	F1 F2	50.0	38.6		ug/L		77	48 - 139
sec-Butylbenzene	ND	F1 F2	50.0	38.6		ug/L		77	50 - 138
Styrene	ND	F1 F2	50.0	40.6		ug/L		81	58 - 131
tert-Butylbenzene	ND	F1 F2	50.0	37.9		ug/L		76	54 - 146
1,1,1,2-Tetrachloroethane	ND	F1 F2	50.0	41.9		ug/L		84	59 - 137
1,1,2,2-Tetrachloroethane	ND	F1 F2	50.0	49.3		ug/L		99	66 - 135
Tetrachloroethene	ND	F1 F2	50.0	38.5		ug/L		77	52 - 133
Toluene	ND	F1 F2	50.0	40.6		ug/L		81	65 - 130
trans-1,2-Dichloroethene	ND	F1 F2	50.0	41.1		ug/L		82	61 - 143
trans-1,3-Dichloropropene	ND	F1 F2	50.0	39.7		ug/L		79	53 - 133
1,2,3-Trichlorobenzene	ND	F1 F2	50.0	44.4		ug/L		89	43 - 145
1,2,4-Trichlorobenzene	ND	F1 F2	50.0	41.9		ug/L		84	39 - 148
1,1,1-Trichloroethane	ND	F1 F2	50.0	36.9		ug/L		74	57 - 142
1,1,2-Trichloroethane	ND	F1 F2	50.0	45.3		ug/L		91	66 - 131
Trichloroethene	ND	F1 F2	50.0	43.2		ug/L		86	64 - 136
Trichlorofluoromethane	ND	F1 F2	50.0	36.1		ug/L		72	54 - 150
1,2,3-Trichloropropane	ND	F1 F2	50.0	51.9		ug/L		104	65 - 133
1,2,4-Trimethylbenzene	ND	F1 F2	50.0	39.8		ug/L		80	50 - 139
1,3,5-Trimethylbenzene	ND	F1 F2	50.0	40.2		ug/L		80	52 - 135
Vinyl acetate	ND	F2	100	88.7		ug/L		89	26 - 150
Vinyl chloride	ND	F1 F2	50.0	39.2		ug/L		78	46 - 150
Xylenes, Total	ND	F1 F2	100	78.3		ug/L		78	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*103*		*64 - 132*

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

Lab Sample ID: 400-206046-9 MSD
Matrix: Water
Analysis Batch: 541380

Client Sample ID: P93A-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*+ F1 F2	200	80.0	F1 F2	ug/L		40	43 - 150	86	30
Acrolein	ND	F2	500	226	F2	ug/L		45	38 - 150	92	31
Acrylonitrile	ND	F1 F2	500	236	F1 F2	ug/L		47	62 - 149	87	30
Benzene	48	F1 F2	50.0	58.7	F1 F2	ug/L		22	56 - 142	34	30
Bromobenzene	ND	F1 F2	50.0	16.3	F1 F2	ug/L		33	59 - 136	91	30
Bromochloromethane	ND	F1 F2	50.0	17.5	F1 F2	ug/L		35	64 - 140	88	30
Bromodichloromethane	ND	F1 F2	50.0	14.9	F1 F2	ug/L		30	59 - 143	89	30
Bromoform	ND	F1 F2	50.0	16.3	F1 F2	ug/L		33	50 - 140	92	30
Bromomethane	ND	F2	50.0	12.6	F2	ug/L		25	10 - 150	98	50
2-Butanone (MEK)	ND	F1 F2	200	73.5	F1 F2	ug/L		37	55 - 150	83	30
Carbon disulfide	ND	F1 F2	50.0	12.5	F1 F2	ug/L		25	48 - 150	102	30
Carbon tetrachloride	ND	F1 F2	50.0	12.9	F1 F2	ug/L		26	55 - 145	96	30
Chlorobenzene	ND	F1 F2	50.0	16.3	F1 F2	ug/L		33	64 - 130	92	30
Dibromochloromethane	ND	F1 F2	50.0	16.7	F1 F2	ug/L		33	56 - 143	91	30
Chloroethane	ND	F1 F2	50.0	10.5	F1 F2	ug/L		21	50 - 150	115	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND	F1 F2	50.0	15.5	F1 F2	ug/L		31	60 - 141	88	30
1-Chlorohexane	ND	*+ F1 F2	50.0	16.8	F1 F2	ug/L		34	56 - 136	95	30
Chloromethane	ND	F1 F2	50.0	10.1	F1 F2	ug/L		20	49 - 148	124	31
cis-1,2-Dichloroethene	ND	F1 F2	50.0	17.5	F1 F2	ug/L		35	59 - 143	91	30
cis-1,3-Dichloropropene	ND	F1 F2	50.0	14.6	F1 F2	ug/L		29	57 - 140	91	30
1,2-Dichlorobenzene	ND	F1 F2	50.0	15.5	F1 F2	ug/L		31	52 - 137	93	30
1,3-Dichlorobenzene	ND	F1 F2	50.0	14.8	F1 F2	ug/L		30	54 - 135	93	30
1,4-Dichlorobenzene	ND	F1 F2	50.0	14.7	F1 F2	ug/L		29	53 - 135	94	30
Dichlorodifluoromethane	ND	F1 F2	50.0	6.00	F1 F2	ug/L		12	16 - 150	133	31
1,1-Dichloroethane	ND	F1 F2	50.0	17.1	F1 F2	ug/L		34	61 - 144	90	30
1,2-Dichloroethane	ND	F1 F2	50.0	19.8	F1 F2	ug/L		40	60 - 141	83	30
1,1-Dichloroethene	ND	F1 F2	50.0	13.3	F1 F2	ug/L		27	54 - 147	98	30
1,2-Dichloropropane	ND	F1 F2	50.0	18.0	F1 F2	ug/L		36	66 - 137	88	30
1,3-Dichloropropane	ND	F1 F2	50.0	17.8	F1 F2	ug/L		36	66 - 133	88	30
2,2-Dichloropropane	ND	F1 F2	50.0	10.9	F1 F2	ug/L		22	42 - 144	92	31
1,1-Dichloropropene	ND	F1 F2	50.0	14.1	F1 F2	ug/L		28	65 - 136	95	30
Ethylbenzene	ND	F1 F2	50.0	14.3	F1 F2	ug/L		29	58 - 131	94	30
Ethyl methacrylate	ND	F1 F2	50.0	17.6	F1 F2	ug/L		35	64 - 130	88	30
Hexachlorobutadiene	ND	F1 F2	50.0	12.3	F1 F2	ug/L		25	31 - 149	101	36
2-Hexanone	ND	*+ F1 F2	200	95.3	F1 F2	ug/L		48	65 - 140	88	30
Isopropylbenzene	ND	F1 F2	50.0	13.6	F1 F2	ug/L		27	56 - 133	97	30
Methylene bromide	ND	F1 F2	50.0	17.5	F1 F2	ug/L		35	63 - 138	85	30
Methylene Chloride	ND	F1 F2	50.0	19.0	F1 F2	ug/L		38	60 - 146	83	32
4-Methyl-2-pentanone (MIBK)	ND	F1 F2	200	95.3	F1 F2	ug/L		48	63 - 146	84	30
Methyl tert-butyl ether	ND	F1 F2	50.0	16.4	F1 F2	ug/L		33	59 - 137	86	30
m-Xylene & p-Xylene	ND	F1 F2	50.0	13.6	F1 F2	ug/L		27	57 - 130	96	30
Naphthalene	ND	F2	50.0	17.8	F2	ug/L		36	25 - 150	87	30
n-Butylbenzene	ND	F1 F2	50.0	14.9	F1 F2	ug/L		30	41 - 142	84	31
N-Propylbenzene	ND	F1 F2	50.0	12.8	F1 F2	ug/L		26	51 - 138	99	30
o-Chlorotoluene	ND	F1 F2	50.0	16.6	F1 F2	ug/L		33	53 - 134	81	30
o-Xylene	ND	F1 F2	50.0	14.5	F1 F2	ug/L		29	61 - 130	93	30
p-Chlorotoluene	ND	F1 F2	50.0	13.6	F1 F2	ug/L		27	54 - 133	96	30

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

Lab Sample ID: 400-206046-9 MSD
Matrix: Water
Analysis Batch: 541380

Client Sample ID: P93A-ROX-071521
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND	F1 F2	50.0	12.6	F1 F2	ug/L		25	48 - 139	102	30
sec-Butylbenzene	ND	F1 F2	50.0	12.6	F1 F2	ug/L		25	50 - 138	101	30
Styrene	ND	F1 F2	50.0	14.8	F1 F2	ug/L		30	58 - 131	93	30
tert-Butylbenzene	ND	F1 F2	50.0	13.6	F1 F2	ug/L		27	54 - 146	95	30
1,1,1,2-Tetrachloroethane	ND	F1 F2	50.0	15.4	F1 F2	ug/L		31	59 - 137	92	30
1,1,2,2-Tetrachloroethane	ND	F1 F2	50.0	19.9	F1 F2	ug/L		40	66 - 135	85	30
Tetrachloroethene	ND	F1 F2	50.0	13.9	F1 F2	ug/L		28	52 - 133	94	30
Toluene	ND	F1 F2	50.0	15.1	F1 F2	ug/L		30	65 - 130	92	30
trans-1,2-Dichloroethene	ND	F1 F2	50.0	15.0	F1 F2	ug/L		30	61 - 143	93	30
trans-1,3-Dichloropropene	ND	F1 F2	50.0	14.5	F1 F2	ug/L		29	53 - 133	93	30
1,2,3-Trichlorobenzene	ND	F1 F2	50.0	17.0	F1 F2	ug/L		34	43 - 145	89	30
1,2,4-Trichlorobenzene	ND	F1 F2	50.0	15.3	F1 F2	ug/L		31	39 - 148	93	30
1,1,1-Trichloroethane	ND	F1 F2	50.0	13.6	F1 F2	ug/L		27	57 - 142	92	30
1,1,2-Trichloroethane	ND	F1 F2	50.0	17.9	F1 F2	ug/L		36	66 - 131	87	30
Trichloroethene	ND	F1 F2	50.0	15.8	F1 F2	ug/L		32	64 - 136	93	30
Trichlorofluoromethane	ND	F1 F2	50.0	9.20	F1 F2	ug/L		18	54 - 150	119	30
1,2,3-Trichloropropane	ND	F1 F2	50.0	20.9	F1 F2	ug/L		42	65 - 133	85	30
1,2,4-Trimethylbenzene	ND	F1 F2	50.0	13.7	F1 F2	ug/L		27	50 - 139	98	30
1,3,5-Trimethylbenzene	ND	F1 F2	50.0	13.9	F1 F2	ug/L		28	52 - 135	97	30
Vinyl acetate	ND	F2	100	33.6	F2	ug/L		34	26 - 150	90	33
Vinyl chloride	ND	F1 F2	50.0	9.06	F1 F2	ug/L		18	46 - 150	125	30
Xylenes, Total	ND	F1 F2	100	28.1	F1 F2	ug/L		28	59 - 130	94	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*104*		*64 - 132*

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

Lab Sample ID: MB 400-540128/1-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
Benzenethiol	ND		10	1.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
Benzoic acid	ND		30	7.3	ug/L		07/20/21 13:40	07/23/21 09:53	1
Benzyl alcohol	ND		10	2.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/20/21 13:40	07/23/21 09:53	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/20/21 13:40	07/23/21 09:53	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/20/21 13:40	07/23/21 09:53	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Chloroaniline	ND		10	3.4	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Chlorophenol	ND		10	2.2	ug/L		07/20/21 13:40	07/23/21 09:53	1

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

Lab Sample ID: MB 400-540128/1-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Dibenzofuran	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Diethyl phthalate	ND		10	0.24	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/20/21 13:40	07/23/21 09:53	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
1,4-Dioxane	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/20/21 13:40	07/23/21 09:53	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
Hexachloroethane	ND		10	4.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
Indene	ND		10	1.0	ug/L		07/20/21 13:40	07/23/21 09:53	1
Isophorone	ND		10	0.14	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Methylphenol	ND		10	1.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Nitroaniline	ND		10	2.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
3-Nitroaniline	ND		10	1.8	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Nitroaniline	ND		10	1.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
Nitrobenzene	ND		10	0.13	ug/L		07/20/21 13:40	07/23/21 09:53	1
2-Nitrophenol	ND		10	5.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
4-Nitrophenol	ND		10	2.1	ug/L		07/20/21 13:40	07/23/21 09:53	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/20/21 13:40	07/23/21 09:53	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/20/21 13:40	07/23/21 09:53	1
Pentachlorophenol	ND		20	1.4	ug/L		07/20/21 13:40	07/23/21 09:53	1
Phenol	ND		10	2.6	ug/L		07/20/21 13:40	07/23/21 09:53	1
Pyridine	ND		10	3.2	ug/L		07/20/21 13:40	07/23/21 09:53	1
Quinoline	ND		10	4.5	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/20/21 13:40	07/23/21 09:53	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/20/21 13:40	07/23/21 09:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*46 - 124*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
2-Fluorophenol	*23*		*13 - 113*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
Nitrobenzene-d5	*55*		*36 - 126*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
Phenol-d5	*40*		*17 - 127*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
Terphenyl-d14	*52*		*44 - 149*	*07/20/21 13:40*	*07/23/21 09:53*	*1*
2,4,6-Tribromophenol	*46*		*26 - 150*	*07/20/21 13:40*	*07/23/21 09:53*	*1*

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

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	127		ug/L		106	21 - 120
Benzoic acid	502	565		ug/L		113	10 - 144
Benzyl alcohol	120	124		ug/L		103	28 - 120
Bis(2-chloroethoxy)methane	120	122		ug/L		102	47 - 120
Bis(2-chloroethyl)ether	120	121		ug/L		101	44 - 120
bis (2-chloroisopropyl) ether	120	122		ug/L		102	33 - 121
Bis(2-ethylhexyl) phthalate	120	144		ug/L		120	52 - 147
4-Bromophenyl phenyl ether	120	135		ug/L		113	54 - 122
Butyl benzyl phthalate	120	127		ug/L		106	54 - 133
4-Chloroaniline	120	112		ug/L		94	26 - 120
4-Chloro-3-methylphenol	120	126		ug/L		105	48 - 131
2-Chloronaphthalene	120	125		ug/L		104	52 - 121
2-Chlorophenol	120	108		ug/L		90	40 - 120
4-Chlorophenyl phenyl ether	120	132		ug/L		110	56 - 125
Dibenz[a,h]acridine	120	158		ug/L		132	31 - 150
Dibenzofuran	120	130		ug/L		108	56 - 122
3,3'-Dichlorobenzidine	160	201		ug/L		126	36 - 132
2,4-Dichlorophenol	120	117		ug/L		98	49 - 120
Diethyl phthalate	120	134		ug/L		111	50 - 137
2,4-Dimethylphenol	120	129		ug/L		107	48 - 120
Dimethyl phthalate	120	132		ug/L		110	57 - 124
Di-n-butyl phthalate	120	137		ug/L		114	58 - 126
4,6-Dinitro-ortho-cresol	240	243		ug/L		101	23 - 148
2,4-Dinitrophenol	240	277		ug/L		116	10 - 150
2,4-Dinitrotoluene	120	132		ug/L		110	54 - 142
2,6-Dinitrotoluene	120	134		ug/L		112	55 - 130
Di-n-octyl phthalate	120	154		ug/L		128	57 - 138
1,4-Dioxane	120	88.0		ug/L		73	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	134		ug/L		111	45 - 124
Hexachlorobenzene	120	130		ug/L		109	52 - 129
Hexachlorocyclopentadiene	120	102		ug/L		85	10 - 134
Hexachloroethane	120	110		ug/L		91	20 - 120
Indene	120	127		ug/L		106	49 - 120
Isophorone	120	126		ug/L		105	48 - 120
2-Methylphenol	120	124		ug/L		103	46 - 124
3 & 4 Methylphenol	120	127		ug/L		106	45 - 120
2-Nitroaniline	120	135		ug/L		112	51 - 145
3-Nitroaniline	120	121		ug/L		101	37 - 127
4-Nitroaniline	120	135		ug/L		113	36 - 137
Nitrobenzene	120	116		ug/L		96	45 - 120
2-Nitrophenol	120	120		ug/L		100	40 - 124
4-Nitrophenol	240	232		ug/L		97	23 - 146
N-Nitrosodimethylamine	120	118		ug/L		99	29 - 137
N-Nitrosodi-n-propylamine	120	137		ug/L		114	45 - 120
N-Nitrosodiphenylamine	119	137		ug/L		115	54 - 120
Pentachlorophenol	240	262		ug/L		109	31 - 130
Phenol	120	116		ug/L		96	11 - 120
Pyridine	240	203		ug/L		85	16 - 120

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

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	141		ug/L		118	49 - 130
2,4,5-Trichlorophenol	120	121		ug/L		101	51 - 136
2,4,6-Trichlorophenol	120	119		ug/L		99	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*109*		*46 - 124*
2-Fluorophenol	*83*		*13 - 113*
Nitrobenzene-d5	*106*		*36 - 126*
Phenol-d5	*97*		*17 - 127*
Terphenyl-d14	*95*		*44 - 149*
2,4,6-Tribromophenol	*105*		*26 - 150*

Lab Sample ID: LCS 400-540128/4-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	3.91	J *-	ug/L		3	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*46 - 124*
2-Fluorophenol	*34*		*13 - 113*
Nitrobenzene-d5	*43*		*36 - 126*
Phenol-d5	*43*		*17 - 127*
Terphenyl-d14	*40*	*S1-*	*44 - 149*
2,4,6-Tribromophenol	*41*		*26 - 150*

Lab Sample ID: LCSD 400-540128/3-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	143		ug/L		119	21 - 120	12	30
Benzoic acid	502	527		ug/L		105	10 - 144	7	30
Benzyl alcohol	120	124		ug/L		103	28 - 120	0	30
Bis(2-chloroethoxy)methane	120	124		ug/L		103	47 - 120	2	30
Bis(2-chloroethyl)ether	120	105		ug/L		88	44 - 120	14	30
bis (2-chloroisopropyl) ether	120	120		ug/L		100	33 - 121	1	30
Bis(2-ethylhexyl) phthalate	120	140		ug/L		116	52 - 147	3	30
4-Bromophenyl phenyl ether	120	129		ug/L		107	54 - 122	5	30
Butyl benzyl phthalate	120	126		ug/L		105	54 - 133	1	30
4-Chloroaniline	120	108		ug/L		90	26 - 120	4	30
4-Chloro-3-methylphenol	120	129		ug/L		108	48 - 131	2	30
2-Chloronaphthalene	120	127		ug/L		106	52 - 121	1	30
2-Chlorophenol	120	107		ug/L		89	40 - 120	1	30
4-Chlorophenyl phenyl ether	120	133		ug/L		111	56 - 125	1	30
Dibenz[a,h]acridine	120	146		ug/L		122	31 - 150	8	30
Dibenzofuran	120	132		ug/L		110	56 - 122	1	30

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

Lab Sample ID: LCSD 400-540128/3-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	160	197		ug/L		123	36 - 132	2	30
2,4-Dichlorophenol	120	120		ug/L		100	49 - 120	3	30
Diethyl phthalate	120	135		ug/L		112	50 - 137	1	30
2,4-Dimethylphenol	120	129		ug/L		107	48 - 120	0	30
Dimethyl phthalate	120	133		ug/L		111	57 - 124	1	30
Di-n-butyl phthalate	120	137		ug/L		114	58 - 126	0	30
4,6-Dinitro-ortho-cresol	240	245		ug/L		102	23 - 148	1	30
2,4-Dinitrophenol	240	284		ug/L		118	10 - 150	2	30
2,4-Dinitrotoluene	120	134		ug/L		112	54 - 142	2	30
2,6-Dinitrotoluene	120	135		ug/L		113	55 - 130	1	30
Di-n-octyl phthalate	120	150		ug/L		125	57 - 138	2	30
1,4-Dioxane	120	87.3		ug/L		73	31 - 120	1	30
1,2-Diphenylhydrazine (as Azobenzene)	120	130		ug/L		108	45 - 124	3	30
Hexachlorobenzene	120	128		ug/L		107	52 - 129	2	30
Hexachlorocyclopentadiene	120	111		ug/L		93	10 - 134	8	30
Hexachloroethane	120	107		ug/L		89	20 - 120	3	30
Indene	120	126		ug/L		105	49 - 120	0	30
Isophorone	120	125		ug/L		105	48 - 120	0	30
2-Methylphenol	120	125		ug/L		105	46 - 124	1	30
3 & 4 Methylphenol	120	127		ug/L		106	45 - 120	0	30
2-Nitroaniline	120	135		ug/L		112	51 - 145	0	30
3-Nitroaniline	120	119		ug/L		99	37 - 127	2	30
4-Nitroaniline	120	134		ug/L		112	36 - 137	1	30
Nitrobenzene	120	117		ug/L		97	45 - 120	1	30
2-Nitrophenol	120	124		ug/L		104	40 - 124	4	30
4-Nitrophenol	240	233		ug/L		97	23 - 146	0	30
N-Nitrosodimethylamine	120	117		ug/L		97	29 - 137	1	30
N-Nitrosodi-n-propylamine	120	136		ug/L		114	45 - 120	0	30
N-Nitrosodiphenylamine	119	130		ug/L		109	54 - 120	5	30
Pentachlorophenol	240	259		ug/L		108	31 - 130	1	30
Phenol	120	116		ug/L		97	11 - 120	1	30
Pyridine	240	201		ug/L		84	16 - 120	1	30
Quinoline	120	141		ug/L		118	49 - 130	0	30
2,4,5-Trichlorophenol	120	123		ug/L		103	51 - 136	2	30
2,4,6-Trichlorophenol	120	123		ug/L		103	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*110*		*46 - 124*
2-Fluorophenol	*75*		*13 - 113*
Nitrobenzene-d5	*104*		*36 - 126*
Phenol-d5	*97*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*108*		*26 - 150*

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

Lab Sample ID: LCSD 400-540128/5-A
Matrix: Water
Analysis Batch: 540593

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	4.04	J *-	ug/L		3	10 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*47*		*46 - 124*
2-Fluorophenol	*36*		*13 - 113*
Nitrobenzene-d5	*41*		*36 - 126*
Phenol-d5	*43*		*17 - 127*
Terphenyl-d14	*37*	*S1-*	*44 - 149*
2,4,6-Tribromophenol	*41*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-540128/1-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/20/21 13:40	07/22/21 20:01	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/20/21 13:40	07/22/21 20:01	1
Anthracene	ND		0.20	0.032	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/20/21 13:40	07/22/21 20:01	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/20/21 13:40	07/22/21 20:01	1
Chrysene	ND		0.20	0.074	ug/L		07/20/21 13:40	07/22/21 20:01	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/20/21 13:40	07/22/21 20:01	1
Fluoranthene	ND		0.20	0.068	ug/L		07/20/21 13:40	07/22/21 20:01	1
Fluorene	ND		0.20	0.11	ug/L		07/20/21 13:40	07/22/21 20:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/20/21 13:40	07/22/21 20:01	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/20/21 13:40	07/22/21 20:01	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/20/21 13:40	07/22/21 20:01	1
Phenanthrene	ND		0.20	0.036	ug/L		07/20/21 13:40	07/22/21 20:01	1
Pyrene	ND		0.20	0.040	ug/L		07/20/21 13:40	07/22/21 20:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*15 - 122*	*07/20/21 13:40*	*07/22/21 20:01*	*1*
Nitrobenzene-d5	*83*		*19 - 130*	*07/20/21 13:40*	*07/22/21 20:01*	*1*
Terphenyl-d14	*90*		*33 - 138*	*07/20/21 13:40*	*07/22/21 20:01*	*1*

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	98.1		ug/L		82	41 - 120
Acenaphthylene	120	103		ug/L		86	44 - 120
Anthracene	120	110		ug/L		92	49 - 120

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-540128/2-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	120	107		ug/L		89	61 - 135
Benzo[a]pyrene	120	119		ug/L		99	52 - 120
Benzo[b]fluoranthene	120	129		ug/L		107	53 - 134
Benzo[g,h,i]perylene	120	102		ug/L		85	47 - 133
Benzo[k]fluoranthene	120	118		ug/L		98	57 - 134
Chrysene	120	100		ug/L		83	55 - 122
Dibenz(a,h)anthracene	120	113		ug/L		95	48 - 146
Fluoranthene	120	108		ug/L		90	54 - 128
Fluorene	120	110		ug/L		92	45 - 125
Indeno[1,2,3-cd]pyrene	120	103		ug/L		85	43 - 142
1-Methylnaphthalene	120	96.3		ug/L		80	41 - 120
2-Methylnaphthalene	120	103		ug/L		86	32 - 124
Phenanthrene	120	112		ug/L		93	48 - 120
Pyrene	120	100		ug/L		84	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*15 - 122*
Nitrobenzene-d5	*96*		*19 - 130*
Terphenyl-d14	*82*		*33 - 138*

Lab Sample ID: LCSD 400-540128/3-A
Matrix: Water
Analysis Batch: 540521

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	104		ug/L		86	41 - 120	6	56
Acenaphthylene	120	112		ug/L		94	44 - 120	9	56
Anthracene	120	94.5		ug/L		79	49 - 120	15	51
Benzo[a]anthracene	120	98.6		ug/L		82	61 - 135	8	49
Benzo[a]pyrene	120	110		ug/L		92	52 - 120	8	50
Benzo[b]fluoranthene	120	114		ug/L		95	53 - 134	12	54
Benzo[g,h,i]perylene	120	97.4		ug/L		81	47 - 133	5	50
Benzo[k]fluoranthene	120	97.0		ug/L		81	57 - 134	19	52
Chrysene	120	105		ug/L		87	55 - 122	4	50
Dibenz(a,h)anthracene	120	100		ug/L		84	48 - 146	12	50
Fluoranthene	120	104		ug/L		87	54 - 128	4	52
Fluorene	120	117		ug/L		97	45 - 125	6	56
Indeno[1,2,3-cd]pyrene	120	99.0		ug/L		82	43 - 142	4	51
1-Methylnaphthalene	120	95.7		ug/L		80	41 - 120	1	55
2-Methylnaphthalene	120	101		ug/L		85	32 - 124	1	57
Phenanthrene	120	101		ug/L		84	48 - 120	10	56
Pyrene	120	88.7		ug/L		74	48 - 132	12	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*88*		*19 - 130*
Terphenyl-d14	*83*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-541296/1-A
Matrix: Water
Analysis Batch: 541352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:09	07/28/21 16:55	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:09	07/28/21 16:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*	*p*	*51 - 149*	*07/28/21 13:09*	*07/28/21 16:55*	*1*

Lab Sample ID: LCS 400-541296/2-A
Matrix: Water
Analysis Batch: 541352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.107		ug/L		106	60 - 140
1,2-Dibromoethane	0.101	0.103		ug/L		102	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*51 - 149*

Lab Sample ID: LCSD 400-541296/3-A
Matrix: Water
Analysis Batch: 541352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541296

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.109		ug/L		109	60 - 140	2	30
1,2-Dibromoethane	0.101	0.106		ug/L		105	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*51 - 149*

Lab Sample ID: MB 400-541301/1-A
Matrix: Water
Analysis Batch: 541352

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541301

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/28/21 13:21	07/29/21 01:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/28/21 13:21	07/29/21 01:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*07/28/21 13:21*	*07/29/21 01:24*	*1*

Lab Sample ID: LCS 400-541301/2-A
Matrix: Water
Analysis Batch: 541486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.112		ug/L		111	60 - 140
1,2-Dibromoethane	0.101	0.101		ug/L		100	60 - 140

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-541301/2-A
Matrix: Water
Analysis Batch: 541486

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541301

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*124*		*51 - 149*

Lab Sample ID: LCSD 400-541301/3-A
Matrix: Water
Analysis Batch: 541486

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541301

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.114		ug/L		113	60 - 140	2	30
1,2-Dibromoethane			0.101	0.105		ug/L		105	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG | ☐ PIPELINE | ☐ RETAIL
☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES
☐ TRANSPORTATION | ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID
Wendy Pennington	25278
PO #	**GSAP Project ID**
60648474 – 3.2.3F	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/15/21

PAGE: 1 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: 60648474 – 3.2.3F

Roxana Quarterly GW

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; bob.billman@aecom.com; wendy.pennington@aecom.com

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

SAMPLER NAME(S) (Print): Tony Jones, Aaron Oliver

LAB USE ONLY

400-206046 COC

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-071521-8011-A	7/15/2021	0000	Water	2					2		X			
	TB-ROX-071521-8260-A	7/15/2021	0000	Water	2					2	X				
	MW28-ROX-071521	7/15/2021	0910	Water	6			2		8	X	X	X	X	
	ROST4PZE-ROX-071521	7/15/2021	1015	Water	6			2		8	X	X	X	X	
	MW22-ROX-071521	7/15/2021	1130	Water	6			2		8	X	X	X	X	
	MW22-ROX-071521-DUP	7/15/2021	1130	Water	6			2		8	X	X	X	X	

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	FEDEX: 949566012820 949566012831	7/15/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-16-21	Time: 9:47

CUSTODY SEALS: 1503920, 1503921, 1503922, 1503923

0.0 ; 3.2 ; 1R7

Version: 2Apr21

Page 87 of 93

7/30/2021

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/15/21
PO #	GSAP Project ID	PAGE: 2 of 2
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Other ID

TELEPHONE: 314-429-0100 FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 Cooler #2 Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-071521-8011-B	7/15/2021	0000	Water	2					2		X			
	TB-ROX-071521-8260-B	7/15/2021	0000	Water	2					2	X				
	P93C-ROX-071521	7/15/2021	0940	Water	6			2		8	X	X	X	X	
	P93C-ROX-071521-DUP	7/15/2021	0940	Water	6			2		8	X	X	X	X	
	T12-ROX-071521	7/15/2021	1045	Water	6			2		8	X	X	X	X	
	P59-ROX-071521	7/15/2021	1145	Water	6			2		8	X	X	X	X	

FIELD NOTES: TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	FEDEX: see page 1	7/15/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7.16.21	Time: 9:47

CUSTODY SEALS: see page 1

Version: 2Apr21

0.0c, 3.2c IR7

Page 88 of 93

7/30/2021

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/15/21
PO #	GSAP Project ID	PAGE: 2 of 2
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington
PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122
E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com
SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☐ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60648474 – 3.2.3F

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071521-8011-B	7/15/2021	0000	Water	2					2		X		
	TB-ROX-071521-8260-B	7/15/2021	0000	Water	2					2	X			
	~~P93C~~ P93A ROX-071521	7/15/2021	0940	Water	6			2		8	X	X	X	X
	~~P93C~~ P93A ROX-071521-DUP	7/15/2021	0940	Water	6			2		8	X	X	X	X
	T12-ROX-071521	7/15/2021	1045	Water	6			2		8	X	X	X	X
	P59-ROX-071521	7/15/2021	1145	Water	6			2		8	X	X	X	X

mar 7/19/21

7/15/21

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	FEDEX: see page 1	7/15/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 2Apr21

CUSTODY SEALS: see page 1

7/30/2021

Klingensmith, Leah

From: Remiger, Melissa <melissa.remiger@aecom.com>
Sent: Monday, July 19, 2021 7:42 AM
To: Klingensmith, Leah; Billman, Bob; Kunkel, Elizabeth; Pennington, Wendy
Subject: RE: [EXTERNAL] ***Please Note****Eurofins TestAmerica Sample Login Confirmation files from 400-206046 ROXANA QUARTERLY GW
Attachments: 3Q21 Roxana GW Sampling COC_071521.pdf

EXTERNAL EMAIL*

Good morning, and apologies for any confusion. The COC should read P93A (and P93A/Dup). Location P93C was collected and sampled previously on 7/12. I've attached a corrected COC for sampling on 7/15.

Thank you,

Melissa Remiger
Environmental Scientist, Design and Consulting Services Group (DCS)
D 314-802-1207 C 314-449-2913
Cisco Internal: 2221207
melissa.remiger@aecom.com

AECOM
100 N. Broadway, 20th Floor
St. Louis, MO 63102
T +1-314-429-0100
www.aecom.com

Built to deliver a better world

LinkedIn Twitter Facebook Instagram

FORTUNE WORLD'S MOST ADMIRED COMPANIES 2018
©2018 Time Inc. Used under license.

From: Leah Klingensmith <Leah.Klingensmith@Eurofinset.com>
Sent: Sunday, July 18, 2021 9:00 PM
To: Billman, Bob <bob.billman@aecom.com>; Kunkel, Elizabeth <elizabeth.kunkel@aecom.com>; Remiger, Melissa <melissa.remiger@aecom.com>; Pennington, Wendy <wendy.pennington@aecom.com>
Subject: [EXTERNAL] ***Please Note****Eurofins TestAmerica Sample Login Confirmation files from 400-206046 ROXANA QUARTERLY GW

Hello,

For the P93C, the labels indicate P93A. Please, confirm the ID.

Attached, please find the Sample Confirmation files for job 400-206046; ROXANA QUARTERLY GW

Please feel free to contact me if you have any questions.

Thank you.

Leah Klingensmith
Project Manager

Eurofins TestAmerica, Pensacola
Phone: 615-301-5038

E-mail: Leah.Klingensmith@Eurofinset.com
www.eurofinsus.com/env

Reference: [400-570603]
Attachments: 4

> > Bank information has changed, please refer to remittance information on invoice. < <

* WARNING - EXTERNAL: This email originated from outside of Eurofins Environment Testing America. Do not click any links or open any attachments unless you trust the sender and know that the content is safe!

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-206046-1

Login Number: 206046
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 3.2°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-206046-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-206082-1-R1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/24/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-071621-8011	TB-ROX-071621-8260
P93B-ROX-071621	P93B-ROX-071621-Dup
P93D-ROX-071621	

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated PAHs and/or SVOCs were extracted or re-extracted outside extraction time criteria in samples P93B-ROX-071621 and P93D-ROX-071621. Several VOC and SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Several SVOC surrogates were outside criteria in several investigative and quality control samples. The VOC MS/MSD recovery for 2-chloroethyl vinyl ether was outside evaluation criteria in sample P93D-ROX-071621. The difference in phenol results for the field duplicate pair P93B-ROX-071621/P93B-ROX-071621-Dup was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (**J**). Field duplicate pair P93B-ROX-071621/P93B-ROX-071621-Dup was diluted to bring VOCs into calibration range of the instrument. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on August 26, 2021 to correct a laboratory transcription error in the date portion of the investigative samples; no qualification of data was required.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, several SVOCs were re-extracted 5 days outside analysis extraction time criteria (7 days) in sample P93B-ROX-071621 due to initial failing acid surrogate recoveries. SVOCs and PAHs in sample P93D-ROX-071621 were extracted 1 day outside criteria due to laboratory error. Professional judgement was used to qualify as estimated, however, not reject the out of holding time data. Holding time exceedances were not

greater than two times (2X) criteria; data requiring qualification is summarized in the following table. SVOCs in sample P93B-ROX-071621 were reported from the initial run due to non-detect data in the re-extracted secondary run; qualifications due to surrogate recovery are reported in Section 6.0 of this data review.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-071621	PAHs	All non-detects	**UJ**
P93D-ROX-071621	SVOCs	All non-detects	**UJ**

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-540597/1002	VOCs	Acetone	**213**	NA	43-160
LCS 400-540597/1002	VOCs	2-Butanone (MEK)	**219**	NA	61-145
LCS/LCSD 400-540615/2-A/3-A	SVOCs	Benzoic acid	110/81	**31**	10-144/30
LCS/LCSD 400-540615/2-A/3-A	SVOCs	bis(2-Chloroethyl) ether	**123**/99	21	44-120/30
LCS/LCSD 400-540615/4-A/5-A	SVOCs	Benzenethiol	**7**/16	**73**	10-120/30
LCS/LCSD 400-541252/2-A/3-A	SVOCs	2-Chlorophenol	49/70	**36**	40-120/30
LCS/LCSD 400-541252/2-A/3-A	SVOCs	Phenol	55/79	**35**	11-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-540615/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification. Benzenethiol in sample P93D-ROX-071621 was previously qualified in Section 3.0 of this data review due to holding time criteria; no additional qualification was required.

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-071621	SVOCs	Benzenethiol	**UJ**
P93B-ROX-071621-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P93B-ROX-071621	SVOCs	2-Fluorophenol	**3**	13-113
P93B-ROX-071621	SVOCs	Phenol-d_5	**1**	17-127
P93B-ROX-071621	SVOCs	2,4,6-Tribromophenol	**0**	26-150
P93B-ROX-071621-Dup	SVOCs	2-Fluorophenol	**7**	13-113
MB 400-540615/1-A	SVOCs	2-Fluorophenol	**5**	13-113

Analytical data that required qualification based on surrogate data are included in the table below. Qualifications due to surrogate recoveries were not required if only one of three acid SCOC surrogate recoveries were outside evaluation criteria. Method blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-071621	SVOCs	Benzyl alcohol	**UJ**
P93B-ROX-071621	SVOCs	4-Chloro-3-methylphenol	**UJ**
P93B-ROX-071621	SVOCs	2-Chlorophenol	**UJ**
P93B-ROX-071621	SVOCs	2,4-Dichlorophenol	**UJ**
P93B-ROX-071621	SVOCs	2,4-Dimethylphenol	**UJ**
P93B-ROX-071621	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
P93B-ROX-071621	SVOCs	2,4-Dinitrophenol	**UJ**
P93B-ROX-071621	SVOCs	2-Methylphenol	**UJ**
P93B-ROX-071621	SVOCs	3&4-Methylphenol	**UJ**
P93B-ROX-071621	SVOCs	2-Nitrophenol	**UJ**
P93B-ROX-071621	SVOCs	4-Nitrophenol	**UJ**
P93B-ROX-071621	SVOCs	Pentachlorophenol	**UJ**
P93B-ROX-071621	SVOCs	Phenol	**J**
P93B-ROX-071621	SVOCs	2,4,5-Trichlorophenol	**UJ**
P93B-ROX-071621	SVOCs	2,4,6-Trichlorophenol	**UJ**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

Yes, although not requested, sample P93D-ROX-071621 was spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P93D-ROX-071621	VOCs	2-Chloroethyl vinyl ether	13/**0**	NC	10-150/50

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-071621	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P93B-ROX-071621	P93B-ROX-071621-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P93B-ROX-071621	P93B-ROX-071621-Dup	SVOCs	Phenol	**> 2X RL**	**J/J**

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted; with the exception of non-detect VOCs in field duplicate pair P93B-ROX-071621/P93B-ROX-071621-Dup, due to the nature of the sample matrix. VOCs were non-detect at a dilution factor of 2000X, with raised reporting limits of 50,000 µg/L. Due to historical detections, please see section 12.0 of the data review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, analytes in field duplicate pair P93B-ROX-071621/P93B-ROX-071621-Dup were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-071621	VOCs	All non-detects	**UJ**

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-071621-Dup	VOCs	All non-detects	**UJ**

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-206082-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
8/26/2021 2:42:52 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

Reviewed 8/24/2021 MR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Detection Summary 6
Client Sample Results 7
Definitions 23
Surrogate Summary 24
Method Summary 26
Chronicle 27
QC Association 31
QC Sample Results 33
Chain of Custody 49
Receipt Checklists 50
Certification Summary 51

Job ID: 400-206082-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-206082-1

Comments
Revised Report
Report revised to correct sample IDs.
Supersedes report dated 7-31-2021.

Receipt
The samples were received on 7/17/2021 8:59 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-540597 recovered above the upper control limit for Acetone and 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-540597 recovered outside control limits for the following analytes: Acetone and 2-Butanone (MEK). These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071621-8260 (400-206082-2), P93B-ROX-071621 (400-206082-3), P93B-ROX-071621-DUP (400-206082-4) and P93D-ROX-071621 (400-206082-5). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-071621 (400-206082-3) and P93B-ROX-071621-DUP (400-206082-4). Elevated reporting limits (RLs) are provided.

Method 8260B: The matrix spike duplicate (MSD) recovery for analytical batch 400-540597 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-540597 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-540615 and analytical batch 400-540930 recovered outside control limits for the following analytes: Bis(2-chloroethyl)ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 400-540615 and analytical batch 400-540930 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-540615 and analytical batch 400-540930 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540930 recovered above the upper control limit for Quinoline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance

Job ID: 400-206082-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: P93B-ROX-071621 (400-206082-3), P93B-ROX-071621-DUP (400-206082-4) and (MB 400-540615/1-A). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-540615 and analytical batch 400-541114 recovered outside control limits for the following analytes: Benzoic acid.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-541576 recovered outside acceptance criteria, low biased, for Benzyl alcohol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS/LCSD associated with preparation batch 400-541252 and analytical batch 400-541564: Pyridine. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-541252 and analytical batch 400-541564 recovered outside control limits for the following analytes: 2-Chlorophenol, Aniline, Phenol and Pyridine.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-541564 recovered outside acceptance criteria, low biased, for Aniline. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-541564 recovered above the upper control limit for Bis(2-chloroethyl)ether, Bis(2-ethylhexyl) phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate and 1,4-Dioxane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-541564 recovered above the upper control limit for Dibenz[a,h]acridine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The following sample was inadvertently prepared outside of the analytical holding time: P93D-ROX-071621 (400-206082-5). The sample was extracted 1 day outside of the hold.

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

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

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

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-206082-1	TB-ROX-071621-8011	Water	07/16/21 00:00	07/17/21 08:59
400-206082-2	TB-ROX-071621-8260	Water	07/16/21 00:00	07/17/21 08:59
400-206082-3	P93B-ROX-071621	Water	07/16/21 10:00	07/17/21 08:59
400-206082-4	P93B-ROX-071621-DUP	Water	07/16/21 10:00	07/17/21 08:59
400-206082-5	P93D-ROX-071621	Water	07/16/21 10:50	07/17/21 08:59

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: TB-ROX-071621-8011 — Lab Sample ID: 400-206082-1

No Detections.

Client Sample ID: TB-ROX-071621-8260 — Lab Sample ID: 400-206082-2

No Detections.

Client Sample ID: P93B-ROX-071621 — Lab Sample ID: 400-206082-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	1100000		5000	1900	ug/L	5000		8260B	Total/NA
Acenaphthylene	0.074	J	0.21	0.047	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.16	J	0.21	0.063	ug/L	1		8270D LL	Total/NA
Diethyl phthalate	1.4	J	10	0.25	ug/L	1		8270D	Total/NA
Phenol	3.9	J	10	2.7	ug/L	1		8270D	Total/NA

Client Sample ID: P93B-ROX-071621-DUP — Lab Sample ID: 400-206082-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	990000		5000	1900	ug/L	5000		8260B	Total/NA
2-Methylnaphthalene	0.079	J	0.21	0.062	ug/L	1		8270D LL	Total/NA
3 & 4 Methylphenol	1.9	J	21	0.40	ug/L	1		8270D	Total/NA
Phenol	190	J	10	2.7	ug/L	1		8270D	Total/NA

Client Sample ID: P93D-ROX-071621 — Lab Sample ID: 400-206082-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.7		1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.4		1.0	0.74	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-071621-8011
Date Collected: 07/16/21 00:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 19:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*07/30/21 13:25*	*07/30/21 19:04*	*1*

Client Sample ID: TB-ROX-071621-8260
Date Collected: 07/16/21 00:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/23/21 09:52	1
Acrolein	ND		20	10	ug/L			07/23/21 09:52	1
Acrylonitrile	ND		10	2.8	ug/L			07/23/21 09:52	1
Benzene	ND		1.0	0.38	ug/L			07/23/21 09:52	1
Bromobenzene	ND		1.0	0.54	ug/L			07/23/21 09:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/23/21 09:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Bromoform	ND		5.0	0.71	ug/L			07/23/21 09:52	1
Bromomethane	ND		1.0	0.98	ug/L			07/23/21 09:52	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/23/21 09:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Chloroethane	ND		1.0	0.76	ug/L			07/23/21 09:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/23/21 09:52	1
Chloroform	ND		1.0	0.60	ug/L			07/23/21 09:52	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/23/21 09:52	1
Chloromethane	ND		1.0	0.83	ug/L			07/23/21 09:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 09:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/23/21 09:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/23/21 09:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/23/21 09:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/23/21 09:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/23/21 09:52	1
2-Hexanone	ND		25	3.1	ug/L			07/23/21 09:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/23/21 09:52	1
Methylene bromide	ND		5.0	0.59	ug/L			07/23/21 09:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/23/21 09:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/23/21 09:52	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/23/21 09:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/23/21 09:52	1
Naphthalene	ND		1.0	1.0	ug/L			07/23/21 09:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/23/21 09:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/23/21 09:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/23/21 09:52	1
o-Xylene	ND		5.0	0.60	ug/L			07/23/21 09:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/23/21 09:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/23/21 09:52	1

Client Sample ID: TB-ROX-071621-8260
Date Collected: 07/16/21 00:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/23/21 09:52	1
Styrene	ND		1.0	1.0	ug/L			07/23/21 09:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/23/21 09:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/23/21 09:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/23/21 09:52	1
Toluene	ND		1.0	0.41	ug/L			07/23/21 09:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 09:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/23/21 09:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/23/21 09:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/23/21 09:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/23/21 09:52	1
Trichloroethene	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/23/21 09:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/23/21 09:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/23/21 09:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/23/21 09:52	1
Vinyl acetate	ND		25	2.0	ug/L			07/23/21 09:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/23/21 09:52	1
Xylenes, Total	ND		10	1.6	ug/L			07/23/21 09:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/23/21 09:52*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/23/21 09:52*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/23/21 09:52*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: P93B-ROX-071621
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50000	20000	ug/L			07/23/21 11:45	2000
Acrolein	ND		40000	20000	ug/L			07/23/21 11:45	2000
Acrylonitrile	ND		20000	5600	ug/L			07/23/21 11:45	2000
Bromobenzene	ND		2000	1100	ug/L			07/23/21 11:45	2000
Bromochloromethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
Bromodichloromethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
Bromoform	ND		10000	1400	ug/L			07/23/21 11:45	2000
Bromomethane	ND		2000	2000	ug/L			07/23/21 11:45	2000
2-Butanone (MEK)	ND	*+	50000	5200	ug/L			07/23/21 11:45	2000
Carbon disulfide	ND		2000	1000	ug/L			07/23/21 11:45	2000
Carbon tetrachloride	ND		2000	1000	ug/L			07/23/21 11:45	2000
Chlorobenzene	ND		2000	1000	ug/L			07/23/21 11:45	2000
Dibromochloromethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
Chloroethane	ND		2000	1500	ug/L			07/23/21 11:45	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			07/23/21 11:45	2000
Chloroform	ND		2000	1200	ug/L			07/23/21 11:45	2000
1-Chlorohexane	ND		2000	1400	ug/L			07/23/21 11:45	2000
Chloromethane	ND		2000	1700	ug/L			07/23/21 11:45	2000
cis-1,2-Dichloroethene	ND		2000	1000	ug/L			07/23/21 11:45	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			07/23/21 11:45	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			07/23/21 11:45	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			07/23/21 11:45	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			07/23/21 11:45	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,2-Dichloroethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			07/23/21 11:45	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			07/23/21 11:45	2000
Ethylbenzene	ND		2000	1000	ug/L			07/23/21 11:45	2000
Ethyl methacrylate	ND		2000	1200	ug/L			07/23/21 11:45	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			07/23/21 11:45	2000
2-Hexanone	ND		50000	6200	ug/L			07/23/21 11:45	2000
Isopropylbenzene	ND		2000	1100	ug/L			07/23/21 11:45	2000
Methylene bromide	ND		10000	1200	ug/L			07/23/21 11:45	2000
Methylene Chloride	ND		10000	6000	ug/L			07/23/21 11:45	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			07/23/21 11:45	2000
Methyl tert-butyl ether	ND		2000	1500	ug/L			07/23/21 11:45	2000
m-Xylene & p-Xylene	ND		10000	3200	ug/L			07/23/21 11:45	2000
Naphthalene	ND		2000	2000	ug/L			07/23/21 11:45	2000
n-Butylbenzene	ND		2000	1500	ug/L			07/23/21 11:45	2000
N-Propylbenzene	ND		2000	1400	ug/L			07/23/21 11:45	2000
o-Chlorotoluene	ND		2000	1100	ug/L			07/23/21 11:45	2000
o-Xylene	ND		10000	1200	ug/L			07/23/21 11:45	2000
p-Chlorotoluene	ND		2000	1100	ug/L			07/23/21 11:45	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			07/23/21 11:45	2000
sec-Butylbenzene	ND		2000	1400	ug/L			07/23/21 11:45	2000

Client Sample ID: P93B-ROX-071621
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	UJ	2000	2000	ug/L			07/23/21 11:45	2000
tert-Butylbenzene	ND		2000	1300	ug/L			07/23/21 11:45	2000
1,1,1,2-Tetrachloroethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
Tetrachloroethene	ND		2000	1200	ug/L			07/23/21 11:45	2000
Toluene	ND		2000	820	ug/L			07/23/21 11:45	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			07/23/21 11:45	2000
trans-1,3-Dichloropropene	ND		10000	1000	ug/L			07/23/21 11:45	2000
1,2,3-Trichlorobenzene	ND		2000	1400	ug/L			07/23/21 11:45	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			07/23/21 11:45	2000
1,1,1-Trichloroethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,1,2-Trichloroethane	ND		10000	1000	ug/L			07/23/21 11:45	2000
Trichloroethene	ND		2000	1000	ug/L			07/23/21 11:45	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			07/23/21 11:45	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			07/23/21 11:45	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			07/23/21 11:45	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			07/23/21 11:45	2000
Vinyl acetate	ND		50000	4000	ug/L			07/23/21 11:45	2000
Vinyl chloride	ND		2000	1000	ug/L			07/23/21 11:45	2000
Xylenes, Total	ND		20000	3200	ug/L			07/23/21 11:45	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/23/21 11:45*	*2000*
Dibromofluoromethane	*108*		*75 - 126*		*07/23/21 11:45*	*2000*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/23/21 11:45*	*2000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1100000		5000	1900	ug/L			07/23/21 17:33	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/23/21 17:33*	*5000*
Dibromofluoromethane	*109*		*75 - 126*		*07/23/21 17:33*	*5000*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/23/21 17:33*	*5000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.034	ug/L		07/23/21 09:14	07/26/21 16:30	1
Acenaphthylene	0.074	J	0.21	0.047	ug/L		07/23/21 09:14	07/26/21 16:30	1
Anthracene	ND		0.21	0.034	ug/L		07/23/21 09:14	07/26/21 16:30	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/23/21 09:14	07/26/21 16:30	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		07/23/21 09:14	07/26/21 16:30	1
Benzo[b]fluoranthene	ND		0.21	0.036	ug/L		07/23/21 09:14	07/26/21 16:30	1
Benzo[g,h,i]perylene	ND		0.21	0.14	ug/L		07/23/21 09:14	07/26/21 16:30	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/23/21 09:14	07/26/21 16:30	1
Chrysene	ND		0.21	0.078	ug/L		07/23/21 09:14	07/26/21 16:30	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/23/21 09:14	07/26/21 16:30	1
Fluoranthene	ND		0.21	0.071	ug/L		07/23/21 09:14	07/26/21 16:30	1
Fluorene	ND		0.21	0.12	ug/L		07/23/21 09:14	07/26/21 16:30	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/23/21 09:14	07/26/21 16:30	1

Client Sample ID: P93B-ROX-071621
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.21	0.078	ug/L		07/23/21 09:14	07/26/21 16:30	1
2-Methylnaphthalene	0.16	J	0.21	0.063	ug/L		07/23/21 09:14	07/26/21 16:30	1
Phenanthrene	ND		0.21	0.038	ug/L		07/23/21 09:14	07/26/21 16:30	1
Pyrene	ND		0.21	0.042	ug/L		07/23/21 09:14	07/26/21 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*15 - 122*	*07/23/21 09:14*	*07/26/21 16:30*	*1*
Nitrobenzene-d5	*88*		*19 - 130*	*07/23/21 09:14*	*07/26/21 16:30*	*1*
Terphenyl-d14	*72*		*33 - 138*	*07/23/21 09:14*	*07/26/21 16:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
Benzenethiol	ND	*- *1 UJ	10	1.8	ug/L		07/23/21 09:14	07/26/21 21:56	1
Benzoic acid	ND		31	7.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
Benzyl alcohol	ND	UJ	10	2.1	ug/L		07/23/21 09:14	07/26/21 21:56	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 21:56	1
Bis(2-chloroethyl)ether	ND	*+	10	2.8	ug/L		07/23/21 09:14	07/26/21 21:56	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 21:56	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/23/21 09:14	07/26/21 21:56	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/23/21 09:14	07/26/21 21:56	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/23/21 09:14	07/26/21 21:56	1
4-Chloroaniline	ND		10	3.6	ug/L		07/23/21 09:14	07/26/21 21:56	1
4-Chloro-3-methylphenol	ND	UJ	10	4.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
2-Chloronaphthalene	ND		10	0.15	ug/L		07/23/21 09:14	07/26/21 21:56	1
2-Chlorophenol	ND	UJ	10	2.3	ug/L		07/23/21 09:14	07/26/21 21:56	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/23/21 09:14	07/26/21 21:56	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
Dibenzofuran	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 21:56	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
2,4-Dichlorophenol	ND	UJ	10	3.1	ug/L		07/23/21 09:14	07/26/21 21:56	1
Diethyl phthalate	1.4	J	10	0.25	ug/L		07/23/21 09:14	07/26/21 21:56	1
2,4-Dimethylphenol	ND	UJ	10	3.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 21:56	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/23/21 09:14	07/26/21 21:56	1
4,6-Dinitro-ortho-cresol	ND	UJ	10	1.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
2,4-Dinitrophenol	ND	UJ	31	3.6	ug/L		07/23/21 09:14	07/26/21 21:56	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 21:56	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 21:56	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
Hexachloroethane	ND		10	4.4	ug/L		07/23/21 09:14	07/26/21 21:56	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 21:56	1
Isophorone	ND		10	0.15	ug/L		07/23/21 09:14	07/26/21 21:56	1
2-Methylphenol	ND	UJ	10	1.9	ug/L		07/23/21 09:14	07/26/21 21:56	1
3 & 4 Methylphenol	ND	UJ	21	0.41	ug/L		07/23/21 09:14	07/26/21 21:56	1

Client Sample ID: P93B-ROX-071621
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.3	ug/L		07/23/21 09:14	07/26/21 21:56	1
3-Nitroaniline	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 21:56	1
4-Nitroaniline	ND		10	1.6	ug/L		07/23/21 09:14	07/26/21 21:56	1
Nitrobenzene	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 21:56	1
2-Nitrophenol	ND	UJ	10	5.5	ug/L		07/23/21 09:14	07/26/21 21:56	1
4-Nitrophenol	ND	UJ	10	2.2	ug/L		07/23/21 09:14	07/26/21 21:56	1
N-Nitrosodimethylamine	ND		10	3.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
N-Nitrosodi-n-propylamine	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 21:56	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/23/21 09:14	07/26/21 21:56	1
Pentachlorophenol	ND	UJ	21	1.5	ug/L		07/23/21 09:14	07/26/21 21:56	1
Phenol	3.9	J J	10	2.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
Pyridine	ND		10	3.4	ug/L		07/23/21 09:14	07/26/21 21:56	1
Quinoline	ND		10	4.7	ug/L		07/23/21 09:14	07/26/21 21:56	1
2,4,5-Trichlorophenol	ND	UJ	10	3.9	ug/L		07/23/21 09:14	07/26/21 21:56	1
2,4,6-Trichlorophenol	ND	UJ	10	3.7	ug/L		07/23/21 09:14	07/26/21 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*46 - 124*	*07/23/21 09:14*	*07/26/21 21:56*	*1*
2-Fluorophenol	*3*	*S1-*	*13 - 113*	*07/23/21 09:14*	*07/26/21 21:56*	*1*
Nitrobenzene-d5	*87*		*36 - 126*	*07/23/21 09:14*	*07/26/21 21:56*	*1*
Phenol-d5	*1*	*S1-*	*17 - 127*	*07/23/21 09:14*	*07/26/21 21:56*	*1*
Terphenyl-d14	*69*		*44 - 149*	*07/23/21 09:14*	*07/26/21 21:56*	*1*
2,4,6-Tribromophenol	*0*	*S1-*	*26 - 150*	*07/23/21 09:14*	*07/26/21 21:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	ND	H	10	3.9	ug/L		07/28/21 11:07	07/30/21 14:08	1
2-Chlorophenol	ND	H *1	10	2.3	ug/L		07/28/21 11:07	07/30/21 14:08	1
2,4-Dichlorophenol	ND	H	10	3.1	ug/L		07/28/21 11:07	07/30/21 14:08	1
2,4-Dimethylphenol	ND	H	10	3.6	ug/L		07/28/21 11:07	07/30/21 14:08	1
4,6-Dinitro-ortho-cresol	ND	H	10	1.6	ug/L		07/28/21 11:07	07/30/21 14:08	1
2,4-Dinitrophenol	ND	H	31	3.5	ug/L		07/28/21 11:07	07/30/21 14:08	1
2-Methylphenol	ND	H	10	1.9	ug/L		07/28/21 11:07	07/30/21 14:08	1
3 & 4 Methylphenol	ND	H	21	0.40	ug/L		07/28/21 11:07	07/30/21 14:08	1
4-Nitrophenol	ND	H	10	2.2	ug/L		07/28/21 11:07	07/30/21 14:08	1
Pentachlorophenol	ND	H	21	1.4	ug/L		07/28/21 11:07	07/30/21 14:08	1
Phenol	ND	H *1	10	2.7	ug/L		07/28/21 11:07	07/30/21 14:08	1
2,4,5-Trichlorophenol	ND	H	10	3.8	ug/L		07/28/21 11:07	07/30/21 14:08	1
2,4,6-Trichlorophenol	ND	H	10	3.6	ug/L		07/28/21 11:07	07/30/21 14:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*59*		*13 - 113*	*07/28/21 11:07*	*07/30/21 14:08*	*1*
Phenol-d5	*67*		*17 - 127*	*07/28/21 11:07*	*07/30/21 14:08*	*1*
2,4,6-Tribromophenol	*82*		*26 - 150*	*07/28/21 11:07*	*07/30/21 14:08*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 19:25	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 19:25	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: P93B-ROX-071621
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	75	p	51 - 149	07/30/21 13:25	07/30/21 19:25	1

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: P93B-ROX-071621-DUP
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50000	20000	ug/L			07/23/21 12:07	2000
Acrolein	ND		40000	20000	ug/L			07/23/21 12:07	2000
Acrylonitrile	ND		20000	5600	ug/L			07/23/21 12:07	2000
Bromobenzene	ND		2000	1100	ug/L			07/23/21 12:07	2000
Bromochloromethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
Bromodichloromethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
Bromoform	ND		10000	1400	ug/L			07/23/21 12:07	2000
Bromomethane	ND		2000	2000	ug/L			07/23/21 12:07	2000
2-Butanone (MEK)	ND	*+	50000	5200	ug/L			07/23/21 12:07	2000
Carbon disulfide	ND		2000	1000	ug/L			07/23/21 12:07	2000
Carbon tetrachloride	ND		2000	1000	ug/L			07/23/21 12:07	2000
Chlorobenzene	ND		2000	1000	ug/L			07/23/21 12:07	2000
Dibromochloromethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
Chloroethane	ND		2000	1500	ug/L			07/23/21 12:07	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			07/23/21 12:07	2000
Chloroform	ND		2000	1200	ug/L			07/23/21 12:07	2000
1-Chlorohexane	ND		2000	1400	ug/L			07/23/21 12:07	2000
Chloromethane	ND		2000	1700	ug/L			07/23/21 12:07	2000
cis-1,2-Dichloroethene	ND		2000	1000	ug/L			07/23/21 12:07	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			07/23/21 12:07	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			07/23/21 12:07	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			07/23/21 12:07	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			07/23/21 12:07	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,2-Dichloroethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			07/23/21 12:07	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			07/23/21 12:07	2000
Ethylbenzene	ND		2000	1000	ug/L			07/23/21 12:07	2000
Ethyl methacrylate	ND		2000	1200	ug/L			07/23/21 12:07	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			07/23/21 12:07	2000
2-Hexanone	ND		50000	6200	ug/L			07/23/21 12:07	2000
Isopropylbenzene	ND		2000	1100	ug/L			07/23/21 12:07	2000
Methylene bromide	ND		10000	1200	ug/L			07/23/21 12:07	2000
Methylene Chloride	ND		10000	6000	ug/L			07/23/21 12:07	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			07/23/21 12:07	2000
Methyl tert-butyl ether	ND		2000	1500	ug/L			07/23/21 12:07	2000
m-Xylene & p-Xylene	ND		10000	3200	ug/L			07/23/21 12:07	2000
Naphthalene	ND		2000	2000	ug/L			07/23/21 12:07	2000
n-Butylbenzene	ND		2000	1500	ug/L			07/23/21 12:07	2000
N-Propylbenzene	ND		2000	1400	ug/L			07/23/21 12:07	2000
o-Chlorotoluene	ND		2000	1100	ug/L			07/23/21 12:07	2000
o-Xylene	ND		10000	1200	ug/L			07/23/21 12:07	2000
p-Chlorotoluene	ND		2000	1100	ug/L			07/23/21 12:07	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			07/23/21 12:07	2000
sec-Butylbenzene	ND		2000	1400	ug/L			07/23/21 12:07	2000

Client Sample ID: P93B-ROX-071621-DUP
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	UJ	2000	2000	ug/L			07/23/21 12:07	2000
tert-Butylbenzene	ND		2000	1300	ug/L			07/23/21 12:07	2000
1,1,1,2-Tetrachloroethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
Tetrachloroethene	ND		2000	1200	ug/L			07/23/21 12:07	2000
Toluene	ND		2000	820	ug/L			07/23/21 12:07	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			07/23/21 12:07	2000
trans-1,3-Dichloropropene	ND		10000	1000	ug/L			07/23/21 12:07	2000
1,2,3-Trichlorobenzene	ND		2000	1400	ug/L			07/23/21 12:07	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			07/23/21 12:07	2000
1,1,1-Trichloroethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,1,2-Trichloroethane	ND		10000	1000	ug/L			07/23/21 12:07	2000
Trichloroethene	ND		2000	1000	ug/L			07/23/21 12:07	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			07/23/21 12:07	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			07/23/21 12:07	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			07/23/21 12:07	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			07/23/21 12:07	2000
Vinyl acetate	ND		50000	4000	ug/L			07/23/21 12:07	2000
Vinyl chloride	ND		2000	1000	ug/L			07/23/21 12:07	2000
Xylenes, Total	ND		20000	3200	ug/L			07/23/21 12:07	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/23/21 12:07*	*2000*
Dibromofluoromethane	*111*		*75 - 126*		*07/23/21 12:07*	*2000*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/23/21 12:07*	*2000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	990000		5000	1900	ug/L			07/23/21 18:00	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/23/21 18:00*	*5000*
Dibromofluoromethane	*111*		*75 - 126*		*07/23/21 18:00*	*5000*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/23/21 18:00*	*5000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 16:48	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/23/21 09:14	07/26/21 16:48	1
Anthracene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 16:48	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/23/21 09:14	07/26/21 16:48	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/23/21 09:14	07/26/21 16:48	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/23/21 09:14	07/26/21 16:48	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/23/21 09:14	07/26/21 16:48	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/23/21 09:14	07/26/21 16:48	1
Chrysene	ND		0.21	0.077	ug/L		07/23/21 09:14	07/26/21 16:48	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/23/21 09:14	07/26/21 16:48	1
Fluoranthene	ND		0.21	0.070	ug/L		07/23/21 09:14	07/26/21 16:48	1
Fluorene	ND		0.21	0.11	ug/L		07/23/21 09:14	07/26/21 16:48	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/23/21 09:14	07/26/21 16:48	1

Client Sample ID: P93B-ROX-071621-DUP
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.21	0.077	ug/L		07/23/21 09:14	07/26/21 16:48	1
2-Methylnaphthalene	0.079	J	0.21	0.062	ug/L		07/23/21 09:14	07/26/21 16:48	1
Phenanthrene	ND		0.21	0.037	ug/L		07/23/21 09:14	07/26/21 16:48	1
Pyrene	ND		0.21	0.041	ug/L		07/23/21 09:14	07/26/21 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*15 - 122*	*07/23/21 09:14*	*07/26/21 16:48*	*1*
Nitrobenzene-d5	*77*		*19 - 130*	*07/23/21 09:14*	*07/26/21 16:48*	*1*
Terphenyl-d14	*82*		*33 - 138*	*07/23/21 09:14*	*07/26/21 16:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/23/21 09:14	07/26/21 22:22	1
Benzenethiol	ND	*- *1	10	1.8	ug/L		07/23/21 09:14	07/26/21 22:22	1
Benzoic acid	ND		31	7.6	ug/L		07/23/21 09:14	07/26/21 22:22	1
Benzyl alcohol	ND		10	2.1	ug/L		07/23/21 09:14	07/26/21 22:22	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 22:22	1
Bis(2-chloroethyl)ether	ND	*+ UJ	10	2.8	ug/L		07/23/21 09:14	07/26/21 22:22	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 22:22	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/23/21 09:14	07/26/21 22:22	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/23/21 09:14	07/26/21 22:22	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/23/21 09:14	07/26/21 22:22	1
4-Chloroaniline	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 22:22	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/23/21 09:14	07/26/21 22:22	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 22:22	1
2-Chlorophenol	ND		10	2.3	ug/L		07/23/21 09:14	07/26/21 22:22	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/23/21 09:14	07/26/21 22:22	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 22:22	1
Dibenzofuran	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 22:22	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/23/21 09:14	07/26/21 22:22	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/23/21 09:14	07/26/21 22:22	1
Diethyl phthalate	ND		10	0.25	ug/L		07/23/21 09:14	07/26/21 22:22	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/23/21 09:14	07/26/21 22:22	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 22:22	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/23/21 09:14	07/26/21 22:22	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/23/21 09:14	07/26/21 22:22	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/23/21 09:14	07/26/21 22:22	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 22:22	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 22:22	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 22:22	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 22:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 22:22	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 22:22	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/23/21 09:14	07/26/21 22:22	1
Hexachloroethane	ND		10	4.3	ug/L		07/23/21 09:14	07/26/21 22:22	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 22:22	1
Isophorone	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 22:22	1
2-Methylphenol	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 22:22	1
3 & 4 Methylphenol	1.9	J	21	0.40	ug/L		07/23/21 09:14	07/26/21 22:22	1

Client Sample ID: P93B-ROX-071621-DUP
Date Collected: 07/16/21 10:00
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.3	ug/L		07/23/21 09:14	07/26/21 22:22	1
3-Nitroaniline	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 22:22	1
4-Nitroaniline	ND		10	1.6	ug/L		07/23/21 09:14	07/26/21 22:22	1
Nitrobenzene	ND		10	0.13	ug/L		07/23/21 09:14	07/26/21 22:22	1
2-Nitrophenol	ND		10	5.4	ug/L		07/23/21 09:14	07/26/21 22:22	1
4-Nitrophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/26/21 22:22	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/23/21 09:14	07/26/21 22:22	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/23/21 09:14	07/26/21 22:22	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/23/21 09:14	07/26/21 22:22	1
Pentachlorophenol	ND		21	1.4	ug/L		07/23/21 09:14	07/26/21 22:22	1
Phenol	190	J	10	2.7	ug/L		07/23/21 09:14	07/26/21 22:22	1
Pyridine	ND		10	3.3	ug/L		07/23/21 09:14	07/26/21 22:22	1
Quinoline	ND		10	4.7	ug/L		07/23/21 09:14	07/26/21 22:22	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/23/21 09:14	07/26/21 22:22	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/23/21 09:14	07/26/21 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*46 - 124*	*07/23/21 09:14*	*07/26/21 22:22*	*1*
2-Fluorophenol	*7*	*S1-*	*13 - 113*	*07/23/21 09:14*	*07/26/21 22:22*	*1*
Nitrobenzene-d5	*79*		*36 - 126*	*07/23/21 09:14*	*07/26/21 22:22*	*1*
Phenol-d5	*33*		*17 - 127*	*07/23/21 09:14*	*07/26/21 22:22*	*1*
Terphenyl-d14	*79*		*44 - 149*	*07/23/21 09:14*	*07/26/21 22:22*	*1*
2,4,6-Tribromophenol	*81*		*26 - 150*	*07/23/21 09:14*	*07/26/21 22:22*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		07/30/21 13:25	07/30/21 19:45	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 19:45*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: P93D-ROX-071621
Date Collected: 07/16/21 10:50
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/23/21 10:37	1
Acrolein	ND		20	10	ug/L			07/23/21 10:37	1
Acrylonitrile	ND		10	2.8	ug/L			07/23/21 10:37	1
Benzene	**2.7**		1.0	0.38	ug/L			07/23/21 10:37	1
Bromobenzene	ND		1.0	0.54	ug/L			07/23/21 10:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/23/21 10:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Bromoform	ND		5.0	0.71	ug/L			07/23/21 10:37	1
Bromomethane	ND		1.0	0.98	ug/L			07/23/21 10:37	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/23/21 10:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Chloroethane	ND		1.0	0.76	ug/L			07/23/21 10:37	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			07/23/21 10:37	1
Chloroform	ND		1.0	0.60	ug/L			07/23/21 10:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/23/21 10:37	1
Chloromethane	ND		1.0	0.83	ug/L			07/23/21 10:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 10:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/23/21 10:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/23/21 10:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/23/21 10:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/23/21 10:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/23/21 10:37	1
2-Hexanone	ND		25	3.1	ug/L			07/23/21 10:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/23/21 10:37	1
Methylene bromide	ND		5.0	0.59	ug/L			07/23/21 10:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/23/21 10:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/23/21 10:37	1
Methyl tert-butyl ether	**1.4**		1.0	0.74	ug/L			07/23/21 10:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/23/21 10:37	1
Naphthalene	ND		1.0	1.0	ug/L			07/23/21 10:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/23/21 10:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/23/21 10:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/23/21 10:37	1
o-Xylene	ND		5.0	0.60	ug/L			07/23/21 10:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/23/21 10:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/23/21 10:37	1

Client Sample ID: P93D-ROX-071621
Date Collected: 07/16/21 10:50
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/23/21 10:37	1
Styrene	ND		1.0	1.0	ug/L			07/23/21 10:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/23/21 10:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/23/21 10:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/23/21 10:37	1
Toluene	ND		1.0	0.41	ug/L			07/23/21 10:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 10:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/23/21 10:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/23/21 10:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/23/21 10:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/23/21 10:37	1
Trichloroethene	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/23/21 10:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/23/21 10:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/23/21 10:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/23/21 10:37	1
Vinyl acetate	ND		25	2.0	ug/L			07/23/21 10:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/23/21 10:37	1
Xylenes, Total	ND		10	1.6	ug/L			07/23/21 10:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/23/21 10:37*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/23/21 10:37*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/23/21 10:37*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	0.22	0.034	ug/L		07/24/21 07:30	07/26/21 17:05	1
Acenaphthylene	ND	H	0.22	0.048	ug/L		07/24/21 07:30	07/26/21 17:05	1
Anthracene	ND	H	0.22	0.034	ug/L		07/24/21 07:30	07/26/21 17:05	1
Benzo[a]anthracene	ND	H	0.22	0.049	ug/L		07/24/21 07:30	07/26/21 17:05	1
Benzo[a]pyrene	ND	H	0.22	0.045	ug/L		07/24/21 07:30	07/26/21 17:05	1
Benzo[b]fluoranthene	ND	H	0.22	0.037	ug/L		07/24/21 07:30	07/26/21 17:05	1
Benzo[g,h,i]perylene	ND	H	0.22	0.14	ug/L		07/24/21 07:30	07/26/21 17:05	1
Benzo[k]fluoranthene	ND	H	0.22	0.11	ug/L		07/24/21 07:30	07/26/21 17:05	1
Chrysene	ND	H	0.22	0.080	ug/L		07/24/21 07:30	07/26/21 17:05	1
Dibenz(a,h)anthracene	ND	H	0.22	0.054	ug/L		07/24/21 07:30	07/26/21 17:05	1
Fluoranthene	ND	H	0.22	0.073	ug/L		07/24/21 07:30	07/26/21 17:05	1
Fluorene	ND	H	0.22	0.12	ug/L		07/24/21 07:30	07/26/21 17:05	1
Indeno[1,2,3-cd]pyrene	ND	H	0.22	0.046	ug/L		07/24/21 07:30	07/26/21 17:05	1
1-Methylnaphthalene	ND	H	0.22	0.080	ug/L		07/24/21 07:30	07/26/21 17:05	1
2-Methylnaphthalene	ND	H	0.22	0.065	ug/L		07/24/21 07:30	07/26/21 17:05	1
Phenanthrene	ND	H	0.22	0.039	ug/L		07/24/21 07:30	07/26/21 17:05	1
Pyrene	ND	H	0.22	0.043	ug/L		07/24/21 07:30	07/26/21 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*15 - 122*	*07/24/21 07:30*	*07/26/21 17:05*	*1*
Nitrobenzene-d5	*99*		*19 - 130*	*07/24/21 07:30*	*07/26/21 17:05*	*1*

Client Sample ID: P93D-ROX-071621
Date Collected: 07/16/21 10:50
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	101		33 - 138	07/24/21 07:30	07/26/21 17:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	11	4.1	ug/L		07/24/21 07:30	07/26/21 22:48	1
Benzenethiol	ND	H *- *1	11	1.8	ug/L		07/24/21 07:30	07/26/21 22:48	1
Benzoic acid	ND	H	32	7.9	ug/L		07/24/21 07:30	07/26/21 22:48	1
Benzyl alcohol	ND	H	11	2.2	ug/L		07/24/21 07:30	07/26/21 22:48	1
Bis(2-chloroethoxy)methane	ND	H	11	0.17	ug/L		07/24/21 07:30	07/26/21 22:48	1
Bis(2-chloroethyl)ether	ND	H *+	11	2.9	ug/L		07/24/21 07:30	07/26/21 22:48	1
bis (2-chloroisopropyl) ether	ND	H	11	0.17	ug/L		07/24/21 07:30	07/26/21 22:48	1
Bis(2-ethylhexyl) phthalate	ND	H	11	5.4	ug/L		07/24/21 07:30	07/26/21 22:48	1
4-Bromophenyl phenyl ether	ND	H	11	0.22	ug/L		07/24/21 07:30	07/26/21 22:48	1
Butyl benzyl phthalate	ND	H	11	0.20	ug/L		07/24/21 07:30	07/26/21 22:48	1
4-Chloroaniline	ND	H	11	3.7	ug/L		07/24/21 07:30	07/26/21 22:48	1
4-Chloro-3-methylphenol	ND	H	11	4.1	ug/L		07/24/21 07:30	07/26/21 22:48	1
2-Chloronaphthalene	ND	H	11	0.15	ug/L		07/24/21 07:30	07/26/21 22:48	1
2-Chlorophenol	ND	H	11	2.4	ug/L		07/24/21 07:30	07/26/21 22:48	1
4-Chlorophenyl phenyl ether	ND	H	11	2.2	ug/L		07/24/21 07:30	07/26/21 22:48	1
Dibenz[a,h]acridine	ND	H	11	1.1	ug/L		07/24/21 07:30	07/26/21 22:48	1
Dibenzofuran	ND	H	11	0.18	ug/L		07/24/21 07:30	07/26/21 22:48	1
3,3'-Dichlorobenzidine	ND	H	11	2.8	ug/L		07/24/21 07:30	07/26/21 22:48	1
2,4-Dichlorophenol	ND	H	11	3.2	ug/L		07/24/21 07:30	07/26/21 22:48	1
Diethyl phthalate	ND	H	11	0.26	ug/L		07/24/21 07:30	07/26/21 22:48	1
2,4-Dimethylphenol	ND	H	11	3.8	ug/L		07/24/21 07:30	07/26/21 22:48	1
Dimethyl phthalate	ND	H	11	0.18	ug/L		07/24/21 07:30	07/26/21 22:48	1
Di-n-butyl phthalate	ND	H	11	2.9	ug/L		07/24/21 07:30	07/26/21 22:48	1
4,6-Dinitro-ortho-cresol	ND	H	11	1.7	ug/L		07/24/21 07:30	07/26/21 22:48	1
2,4-Dinitrophenol	ND	H	32	3.7	ug/L		07/24/21 07:30	07/26/21 22:48	1
2,4-Dinitrotoluene	ND	H	11	2.0	ug/L		07/24/21 07:30	07/26/21 22:48	1
2,6-Dinitrotoluene	ND	H	11	2.0	ug/L		07/24/21 07:30	07/26/21 22:48	1
Di-n-octyl phthalate	ND	H	11	0.18	ug/L		07/24/21 07:30	07/26/21 22:48	1
1,4-Dioxane	ND	H	11	1.1	ug/L		07/24/21 07:30	07/26/21 22:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	11	1.1	ug/L		07/24/21 07:30	07/26/21 22:48	1
Hexachlorobenzene	ND	H	11	0.18	ug/L		07/24/21 07:30	07/26/21 22:48	1
Hexachlorocyclopentadiene	ND	H	22	2.8	ug/L		07/24/21 07:30	07/26/21 22:48	1
Hexachloroethane	ND	H	11	4.5	ug/L		07/24/21 07:30	07/26/21 22:48	1
Indene	ND	H	11	1.1	ug/L		07/24/21 07:30	07/26/21 22:48	1
Isophorone	ND	H	11	0.15	ug/L		07/24/21 07:30	07/26/21 22:48	1
2-Methylphenol	ND	H	11	1.9	ug/L		07/24/21 07:30	07/26/21 22:48	1
3 & 4 Methylphenol	ND	H	22	0.42	ug/L		07/24/21 07:30	07/26/21 22:48	1
2-Nitroaniline	ND	H	11	2.4	ug/L		07/24/21 07:30	07/26/21 22:48	1
3-Nitroaniline	ND	H	11	1.9	ug/L		07/24/21 07:30	07/26/21 22:48	1
4-Nitroaniline	ND	H	11	1.6	ug/L		07/24/21 07:30	07/26/21 22:48	1
Nitrobenzene	ND	H	11	0.14	ug/L		07/24/21 07:30	07/26/21 22:48	1
2-Nitrophenol	ND	H	11	5.6	ug/L		07/24/21 07:30	07/26/21 22:48	1
4-Nitrophenol	ND	H	11	2.3	ug/L		07/24/21 07:30	07/26/21 22:48	1
N-Nitrosodimethylamine	ND	H	11	3.8	ug/L		07/24/21 07:30	07/26/21 22:48	1

Client Sample ID: P93D-ROX-071621
Date Collected: 07/16/21 10:50
Date Received: 07/17/21 08:59

Lab Sample ID: 400-206082-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND	H UJ	11	3.5	ug/L		07/24/21 07:30	07/26/21 22:48	1
N-Nitrosodiphenylamine	ND	H	11	0.19	ug/L		07/24/21 07:30	07/26/21 22:48	1
Pentachlorophenol	ND	H	22	1.5	ug/L		07/24/21 07:30	07/26/21 22:48	1
Phenol	ND	H	11	2.8	ug/L		07/24/21 07:30	07/26/21 22:48	1
Pyridine	ND	H	11	3.4	ug/L		07/24/21 07:30	07/26/21 22:48	1
Quinoline	ND	H	11	4.8	ug/L		07/24/21 07:30	07/26/21 22:48	1
2,4,5-Trichlorophenol	ND	H	11	4.0	ug/L		07/24/21 07:30	07/26/21 22:48	1
2,4,6-Trichlorophenol	ND	H	11	3.8	ug/L		07/24/21 07:30	07/26/21 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*46 - 124*	*07/24/21 07:30*	*07/26/21 22:48*	*1*
2-Fluorophenol	*35*		*13 - 113*	*07/24/21 07:30*	*07/26/21 22:48*	*1*
Nitrobenzene-d5	*91*		*36 - 126*	*07/24/21 07:30*	*07/26/21 22:48*	*1*
Phenol-d5	*66*		*17 - 127*	*07/24/21 07:30*	*07/26/21 22:48*	*1*
Terphenyl-d14	*97*		*44 - 149*	*07/24/21 07:30*	*07/26/21 22:48*	*1*
2,4,6-Tribromophenol	*98*		*26 - 150*	*07/24/21 07:30*	*07/26/21 22:48*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 20:06	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 20:06*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-206082-2	TB-ROX-071621-8260	76	105	99
400-206082-3	P93B-ROX-071621	77	108	97
400-206082-3 - DL	P93B-ROX-071621	76	109	98
400-206082-4	P93B-ROX-071621-DUP	77	111	99
400-206082-4 - DL	P93B-ROX-071621-DUP	78	111	100
400-206082-5	P93D-ROX-071621	76	105	99
400-206082-5 MS	P93D-ROX-071621	79	98	99
400-206082-5 MSD	P93D-ROX-071621	78	100	99
LCS 400-540597/1002	Lab Control Sample	82	99	100
MB 400-540597/4	Method Blank	77	104	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-206082-3	P93B-ROX-071621	100	3 S1-	87	1 S1-	69	0 S1-
400-206082-3 - RE	P93B-ROX-071621		59		67		82
400-206082-4	P93B-ROX-071621-DUP	92	7 S1-	79	33	79	81
400-206082-5	P93D-ROX-071621	108	35	91	66	97	98
LCS 400-540615/2-A	Lab Control Sample	104	50	101	85	86	107
LCS 400-540615/4-A	Lab Control Sample	100	16	86	57	91	89
LCS 400-541252/2-A	Lab Control Sample		40		55		82
LCSD 400-540615/3-A	Lab Control Sample Dup	104	38	98	75	92	105
LCSD 400-540615/5-A	Lab Control Sample Dup	103	54	88	89	93	99
LCSD 400-541252/3-A	Lab Control Sample Dup		69		71		86
MB 400-540615/1-A	Method Blank	108	5 S1-	93	49	106	94
MB 400-541252/1-A	Method Blank		28		51		63

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-206082-3	P93B-ROX-071621	81	88	72
400-206082-4	P93B-ROX-071621-DUP	83	77	82

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-206082-1
Project/Site: ROXANA QUARTERLY GW

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-206082-5	P93D-ROX-071621	96	99	101
LCS 400-540615/2-A	Lab Control Sample	89	107	93
LCSD 400-540615/3-A	Lab Control Sample Dup	93	89	94
MB 400-540615/1-A	Method Blank	87	92	99

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-206082-1	TB-ROX-071621-8011	81
400-206082-3	P93B-ROX-071621	75 p
400-206082-4	P93B-ROX-071621-DUP	87 p
400-206082-5	P93D-ROX-071621	85 p
LCS 400-541608/2-A	Lab Control Sample	99 p
LCSD 400-541608/3-A	Lab Control Sample Dup	98 p
MB 400-541608/1-A	Method Blank	75 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: TB-ROX-071621-8011

Lab Sample ID: 400-206082-1

Date Collected: 07/16/21 00:00
Matrix: Water
Date Received: 07/17/21 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.1 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 19:04	DS	TAL PEN

Client Sample ID: TB-ROX-071621-8260

Lab Sample ID: 400-206082-2

Date Collected: 07/16/21 00:00
Matrix: Water
Date Received: 07/17/21 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 09:52	WPD	TAL PEN

Client Sample ID: P93B-ROX-071621

Lab Sample ID: 400-206082-3

Date Collected: 07/16/21 10:00
Matrix: Water
Date Received: 07/17/21 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2000	5 mL	5 mL	540597	07/23/21 11:45	WPD	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	540597	07/23/21 17:33	WPD	TAL PEN
Total/NA	Prep	3520C	RE		243 mL	1 mL	541252	07/28/21 11:07	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			541576	07/30/21 14:08	KJA	TAL PEN
Total/NA	Prep	3520C			238.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 21:56	S1B	TAL PEN
Total/NA	Prep	3520C			238.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 16:30	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 19:25	DS	TAL PEN

Client Sample ID: P93B-ROX-071621-DUP

Lab Sample ID: 400-206082-4

Date Collected: 07/16/21 10:00
Matrix: Water
Date Received: 07/17/21 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2000	5 mL	5 mL	540597	07/23/21 12:07	WPD	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	540597	07/23/21 18:00	WPD	TAL PEN
Total/NA	Prep	3520C			241.4 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 22:22	S1B	TAL PEN
Total/NA	Prep	3520C			241.4 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 16:48	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 19:45	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: P93D-ROX-071621

Lab Sample ID: 400-206082-5

Date Collected: 07/16/21 10:50
Matrix: Water
Date Received: 07/17/21 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 10:37	WPD	TAL PEN
Total/NA	Prep	3520C			232.4 mL	1 mL	540615	07/24/21 07:30	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 22:48	S1B	TAL PEN
Total/NA	Prep	3520C			232.4 mL	1 mL	540615	07/24/21 07:30	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 17:05	PP1	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 20:06	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-540597/4

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 08:21	WPD	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-540615/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 20:12	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 15:56	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-541252/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	541252	07/28/21 11:06	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541564	07/30/21 14:04	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-541608/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 18:02	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540597/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 07:27	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540615/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 20:38	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			540955	07/26/21 16:13	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540615/4-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 21:04	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541252/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	541252	07/28/21 11:06	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541564	07/30/21 14:31	KJA	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541608/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 18:23	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-540615/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541114	07/27/21 16:34	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			541165	07/27/21 16:45	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-540615/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 21:30	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-541252/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	541252	07/28/21 11:06	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541564	07/30/21 14:58	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-541608/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 18:43	DS	TAL PEN

Client Sample ID: P93D-ROX-071621
Lab Sample ID: 400-206082-5 MS
Date Collected: 07/16/21 10:50
Matrix: Water
Date Received: 07/17/21 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 12:52	WPD	TAL PEN

Client Sample ID: P93D-ROX-071621
Lab Sample ID: 400-206082-5 MSD
Date Collected: 07/16/21 10:50
Matrix: Water
Date Received: 07/17/21 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540597	07/23/21 13:15	WPD	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

GC/MS VOA

Analysis Batch: 540597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-2	TB-ROX-071621-8260	Total/NA	Water	8260B	
400-206082-3	P93B-ROX-071621	Total/NA	Water	8260B	
400-206082-3 - DL	P93B-ROX-071621	Total/NA	Water	8260B	
400-206082-4	P93B-ROX-071621-DUP	Total/NA	Water	8260B	
400-206082-4 - DL	P93B-ROX-071621-DUP	Total/NA	Water	8260B	
400-206082-5	P93D-ROX-071621	Total/NA	Water	8260B	
MB 400-540597/4	Method Blank	Total/NA	Water	8260B	
LCS 400-540597/1002	Lab Control Sample	Total/NA	Water	8260B	
400-206082-5 MS	P93D-ROX-071621	Total/NA	Water	8260B	
400-206082-5 MSD	P93D-ROX-071621	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 540615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-3	P93B-ROX-071621	Total/NA	Water	3520C	
400-206082-4	P93B-ROX-071621-DUP	Total/NA	Water	3520C	
400-206082-5	P93D-ROX-071621	Total/NA	Water	3520C	
MB 400-540615/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-540615/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-540615/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-540615/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-540615/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 540930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-3	P93B-ROX-071621	Total/NA	Water	8270D	540615
400-206082-4	P93B-ROX-071621-DUP	Total/NA	Water	8270D	540615
400-206082-5	P93D-ROX-071621	Total/NA	Water	8270D	540615
MB 400-540615/1-A	Method Blank	Total/NA	Water	8270D	540615
LCS 400-540615/2-A	Lab Control Sample	Total/NA	Water	8270D	540615
LCS 400-540615/4-A	Lab Control Sample	Total/NA	Water	8270D	540615
LCSD 400-540615/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	540615

Analysis Batch: 540955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-3	P93B-ROX-071621	Total/NA	Water	8270D LL	540615
400-206082-4	P93B-ROX-071621-DUP	Total/NA	Water	8270D LL	540615
400-206082-5	P93D-ROX-071621	Total/NA	Water	8270D LL	540615
MB 400-540615/1-A	Method Blank	Total/NA	Water	8270D LL	540615
LCS 400-540615/2-A	Lab Control Sample	Total/NA	Water	8270D LL	540615

Analysis Batch: 541114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-540615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	540615

Analysis Batch: 541165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-540615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	540615

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206082-1

GC/MS Semi VOA

Prep Batch: 541252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-3 - RE	P93B-ROX-071621	Total/NA	Water	3520C	
MB 400-541252/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-541252/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-541252/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 541564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-541252/1-A	Method Blank	Total/NA	Water	8270D	541252
LCS 400-541252/2-A	Lab Control Sample	Total/NA	Water	8270D	541252
LCSD 400-541252/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	541252

Analysis Batch: 541576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-3 - RE	P93B-ROX-071621	Total/NA	Water	8270D	541252

GC Semi VOA

Prep Batch: 541608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-1	TB-ROX-071621-8011	Total/NA	Water	8011	
400-206082-3	P93B-ROX-071621	Total/NA	Water	8011	
400-206082-4	P93B-ROX-071621-DUP	Total/NA	Water	8011	
400-206082-5	P93D-ROX-071621	Total/NA	Water	8011	
MB 400-541608/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-541608/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-541608/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 541653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206082-1	TB-ROX-071621-8011	Total/NA	Water	8011	541608
400-206082-3	P93B-ROX-071621	Total/NA	Water	8011	541608
400-206082-4	P93B-ROX-071621-DUP	Total/NA	Water	8011	541608
400-206082-5	P93D-ROX-071621	Total/NA	Water	8011	541608
MB 400-541608/1-A	Method Blank	Total/NA	Water	8011	541608
LCS 400-541608/2-A	Lab Control Sample	Total/NA	Water	8011	541608
LCSD 400-541608/3-A	Lab Control Sample Dup	Total/NA	Water	8011	541608

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

Lab Sample ID: MB 400-540597/4
Matrix: Water
Analysis Batch: 540597

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/23/21 08:21	1
Acrolein	ND		20	10	ug/L			07/23/21 08:21	1
Acrylonitrile	ND		10	2.8	ug/L			07/23/21 08:21	1
Benzene	ND		1.0	0.38	ug/L			07/23/21 08:21	1
Bromobenzene	ND		1.0	0.54	ug/L			07/23/21 08:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/23/21 08:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Bromoform	ND		5.0	0.71	ug/L			07/23/21 08:21	1
Bromomethane	ND		1.0	0.98	ug/L			07/23/21 08:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/23/21 08:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Chloroethane	ND		1.0	0.76	ug/L			07/23/21 08:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/23/21 08:21	1
Chloroform	ND		1.0	0.60	ug/L			07/23/21 08:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/23/21 08:21	1
Chloromethane	ND		1.0	0.83	ug/L			07/23/21 08:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 08:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/23/21 08:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/23/21 08:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/23/21 08:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/23/21 08:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/23/21 08:21	1
2-Hexanone	ND		25	3.1	ug/L			07/23/21 08:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/23/21 08:21	1
Methylene bromide	ND		5.0	0.59	ug/L			07/23/21 08:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/23/21 08:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/23/21 08:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/23/21 08:21	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/23/21 08:21	1
Naphthalene	ND		1.0	1.0	ug/L			07/23/21 08:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/23/21 08:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/23/21 08:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/23/21 08:21	1
o-Xylene	ND		5.0	0.60	ug/L			07/23/21 08:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/23/21 08:21	1

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

Lab Sample ID: MB 400-540597/4
Matrix: Water
Analysis Batch: 540597

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/23/21 08:21	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/23/21 08:21	1
Styrene	ND		1.0	1.0	ug/L			07/23/21 08:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/23/21 08:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/23/21 08:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/23/21 08:21	1
Toluene	ND		1.0	0.41	ug/L			07/23/21 08:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/21 08:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/23/21 08:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/23/21 08:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/23/21 08:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/23/21 08:21	1
Trichloroethene	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/23/21 08:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/23/21 08:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/23/21 08:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/23/21 08:21	1
Vinyl acetate	ND		25	2.0	ug/L			07/23/21 08:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/23/21 08:21	1
Xylenes, Total	ND		10	1.6	ug/L			07/23/21 08:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/23/21 08:21*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/23/21 08:21*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/23/21 08:21*	*1*

Lab Sample ID: LCS 400-540597/1002
Matrix: Water
Analysis Batch: 540597

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	427	*+	ug/L		213	43 - 160
Acrolein	500	586		ug/L		117	38 - 160
Acrylonitrile	500	410		ug/L		82	64 - 142
Benzene	50.0	51.1		ug/L		102	70 - 130
Bromobenzene	50.0	52.2		ug/L		104	70 - 132
Bromochloromethane	50.0	52.2		ug/L		104	70 - 130
Bromodichloromethane	50.0	46.3		ug/L		93	67 - 133
Bromoform	50.0	50.8		ug/L		102	57 - 140
Bromomethane	50.0	57.6		ug/L		115	10 - 160
2-Butanone (MEK)	200	438	*+	ug/L		219	61 - 145
Carbon disulfide	50.0	51.5		ug/L		103	61 - 137
Carbon tetrachloride	50.0	46.4		ug/L		93	61 - 137
Chlorobenzene	50.0	50.2		ug/L		100	70 - 130
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
Chloroethane	50.0	48.8		ug/L		98	55 - 141

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

Lab Sample ID: LCS 400-540597/1002
Matrix: Water
Analysis Batch: 540597

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	31.2		ug/L		62	10 - 160
Chloroform	50.0	47.1		ug/L		94	69 - 130
1-Chlorohexane	50.0	38.6		ug/L		77	69 - 130
Chloromethane	50.0	29.6		ug/L		59	58 - 137
cis-1,2-Dichloroethene	50.0	49.9		ug/L		100	68 - 130
cis-1,3-Dichloropropene	50.0	50.7		ug/L		101	69 - 132
1,2-Dichlorobenzene	50.0	52.7		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	55.7		ug/L		111	70 - 130
1,4-Dichlorobenzene	50.0	56.2		ug/L		112	70 - 130
Dichlorodifluoromethane	50.0	27.4		ug/L		55	41 - 146
1,1-Dichloroethane	50.0	44.8		ug/L		90	70 - 130
1,2-Dichloroethane	50.0	40.1		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	49.8		ug/L		100	63 - 134
1,2-Dichloropropane	50.0	44.6		ug/L		89	70 - 130
1,3-Dichloropropane	50.0	48.8		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	46.2		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	48.7		ug/L		97	70 - 130
Ethylbenzene	50.0	47.7		ug/L		95	70 - 130
Ethyl methacrylate	50.0	52.3		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	67.2		ug/L		134	53 - 140
2-Hexanone	200	261		ug/L		130	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	50.1		ug/L		100	70 - 130
Methylene Chloride	50.0	53.1		ug/L		106	66 - 135
4-Methyl-2-pentanone (MIBK)	200	184		ug/L		92	69 - 138
Methyl tert-butyl ether	50.0	54.1		ug/L		108	66 - 130
m-Xylene & p-Xylene	50.0	46.8		ug/L		94	70 - 130
Naphthalene	50.0	51.2		ug/L		102	47 - 149
n-Butylbenzene	50.0	47.0		ug/L		94	67 - 130
N-Propylbenzene	50.0	49.8		ug/L		100	70 - 130
o-Chlorotoluene	50.0	45.3		ug/L		91	70 - 130
o-Xylene	50.0	46.3		ug/L		93	70 - 130
p-Chlorotoluene	50.0	44.1		ug/L		88	70 - 130
p-Isopropyltoluene	50.0	48.9		ug/L		98	65 - 130
sec-Butylbenzene	50.0	46.4		ug/L		93	66 - 130
Styrene	50.0	47.2		ug/L		94	70 - 130
tert-Butylbenzene	50.0	43.1		ug/L		86	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.5		ug/L		95	70 - 131
Tetrachloroethene	50.0	52.6		ug/L		105	65 - 130
Toluene	50.0	46.7		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	50.6		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	46.5		ug/L		93	63 - 130
1,2,3-Trichlorobenzene	50.0	61.8		ug/L		124	60 - 138
1,2,4-Trichlorobenzene	50.0	61.2		ug/L		122	60 - 140
1,1,1-Trichloroethane	50.0	44.2		ug/L		88	68 - 130
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	70 - 130
Trichloroethene	50.0	55.1		ug/L		110	70 - 130
Trichlorofluoromethane	50.0	45.4		ug/L		91	65 - 138

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

Lab Sample ID: LCS 400-540597/1002
Matrix: Water
Analysis Batch: 540597

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	45.5		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	50.0	44.3		ug/L		89	70 - 130
1,3,5-Trimethylbenzene	50.0	44.1		ug/L		88	69 - 130
Vinyl acetate	100	134		ug/L		134	26 - 160
Vinyl chloride	50.0	42.1		ug/L		84	59 - 136
Xylenes, Total	100	93.1		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*72 - 119*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-206082-5 MS
Matrix: Water
Analysis Batch: 540597

Client Sample ID: P93D-ROX-071621
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND	*+	200	153		ug/L		77	43 - 150
Acrolein	ND		500	519		ug/L		104	38 - 150
Acrylonitrile	ND		500	391		ug/L		78	62 - 149
Benzene	2.7		50.0	49.9		ug/L		94	56 - 142
Bromobenzene	ND		50.0	45.6		ug/L		91	59 - 136
Bromochloromethane	ND		50.0	50.1		ug/L		100	64 - 140
Bromodichloromethane	ND		50.0	41.6		ug/L		83	59 - 143
Bromoform	ND		50.0	44.4		ug/L		89	50 - 140
Bromomethane	ND		50.0	44.3		ug/L		89	10 - 150
2-Butanone (MEK)	ND	*+	200	209		ug/L		105	55 - 150
Carbon disulfide	ND		50.0	46.4		ug/L		93	48 - 150
Carbon tetrachloride	ND		50.0	41.7		ug/L		83	55 - 145
Chlorobenzene	ND		50.0	45.0		ug/L		90	64 - 130
Dibromochloromethane	ND		50.0	43.0		ug/L		86	56 - 143
Chloroethane	ND		50.0	40.2		ug/L		80	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	6.56		ug/L		13	10 - 150
Chloroform	ND		50.0	42.6		ug/L		85	60 - 141
1-Chlorohexane	ND		50.0	35.5		ug/L		71	56 - 136
Chloromethane	ND		50.0	25.6		ug/L		51	49 - 148
cis-1,2-Dichloroethene	ND		50.0	46.9		ug/L		94	59 - 143
cis-1,3-Dichloropropene	ND		50.0	45.8		ug/L		92	57 - 140
1,2-Dichlorobenzene	ND		50.0	46.6		ug/L		93	52 - 137
1,3-Dichlorobenzene	ND		50.0	48.1		ug/L		96	54 - 135
1,4-Dichlorobenzene	ND		50.0	47.7		ug/L		95	53 - 135
Dichlorodifluoromethane	ND		50.0	22.4		ug/L		45	16 - 150
1,1-Dichloroethane	ND		50.0	39.6		ug/L		79	61 - 144
1,2-Dichloroethane	ND		50.0	37.8		ug/L		76	60 - 141
1,1-Dichloroethene	ND		50.0	46.8		ug/L		94	54 - 147
1,2-Dichloropropane	ND		50.0	42.7		ug/L		85	66 - 137
1,3-Dichloropropane	ND		50.0	44.2		ug/L		88	66 - 133
2,2-Dichloropropane	ND		50.0	42.2		ug/L		84	42 - 144

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

Lab Sample ID: 400-206082-5 MS
Matrix: Water
Analysis Batch: 540597

Client Sample ID: P93D-ROX-071621
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	43.9		ug/L		88	65 - 136
Ethylbenzene	ND		50.0	42.7		ug/L		85	58 - 131
Ethyl methacrylate	ND		50.0	48.1		ug/L		96	64 - 130
Hexachlorobutadiene	ND		50.0	54.2		ug/L		108	31 - 149
2-Hexanone	ND		200	143		ug/L		72	65 - 140
Isopropylbenzene	ND		50.0	43.4		ug/L		87	56 - 133
Methylene bromide	ND		50.0	48.8		ug/L		98	63 - 138
Methylene Chloride	ND		50.0	49.4		ug/L		99	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	156		ug/L		78	63 - 146
Methyl tert-butyl ether	1.4		50.0	52.9		ug/L		103	59 - 137
m-Xylene & p-Xylene	ND		50.0	42.4		ug/L		85	57 - 130
Naphthalene	ND		50.0	44.6		ug/L		89	25 - 150
n-Butylbenzene	ND		50.0	40.7		ug/L		81	41 - 142
N-Propylbenzene	ND		50.0	42.1		ug/L		84	51 - 138
o-Chlorotoluene	ND		50.0	38.9		ug/L		78	53 - 134
o-Xylene	ND		50.0	41.3		ug/L		83	61 - 130
p-Chlorotoluene	ND		50.0	38.3		ug/L		77	54 - 133
p-Isopropyltoluene	ND		50.0	42.5		ug/L		85	48 - 139
sec-Butylbenzene	ND		50.0	39.6		ug/L		79	50 - 138
Styrene	ND		50.0	41.9		ug/L		84	58 - 131
tert-Butylbenzene	ND		50.0	38.5		ug/L		77	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	43.5		ug/L		87	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	44.7		ug/L		89	66 - 135
Tetrachloroethene	ND		50.0	44.2		ug/L		88	52 - 133
Toluene	ND		50.0	41.4		ug/L		83	65 - 130
trans-1,2-Dichloroethene	ND		50.0	46.7		ug/L		93	61 - 143
trans-1,3-Dichloropropene	ND		50.0	41.9		ug/L		84	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	52.3		ug/L		105	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	49.3		ug/L		99	39 - 148
1,1,1-Trichloroethane	ND		50.0	40.0		ug/L		80	57 - 142
1,1,2-Trichloroethane	ND		50.0	45.5		ug/L		91	66 - 131
Trichloroethene	ND		50.0	50.2		ug/L		100	64 - 136
Trichlorofluoromethane	ND		50.0	39.4		ug/L		79	54 - 150
1,2,3-Trichloropropane	ND		50.0	40.5		ug/L		81	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	38.7		ug/L		77	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	39.1		ug/L		78	52 - 135
Vinyl acetate	ND		100	122		ug/L		122	26 - 150
Vinyl chloride	ND		50.0	36.7		ug/L		73	46 - 150
Xylenes, Total	ND		100	83.7		ug/L		84	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*79*		*72 - 119*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: 400-206082-5 MSD
Matrix: Water
Analysis Batch: 540597

Client Sample ID: P93D-ROX-071621
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND	*+	200	195		ug/L		97	43 - 150	24	30
Acrolein	ND		500	626		ug/L		125	38 - 150	19	31
Acrylonitrile	ND		500	481		ug/L		96	62 - 149	21	30
Benzene	2.7		50.0	58.6		ug/L		112	56 - 142	16	30
Bromobenzene	ND		50.0	52.0		ug/L		104	59 - 136	13	30
Bromochloromethane	ND		50.0	58.6		ug/L		117	64 - 140	16	30
Bromodichloromethane	ND		50.0	50.4		ug/L		101	59 - 143	19	30
Bromoform	ND		50.0	53.1		ug/L		106	50 - 140	18	30
Bromomethane	ND		50.0	62.7		ug/L		125	10 - 150	34	50
2-Butanone (MEK)	ND	*+	200	271		ug/L		136	55 - 150	26	30
Carbon disulfide	ND		50.0	54.9		ug/L		110	48 - 150	17	30
Carbon tetrachloride	ND		50.0	50.1		ug/L		100	55 - 145	18	30
Chlorobenzene	ND		50.0	54.6		ug/L		109	64 - 130	19	30
Dibromochloromethane	ND		50.0	51.9		ug/L		104	56 - 143	19	30
Chloroethane	ND		50.0	47.7		ug/L		95	50 - 150	17	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	52.0		ug/L		104	60 - 141	20	30
1-Chlorohexane	ND		50.0	42.0		ug/L		84	56 - 136	17	30
Chloromethane	ND		50.0	30.5		ug/L		61	49 - 148	18	31
cis-1,2-Dichloroethene	ND		50.0	55.6		ug/L		111	59 - 143	17	30
cis-1,3-Dichloropropene	ND		50.0	55.3		ug/L		111	57 - 140	19	30
1,2-Dichlorobenzene	ND		50.0	54.8		ug/L		110	52 - 137	16	30
1,3-Dichlorobenzene	ND		50.0	56.8		ug/L		114	54 - 135	16	30
1,4-Dichlorobenzene	ND		50.0	56.3		ug/L		113	53 - 135	17	30
Dichlorodifluoromethane	ND		50.0	28.1		ug/L		56	16 - 150	22	31
1,1-Dichloroethane	ND		50.0	48.2		ug/L		96	61 - 144	20	30
1,2-Dichloroethane	ND		50.0	45.5		ug/L		91	60 - 141	19	30
1,1-Dichloroethene	ND		50.0	55.3		ug/L		111	54 - 147	17	30
1,2-Dichloropropane	ND		50.0	49.7		ug/L		99	66 - 137	15	30
1,3-Dichloropropane	ND		50.0	53.5		ug/L		107	66 - 133	19	30
2,2-Dichloropropane	ND		50.0	50.6		ug/L		101	42 - 144	18	31
1,1-Dichloropropene	ND		50.0	52.2		ug/L		104	65 - 136	17	30
Ethylbenzene	ND		50.0	51.1		ug/L		102	58 - 131	18	30
Ethyl methacrylate	ND		50.0	57.4		ug/L		115	64 - 130	18	30
Hexachlorobutadiene	ND		50.0	64.9		ug/L		130	31 - 149	18	36
2-Hexanone	ND		200	174		ug/L		87	65 - 140	19	30
Isopropylbenzene	ND		50.0	52.6		ug/L		105	56 - 133	19	30
Methylene bromide	ND		50.0	56.9		ug/L		114	63 - 138	15	30
Methylene Chloride	ND		50.0	58.8		ug/L		118	60 - 146	17	32
4-Methyl-2-pentanone (MIBK)	ND		200	194		ug/L		97	63 - 146	22	30
Methyl tert-butyl ether	1.4		50.0	62.9		ug/L		123	59 - 137	17	30
m-Xylene & p-Xylene	ND		50.0	50.2		ug/L		100	57 - 130	17	30
Naphthalene	ND		50.0	54.0		ug/L		108	25 - 150	19	30
n-Butylbenzene	ND		50.0	47.8		ug/L		96	41 - 142	16	31
N-Propylbenzene	ND		50.0	49.6		ug/L		99	51 - 138	16	30
o-Chlorotoluene	ND		50.0	44.8		ug/L		90	53 - 134	14	30
o-Xylene	ND		50.0	50.0		ug/L		100	61 - 130	19	30
p-Chlorotoluene	ND		50.0	44.3		ug/L		89	54 - 133	15	30

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

Lab Sample ID: 400-206082-5 MSD
Matrix: Water
Analysis Batch: 540597

Client Sample ID: P93D-ROX-071621
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	50.6		ug/L		101	48 - 139	17	30
sec-Butylbenzene	ND		50.0	47.0		ug/L		94	50 - 138	17	30
Styrene	ND		50.0	50.2		ug/L		100	58 - 131	18	30
tert-Butylbenzene	ND		50.0	44.5		ug/L		89	54 - 146	14	30
1,1,1,2-Tetrachloroethane	ND		50.0	54.5		ug/L		109	59 - 137	22	30
1,1,2,2-Tetrachloroethane	ND		50.0	50.2		ug/L		100	66 - 135	12	30
Tetrachloroethene	ND		50.0	51.2		ug/L		102	52 - 133	15	30
Toluene	ND		50.0	49.8		ug/L		100	65 - 130	18	30
trans-1,2-Dichloroethene	ND		50.0	53.6		ug/L		107	61 - 143	14	30
trans-1,3-Dichloropropene	ND		50.0	50.5		ug/L		101	53 - 133	19	30
1,2,3-Trichlorobenzene	ND		50.0	62.9		ug/L		126	43 - 145	18	30
1,2,4-Trichlorobenzene	ND		50.0	59.6		ug/L		119	39 - 148	19	30
1,1,1-Trichloroethane	ND		50.0	48.4		ug/L		97	57 - 142	19	30
1,1,2-Trichloroethane	ND		50.0	53.6		ug/L		107	66 - 131	16	30
Trichloroethene	ND		50.0	59.8		ug/L		120	64 - 136	17	30
Trichlorofluoromethane	ND		50.0	46.9		ug/L		94	54 - 150	17	30
1,2,3-Trichloropropane	ND		50.0	47.4		ug/L		95	65 - 133	16	30
1,2,4-Trimethylbenzene	ND		50.0	45.4		ug/L		91	50 - 139	16	30
1,3,5-Trimethylbenzene	ND		50.0	44.9		ug/L		90	52 - 135	14	30
Vinyl acetate	ND		100	149		ug/L		149	26 - 150	19	33
Vinyl chloride	ND		50.0	43.9		ug/L		88	46 - 150	18	30
Xylenes, Total	ND		100	100		ug/L		100	59 - 130	18	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*78*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
Benzenethiol	ND		10	1.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
Benzoic acid	ND		30	7.3	ug/L		07/23/21 09:14	07/26/21 20:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/23/21 09:14	07/26/21 20:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/23/21 09:14	07/26/21 20:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/23/21 09:14	07/26/21 20:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/26/21 20:12	1

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

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Dibenzofuran	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Diethyl phthalate	ND		10	0.24	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 20:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Isophorone	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Nitroaniline	ND		10	2.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Nitroaniline	ND		10	1.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
Nitrobenzene	ND		10	0.13	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Nitrophenol	ND		10	5.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Nitrophenol	ND		10	2.1	ug/L		07/23/21 09:14	07/26/21 20:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/23/21 09:14	07/26/21 20:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 20:12	1
Pentachlorophenol	ND		20	1.4	ug/L		07/23/21 09:14	07/26/21 20:12	1
Phenol	ND		10	2.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
Pyridine	ND		10	3.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
Quinoline	ND		10	4.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 20:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*46 - 124*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
2-Fluorophenol	*5*	*S1-*	*13 - 113*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
Nitrobenzene-d5	*93*		*36 - 126*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
Phenol-d5	*49*		*17 - 127*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
Terphenyl-d14	*106*		*44 - 149*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
2,4,6-Tribromophenol	*94*		*26 - 150*	*07/23/21 09:14*	*07/26/21 20:12*	*1*

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

Lab Sample ID: LCS 400-540615/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	99.5		ug/L		83	21 - 120
Benzoic acid	502	551		ug/L		110	10 - 144
Benzyl alcohol	120	120		ug/L		100	28 - 120
Bis(2-chloroethoxy)methane	120	118		ug/L		98	47 - 120
Bis(2-chloroethyl)ether	120	148	*+	ug/L		123	44 - 120
bis (2-chloroisopropyl) ether	120	115		ug/L		96	33 - 121
Bis(2-ethylhexyl) phthalate	120	129		ug/L		108	52 - 147
4-Bromophenyl phenyl ether	120	121		ug/L		101	54 - 122
Butyl benzyl phthalate	120	118		ug/L		99	54 - 133
4-Chloroaniline	120	100		ug/L		84	26 - 120
4-Chloro-3-methylphenol	120	121		ug/L		101	48 - 131
2-Chloronaphthalene	120	120		ug/L		100	52 - 121
2-Chlorophenol	120	88.0		ug/L		73	40 - 120
4-Chlorophenyl phenyl ether	120	127		ug/L		106	56 - 125
Dibenz[a,h]acridine	120	134		ug/L		112	31 - 150
Dibenzofuran	120	125		ug/L		104	56 - 122
3,3'-Dichlorobenzidine	160	186		ug/L		116	36 - 132
2,4-Dichlorophenol	120	110		ug/L		92	49 - 120
Diethyl phthalate	120	128		ug/L		107	50 - 137
2,4-Dimethylphenol	120	125		ug/L		104	48 - 120
Dimethyl phthalate	120	126		ug/L		105	57 - 124
Di-n-butyl phthalate	120	134		ug/L		112	58 - 126
4,6-Dinitro-ortho-cresol	240	236		ug/L		98	23 - 148
2,4-Dinitrophenol	240	283		ug/L		118	10 - 150
2,4-Dinitrotoluene	120	128		ug/L		107	54 - 142
2,6-Dinitrotoluene	120	129		ug/L		108	55 - 130
Di-n-octyl phthalate	120	139		ug/L		116	57 - 138
1,4-Dioxane	120	81.6		ug/L		68	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	121		ug/L		101	45 - 124
Hexachlorobenzene	120	122		ug/L		101	52 - 129
Hexachlorocyclopentadiene	120	110		ug/L		91	10 - 134
Hexachloroethane	120	106		ug/L		89	20 - 120
Indene	120	122		ug/L		102	49 - 120
Isophorone	120	119		ug/L		99	48 - 120
2-Methylphenol	120	117		ug/L		98	46 - 124
3 & 4 Methylphenol	120	117		ug/L		98	45 - 120
2-Nitroaniline	120	127		ug/L		106	51 - 145
3-Nitroaniline	120	111		ug/L		93	37 - 127
4-Nitroaniline	120	126		ug/L		105	36 - 137
Nitrobenzene	120	112		ug/L		93	45 - 120
2-Nitrophenol	120	115		ug/L		95	40 - 124
4-Nitrophenol	240	237		ug/L		99	23 - 146
N-Nitrosodimethylamine	120	111		ug/L		92	29 - 137
N-Nitrosodi-n-propylamine	120	127		ug/L		106	45 - 120
N-Nitrosodiphenylamine	119	121		ug/L		102	54 - 120
Pentachlorophenol	240	255		ug/L		106	31 - 130
Phenol	120	101		ug/L		84	11 - 120
Pyridine	240	193		ug/L		80	16 - 120

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

Lab Sample ID: LCS 400-540615/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	137		ug/L		115	49 - 130
2,4,5-Trichlorophenol	120	117		ug/L		98	51 - 136
2,4,6-Trichlorophenol	120	115		ug/L		96	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*104*		*46 - 124*
2-Fluorophenol	*50*		*13 - 113*
Nitrobenzene-d5	*101*		*36 - 126*
Phenol-d5	*85*		*17 - 127*
Terphenyl-d14	*86*		*44 - 149*
2,4,6-Tribromophenol	*107*		*26 - 150*

Lab Sample ID: LCS 400-540615/4-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	8.78	J *-	ug/L		7	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*46 - 124*
2-Fluorophenol	*16*		*13 - 113*
Nitrobenzene-d5	*86*		*36 - 126*
Phenol-d5	*57*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*
2,4,6-Tribromophenol	*89*		*26 - 150*

Lab Sample ID: LCSD 400-540615/3-A
Matrix: Water
Analysis Batch: 541114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	128		ug/L		107	21 - 120	25	30
Benzoic acid	502	404	*1	ug/L		81	10 - 144	31	30
Benzyl alcohol	120	116		ug/L		96	28 - 120	4	30
Bis(2-chloroethoxy)methane	120	115		ug/L		96	47 - 120	2	30
Bis(2-chloroethyl)ether	120	119		ug/L		99	44 - 120	21	30
bis (2-chloroisopropyl) ether	120	110		ug/L		92	33 - 121	5	30
Bis(2-ethylhexyl) phthalate	120	140		ug/L		117	52 - 147	8	30
4-Bromophenyl phenyl ether	120	122		ug/L		102	54 - 122	1	30
Butyl benzyl phthalate	120	125		ug/L		104	54 - 133	5	30
4-Chloroaniline	120	107		ug/L		89	26 - 120	7	30
4-Chloro-3-methylphenol	120	117		ug/L		98	48 - 131	4	30
2-Chloronaphthalene	120	120		ug/L		100	52 - 121	1	30
2-Chlorophenol	120	75.8		ug/L		63	40 - 120	15	30
4-Chlorophenyl phenyl ether	120	127		ug/L		106	56 - 125	0	30
Dibenz[a,h]acridine	120	150		ug/L		125	31 - 150	11	30
Dibenzofuran	120	124		ug/L		103	56 - 122	1	30

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

Lab Sample ID: LCSD 400-540615/3-A
Matrix: Water
Analysis Batch: 541114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	160	182		ug/L		114	36 - 132	2	30
2,4-Dichlorophenol	120	101		ug/L		84	49 - 120	9	30
Diethyl phthalate	120	128		ug/L		106	50 - 137	0	30
2,4-Dimethylphenol	120	119		ug/L		100	48 - 120	4	30
Dimethyl phthalate	120	127		ug/L		106	57 - 124	1	30
Di-n-butyl phthalate	120	135		ug/L		112	58 - 126	0	30
4,6-Dinitro-ortho-cresol	240	222		ug/L		92	23 - 148	6	30
2,4-Dinitrophenol	240	255		ug/L		106	10 - 150	11	30
2,4-Dinitrotoluene	120	128		ug/L		106	54 - 142	0	30
2,6-Dinitrotoluene	120	129		ug/L		107	55 - 130	1	30
Di-n-octyl phthalate	120	139		ug/L		116	57 - 138	0	30
1,4-Dioxane	120	86.6		ug/L		72	31 - 120	6	30
1,2-Diphenylhydrazine (as Azobenzene)	120	121		ug/L		101	45 - 124	1	30
Hexachlorobenzene	120	124		ug/L		103	52 - 129	2	30
Hexachlorocyclopentadiene	120	102		ug/L		85	10 - 134	7	30
Hexachloroethane	120	103		ug/L		86	20 - 120	3	30
Indene	120	121		ug/L		101	49 - 120	1	30
Isophorone	120	118		ug/L		98	48 - 120	1	30
2-Methylphenol	120	108		ug/L		90	46 - 124	9	30
3 & 4 Methylphenol	120	108		ug/L		90	45 - 120	8	30
2-Nitroaniline	120	125		ug/L		104	51 - 145	2	30
3-Nitroaniline	120	111		ug/L		92	37 - 127	1	30
4-Nitroaniline	120	119		ug/L		99	36 - 137	6	30
Nitrobenzene	120	110		ug/L		92	45 - 120	2	30
2-Nitrophenol	120	107		ug/L		89	40 - 124	7	30
4-Nitrophenol	240	222		ug/L		92	23 - 146	7	30
N-Nitrosodimethylamine	120	99.9		ug/L		83	29 - 137	10	30
N-Nitrosodi-n-propylamine	120	125		ug/L		104	45 - 120	2	30
N-Nitrosodiphenylamine	119	122		ug/L		103	54 - 120	1	30
Pentachlorophenol	240	244		ug/L		102	31 - 130	4	30
Phenol	120	88.0		ug/L		73	11 - 120	14	30
Pyridine	240	182		ug/L		76	16 - 120	5	30
Quinoline	120	137		ug/L		114	49 - 130	0	30
2,4,5-Trichlorophenol	120	113		ug/L		94	51 - 136	4	30
2,4,6-Trichlorophenol	120	112		ug/L		93	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*104*		*46 - 124*
2-Fluorophenol	*38*		*13 - 113*
Nitrobenzene-d5	*98*		*36 - 126*
Phenol-d5	*75*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*105*		*26 - 150*

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

Lab Sample ID: LCSD 400-540615/5-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	18.8	*1	ug/L		16	10 - 120	73	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*103*		*46 - 124*
2-Fluorophenol	*54*		*13 - 113*
Nitrobenzene-d5	*88*		*36 - 126*
Phenol-d5	*89*		*17 - 127*
Terphenyl-d14	*93*		*44 - 149*
2,4,6-Tribromophenol	*99*		*26 - 150*

Lab Sample ID: MB 400-541252/1-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541252

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/28/21 11:06	07/30/21 14:04	1
2-Chlorophenol	ND		10	2.2	ug/L		07/28/21 11:06	07/30/21 14:04	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/28/21 11:06	07/30/21 14:04	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/28/21 11:06	07/30/21 14:04	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/28/21 11:06	07/30/21 14:04	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/28/21 11:06	07/30/21 14:04	1
2-Methylphenol	ND		10	1.8	ug/L		07/28/21 11:06	07/30/21 14:04	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/28/21 11:06	07/30/21 14:04	1
2-Nitrophenol	ND		10	5.2	ug/L		07/28/21 11:06	07/30/21 14:04	1
4-Nitrophenol	ND		10	2.1	ug/L		07/28/21 11:06	07/30/21 14:04	1
Pentachlorophenol	ND		20	1.4	ug/L		07/28/21 11:06	07/30/21 14:04	1
Phenol	ND		10	2.6	ug/L		07/28/21 11:06	07/30/21 14:04	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/28/21 11:06	07/30/21 14:04	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/28/21 11:06	07/30/21 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*28*		*13 - 113*	*07/28/21 11:06*	*07/30/21 14:04*	*1*
Phenol-d5	*51*		*17 - 127*	*07/28/21 11:06*	*07/30/21 14:04*	*1*
2,4,6-Tribromophenol	*63*		*26 - 150*	*07/28/21 11:06*	*07/30/21 14:04*	*1*

Lab Sample ID: LCS 400-541252/2-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	120	84.2		ug/L		70	48 - 131
2-Chlorophenol	120	58.5		ug/L		49	40 - 120
2,4-Dichlorophenol	120	69.7		ug/L		58	49 - 120
2,4-Dimethylphenol	120	80.3		ug/L		67	48 - 120
4,6-Dinitro-ortho-cresol	240	176		ug/L		73	23 - 148
2,4-Dinitrophenol	240	216		ug/L		90	10 - 150
2-Methylphenol	120	81.5		ug/L		68	46 - 124
3 & 4 Methylphenol	120	77.1		ug/L		64	45 - 120

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

Lab Sample ID: LCS 400-541252/2-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitrophenol	120	69.0		ug/L		57	40 - 124
4-Nitrophenol	240	169		ug/L		71	23 - 146
Pentachlorophenol	240	184		ug/L		77	31 - 130
Phenol	120	66.1		ug/L		55	11 - 120
2,4,5-Trichlorophenol	120	84.6		ug/L		70	51 - 136
2,4,6-Trichlorophenol	120	81.0		ug/L		68	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*40*		*13 - 113*
Phenol-d5	*55*		*17 - 127*
2,4,6-Tribromophenol	*82*		*26 - 150*

Lab Sample ID: LCSD 400-541252/3-A
Matrix: Water
Analysis Batch: 541564

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541252

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	120	84.3		ug/L		70	48 - 131	0	30
2-Chlorophenol	120	83.8	*1	ug/L		70	40 - 120	36	30
2,4-Dichlorophenol	120	82.5		ug/L		69	49 - 120	17	30
2,4-Dimethylphenol	120	80.7		ug/L		67	48 - 120	1	30
4,6-Dinitro-ortho-cresol	240	187		ug/L		78	23 - 148	6	30
2,4-Dinitrophenol	240	224		ug/L		93	10 - 150	4	30
2-Methylphenol	120	95.3		ug/L		79	46 - 124	16	30
3 & 4 Methylphenol	120	86.3		ug/L		72	45 - 120	11	30
2-Nitrophenol	120	86.9		ug/L		72	40 - 124	23	30
4-Nitrophenol	240	184		ug/L		77	23 - 146	8	30
Pentachlorophenol	240	191		ug/L		80	31 - 130	4	30
Phenol	120	94.6	*1	ug/L		79	11 - 120	35	30
2,4,5-Trichlorophenol	120	90.7		ug/L		76	51 - 136	7	30
2,4,6-Trichlorophenol	120	88.2		ug/L		74	50 - 127	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*69*		*13 - 113*
Phenol-d5	*71*		*17 - 127*
2,4,6-Tribromophenol	*86*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 15:56	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/23/21 09:14	07/26/21 15:56	1
Anthracene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/23/21 09:14	07/26/21 15:56	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/23/21 09:14	07/26/21 15:56	1
Chrysene	ND		0.20	0.074	ug/L		07/23/21 09:14	07/26/21 15:56	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/23/21 09:14	07/26/21 15:56	1
Fluoranthene	ND		0.20	0.068	ug/L		07/23/21 09:14	07/26/21 15:56	1
Fluorene	ND		0.20	0.11	ug/L		07/23/21 09:14	07/26/21 15:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/23/21 09:14	07/26/21 15:56	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/23/21 09:14	07/26/21 15:56	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/23/21 09:14	07/26/21 15:56	1
Phenanthrene	ND		0.20	0.036	ug/L		07/23/21 09:14	07/26/21 15:56	1
Pyrene	ND		0.20	0.040	ug/L		07/23/21 09:14	07/26/21 15:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*15 - 122*	*07/23/21 09:14*	*07/26/21 15:56*	*1*
Nitrobenzene-d5	*92*		*19 - 130*	*07/23/21 09:14*	*07/26/21 15:56*	*1*
Terphenyl-d14	*99*		*33 - 138*	*07/23/21 09:14*	*07/26/21 15:56*	*1*

Lab Sample ID: LCS 400-540615/2-A
Matrix: Water
Analysis Batch: 540955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	102		ug/L		85	41 - 120
Acenaphthylene	120	107		ug/L		89	44 - 120
Anthracene	120	111		ug/L		92	49 - 120
Benzo[a]anthracene	120	109		ug/L		91	61 - 135
Benzo[a]pyrene	120	116		ug/L		96	52 - 120
Benzo[b]fluoranthene	120	129		ug/L		107	53 - 134
Benzo[g,h,i]perylene	120	89.6		ug/L		75	47 - 133
Benzo[k]fluoranthene	120	115		ug/L		96	57 - 134
Chrysene	120	96.1		ug/L		80	55 - 122
Dibenz(a,h)anthracene	120	99.0		ug/L		83	48 - 146
Fluoranthene	120	104		ug/L		87	54 - 128
Fluorene	120	113		ug/L		94	45 - 125
Indeno[1,2,3-cd]pyrene	120	91.8		ug/L		77	43 - 142
1-Methylnaphthalene	120	95.8		ug/L		80	41 - 120
2-Methylnaphthalene	120	103		ug/L		86	32 - 124
Phenanthrene	120	113		ug/L		95	48 - 120
Pyrene	120	102		ug/L		85	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*15 - 122*
Nitrobenzene-d5	*107*		*19 - 130*
Terphenyl-d14	*93*		*33 - 138*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 400-540615/3-A
Matrix: Water
Analysis Batch: 541165

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	111		ug/L		93	41 - 120	9	56
Acenaphthylene	120	114		ug/L		95	44 - 120	6	56
Anthracene	120	114		ug/L		95	49 - 120	3	51
Benzo[a]anthracene	120	114		ug/L		95	61 - 135	5	49
Benzo[a]pyrene	120	119		ug/L		99	52 - 120	3	50
Benzo[b]fluoranthene	120	133		ug/L		111	53 - 134	3	54
Benzo[g,h,i]perylene	120	91.3		ug/L		76	47 - 133	2	50
Benzo[k]fluoranthene	120	135		ug/L		113	57 - 134	16	52
Chrysene	120	101		ug/L		84	55 - 122	5	50
Dibenz(a,h)anthracene	120	102		ug/L		85	48 - 146	3	50
Fluoranthene	120	116		ug/L		96	54 - 128	11	52
Fluorene	120	123		ug/L		102	45 - 125	9	56
Indeno[1,2,3-cd]pyrene	120	88.3		ug/L		74	43 - 142	4	51
1-Methylnaphthalene	120	88.1		ug/L		73	41 - 120	8	55
2-Methylnaphthalene	120	93.0		ug/L		77	32 - 124	10	57
Phenanthrene	120	104		ug/L		87	48 - 120	9	56
Pyrene	120	106		ug/L		89	48 - 132	4	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*15 - 122*
Nitrobenzene-d5	*89*		*19 - 130*
Terphenyl-d14	*94*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-541608/1-A
Matrix: Water
Analysis Batch: 541653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 18:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 18:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 18:02*	*1*

Lab Sample ID: LCS 400-541608/2-A
Matrix: Water
Analysis Batch: 541653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.109	p	ug/L		108	60 - 140
1,2-Dibromoethane	0.101	0.102	p	ug/L		101	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*	*p*	*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-541608/3-A
Matrix: Water
Analysis Batch: 541653

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541608

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.107	p	ug/L		106	60 - 140	2	30
1,2-Dibromoethane			0.101	0.106	p	ug/L		105	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*	*p*	*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/16/21
PO #	GSAP Project ID	PAGE: 1 of 1
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: 60648474 – 3.2.3F

Roxana Quarterly GW

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Driver ID

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☑ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

400-206082 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071621-8011	7/16/2021	0000	Water	2					2		X		
	TB-ROX-071621-8260	7/16/2021	0000	Water	2					2	X			
	P93B-ROX-071621	7/16/2021	1000	Water	6			2		8	X	X	X	X
	P93B-ROX-071621-DUP	7/16/2021	1000	Water	6			2		8	X	X	X	X
	P93D-ROX-071621	7/16/2021	1050	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) FEDEX: 5174 1258 5669	Date: 7/16/21	Time: 1500
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-17-21	Time: 8:56

CUSTODY SEALS: 1599625, 1599624

1.8° C IR8

Version: 2Apr21

Page 49 of 51

8/26/2021 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-206082-1

Login Number: 206082
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-206082-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-206123-1-R1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/24/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-071921-8011	TB-ROX-071921-8260
MW4-ROX-071921-EB	MW4-ROX-071921
MW25-ROX-071921	MW8-ROX-071921
MW8-ROX-071921-Dup	MW7-ROX-071921

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated 2-butanone (methyl ethyl ketone) was detected in the equipment blank. Several VOC and SVOC LCS/LCSD recoveries, and/or SVOC LCS/LCSD RPDs, were outside evaluation criteria. Several SVOC surrogates were outside criteria in several investigative and quality control samples. Field duplicate pair MW8-ROX-071921/MW8-ROX-071921-Dup and sample MW7-ROX-071921 were diluted to bring VOCs into calibration range of the instrument. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on August 4, 2021 to correctly report a laboratory identified pentachlorophenol false positive in sample MW7-ROX-071921; no qualification of data was required.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW4-ROX-071921-EB	VOCs	2-Butanone (MEK)	2.9 µg/L

Analytical data that were reported non-detect or at concentrations greater than ten times (10X) the associated blank concentration for common laboratory contaminants did not require qualification. The compound 2-butanone is a common laboratory contaminant and was not detected in the associated sample. No qualification of data was required.

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-540910/1002	VOCs	Acetone	**197**	NA	43-160
LCS 400-540910/1002	VOCs	2-Butanone (MEK)	**200**	NA	61-145
LCS 400-540910/1002	VOCs	Hexachlorobutadiene	**150**	NA	53-140
LCS 400-541019/1002	VOCs	Acetone	**196**	NA	43-160
LCS 400-541019/1002	VOCs	2-Butanone (MEK)	**192**	NA	61-145
LCS 400-541019/1002	VOCs	Hexachlorobutadiene	**145**	NA	53-140
LCS/LCSD 400-540615/2-A/3-A	SVOCs	Benzoic acid	110/81	**31**	10-144/30
LCS/LCSD 400-540615/2-A/3-A	SVOCs	bis(2-Chloroethyl) ether	**123**/99	21	44-120/30
LCS/LCSD 400-540615/4-A/5-A	SVOCs	Benzenethiol	**7**/16	**73**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-540615/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-071921	SVOCs	Benzenethiol	**UJ**
MW25-ROX-071921	SVOCs	Benzenethiol	**UJ**
MW8-ROX-071921	SVOCs	Benzenethiol	**UJ**
MW8-ROX-071921-Dup	SVOCs	Benzenethiol	**UJ**
MW7-ROX-071921	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW4-ROX-071921-EB	SVOCs	2-Fluorophenol	**3**	13-113
MW4-ROX-071921	SVOCs	2-Fluorophenol	**6**	13-113
MW8-ROX-071921	SVOCs	Terphenyl-d_{14}	**42**	44-149
MW7-ROX-071921	SVOCs	2-Fluorophenol	**6**	13-113
MB 400-540615/1-A	SVOCs	2-Fluorophenol	**5**	13-113

Qualifications due to surrogate recoveries were not required if only one of three acid or base/neutral SCOC surrogate recoveries were outside evaluation criteria. Method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW8-ROX-071921	MW8-ROX-071921-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-206123-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
8/4/2021 1:10:00 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Reviewed 8/24/20
LR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Detection Summary 6
Client Sample Results 7
Definitions 34
Surrogate Summary 35
Method Summary 37
Chronicle 38
QC Association 43
QC Sample Results 45
Chain of Custody 60
Receipt Checklists 61
Certification Summary 62

Job ID: 400-206123-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-206123-1

Comments
Revised Report
Report revised to correct the result for PCP for MW7-ROX-071921 (400-206123-8).
Supersedes report dated 7-31-2021.

Receipt
The samples were received on 7/20/2021 9:28 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-540910 recovered above the upper control limit for 2-Butanone (MEK), Acetone and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW8-ROX-071921 (400-206123-6), MW8-ROX-071921-DUP (400-206123-7), MW7-ROX-071921 (400-206123-8). Elevated reporting limits (RLs) are provided.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-540910 recovered outside control limits for the following analytes: 2-Butanone (MEK), Acetone and Hexachlorobutadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-071921-8260 (400-206123-2), MW4-ROX-071921-EB (400-206123-3), MW4-ROX-071921 (400-206123-4), MW25-ROX-071921 (400-206123-5), MW8-ROX-071921 (400-206123-6), MW8-ROX-071921-DUP (400-206123-7), MW7-ROX-071921 (400-206123-8). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-541019 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-541019 recovered outside control limits for the following analytes: 2-Butanone (MEK), Acetone and Hexachlorobutadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The following sample contained 2-Butanone (MEK) above the method detection limit (MDL): MW4-ROX-071921-EB (400-206123-3). Reanalysis was performed with concurring results.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-540615 and analytical batch 400-540930 recovered outside control limits for the following analytes: Bis(2-chloroethyl)ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 400-540615 and analytical batch 400-540930 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch

Job ID: 400-206123-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

400-540615 and analytical batch 400-540930 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-540930 recovered above the upper control limit for Quinoline. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW4-ROX-071921-EB (400-206123-3), MW4-ROX-071921 (400-206123-4), MW8-ROX-071921 (400-206123-6), MW7-ROX-071921 (400-206123-8), (MB 400-540615/1-A). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-541114 recovered above the upper control limit for Quinoline and Dibenz[a,h]acridine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-540615 and analytical batch 400-541114 recovered outside control limits for the following analytes: Benzoic acid.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-541653 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

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

VOA Prep

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-206123-1	TB-ROX-071921-8011	Water	07/19/21 00:00	07/20/21 09:28
400-206123-2	TB-ROX-071921-8260	Water	07/19/21 00:00	07/20/21 09:28
400-206123-3	MW4-ROX-071921-EB	Water	07/19/21 08:25	07/20/21 09:28
400-206123-4	MW4-ROX-071921	Water	07/19/21 09:35	07/20/21 09:28
400-206123-5	MW25-ROX-071921	Water	07/19/21 11:00	07/20/21 09:28
400-206123-6	MW8-ROX-071921	Water	07/19/21 12:00	07/20/21 09:28
400-206123-7	MW8-ROX-071921-DUP	Water	07/19/21 12:00	07/20/21 09:28
400-206123-8	MW7-ROX-071921	Water	07/19/21 13:30	07/20/21 09:28

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: TB-ROX-071921-8011 — Lab Sample ID: 400-206123-1

No Detections.

Client Sample ID: TB-ROX-071921-8260 — Lab Sample ID: 400-206123-2

No Detections.

Client Sample ID: MW4-ROX-071921-EB — Lab Sample ID: 400-206123-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.9	J	25	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: MW4-ROX-071921 — Lab Sample ID: 400-206123-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59	J	1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.5		1.0	0.74	ug/L	1		8260B	Total/NA
Toluene	0.47	J	1.0	0.41	ug/L	1		8260B	Total/NA
Benzoic acid	24	J	30	7.4	ug/L	1		8270D	Total/NA
Benzyl alcohol	3.1	J	10	2.0	ug/L	1		8270D	Total/NA

Client Sample ID: MW25-ROX-071921 — Lab Sample ID: 400-206123-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	43		1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.6		1.0	0.74	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.095	J	0.21	0.076	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.093	J	0.21	0.062	ug/L	1		8270D LL	Total/NA
Benzoic acid	23	J	31	7.5	ug/L	1		8270D	Total/NA

Client Sample ID: MW8-ROX-071921 — Lab Sample ID: 400-206123-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	270000		2000	760	ug/L	2000		8260B	Total/NA
1-Methylnaphthalene	10		0.21	0.077	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.2		0.21	0.062	ug/L	1		8270D LL	Total/NA
3 & 4 Methylphenol	0.69	J	21	0.40	ug/L	1		8270D	Total/NA
Phenol	300		10	2.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW8-ROX-071921-DUP — Lab Sample ID: 400-206123-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	270000		2000	760	ug/L	2000		8260B	Total/NA
1-Methylnaphthalene	8.6		0.21	0.077	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.2		0.21	0.062	ug/L	1		8270D LL	Total/NA
3 & 4 Methylphenol	0.77	J	21	0.41	ug/L	1		8270D	Total/NA
Phenol	330		10	2.7	ug/L	1		8270D	Total/NA

Client Sample ID: MW7-ROX-071921 — Lab Sample ID: 400-206123-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	890000		5000	1900	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	1.8		0.20	0.075	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.5		0.20	0.061	ug/L	1		8270D LL	Total/NA
Benzoic acid	41	*1	30	7.4	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	0.73	J	20	0.39	ug/L	1		8270D	Total/NA
Phenol	38		10	2.6	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: TB-ROX-071921-8011
Date Collected: 07/19/21 00:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 20:26	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*07/30/21 13:25*	*07/30/21 20:26*	*1*

Client Sample ID: TB-ROX-071921-8260
Date Collected: 07/19/21 00:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/26/21 14:28	1
Acrolein	ND		20	10	ug/L			07/26/21 14:28	1
Acrylonitrile	ND		10	2.8	ug/L			07/26/21 14:28	1
Benzene	ND		1.0	0.38	ug/L			07/26/21 14:28	1
Bromobenzene	ND		1.0	0.54	ug/L			07/26/21 14:28	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/26/21 14:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Bromoform	ND		5.0	0.71	ug/L			07/26/21 14:28	1
Bromomethane	ND		1.0	0.98	ug/L			07/26/21 14:28	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/26/21 14:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Chloroethane	ND		1.0	0.76	ug/L			07/26/21 14:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/26/21 14:28	1
Chloroform	ND		1.0	0.60	ug/L			07/26/21 14:28	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/26/21 14:28	1
Chloromethane	ND		1.0	0.83	ug/L			07/26/21 14:28	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 14:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/26/21 14:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/26/21 14:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/26/21 14:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/26/21 14:28	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/26/21 14:28	1
2-Hexanone	ND		25	3.1	ug/L			07/26/21 14:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/26/21 14:28	1
Methylene bromide	ND		5.0	0.59	ug/L			07/26/21 14:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/26/21 14:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/26/21 14:28	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/26/21 14:28	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/26/21 14:28	1
Naphthalene	ND		1.0	1.0	ug/L			07/26/21 14:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/26/21 14:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/26/21 14:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/26/21 14:28	1
o-Xylene	ND		5.0	0.60	ug/L			07/26/21 14:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/26/21 14:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/26/21 14:28	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: TB-ROX-071921-8260
Date Collected: 07/19/21 00:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/26/21 14:28	1
Styrene	ND		1.0	1.0	ug/L			07/26/21 14:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/26/21 14:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/26/21 14:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/26/21 14:28	1
Toluene	ND		1.0	0.41	ug/L			07/26/21 14:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 14:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/26/21 14:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/26/21 14:28	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/26/21 14:28	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/26/21 14:28	1
Trichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/26/21 14:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/26/21 14:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/26/21 14:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/26/21 14:28	1
Vinyl acetate	ND		25	2.0	ug/L			07/26/21 14:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/26/21 14:28	1
Xylenes, Total	ND		10	1.6	ug/L			07/26/21 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/26/21 14:28*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/26/21 14:28*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/26/21 14:28*	*1*

Client Sample ID: MW4-ROX-071921-EB
Date Collected: 07/19/21 08:25
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/26/21 15:23	1
Acrolein	ND		20	10	ug/L			07/26/21 15:23	1
Acrylonitrile	ND		10	2.8	ug/L			07/26/21 15:23	1
Benzene	ND		1.0	0.38	ug/L			07/26/21 15:23	1
Bromobenzene	ND		1.0	0.54	ug/L			07/26/21 15:23	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/26/21 15:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Bromoform	ND		5.0	0.71	ug/L			07/26/21 15:23	1
Bromomethane	ND		1.0	0.98	ug/L			07/26/21 15:23	1
2-Butanone (MEK)	2.9	J	25	2.6	ug/L			07/27/21 16:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Chloroethane	ND		1.0	0.76	ug/L			07/26/21 15:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/26/21 15:23	1
Chloroform	ND		1.0	0.60	ug/L			07/26/21 15:23	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/26/21 15:23	1
Chloromethane	ND		1.0	0.83	ug/L			07/26/21 15:23	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 15:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/26/21 15:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/26/21 15:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/26/21 15:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/26/21 15:23	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/26/21 15:23	1
2-Hexanone	ND		25	3.1	ug/L			07/26/21 15:23	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/26/21 15:23	1
Methylene bromide	ND		5.0	0.59	ug/L			07/26/21 15:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/26/21 15:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/26/21 15:23	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/26/21 15:23	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/26/21 15:23	1
Naphthalene	ND		1.0	1.0	ug/L			07/26/21 15:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/26/21 15:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/26/21 15:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/26/21 15:23	1
o-Xylene	ND		5.0	0.60	ug/L			07/26/21 15:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/26/21 15:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/26/21 15:23	1

Client Sample ID: MW4-ROX-071921-EB

Date Collected: 07/19/21 08:25
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/26/21 15:23	1
Styrene	ND		1.0	1.0	ug/L			07/26/21 15:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/26/21 15:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/26/21 15:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/26/21 15:23	1
Toluene	ND		1.0	0.41	ug/L			07/26/21 15:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 15:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/26/21 15:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/26/21 15:23	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/26/21 15:23	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/26/21 15:23	1
Trichloroethene	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/26/21 15:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/26/21 15:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/26/21 15:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/26/21 15:23	1
Vinyl acetate	ND		25	2.0	ug/L			07/26/21 15:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/26/21 15:23	1
Xylenes, Total	ND		10	1.6	ug/L			07/26/21 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/26/21 15:23*	*1*
4-Bromofluorobenzene	*102*		*72 - 119*		*07/27/21 16:05*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/26/21 15:23*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/27/21 16:05*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/26/21 15:23*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/27/21 16:05*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		07/23/21 09:14	07/26/21 17:22	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/23/21 09:14	07/26/21 17:22	1
Anthracene	ND		0.19	0.030	ug/L		07/23/21 09:14	07/26/21 17:22	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		07/23/21 09:14	07/26/21 17:22	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		07/23/21 09:14	07/26/21 17:22	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		07/23/21 09:14	07/26/21 17:22	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		07/23/21 09:14	07/26/21 17:22	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		07/23/21 09:14	07/26/21 17:22	1
Chrysene	ND		0.19	0.070	ug/L		07/23/21 09:14	07/26/21 17:22	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		07/23/21 09:14	07/26/21 17:22	1
Fluoranthene	ND		0.19	0.065	ug/L		07/23/21 09:14	07/26/21 17:22	1
Fluorene	ND		0.19	0.10	ug/L		07/23/21 09:14	07/26/21 17:22	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		07/23/21 09:14	07/26/21 17:22	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		07/23/21 09:14	07/26/21 17:22	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		07/23/21 09:14	07/26/21 17:22	1
Phenanthrene	ND		0.19	0.034	ug/L		07/23/21 09:14	07/26/21 17:22	1
Pyrene	ND		0.19	0.038	ug/L		07/23/21 09:14	07/26/21 17:22	1

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: MW4-ROX-071921-EB

Date Collected: 07/19/21 08:25
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*15 - 122*	*07/23/21 09:14*	*07/26/21 17:22*	*1*
Nitrobenzene-d5	*99*		*19 - 130*	*07/23/21 09:14*	*07/26/21 17:22*	*1*
Terphenyl-d14	*108*		*33 - 138*	*07/23/21 09:14*	*07/26/21 17:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		07/23/21 09:14	07/26/21 23:14	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		07/23/21 09:14	07/26/21 23:14	1
Benzoic acid	ND		29	6.9	ug/L		07/23/21 09:14	07/26/21 23:14	1
Benzyl alcohol	ND		9.5	1.9	ug/L		07/23/21 09:14	07/26/21 23:14	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		07/23/21 09:14	07/26/21 23:14	1
Bis(2-chloroethyl)ether	ND	*+	9.5	2.6	ug/L		07/23/21 09:14	07/26/21 23:14	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		07/23/21 09:14	07/26/21 23:14	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		07/23/21 09:14	07/26/21 23:14	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		07/23/21 09:14	07/26/21 23:14	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		07/23/21 09:14	07/26/21 23:14	1
4-Chloroaniline	ND		9.5	3.2	ug/L		07/23/21 09:14	07/26/21 23:14	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		07/23/21 09:14	07/26/21 23:14	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		07/23/21 09:14	07/26/21 23:14	1
2-Chlorophenol	ND		9.5	2.1	ug/L		07/23/21 09:14	07/26/21 23:14	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		07/23/21 09:14	07/26/21 23:14	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		07/23/21 09:14	07/26/21 23:14	1
Dibenzofuran	ND		9.5	0.16	ug/L		07/23/21 09:14	07/26/21 23:14	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		07/23/21 09:14	07/26/21 23:14	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		07/23/21 09:14	07/26/21 23:14	1
Diethyl phthalate	ND		9.5	0.23	ug/L		07/23/21 09:14	07/26/21 23:14	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		07/23/21 09:14	07/26/21 23:14	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		07/23/21 09:14	07/26/21 23:14	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		07/23/21 09:14	07/26/21 23:14	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		07/23/21 09:14	07/26/21 23:14	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		07/23/21 09:14	07/26/21 23:14	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		07/23/21 09:14	07/26/21 23:14	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		07/23/21 09:14	07/26/21 23:14	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		07/23/21 09:14	07/26/21 23:14	1
1,4-Dioxane	ND		9.5	0.95	ug/L		07/23/21 09:14	07/26/21 23:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		07/23/21 09:14	07/26/21 23:14	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		07/23/21 09:14	07/26/21 23:14	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		07/23/21 09:14	07/26/21 23:14	1
Hexachloroethane	ND		9.5	4.0	ug/L		07/23/21 09:14	07/26/21 23:14	1
Indene	ND		9.5	0.95	ug/L		07/23/21 09:14	07/26/21 23:14	1
Isophorone	ND		9.5	0.13	ug/L		07/23/21 09:14	07/26/21 23:14	1
2-Methylphenol	ND		9.5	1.7	ug/L		07/23/21 09:14	07/26/21 23:14	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		07/23/21 09:14	07/26/21 23:14	1
2-Nitroaniline	ND		9.5	2.1	ug/L		07/23/21 09:14	07/26/21 23:14	1
3-Nitroaniline	ND		9.5	1.7	ug/L		07/23/21 09:14	07/26/21 23:14	1
4-Nitroaniline	ND		9.5	1.4	ug/L		07/23/21 09:14	07/26/21 23:14	1
Nitrobenzene	ND		9.5	0.12	ug/L		07/23/21 09:14	07/26/21 23:14	1
2-Nitrophenol	ND		9.5	4.9	ug/L		07/23/21 09:14	07/26/21 23:14	1
4-Nitrophenol	ND		9.5	2.0	ug/L		07/23/21 09:14	07/26/21 23:14	1

Client Sample ID: MW4-ROX-071921-EB

Date Collected: 07/19/21 08:25
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		07/23/21 09:14	07/26/21 23:14	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		07/23/21 09:14	07/26/21 23:14	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		07/23/21 09:14	07/26/21 23:14	1
Pentachlorophenol	ND		19	1.3	ug/L		07/23/21 09:14	07/26/21 23:14	1
Phenol	ND		9.5	2.5	ug/L		07/23/21 09:14	07/26/21 23:14	1
Pyridine	ND		9.5	3.0	ug/L		07/23/21 09:14	07/26/21 23:14	1
Quinoline	ND		9.5	4.3	ug/L		07/23/21 09:14	07/26/21 23:14	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		07/23/21 09:14	07/26/21 23:14	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/23/21 09:14	07/26/21 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*46 - 124*	*07/23/21 09:14*	*07/26/21 23:14*	*1*
2-Fluorophenol	*3*	*S1-*	*13 - 113*	*07/23/21 09:14*	*07/26/21 23:14*	*1*
Nitrobenzene-d5	*85*		*36 - 126*	*07/23/21 09:14*	*07/26/21 23:14*	*1*
Phenol-d5	*32*		*17 - 127*	*07/23/21 09:14*	*07/26/21 23:14*	*1*
Terphenyl-d14	*89*		*44 - 149*	*07/23/21 09:14*	*07/26/21 23:14*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*07/23/21 09:14*	*07/26/21 23:14*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 20:47	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 20:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*07/30/21 13:25*	*07/30/21 20:47*	*1*

Client Sample ID: MW4-ROX-071921
Date Collected: 07/19/21 09:35
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/26/21 17:40	1
Acrolein	ND		20	10	ug/L			07/26/21 17:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/26/21 17:40	1
Benzene	**0.59**	**J**	1.0	0.38	ug/L			07/26/21 17:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/26/21 17:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/26/21 17:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Bromoform	ND		5.0	0.71	ug/L			07/26/21 17:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/26/21 17:40	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/26/21 17:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/26/21 17:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/26/21 17:40	1
Chloroform	ND		1.0	0.60	ug/L			07/26/21 17:40	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/26/21 17:40	1
Chloromethane	ND		1.0	0.83	ug/L			07/26/21 17:40	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 17:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/26/21 17:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/26/21 17:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/26/21 17:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/26/21 17:40	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/26/21 17:40	1
2-Hexanone	ND		25	3.1	ug/L			07/26/21 17:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/26/21 17:40	1
Methylene bromide	ND		5.0	0.59	ug/L			07/26/21 17:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/26/21 17:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/26/21 17:40	1
Methyl tert-butyl ether	**1.5**		1.0	0.74	ug/L			07/26/21 17:40	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/26/21 17:40	1
Naphthalene	ND		1.0	1.0	ug/L			07/26/21 17:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/26/21 17:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/26/21 17:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/26/21 17:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/26/21 17:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/26/21 17:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/26/21 17:40	1

Client Sample ID: MW4-ROX-071921
Date Collected: 07/19/21 09:35
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/26/21 17:40	1
Styrene	ND		1.0	1.0	ug/L			07/26/21 17:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/26/21 17:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/26/21 17:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/26/21 17:40	1
Toluene	0.47	J	1.0	0.41	ug/L			07/26/21 17:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 17:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/26/21 17:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/26/21 17:40	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/26/21 17:40	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/26/21 17:40	1
Trichloroethene	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/26/21 17:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/26/21 17:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/26/21 17:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/26/21 17:40	1
Vinyl acetate	ND		25	2.0	ug/L			07/26/21 17:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/26/21 17:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/26/21 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*72 - 119*		*07/26/21 17:40*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/26/21 17:40*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/26/21 17:40*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 17:39	1
Acenaphthylene	ND		0.20	0.046	ug/L		07/23/21 09:14	07/26/21 17:39	1
Anthracene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 17:39	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		07/23/21 09:14	07/26/21 17:39	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		07/23/21 09:14	07/26/21 17:39	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/23/21 09:14	07/26/21 17:39	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/23/21 09:14	07/26/21 17:39	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/23/21 09:14	07/26/21 17:39	1
Chrysene	ND		0.20	0.075	ug/L		07/23/21 09:14	07/26/21 17:39	1
Dibenz(a,h)anthracene	ND		0.20	0.051	ug/L		07/23/21 09:14	07/26/21 17:39	1
Fluoranthene	ND		0.20	0.069	ug/L		07/23/21 09:14	07/26/21 17:39	1
Fluorene	ND		0.20	0.11	ug/L		07/23/21 09:14	07/26/21 17:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.044	ug/L		07/23/21 09:14	07/26/21 17:39	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		07/23/21 09:14	07/26/21 17:39	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		07/23/21 09:14	07/26/21 17:39	1
Phenanthrene	ND		0.20	0.037	ug/L		07/23/21 09:14	07/26/21 17:39	1
Pyrene	ND		0.20	0.041	ug/L		07/23/21 09:14	07/26/21 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*15 - 122*	*07/23/21 09:14*	*07/26/21 17:39*	*1*
Nitrobenzene-d5	*84*		*19 - 130*	*07/23/21 09:14*	*07/26/21 17:39*	*1*

Client Sample ID: MW4-ROX-071921
Date Collected: 07/19/21 09:35
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	85		33 - 138	07/23/21 09:14	07/26/21 17:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/23/21 09:14	07/26/21 23:40	1
Benzenethiol	ND	*- *1 UJ	10	1.7	ug/L		07/23/21 09:14	07/26/21 23:40	1
Benzoic acid	24	J	30	7.4	ug/L		07/23/21 09:14	07/26/21 23:40	1
Benzyl alcohol	3.1	J	10	2.0	ug/L		07/23/21 09:14	07/26/21 23:40	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/23/21 09:14	07/26/21 23:40	1
Bis(2-chloroethyl)ether	ND	*+	10	2.7	ug/L		07/23/21 09:14	07/26/21 23:40	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/23/21 09:14	07/26/21 23:40	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/23/21 09:14	07/26/21 23:40	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/23/21 09:14	07/26/21 23:40	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/23/21 09:14	07/26/21 23:40	1
4-Chloroaniline	ND		10	3.4	ug/L		07/23/21 09:14	07/26/21 23:40	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/23/21 09:14	07/26/21 23:40	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 23:40	1
2-Chlorophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/26/21 23:40	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 23:40	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 23:40	1
Dibenzofuran	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 23:40	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/23/21 09:14	07/26/21 23:40	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/23/21 09:14	07/26/21 23:40	1
Diethyl phthalate	ND		10	0.24	ug/L		07/23/21 09:14	07/26/21 23:40	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/23/21 09:14	07/26/21 23:40	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 23:40	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/23/21 09:14	07/26/21 23:40	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/23/21 09:14	07/26/21 23:40	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/23/21 09:14	07/26/21 23:40	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 23:40	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 23:40	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 23:40	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 23:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 23:40	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 23:40	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/23/21 09:14	07/26/21 23:40	1
Hexachloroethane	ND		10	4.3	ug/L		07/23/21 09:14	07/26/21 23:40	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 23:40	1
Isophorone	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 23:40	1
2-Methylphenol	ND		10	1.8	ug/L		07/23/21 09:14	07/26/21 23:40	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		07/23/21 09:14	07/26/21 23:40	1
2-Nitroaniline	ND		10	2.2	ug/L		07/23/21 09:14	07/26/21 23:40	1
3-Nitroaniline	ND		10	1.8	ug/L		07/23/21 09:14	07/26/21 23:40	1
4-Nitroaniline	ND		10	1.5	ug/L		07/23/21 09:14	07/26/21 23:40	1
Nitrobenzene	ND		10	0.13	ug/L		07/23/21 09:14	07/26/21 23:40	1
2-Nitrophenol	ND		10	5.3	ug/L		07/23/21 09:14	07/26/21 23:40	1
4-Nitrophenol	ND		10	2.1	ug/L		07/23/21 09:14	07/26/21 23:40	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/23/21 09:14	07/26/21 23:40	1

Client Sample ID: MW4-ROX-071921
Date Collected: 07/19/21 09:35
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/23/21 09:14	07/26/21 23:40	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 23:40	1
Pentachlorophenol	ND		20	1.4	ug/L		07/23/21 09:14	07/26/21 23:40	1
Phenol	ND		10	2.6	ug/L		07/23/21 09:14	07/26/21 23:40	1
Pyridine	ND		10	3.2	ug/L		07/23/21 09:14	07/26/21 23:40	1
Quinoline	ND		10	4.6	ug/L		07/23/21 09:14	07/26/21 23:40	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/23/21 09:14	07/26/21 23:40	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/23/21 09:14	07/26/21 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*46 - 124*	*07/23/21 09:14*	*07/26/21 23:40*	*1*
2-Fluorophenol	*6*	*S1-*	*13 - 113*	*07/23/21 09:14*	*07/26/21 23:40*	*1*
Nitrobenzene-d5	*81*		*36 - 126*	*07/23/21 09:14*	*07/26/21 23:40*	*1*
Phenol-d5	*33*		*17 - 127*	*07/23/21 09:14*	*07/26/21 23:40*	*1*
Terphenyl-d14	*80*		*44 - 149*	*07/23/21 09:14*	*07/26/21 23:40*	*1*
2,4,6-Tribromophenol	*68*		*26 - 150*	*07/23/21 09:14*	*07/26/21 23:40*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 21:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 21:08*	*1*

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: MW25-ROX-071921
Date Collected: 07/19/21 11:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25	10	ug/L			07/26/21 18:07	1
Acrolein	ND		20	10	ug/L			07/26/21 18:07	1
Acrylonitrile	ND		10	2.8	ug/L			07/26/21 18:07	1
Benzene	**43**		1.0	0.38	ug/L			07/26/21 18:07	1
Bromobenzene	ND		1.0	0.54	ug/L			07/26/21 18:07	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/26/21 18:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Bromoform	ND		5.0	0.71	ug/L			07/26/21 18:07	1
Bromomethane	ND		1.0	0.98	ug/L			07/26/21 18:07	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/26/21 18:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Chloroethane	ND		1.0	0.76	ug/L			07/26/21 18:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/26/21 18:07	1
Chloroform	ND		1.0	0.60	ug/L			07/26/21 18:07	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/26/21 18:07	1
Chloromethane	ND		1.0	0.83	ug/L			07/26/21 18:07	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 18:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/26/21 18:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/26/21 18:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/26/21 18:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/26/21 18:07	1
Hexachlorobutadiene	ND	*+	5.0	0.90	ug/L			07/26/21 18:07	1
2-Hexanone	ND		25	3.1	ug/L			07/26/21 18:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/26/21 18:07	1
Methylene bromide	ND		5.0	0.59	ug/L			07/26/21 18:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/26/21 18:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/26/21 18:07	1
Methyl tert-butyl ether	**2.6**		1.0	0.74	ug/L			07/26/21 18:07	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/26/21 18:07	1
Naphthalene	ND		1.0	1.0	ug/L			07/26/21 18:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/26/21 18:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/26/21 18:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/26/21 18:07	1
o-Xylene	ND		5.0	0.60	ug/L			07/26/21 18:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/26/21 18:07	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/26/21 18:07	1

Client Sample ID: MW25-ROX-071921
Date Collected: 07/19/21 11:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/26/21 18:07	1
Styrene	ND		1.0	1.0	ug/L			07/26/21 18:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/26/21 18:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/26/21 18:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/26/21 18:07	1
Toluene	ND		1.0	0.41	ug/L			07/26/21 18:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 18:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/26/21 18:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/26/21 18:07	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/26/21 18:07	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/26/21 18:07	1
Trichloroethene	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/26/21 18:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/26/21 18:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/26/21 18:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/26/21 18:07	1
Vinyl acetate	ND		25	2.0	ug/L			07/26/21 18:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/26/21 18:07	1
Xylenes, Total	ND		10	1.6	ug/L			07/26/21 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/26/21 18:07*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/26/21 18:07*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/26/21 18:07*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 17:57	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/23/21 09:14	07/26/21 17:57	1
Anthracene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 17:57	1
Benzo[a]anthracene	ND		0.21	0.047	ug/L		07/23/21 09:14	07/26/21 17:57	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		07/23/21 09:14	07/26/21 17:57	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/23/21 09:14	07/26/21 17:57	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/23/21 09:14	07/26/21 17:57	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/23/21 09:14	07/26/21 17:57	1
Chrysene	ND		0.21	0.076	ug/L		07/23/21 09:14	07/26/21 17:57	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		07/23/21 09:14	07/26/21 17:57	1
Fluoranthene	ND		0.21	0.070	ug/L		07/23/21 09:14	07/26/21 17:57	1
Fluorene	ND		0.21	0.11	ug/L		07/23/21 09:14	07/26/21 17:57	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.044	ug/L		07/23/21 09:14	07/26/21 17:57	1
1-Methylnaphthalene	**0.095**	**J**	0.21	0.076	ug/L		07/23/21 09:14	07/26/21 17:57	1
2-Methylnaphthalene	**0.093**	**J**	0.21	0.062	ug/L		07/23/21 09:14	07/26/21 17:57	1
Phenanthrene	ND		0.21	0.037	ug/L		07/23/21 09:14	07/26/21 17:57	1
Pyrene	ND		0.21	0.041	ug/L		07/23/21 09:14	07/26/21 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*15 - 122*	*07/23/21 09:14*	*07/26/21 17:57*	*1*
Nitrobenzene-d5	*90*		*19 - 130*	*07/23/21 09:14*	*07/26/21 17:57*	*1*

Client Sample ID: MW25-ROX-071921
Date Collected: 07/19/21 11:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	83		33 - 138	07/23/21 09:14	07/26/21 17:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/23/21 09:14	07/27/21 00:05	1
Benzenethiol	ND	*- *1 UJ	10	1.7	ug/L		07/23/21 09:14	07/27/21 00:05	1
Benzoic acid	23	J	31	7.5	ug/L		07/23/21 09:14	07/27/21 00:05	1
Benzyl alcohol	ND		10	2.1	ug/L		07/23/21 09:14	07/27/21 00:05	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/23/21 09:14	07/27/21 00:05	1
Bis(2-chloroethyl)ether	ND	*+	10	2.8	ug/L		07/23/21 09:14	07/27/21 00:05	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/23/21 09:14	07/27/21 00:05	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		07/23/21 09:14	07/27/21 00:05	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/23/21 09:14	07/27/21 00:05	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/23/21 09:14	07/27/21 00:05	1
4-Chloroaniline	ND		10	3.5	ug/L		07/23/21 09:14	07/27/21 00:05	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/23/21 09:14	07/27/21 00:05	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/23/21 09:14	07/27/21 00:05	1
2-Chlorophenol	ND		10	2.3	ug/L		07/23/21 09:14	07/27/21 00:05	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/23/21 09:14	07/27/21 00:05	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:05	1
Dibenzofuran	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:05	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/23/21 09:14	07/27/21 00:05	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/23/21 09:14	07/27/21 00:05	1
Diethyl phthalate	ND		10	0.25	ug/L		07/23/21 09:14	07/27/21 00:05	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:05	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:05	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/23/21 09:14	07/27/21 00:05	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/23/21 09:14	07/27/21 00:05	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/23/21 09:14	07/27/21 00:05	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 00:05	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 00:05	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:05	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:05	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:05	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/23/21 09:14	07/27/21 00:05	1
Hexachloroethane	ND		10	4.3	ug/L		07/23/21 09:14	07/27/21 00:05	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:05	1
Isophorone	ND		10	0.14	ug/L		07/23/21 09:14	07/27/21 00:05	1
2-Methylphenol	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 00:05	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		07/23/21 09:14	07/27/21 00:05	1
2-Nitroaniline	ND		10	2.3	ug/L		07/23/21 09:14	07/27/21 00:05	1
3-Nitroaniline	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 00:05	1
4-Nitroaniline	ND		10	1.5	ug/L		07/23/21 09:14	07/27/21 00:05	1
Nitrobenzene	ND		10	0.13	ug/L		07/23/21 09:14	07/27/21 00:05	1
2-Nitrophenol	ND		10	5.3	ug/L		07/23/21 09:14	07/27/21 00:05	1
4-Nitrophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/27/21 00:05	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:05	1

Client Sample ID: MW25-ROX-071921
Date Collected: 07/19/21 11:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/23/21 09:14	07/27/21 00:05	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/23/21 09:14	07/27/21 00:05	1
Pentachlorophenol	ND		21	1.4	ug/L		07/23/21 09:14	07/27/21 00:05	1
Phenol	ND		10	2.7	ug/L		07/23/21 09:14	07/27/21 00:05	1
Pyridine	ND		10	3.3	ug/L		07/23/21 09:14	07/27/21 00:05	1
Quinoline	ND		10	4.6	ug/L		07/23/21 09:14	07/27/21 00:05	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/23/21 09:14	07/27/21 00:05	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*46 - 124*	*07/23/21 09:14*	*07/27/21 00:05*	*1*
2-Fluorophenol	*19*		*13 - 113*	*07/23/21 09:14*	*07/27/21 00:05*	*1*
Nitrobenzene-d5	*80*		*36 - 126*	*07/23/21 09:14*	*07/27/21 00:05*	*1*
Phenol-d5	*52*		*17 - 127*	*07/23/21 09:14*	*07/27/21 00:05*	*1*
Terphenyl-d14	*74*		*44 - 149*	*07/23/21 09:14*	*07/27/21 00:05*	*1*
2,4,6-Tribromophenol	*93*		*26 - 150*	*07/23/21 09:14*	*07/27/21 00:05*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 21:49	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 21:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 21:49*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: MW8-ROX-071921
Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50000	20000	ug/L			07/26/21 23:34	2000
Acrolein	ND		40000	20000	ug/L			07/26/21 23:34	2000
Acrylonitrile	ND		20000	5600	ug/L			07/26/21 23:34	2000
Benzene	270000		2000	760	ug/L			07/26/21 23:34	2000
Bromobenzene	ND		2000	1100	ug/L			07/26/21 23:34	2000
Bromochloromethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
Bromodichloromethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
Bromoform	ND		10000	1400	ug/L			07/26/21 23:34	2000
Bromomethane	ND		2000	2000	ug/L			07/26/21 23:34	2000
2-Butanone (MEK)	ND	*+	50000	5200	ug/L			07/26/21 23:34	2000
Carbon disulfide	ND		2000	1000	ug/L			07/26/21 23:34	2000
Carbon tetrachloride	ND		2000	1000	ug/L			07/26/21 23:34	2000
Chlorobenzene	ND		2000	1000	ug/L			07/26/21 23:34	2000
Dibromochloromethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
Chloroethane	ND		2000	1500	ug/L			07/26/21 23:34	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			07/26/21 23:34	2000
Chloroform	ND		2000	1200	ug/L			07/26/21 23:34	2000
1-Chlorohexane	ND		2000	1400	ug/L			07/26/21 23:34	2000
Chloromethane	ND		2000	1700	ug/L			07/26/21 23:34	2000
cis-1,2-Dichloroethene	ND		2000	1000	ug/L			07/26/21 23:34	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			07/26/21 23:34	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			07/26/21 23:34	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			07/26/21 23:34	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			07/26/21 23:34	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,2-Dichloroethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			07/26/21 23:34	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			07/26/21 23:34	2000
Ethylbenzene	ND		2000	1000	ug/L			07/26/21 23:34	2000
Ethyl methacrylate	ND		2000	1200	ug/L			07/26/21 23:34	2000
Hexachlorobutadiene	ND	*+	10000	1800	ug/L			07/26/21 23:34	2000
2-Hexanone	ND		50000	6200	ug/L			07/26/21 23:34	2000
Isopropylbenzene	ND		2000	1100	ug/L			07/26/21 23:34	2000
Methylene bromide	ND		10000	1200	ug/L			07/26/21 23:34	2000
Methylene Chloride	ND		10000	6000	ug/L			07/26/21 23:34	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			07/26/21 23:34	2000
Methyl tert-butyl ether	ND		2000	1500	ug/L			07/26/21 23:34	2000
m-Xylene & p-Xylene	ND		10000	3200	ug/L			07/26/21 23:34	2000
Naphthalene	ND		2000	2000	ug/L			07/26/21 23:34	2000
n-Butylbenzene	ND		2000	1500	ug/L			07/26/21 23:34	2000
N-Propylbenzene	ND		2000	1400	ug/L			07/26/21 23:34	2000
o-Chlorotoluene	ND		2000	1100	ug/L			07/26/21 23:34	2000
o-Xylene	ND		10000	1200	ug/L			07/26/21 23:34	2000
p-Chlorotoluene	ND		2000	1100	ug/L			07/26/21 23:34	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			07/26/21 23:34	2000

Client Sample ID: MW8-ROX-071921
Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2000	1400	ug/L			07/26/21 23:34	2000
Styrene	ND		2000	2000	ug/L			07/26/21 23:34	2000
tert-Butylbenzene	ND		2000	1300	ug/L			07/26/21 23:34	2000
1,1,1,2-Tetrachloroethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
Tetrachloroethene	ND		2000	1200	ug/L			07/26/21 23:34	2000
Toluene	ND		2000	820	ug/L			07/26/21 23:34	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			07/26/21 23:34	2000
trans-1,3-Dichloropropene	ND		10000	1000	ug/L			07/26/21 23:34	2000
1,2,3-Trichlorobenzene	ND		2000	1400	ug/L			07/26/21 23:34	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			07/26/21 23:34	2000
1,1,1-Trichloroethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,1,2-Trichloroethane	ND		10000	1000	ug/L			07/26/21 23:34	2000
Trichloroethene	ND		2000	1000	ug/L			07/26/21 23:34	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			07/26/21 23:34	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			07/26/21 23:34	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			07/26/21 23:34	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			07/26/21 23:34	2000
Vinyl acetate	ND		50000	4000	ug/L			07/26/21 23:34	2000
Vinyl chloride	ND		2000	1000	ug/L			07/26/21 23:34	2000
Xylenes, Total	ND		20000	3200	ug/L			07/26/21 23:34	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/26/21 23:34*	*2000*
Dibromofluoromethane	*107*		*75 - 126*		*07/26/21 23:34*	*2000*
Toluene-d8 (Surr)	*102*		*64 - 132*		*07/26/21 23:34*	*2000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 18:14	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/23/21 09:14	07/26/21 18:14	1
Anthracene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 18:14	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/23/21 09:14	07/26/21 18:14	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		07/23/21 09:14	07/26/21 18:14	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/23/21 09:14	07/26/21 18:14	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		07/23/21 09:14	07/26/21 18:14	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/23/21 09:14	07/26/21 18:14	1
Chrysene	ND		0.21	0.077	ug/L		07/23/21 09:14	07/26/21 18:14	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/23/21 09:14	07/26/21 18:14	1
Fluoranthene	ND		0.21	0.070	ug/L		07/23/21 09:14	07/26/21 18:14	1
Fluorene	ND		0.21	0.11	ug/L		07/23/21 09:14	07/26/21 18:14	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/23/21 09:14	07/26/21 18:14	1
1-Methylnaphthalene	**10**		0.21	0.077	ug/L		07/23/21 09:14	07/26/21 18:14	1
2-Methylnaphthalene	**2.2**		0.21	0.062	ug/L		07/23/21 09:14	07/26/21 18:14	1
Phenanthrene	ND		0.21	0.037	ug/L		07/23/21 09:14	07/26/21 18:14	1
Pyrene	ND		0.21	0.041	ug/L		07/23/21 09:14	07/26/21 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*15 - 122*	*07/23/21 09:14*	*07/26/21 18:14*	*1*
Nitrobenzene-d5	*89*		*19 - 130*	*07/23/21 09:14*	*07/26/21 18:14*	*1*

Client Sample ID: MW8-ROX-071921
Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	46		33 - 138	07/23/21 09:14	07/26/21 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		07/23/21 09:14	07/27/21 00:31	1
Benzenethiol	ND	*-*1 UJ	10	1.8	ug/L		07/23/21 09:14	07/27/21 00:31	1
Benzoic acid	ND		31	7.6	ug/L		07/23/21 09:14	07/27/21 00:31	1
Benzyl alcohol	ND		10	2.1	ug/L		07/23/21 09:14	07/27/21 00:31	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:31	1
Bis(2-chloroethyl)ether	ND	*+	10	2.8	ug/L		07/23/21 09:14	07/27/21 00:31	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:31	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/23/21 09:14	07/27/21 00:31	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/23/21 09:14	07/27/21 00:31	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/23/21 09:14	07/27/21 00:31	1
4-Chloroaniline	ND		10	3.5	ug/L		07/23/21 09:14	07/27/21 00:31	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		07/23/21 09:14	07/27/21 00:31	1
2-Chloronaphthalene	ND		10	0.15	ug/L		07/23/21 09:14	07/27/21 00:31	1
2-Chlorophenol	ND		10	2.3	ug/L		07/23/21 09:14	07/27/21 00:31	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/23/21 09:14	07/27/21 00:31	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:31	1
Dibenzofuran	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:31	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/23/21 09:14	07/27/21 00:31	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/23/21 09:14	07/27/21 00:31	1
Diethyl phthalate	ND		10	0.25	ug/L		07/23/21 09:14	07/27/21 00:31	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:31	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:31	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/23/21 09:14	07/27/21 00:31	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/23/21 09:14	07/27/21 00:31	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/23/21 09:14	07/27/21 00:31	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 00:31	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 00:31	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:31	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:31	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:31	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/23/21 09:14	07/27/21 00:31	1
Hexachloroethane	ND		10	4.4	ug/L		07/23/21 09:14	07/27/21 00:31	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:31	1
Isophorone	ND		10	0.15	ug/L		07/23/21 09:14	07/27/21 00:31	1
2-Methylphenol	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 00:31	1
3 & 4 Methylphenol	**0.69**	**J**	21	0.40	ug/L		07/23/21 09:14	07/27/21 00:31	1
2-Nitroaniline	ND		10	2.3	ug/L		07/23/21 09:14	07/27/21 00:31	1
3-Nitroaniline	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 00:31	1
4-Nitroaniline	ND		10	1.6	ug/L		07/23/21 09:14	07/27/21 00:31	1
Nitrobenzene	ND		10	0.13	ug/L		07/23/21 09:14	07/27/21 00:31	1
2-Nitrophenol	ND		10	5.4	ug/L		07/23/21 09:14	07/27/21 00:31	1
4-Nitrophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/27/21 00:31	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:31	1

Client Sample ID: MW8-ROX-071921
Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/23/21 09:14	07/27/21 00:31	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/23/21 09:14	07/27/21 00:31	1
Pentachlorophenol	ND		21	1.5	ug/L		07/23/21 09:14	07/27/21 00:31	1
Phenol	300		10	2.7	ug/L		07/23/21 09:14	07/27/21 00:31	1
Pyridine	ND		10	3.3	ug/L		07/23/21 09:14	07/27/21 00:31	1
Quinoline	ND		10	4.7	ug/L		07/23/21 09:14	07/27/21 00:31	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		07/23/21 09:14	07/27/21 00:31	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*46 - 124*	*07/23/21 09:14*	*07/27/21 00:31*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/23/21 09:14*	*07/27/21 00:31*	*1*
Nitrobenzene-d5	*87*		*36 - 126*	*07/23/21 09:14*	*07/27/21 00:31*	*1*
Phenol-d5	*60*		*17 - 127*	*07/23/21 09:14*	*07/27/21 00:31*	*1*
Terphenyl-d14	*42*	*S1-*	*44 - 149*	*07/23/21 09:14*	*07/27/21 00:31*	*1*
2,4,6-Tribromophenol	*96*		*26 - 150*	*07/23/21 09:14*	*07/27/21 00:31*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 22:09	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 22:09*	*1*

Client Sample ID: MW8-ROX-071921-DUP
Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50000	20000	ug/L			07/27/21 00:02	2000
Acrolein	ND		40000	20000	ug/L			07/27/21 00:02	2000
Acrylonitrile	ND		20000	5600	ug/L			07/27/21 00:02	2000
Benzene	270000		2000	760	ug/L			07/27/21 00:02	2000
Bromobenzene	ND		2000	1100	ug/L			07/27/21 00:02	2000
Bromochloromethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
Bromodichloromethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
Bromoform	ND		10000	1400	ug/L			07/27/21 00:02	2000
Bromomethane	ND		2000	2000	ug/L			07/27/21 00:02	2000
2-Butanone (MEK)	ND	*+	50000	5200	ug/L			07/27/21 00:02	2000
Carbon disulfide	ND		2000	1000	ug/L			07/27/21 00:02	2000
Carbon tetrachloride	ND		2000	1000	ug/L			07/27/21 00:02	2000
Chlorobenzene	ND		2000	1000	ug/L			07/27/21 00:02	2000
Dibromochloromethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
Chloroethane	ND		2000	1500	ug/L			07/27/21 00:02	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			07/27/21 00:02	2000
Chloroform	ND		2000	1200	ug/L			07/27/21 00:02	2000
1-Chlorohexane	ND		2000	1400	ug/L			07/27/21 00:02	2000
Chloromethane	ND		2000	1700	ug/L			07/27/21 00:02	2000
cis-1,2-Dichloroethene	ND		2000	1000	ug/L			07/27/21 00:02	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			07/27/21 00:02	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			07/27/21 00:02	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			07/27/21 00:02	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			07/27/21 00:02	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,2-Dichloroethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			07/27/21 00:02	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,1-Dichloropropene	ND		2000	1000	ug/L			07/27/21 00:02	2000
Ethylbenzene	ND		2000	1000	ug/L			07/27/21 00:02	2000
Ethyl methacrylate	ND		2000	1200	ug/L			07/27/21 00:02	2000
Hexachlorobutadiene	ND	*+	10000	1800	ug/L			07/27/21 00:02	2000
2-Hexanone	ND		50000	6200	ug/L			07/27/21 00:02	2000
Isopropylbenzene	ND		2000	1100	ug/L			07/27/21 00:02	2000
Methylene bromide	ND		10000	1200	ug/L			07/27/21 00:02	2000
Methylene Chloride	ND		10000	6000	ug/L			07/27/21 00:02	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			07/27/21 00:02	2000
Methyl tert-butyl ether	ND		2000	1500	ug/L			07/27/21 00:02	2000
m-Xylene & p-Xylene	ND		10000	3200	ug/L			07/27/21 00:02	2000
Naphthalene	ND		2000	2000	ug/L			07/27/21 00:02	2000
n-Butylbenzene	ND		2000	1500	ug/L			07/27/21 00:02	2000
N-Propylbenzene	ND		2000	1400	ug/L			07/27/21 00:02	2000
o-Chlorotoluene	ND		2000	1100	ug/L			07/27/21 00:02	2000
o-Xylene	ND		10000	1200	ug/L			07/27/21 00:02	2000
p-Chlorotoluene	ND		2000	1100	ug/L			07/27/21 00:02	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			07/27/21 00:02	2000

Client Sample ID: MW8-ROX-071921-DUP
Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2000	1400	ug/L			07/27/21 00:02	2000
Styrene	ND		2000	2000	ug/L			07/27/21 00:02	2000
tert-Butylbenzene	ND		2000	1300	ug/L			07/27/21 00:02	2000
1,1,1,2-Tetrachloroethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
Tetrachloroethene	ND		2000	1200	ug/L			07/27/21 00:02	2000
Toluene	ND		2000	820	ug/L			07/27/21 00:02	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			07/27/21 00:02	2000
trans-1,3-Dichloropropene	ND		10000	1000	ug/L			07/27/21 00:02	2000
1,2,3-Trichlorobenzene	ND		2000	1400	ug/L			07/27/21 00:02	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			07/27/21 00:02	2000
1,1,1-Trichloroethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,1,2-Trichloroethane	ND		10000	1000	ug/L			07/27/21 00:02	2000
Trichloroethene	ND		2000	1000	ug/L			07/27/21 00:02	2000
Trichlorofluoromethane	ND		2000	1000	ug/L			07/27/21 00:02	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			07/27/21 00:02	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			07/27/21 00:02	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			07/27/21 00:02	2000
Vinyl acetate	ND		50000	4000	ug/L			07/27/21 00:02	2000
Vinyl chloride	ND		2000	1000	ug/L			07/27/21 00:02	2000
Xylenes, Total	ND		20000	3200	ug/L			07/27/21 00:02	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/27/21 00:02*	*2000*
Dibromofluoromethane	*102*		*75 - 126*		*07/27/21 00:02*	*2000*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/27/21 00:02*	*2000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 18:31	1
Acenaphthylene	ND		0.21	0.047	ug/L		07/23/21 09:14	07/26/21 18:31	1
Anthracene	ND		0.21	0.033	ug/L		07/23/21 09:14	07/26/21 18:31	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		07/23/21 09:14	07/26/21 18:31	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		07/23/21 09:14	07/26/21 18:31	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		07/23/21 09:14	07/26/21 18:31	1
Benzo[g,h,i]perylene	ND		0.21	0.14	ug/L		07/23/21 09:14	07/26/21 18:31	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		07/23/21 09:14	07/26/21 18:31	1
Chrysene	ND		0.21	0.077	ug/L		07/23/21 09:14	07/26/21 18:31	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		07/23/21 09:14	07/26/21 18:31	1
Fluoranthene	ND		0.21	0.071	ug/L		07/23/21 09:14	07/26/21 18:31	1
Fluorene	ND		0.21	0.11	ug/L		07/23/21 09:14	07/26/21 18:31	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		07/23/21 09:14	07/26/21 18:31	1
1-Methylnaphthalene	**8.6**		0.21	0.077	ug/L		07/23/21 09:14	07/26/21 18:31	1
2-Methylnaphthalene	**2.2**		0.21	0.062	ug/L		07/23/21 09:14	07/26/21 18:31	1
Phenanthrene	ND		0.21	0.037	ug/L		07/23/21 09:14	07/26/21 18:31	1
Pyrene	ND		0.21	0.042	ug/L		07/23/21 09:14	07/26/21 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*15 - 122*	*07/23/21 09:14*	*07/26/21 18:31*	*1*
Nitrobenzene-d5	*88*		*19 - 130*	*07/23/21 09:14*	*07/26/21 18:31*	*1*

Client Sample ID: MW8-ROX-071921-DUP
Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*58*		*33 - 138*	*07/23/21 09:14*	*07/26/21 18:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
Benzenethiol	ND	*- *1 UJ	10	1.8	ug/L		07/23/21 09:14	07/27/21 00:57	1
Benzoic acid	ND		31	7.6	ug/L		07/23/21 09:14	07/27/21 00:57	1
Benzyl alcohol	ND		10	2.1	ug/L		07/23/21 09:14	07/27/21 00:57	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:57	1
Bis(2-chloroethyl)ether	ND	*+	10	2.8	ug/L		07/23/21 09:14	07/27/21 00:57	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 00:57	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		07/23/21 09:14	07/27/21 00:57	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		07/23/21 09:14	07/27/21 00:57	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		07/23/21 09:14	07/27/21 00:57	1
4-Chloroaniline	ND		10	3.5	ug/L		07/23/21 09:14	07/27/21 00:57	1
4-Chloro-3-methylphenol	ND		10	4.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
2-Chloronaphthalene	ND		10	0.15	ug/L		07/23/21 09:14	07/27/21 00:57	1
2-Chlorophenol	ND		10	2.3	ug/L		07/23/21 09:14	07/27/21 00:57	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		07/23/21 09:14	07/27/21 00:57	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
Dibenzofuran	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:57	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		07/23/21 09:14	07/27/21 00:57	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		07/23/21 09:14	07/27/21 00:57	1
Diethyl phthalate	ND		10	0.25	ug/L		07/23/21 09:14	07/27/21 00:57	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:57	1
Dimethyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:57	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		07/23/21 09:14	07/27/21 00:57	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		07/23/21 09:14	07/27/21 00:57	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		07/23/21 09:14	07/27/21 00:57	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:57	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
Hexachlorobenzene	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 00:57	1
Hexachlorocyclopentadiene	ND		21	2.7	ug/L		07/23/21 09:14	07/27/21 00:57	1
Hexachloroethane	ND		10	4.4	ug/L		07/23/21 09:14	07/27/21 00:57	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 00:57	1
Isophorone	ND		10	0.15	ug/L		07/23/21 09:14	07/27/21 00:57	1
2-Methylphenol	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 00:57	1
3 & 4 Methylphenol	**0.77**	**J**	21	0.41	ug/L		07/23/21 09:14	07/27/21 00:57	1
2-Nitroaniline	ND		10	2.3	ug/L		07/23/21 09:14	07/27/21 00:57	1
3-Nitroaniline	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 00:57	1
4-Nitroaniline	ND		10	1.6	ug/L		07/23/21 09:14	07/27/21 00:57	1
Nitrobenzene	ND		10	0.14	ug/L		07/23/21 09:14	07/27/21 00:57	1
2-Nitrophenol	ND		10	5.4	ug/L		07/23/21 09:14	07/27/21 00:57	1
4-Nitrophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/27/21 00:57	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:57	1

Client Sample ID: MW8-ROX-071921-DUP

Date Collected: 07/19/21 12:00
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		07/23/21 09:14	07/27/21 00:57	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		07/23/21 09:14	07/27/21 00:57	1
Pentachlorophenol	ND		21	1.5	ug/L		07/23/21 09:14	07/27/21 00:57	1
Phenol	330		10	2.7	ug/L		07/23/21 09:14	07/27/21 00:57	1
Pyridine	ND		10	3.3	ug/L		07/23/21 09:14	07/27/21 00:57	1
Quinoline	ND		10	4.7	ug/L		07/23/21 09:14	07/27/21 00:57	1
2,4,5-Trichlorophenol	ND		10	3.9	ug/L		07/23/21 09:14	07/27/21 00:57	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/23/21 09:14	07/27/21 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*46 - 124*	*07/23/21 09:14*	*07/27/21 00:57*	*1*
2-Fluorophenol	*25*		*13 - 113*	*07/23/21 09:14*	*07/27/21 00:57*	*1*
Nitrobenzene-d5	*84*		*36 - 126*	*07/23/21 09:14*	*07/27/21 00:57*	*1*
Phenol-d5	*65*		*17 - 127*	*07/23/21 09:14*	*07/27/21 00:57*	*1*
Terphenyl-d14	*51*		*44 - 149*	*07/23/21 09:14*	*07/27/21 00:57*	*1*
2,4,6-Tribromophenol	*102*		*26 - 150*	*07/23/21 09:14*	*07/27/21 00:57*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 22:30	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 22:30*	*1*

Client Sample ID: MW7-ROX-071921
Date Collected: 07/19/21 13:30
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	130000	50000	ug/L			07/27/21 13:06	5000
Acrolein	ND		100000	50000	ug/L			07/27/21 13:06	5000
Acrylonitrile	ND		50000	14000	ug/L			07/27/21 13:06	5000
Benzene	890000		5000	1900	ug/L			07/27/21 13:06	5000
Bromobenzene	ND		5000	2700	ug/L			07/27/21 13:06	5000
Bromochloromethane	ND		5000	2600	ug/L			07/27/21 13:06	5000
Bromodichloromethane	ND		5000	2500	ug/L			07/27/21 13:06	5000
Bromoform	ND		25000	3600	ug/L			07/27/21 13:06	5000
Bromomethane	ND		5000	4900	ug/L			07/27/21 13:06	5000
2-Butanone (MEK)	ND	*+	130000	13000	ug/L			07/27/21 13:06	5000
Carbon disulfide	ND		5000	2500	ug/L			07/27/21 13:06	5000
Carbon tetrachloride	ND		5000	2500	ug/L			07/27/21 13:06	5000
Chlorobenzene	ND		5000	2500	ug/L			07/27/21 13:06	5000
Dibromochloromethane	ND		5000	2500	ug/L			07/27/21 13:06	5000
Chloroethane	ND		5000	3800	ug/L			07/27/21 13:06	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			07/27/21 13:06	5000
Chloroform	ND		5000	3000	ug/L			07/27/21 13:06	5000
1-Chlorohexane	ND		5000	3500	ug/L			07/27/21 13:06	5000
Chloromethane	ND		5000	4200	ug/L			07/27/21 13:06	5000
cis-1,2-Dichloroethene	ND		5000	2500	ug/L			07/27/21 13:06	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			07/27/21 13:06	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			07/27/21 13:06	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			07/27/21 13:06	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			07/27/21 13:06	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			07/27/21 13:06	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			07/27/21 13:06	5000
1,2-Dichloroethane	ND		5000	2500	ug/L			07/27/21 13:06	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			07/27/21 13:06	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			07/27/21 13:06	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			07/27/21 13:06	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			07/27/21 13:06	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			07/27/21 13:06	5000
Ethylbenzene	ND		5000	2500	ug/L			07/27/21 13:06	5000
Ethyl methacrylate	ND		5000	3000	ug/L			07/27/21 13:06	5000
Hexachlorobutadiene	ND	*+	25000	4500	ug/L			07/27/21 13:06	5000
2-Hexanone	ND		130000	16000	ug/L			07/27/21 13:06	5000
Isopropylbenzene	ND		5000	2700	ug/L			07/27/21 13:06	5000
Methylene bromide	ND		25000	3000	ug/L			07/27/21 13:06	5000
Methylene Chloride	ND		25000	15000	ug/L			07/27/21 13:06	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			07/27/21 13:06	5000
Methyl tert-butyl ether	ND		5000	3700	ug/L			07/27/21 13:06	5000
m-Xylene & p-Xylene	ND		25000	8000	ug/L			07/27/21 13:06	5000
Naphthalene	ND		5000	5000	ug/L			07/27/21 13:06	5000
n-Butylbenzene	ND		5000	3800	ug/L			07/27/21 13:06	5000
N-Propylbenzene	ND		5000	3500	ug/L			07/27/21 13:06	5000
o-Chlorotoluene	ND		5000	2900	ug/L			07/27/21 13:06	5000
o-Xylene	ND		25000	3000	ug/L			07/27/21 13:06	5000
p-Chlorotoluene	ND		5000	2800	ug/L			07/27/21 13:06	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			07/27/21 13:06	5000

Client Sample ID: MW7-ROX-071921
Date Collected: 07/19/21 13:30
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5000	3500	ug/L			07/27/21 13:06	5000
Styrene	ND		5000	5000	ug/L			07/27/21 13:06	5000
tert-Butylbenzene	ND		5000	3200	ug/L			07/27/21 13:06	5000
1,1,1,2-Tetrachloroethane	ND		5000	2600	ug/L			07/27/21 13:06	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			07/27/21 13:06	5000
Tetrachloroethene	ND		5000	2900	ug/L			07/27/21 13:06	5000
Toluene	ND		5000	2100	ug/L			07/27/21 13:06	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			07/27/21 13:06	5000
trans-1,3-Dichloropropene	ND		25000	2500	ug/L			07/27/21 13:06	5000
1,2,3-Trichlorobenzene	ND		5000	3500	ug/L			07/27/21 13:06	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			07/27/21 13:06	5000
1,1,1-Trichloroethane	ND		5000	2500	ug/L			07/27/21 13:06	5000
1,1,2-Trichloroethane	ND		25000	2500	ug/L			07/27/21 13:06	5000
Trichloroethene	ND		5000	2500	ug/L			07/27/21 13:06	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			07/27/21 13:06	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			07/27/21 13:06	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			07/27/21 13:06	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			07/27/21 13:06	5000
Vinyl acetate	ND		130000	10000	ug/L			07/27/21 13:06	5000
Vinyl chloride	ND		5000	2500	ug/L			07/27/21 13:06	5000
Xylenes, Total	ND		50000	8000	ug/L			07/27/21 13:06	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*72 - 119*		*07/27/21 13:06*	*5000*
Dibromofluoromethane	*107*		*75 - 126*		*07/27/21 13:06*	*5000*
Toluene-d8 (Surr)	*104*		*64 - 132*		*07/27/21 13:06*	*5000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 18:48	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/23/21 09:14	07/26/21 18:48	1
Anthracene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 18:48	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/23/21 09:14	07/26/21 18:48	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/23/21 09:14	07/26/21 18:48	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/23/21 09:14	07/26/21 18:48	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/23/21 09:14	07/26/21 18:48	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/23/21 09:14	07/26/21 18:48	1
Chrysene	ND		0.20	0.075	ug/L		07/23/21 09:14	07/26/21 18:48	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/23/21 09:14	07/26/21 18:48	1
Fluoranthene	ND		0.20	0.069	ug/L		07/23/21 09:14	07/26/21 18:48	1
Fluorene	ND		0.20	0.11	ug/L		07/23/21 09:14	07/26/21 18:48	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/23/21 09:14	07/26/21 18:48	1
1-Methylnaphthalene	**1.8**		0.20	0.075	ug/L		07/23/21 09:14	07/26/21 18:48	1
2-Methylnaphthalene	**2.5**		0.20	0.061	ug/L		07/23/21 09:14	07/26/21 18:48	1
Phenanthrene	ND		0.20	0.036	ug/L		07/23/21 09:14	07/26/21 18:48	1
Pyrene	ND		0.20	0.040	ug/L		07/23/21 09:14	07/26/21 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*15 - 122*	*07/23/21 09:14*	*07/26/21 18:48*	*1*
Nitrobenzene-d5	*89*		*19 - 130*	*07/23/21 09:14*	*07/26/21 18:48*	*1*

Client Sample ID: MW7-ROX-071921
Date Collected: 07/19/21 13:30
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-8
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	70		33 - 138	07/23/21 09:14	07/26/21 18:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/23/21 09:14	07/27/21 17:00	1
Benzenethiol	ND		10	1.7	ug/L		07/23/21 09:14	07/27/21 17:00	1
Benzoic acid	**41**	*1 UJ	30	7.4	ug/L		07/23/21 09:14	07/27/21 17:00	1
Benzyl alcohol	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/23/21 09:14	07/27/21 17:00	1
Bis(2-chloroethyl)ether	ND	*+	10	2.7	ug/L		07/23/21 09:14	07/27/21 17:00	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/23/21 09:14	07/27/21 17:00	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/23/21 09:14	07/27/21 17:00	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/23/21 09:14	07/27/21 17:00	1
4-Chloroaniline	ND		10	3.4	ug/L		07/23/21 09:14	07/27/21 17:00	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/23/21 09:14	07/27/21 17:00	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/23/21 09:14	07/27/21 17:00	1
2-Chlorophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/27/21 17:00	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
Dibenzofuran	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 17:00	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/23/21 09:14	07/27/21 17:00	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
Diethyl phthalate	ND		10	0.24	ug/L		07/23/21 09:14	07/27/21 17:00	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/23/21 09:14	07/27/21 17:00	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 17:00	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/23/21 09:14	07/27/21 17:00	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/23/21 09:14	07/27/21 17:00	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/23/21 09:14	07/27/21 17:00	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 17:00	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/27/21 17:00	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 17:00	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/23/21 09:14	07/27/21 17:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/23/21 09:14	07/27/21 17:00	1
Hexachloroethane	ND		10	4.2	ug/L		07/23/21 09:14	07/27/21 17:00	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/27/21 17:00	1
Isophorone	ND		10	0.14	ug/L		07/23/21 09:14	07/27/21 17:00	1
2-Methylphenol	ND		10	1.8	ug/L		07/23/21 09:14	07/27/21 17:00	1
3 & 4 Methylphenol	**0.73**	J	20	0.39	ug/L		07/23/21 09:14	07/27/21 17:00	1
2-Nitroaniline	ND		10	2.2	ug/L		07/23/21 09:14	07/27/21 17:00	1
3-Nitroaniline	ND		10	1.8	ug/L		07/23/21 09:14	07/27/21 17:00	1
4-Nitroaniline	ND		10	1.5	ug/L		07/23/21 09:14	07/27/21 17:00	1
Nitrobenzene	ND		10	0.13	ug/L		07/23/21 09:14	07/27/21 17:00	1
2-Nitrophenol	ND		10	5.2	ug/L		07/23/21 09:14	07/27/21 17:00	1
4-Nitrophenol	ND		10	2.1	ug/L		07/23/21 09:14	07/27/21 17:00	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/23/21 09:14	07/27/21 17:00	1

Client Sample ID: MW7-ROX-071921
Date Collected: 07/19/21 13:30
Date Received: 07/20/21 09:28

Lab Sample ID: 400-206123-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/23/21 09:14	07/27/21 17:00	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/23/21 09:14	07/27/21 17:00	1
Pentachlorophenol	ND		20	1.4	ug/L		07/23/21 09:14	07/27/21 17:00	1
Phenol	38		10	2.6	ug/L		07/23/21 09:14	07/27/21 17:00	1
Pyridine	ND		10	3.2	ug/L		07/23/21 09:14	07/27/21 17:00	1
Quinoline	ND		10	4.5	ug/L		07/23/21 09:14	07/27/21 17:00	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/23/21 09:14	07/27/21 17:00	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/23/21 09:14	07/27/21 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*46 - 124*	*07/23/21 09:14*	*07/27/21 17:00*	*1*
2-Fluorophenol	*6*	*S1-*	*13 - 113*	*07/23/21 09:14*	*07/27/21 17:00*	*1*
Nitrobenzene-d5	*83*		*36 - 126*	*07/23/21 09:14*	*07/27/21 17:00*	*1*
Phenol-d5	*22*		*17 - 127*	*07/23/21 09:14*	*07/27/21 17:00*	*1*
Terphenyl-d14	*66*		*44 - 149*	*07/23/21 09:14*	*07/27/21 17:00*	*1*
2,4,6-Tribromophenol	*77*		*26 - 150*	*07/23/21 09:14*	*07/27/21 17:00*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 22:50	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 22:50*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-206123-2	TB-ROX-071921-8260	79	107	99
400-206123-3	MW4-ROX-071921-EB	78	104	100
400-206123-3	MW4-ROX-071921-EB	102	99	97
400-206123-4	MW4-ROX-071921	79	105	97
400-206123-5	MW25-ROX-071921	78	102	100
400-206123-6	MW8-ROX-071921	77	107	102
400-206123-7	MW8-ROX-071921-DUP	77	102	103
400-206123-8	MW7-ROX-071921	78	107	104
LCS 400-540910/1002	Lab Control Sample	80	100	98
LCS 400-541019/1002	Lab Control Sample	81	98	104
LCS 400-541023/1002	Lab Control Sample	93	97	94
MB 400-540910/4	Method Blank	77	104	98
MB 400-541019/4	Method Blank	76	101	103
MB 400-541023/5	Method Blank	88	96	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-206123-3	MW4-ROX-071921-EB	98	3 S1-	85	32	89	85
400-206123-4	MW4-ROX-071921	95	6 S1-	81	33	80	68
400-206123-5	MW25-ROX-071921	95	19	80	52	74	93
400-206123-6	MW8-ROX-071921	97	25	87	60	42 S1-	96
400-206123-7	MW8-ROX-071921-DUP	99	25	84	65	51	102
400-206123-8	MW7-ROX-071921	97	6 S1-	83	22	66	77
LCS 400-540615/2-A	Lab Control Sample	104	50	101	85	86	107
LCS 400-540615/4-A	Lab Control Sample	100	16	86	57	91	89
LCSD 400-540615/3-A	Lab Control Sample Dup	104	38	98	75	92	105
LCSD 400-540615/5-A	Lab Control Sample Dup	103	54	88	89	93	99
MB 400-540615/1-A	Method Blank	108	5 S1-	93	49	106	94

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-206123-1
Project/Site: ROXANA QUARTERLY GW

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-206123-3	MW4-ROX-071921-EB	103	99	108
400-206123-4	MW4-ROX-071921	83	84	85
400-206123-5	MW25-ROX-071921	90	90	83
400-206123-6	MW8-ROX-071921	89	89	46
400-206123-7	MW8-ROX-071921-DUP	83	88	58
400-206123-8	MW7-ROX-071921	90	89	70
LCS 400-540615/2-A	Lab Control Sample	89	107	93
LCSD 400-540615/3-A	Lab Control Sample Dup	93	89	94
MB 400-540615/1-A	Method Blank	87	92	99

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-206123-1	TB-ROX-071921-8011	85
400-206123-3	MW4-ROX-071921-EB	80
400-206123-4	MW4-ROX-071921	70 p
400-206123-5	MW25-ROX-071921	83 p
400-206123-6	MW8-ROX-071921	71 p
400-206123-7	MW8-ROX-071921-DUP	83 p
400-206123-8	MW7-ROX-071921	73 p
LCS 400-541608/2-A	Lab Control Sample	99 p
LCSD 400-541608/3-A	Lab Control Sample Dup	98 p
MB 400-541608/1-A	Method Blank	75 p

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: TB-ROX-071921-8011

Lab Sample ID: 400-206123-1

Date Collected: 07/19/21 00:00
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.2 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 20:26	DS	TAL PEN

Client Sample ID: TB-ROX-071921-8260

Lab Sample ID: 400-206123-2

Date Collected: 07/19/21 00:00
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540910	07/26/21 14:28	SAB	TAL PEN

Client Sample ID: MW4-ROX-071921-EB

Lab Sample ID: 400-206123-3

Date Collected: 07/19/21 08:25
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541023	07/27/21 16:05	EEH	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	540910	07/26/21 15:23	SAB	TAL PEN
Total/NA	Prep	3520C			263 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 23:14	S1B	TAL PEN
Total/NA	Prep	3520C			263 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 17:22	PP1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 20:47	DS	TAL PEN

Client Sample ID: MW4-ROX-071921

Lab Sample ID: 400-206123-4

Date Collected: 07/19/21 09:35
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540910	07/26/21 17:40	SAB	TAL PEN
Total/NA	Prep	3520C			246.4 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 23:40	S1B	TAL PEN
Total/NA	Prep	3520C			246.4 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 17:39	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 21:08	DS	TAL PEN

Client Sample ID: MW25-ROX-071921

Lab Sample ID: 400-206123-5

Date Collected: 07/19/21 11:00
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540910	07/26/21 18:07	SAB	TAL PEN
Total/NA	Prep	3520C			243.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/27/21 00:05	S1B	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: MW25-ROX-071921

Lab Sample ID: 400-206123-5

Date Collected: 07/19/21 11:00
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			243.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 17:57	PP1	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 21:49	DS	TAL PEN

Client Sample ID: MW8-ROX-071921

Lab Sample ID: 400-206123-6

Date Collected: 07/19/21 12:00
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2000	5 mL	5 mL	540910	07/26/21 23:34	SAB	TAL PEN
Total/NA	Prep	3520C			241.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/27/21 00:31	S1B	TAL PEN
Total/NA	Prep	3520C			241.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 18:14	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 22:09	DS	TAL PEN

Client Sample ID: MW8-ROX-071921-DUP

Lab Sample ID: 400-206123-7

Date Collected: 07/19/21 12:00
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2000	5 mL	5 mL	540910	07/27/21 00:02	SAB	TAL PEN
Total/NA	Prep	3520C			240.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/27/21 00:57	S1B	TAL PEN
Total/NA	Prep	3520C			240.2 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 18:31	PP1	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 22:30	DS	TAL PEN

Client Sample ID: MW7-ROX-071921

Lab Sample ID: 400-206123-8

Date Collected: 07/19/21 13:30
Matrix: Water
Date Received: 07/20/21 09:28

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5000	5 mL	5 mL	541019	07/27/21 13:06	WPD	TAL PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	541114	07/27/21 17:00	S1B	TAL PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 18:48	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 22:50	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-540615/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 20:12	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			540955	07/26/21 15:56	PP1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-540910/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540910	07/26/21 14:01	SAB	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-541019/4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541019	07/27/21 08:40	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-541023/5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541023	07/27/21 09:35	EEH	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-541608/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 18:02	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-540615/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 20:38	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			540955	07/26/21 16:13	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540615/4-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 21:04	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-540910/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	540910	07/26/21 12:59	SAB	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541019/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541019	07/27/21 07:49	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541023/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	541023	07/27/21 08:35	EEH	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-541608/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 18:23	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-540615/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			541114	07/27/21 16:34	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			541165	07/27/21 16:45	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-540615/5-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	540615	07/23/21 09:14	KWS	TAL PEN
Total/NA	Analysis	8270D		1			540930	07/26/21 21:30	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-541608/3-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	541608	07/30/21 13:25	DS	TAL PEN
Total/NA	Analysis	8011		1			541653	07/30/21 18:43	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

GC/MS VOA

Analysis Batch: 540910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-2	TB-ROX-071921-8260	Total/NA	Water	8260B	
400-206123-3	MW4-ROX-071921-EB	Total/NA	Water	8260B	
400-206123-4	MW4-ROX-071921	Total/NA	Water	8260B	
400-206123-5	MW25-ROX-071921	Total/NA	Water	8260B	
400-206123-6	MW8-ROX-071921	Total/NA	Water	8260B	
400-206123-7	MW8-ROX-071921-DUP	Total/NA	Water	8260B	
MB 400-540910/4	Method Blank	Total/NA	Water	8260B	
LCS 400-540910/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 541019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-8	MW7-ROX-071921	Total/NA	Water	8260B	
MB 400-541019/4	Method Blank	Total/NA	Water	8260B	
LCS 400-541019/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 541023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-3	MW4-ROX-071921-EB	Total/NA	Water	8260B	
MB 400-541023/5	Method Blank	Total/NA	Water	8260B	
LCS 400-541023/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 540615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-3	MW4-ROX-071921-EB	Total/NA	Water	3520C	
400-206123-4	MW4-ROX-071921	Total/NA	Water	3520C	
400-206123-5	MW25-ROX-071921	Total/NA	Water	3520C	
400-206123-6	MW8-ROX-071921	Total/NA	Water	3520C	
400-206123-7	MW8-ROX-071921-DUP	Total/NA	Water	3520C	
400-206123-8	MW7-ROX-071921	Total/NA	Water	3520C	
MB 400-540615/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-540615/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-540615/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-540615/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-540615/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 540930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-3	MW4-ROX-071921-EB	Total/NA	Water	8270D	540615
400-206123-4	MW4-ROX-071921	Total/NA	Water	8270D	540615
400-206123-5	MW25-ROX-071921	Total/NA	Water	8270D	540615
400-206123-6	MW8-ROX-071921	Total/NA	Water	8270D	540615
400-206123-7	MW8-ROX-071921-DUP	Total/NA	Water	8270D	540615
MB 400-540615/1-A	Method Blank	Total/NA	Water	8270D	540615
LCS 400-540615/2-A	Lab Control Sample	Total/NA	Water	8270D	540615
LCS 400-540615/4-A	Lab Control Sample	Total/NA	Water	8270D	540615
LCSD 400-540615/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	540615

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

GC/MS Semi VOA

Analysis Batch: 540955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-3	MW4-ROX-071921-EB	Total/NA	Water	8270D LL	540615
400-206123-4	MW4-ROX-071921	Total/NA	Water	8270D LL	540615
400-206123-5	MW25-ROX-071921	Total/NA	Water	8270D LL	540615
400-206123-6	MW8-ROX-071921	Total/NA	Water	8270D LL	540615
400-206123-7	MW8-ROX-071921-DUP	Total/NA	Water	8270D LL	540615
400-206123-8	MW7-ROX-071921	Total/NA	Water	8270D LL	540615
MB 400-540615/1-A	Method Blank	Total/NA	Water	8270D LL	540615
LCS 400-540615/2-A	Lab Control Sample	Total/NA	Water	8270D LL	540615

Analysis Batch: 541114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-8	MW7-ROX-071921	Total/NA	Water	8270D	540615
LCSD 400-540615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	540615

Analysis Batch: 541165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-540615/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	540615

GC Semi VOA

Prep Batch: 541608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-1	TB-ROX-071921-8011	Total/NA	Water	8011	
400-206123-3	MW4-ROX-071921-EB	Total/NA	Water	8011	
400-206123-4	MW4-ROX-071921	Total/NA	Water	8011	
400-206123-5	MW25-ROX-071921	Total/NA	Water	8011	
400-206123-6	MW8-ROX-071921	Total/NA	Water	8011	
400-206123-7	MW8-ROX-071921-DUP	Total/NA	Water	8011	
400-206123-8	MW7-ROX-071921	Total/NA	Water	8011	
MB 400-541608/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-541608/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-541608/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 541653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206123-1	TB-ROX-071921-8011	Total/NA	Water	8011	541608
400-206123-3	MW4-ROX-071921-EB	Total/NA	Water	8011	541608
400-206123-4	MW4-ROX-071921	Total/NA	Water	8011	541608
400-206123-5	MW25-ROX-071921	Total/NA	Water	8011	541608
400-206123-6	MW8-ROX-071921	Total/NA	Water	8011	541608
400-206123-7	MW8-ROX-071921-DUP	Total/NA	Water	8011	541608
400-206123-8	MW7-ROX-071921	Total/NA	Water	8011	541608
MB 400-541608/1-A	Method Blank	Total/NA	Water	8011	541608
LCS 400-541608/2-A	Lab Control Sample	Total/NA	Water	8011	541608
LCSD 400-541608/3-A	Lab Control Sample Dup	Total/NA	Water	8011	541608

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

Lab Sample ID: MB 400-540910/4
Matrix: Water
Analysis Batch: 540910

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/26/21 14:01	1
Acrolein	ND		20	10	ug/L			07/26/21 14:01	1
Acrylonitrile	ND		10	2.8	ug/L			07/26/21 14:01	1
Benzene	ND		1.0	0.38	ug/L			07/26/21 14:01	1
Bromobenzene	ND		1.0	0.54	ug/L			07/26/21 14:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/26/21 14:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Bromoform	ND		5.0	0.71	ug/L			07/26/21 14:01	1
Bromomethane	ND		1.0	0.98	ug/L			07/26/21 14:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/26/21 14:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Chloroethane	ND		1.0	0.76	ug/L			07/26/21 14:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/26/21 14:01	1
Chloroform	ND		1.0	0.60	ug/L			07/26/21 14:01	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/26/21 14:01	1
Chloromethane	ND		1.0	0.83	ug/L			07/26/21 14:01	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 14:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/26/21 14:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/26/21 14:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/26/21 14:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/26/21 14:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/26/21 14:01	1
2-Hexanone	ND		25	3.1	ug/L			07/26/21 14:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/26/21 14:01	1
Methylene bromide	ND		5.0	0.59	ug/L			07/26/21 14:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/26/21 14:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/26/21 14:01	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/26/21 14:01	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/26/21 14:01	1
Naphthalene	ND		1.0	1.0	ug/L			07/26/21 14:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/26/21 14:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/26/21 14:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/26/21 14:01	1
o-Xylene	ND		5.0	0.60	ug/L			07/26/21 14:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/26/21 14:01	1

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

Lab Sample ID: MB 400-540910/4
Matrix: Water
Analysis Batch: 540910

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/26/21 14:01	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/26/21 14:01	1
Styrene	ND		1.0	1.0	ug/L			07/26/21 14:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/26/21 14:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/26/21 14:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/26/21 14:01	1
Toluene	ND		1.0	0.41	ug/L			07/26/21 14:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/26/21 14:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/26/21 14:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/26/21 14:01	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/26/21 14:01	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/26/21 14:01	1
Trichloroethene	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/26/21 14:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/26/21 14:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/26/21 14:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/26/21 14:01	1
Vinyl acetate	ND		25	2.0	ug/L			07/26/21 14:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/26/21 14:01	1
Xylenes, Total	ND		10	1.6	ug/L			07/26/21 14:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*72 - 119*		*07/26/21 14:01*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/26/21 14:01*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/26/21 14:01*	*1*

Lab Sample ID: LCS 400-540910/1002
Matrix: Water
Analysis Batch: 540910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	394	*+	ug/L		197	43 - 160
Acrolein	500	435		ug/L		87	38 - 160
Acrylonitrile	500	367		ug/L		73	64 - 142
Benzene	50.0	55.0		ug/L		110	70 - 130
Bromobenzene	50.0	53.3		ug/L		107	70 - 132
Bromochloromethane	50.0	53.3		ug/L		107	70 - 130
Bromodichloromethane	50.0	48.5		ug/L		97	67 - 133
Bromoform	50.0	48.5		ug/L		97	57 - 140
Bromomethane	50.0	57.2		ug/L		114	10 - 160
2-Butanone (MEK)	200	400	*+	ug/L		200	61 - 145
Carbon disulfide	50.0	54.9		ug/L		110	61 - 137
Carbon tetrachloride	50.0	51.6		ug/L		103	61 - 137
Chlorobenzene	50.0	52.1		ug/L		104	70 - 130
Dibromochloromethane	50.0	48.3		ug/L		97	67 - 135
Chloroethane	50.0	49.3		ug/L		99	55 - 141

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

Lab Sample ID: LCS 400-540910/1002
Matrix: Water
Analysis Batch: 540910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	29.4		ug/L		59	10 - 160
Chloroform	50.0	49.9		ug/L		100	69 - 130
1-Chlorohexane	50.0	42.1		ug/L		84	69 - 130
Chloromethane	50.0	31.1		ug/L		62	58 - 137
cis-1,2-Dichloroethene	50.0	53.5		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	52.7		ug/L		105	69 - 132
1,2-Dichlorobenzene	50.0	53.5		ug/L		107	67 - 130
1,3-Dichlorobenzene	50.0	58.1		ug/L		116	70 - 130
1,4-Dichlorobenzene	50.0	57.8		ug/L		116	70 - 130
Dichlorodifluoromethane	50.0	30.2		ug/L		60	41 - 146
1,1-Dichloroethane	50.0	48.5		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	42.2		ug/L		84	69 - 130
1,1-Dichloroethene	50.0	53.7		ug/L		107	63 - 134
1,2-Dichloropropane	50.0	47.9		ug/L		96	70 - 130
1,3-Dichloropropane	50.0	46.8		ug/L		94	70 - 130
2,2-Dichloropropane	50.0	51.2		ug/L		102	52 - 135
1,1-Dichloropropene	50.0	53.2		ug/L		106	70 - 130
Ethylbenzene	50.0	50.9		ug/L		102	70 - 130
Ethyl methacrylate	50.0	48.7		ug/L		97	68 - 130
Hexachlorobutadiene	50.0	75.2	*+	ug/L		150	53 - 140
2-Hexanone	200	235		ug/L		117	65 - 137
Isopropylbenzene	50.0	52.0		ug/L		104	70 - 130
Methylene bromide	50.0	51.6		ug/L		103	70 - 130
Methylene Chloride	50.0	54.2		ug/L		108	66 - 135
4-Methyl-2-pentanone (MIBK)	200	171		ug/L		86	69 - 138
Methyl tert-butyl ether	50.0	53.9		ug/L		108	66 - 130
m-Xylene & p-Xylene	50.0	49.2		ug/L		98	70 - 130
Naphthalene	50.0	46.6		ug/L		93	47 - 149
n-Butylbenzene	50.0	50.3		ug/L		101	67 - 130
N-Propylbenzene	50.0	52.6		ug/L		105	70 - 130
o-Chlorotoluene	50.0	47.3		ug/L		95	70 - 130
o-Xylene	50.0	48.6		ug/L		97	70 - 130
p-Chlorotoluene	50.0	46.2		ug/L		92	70 - 130
p-Isopropyltoluene	50.0	52.0		ug/L		104	65 - 130
sec-Butylbenzene	50.0	49.0		ug/L		98	66 - 130
Styrene	50.0	48.7		ug/L		97	70 - 130
tert-Butylbenzene	50.0	46.2		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/L		105	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.5		ug/L		87	70 - 131
Tetrachloroethene	50.0	57.7		ug/L		115	65 - 130
Toluene	50.0	49.0		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	54.1		ug/L		108	70 - 130
trans-1,3-Dichloropropene	50.0	47.0		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	64.3		ug/L		129	60 - 138
1,2,4-Trichlorobenzene	50.0	61.6		ug/L		123	60 - 140
1,1,1-Trichloroethane	50.0	48.2		ug/L		96	68 - 130
1,1,2-Trichloroethane	50.0	47.2		ug/L		94	70 - 130
Trichloroethene	50.0	60.7		ug/L		121	70 - 130
Trichlorofluoromethane	50.0	45.5		ug/L		91	65 - 138

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

Lab Sample ID: LCS 400-540910/1002
Matrix: Water
Analysis Batch: 540910

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	40.3		ug/L		81	70 - 130
1,2,4-Trimethylbenzene	50.0	46.5		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	50.0	46.8		ug/L		94	69 - 130
Vinyl acetate	100	124		ug/L		124	26 - 160
Vinyl chloride	50.0	42.9		ug/L		86	59 - 136
Xylenes, Total	100	97.8		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*80*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-541019/4
Matrix: Water
Analysis Batch: 541019

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/27/21 08:40	1
Acrolein	ND		20	10	ug/L			07/27/21 08:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/27/21 08:40	1
Benzene	ND		1.0	0.38	ug/L			07/27/21 08:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/27/21 08:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/27/21 08:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Bromoform	ND		5.0	0.71	ug/L			07/27/21 08:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/27/21 08:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/21 08:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Dibromochloromethane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/27/21 08:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/27/21 08:40	1
Chloroform	ND		1.0	0.60	ug/L			07/27/21 08:40	1
1-Chlorohexane	ND		1.0	0.70	ug/L			07/27/21 08:40	1
Chloromethane	ND		1.0	0.83	ug/L			07/27/21 08:40	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/21 08:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/27/21 08:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/27/21 08:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/27/21 08:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/27/21 08:40	1

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

Lab Sample ID: MB 400-541019/4
Matrix: Water
Analysis Batch: 541019

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/27/21 08:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/27/21 08:40	1
2-Hexanone	ND		25	3.1	ug/L			07/27/21 08:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/27/21 08:40	1
Methylene bromide	ND		5.0	0.59	ug/L			07/27/21 08:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/27/21 08:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/27/21 08:40	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			07/27/21 08:40	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			07/27/21 08:40	1
Naphthalene	ND		1.0	1.0	ug/L			07/27/21 08:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/27/21 08:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/27/21 08:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/27/21 08:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/27/21 08:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/27/21 08:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/27/21 08:40	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/27/21 08:40	1
Styrene	ND		1.0	1.0	ug/L			07/27/21 08:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/27/21 08:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			07/27/21 08:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Tetrachloroethene	ND		1.0	0.58	ug/L			07/27/21 08:40	1
Toluene	ND		1.0	0.41	ug/L			07/27/21 08:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/27/21 08:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			07/27/21 08:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/27/21 08:40	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			07/27/21 08:40	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			07/27/21 08:40	1
Trichloroethene	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/27/21 08:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/27/21 08:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/27/21 08:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/27/21 08:40	1
Vinyl acetate	ND		25	2.0	ug/L			07/27/21 08:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/27/21 08:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/27/21 08:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*72 - 119*		*07/27/21 08:40*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/27/21 08:40*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*07/27/21 08:40*	*1*

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

Lab Sample ID: LCS 400-541019/1002
Matrix: Water
Analysis Batch: 541019

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	392	*+	ug/L		196	43 - 160
Acrolein	500	458		ug/L		92	38 - 160
Acrylonitrile	500	366		ug/L		73	64 - 142
Benzene	50.0	50.7		ug/L		101	70 - 130
Bromobenzene	50.0	55.8		ug/L		112	70 - 132
Bromochloromethane	50.0	51.1		ug/L		102	70 - 130
Bromodichloromethane	50.0	45.1		ug/L		90	67 - 133
Bromoform	50.0	50.2		ug/L		100	57 - 140
Bromomethane	50.0	56.9		ug/L		114	10 - 160
2-Butanone (MEK)	200	384	*+	ug/L		192	61 - 145
Carbon disulfide	50.0	49.8		ug/L		100	61 - 137
Carbon tetrachloride	50.0	45.0		ug/L		90	61 - 137
Chlorobenzene	50.0	53.3		ug/L		107	70 - 130
Dibromochloromethane	50.0	47.5		ug/L		95	67 - 135
Chloroethane	50.0	45.2		ug/L		90	55 - 141
2-Chloroethyl vinyl ether	50.0	24.1		ug/L		48	10 - 160
Chloroform	50.0	46.8		ug/L		94	69 - 130
1-Chlorohexane	50.0	41.5		ug/L		83	69 - 130
Chloromethane	50.0	29.7		ug/L		59	58 - 137
cis-1,2-Dichloroethene	50.0	50.3		ug/L		101	68 - 130
cis-1,3-Dichloropropene	50.0	49.0		ug/L		98	69 - 132
1,2-Dichlorobenzene	50.0	55.7		ug/L		111	67 - 130
1,3-Dichlorobenzene	50.0	59.1		ug/L		118	70 - 130
1,4-Dichlorobenzene	50.0	59.2		ug/L		118	70 - 130
Dichlorodifluoromethane	50.0	30.2		ug/L		60	41 - 146
1,1-Dichloroethane	50.0	43.2		ug/L		86	70 - 130
1,2-Dichloroethane	50.0	39.5		ug/L		79	69 - 130
1,1-Dichloroethene	50.0	50.1		ug/L		100	63 - 134
1,2-Dichloropropane	50.0	44.1		ug/L		88	70 - 130
1,3-Dichloropropane	50.0	50.4		ug/L		101	70 - 130
2,2-Dichloropropane	50.0	46.0		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	48.7		ug/L		97	70 - 130
Ethylbenzene	50.0	50.2		ug/L		100	70 - 130
Ethyl methacrylate	50.0	51.3		ug/L		103	68 - 130
Hexachlorobutadiene	50.0	72.7	*+	ug/L		145	53 - 140
2-Hexanone	200	255		ug/L		128	65 - 137
Isopropylbenzene	50.0	51.6		ug/L		103	70 - 130
Methylene bromide	50.0	48.1		ug/L		96	70 - 130
Methylene Chloride	50.0	49.7		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	167		ug/L		83	69 - 138
Methyl tert-butyl ether	50.0	51.6		ug/L		103	66 - 130
m-Xylene & p-Xylene	50.0	47.5		ug/L		95	70 - 130
Naphthalene	50.0	51.1		ug/L		102	47 - 149
n-Butylbenzene	50.0	49.5		ug/L		99	67 - 130
N-Propylbenzene	50.0	52.0		ug/L		104	70 - 130
o-Chlorotoluene	50.0	46.9		ug/L		94	70 - 130
o-Xylene	50.0	48.0		ug/L		96	70 - 130
p-Chlorotoluene	50.0	46.1		ug/L		92	70 - 130

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

Lab Sample ID: LCS 400-541019/1002
Matrix: Water
Analysis Batch: 541019

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	51.9		ug/L		104	65 - 130
sec-Butylbenzene	50.0	48.5		ug/L		97	66 - 130
Styrene	50.0	48.5		ug/L		97	70 - 130
tert-Butylbenzene	50.0	47.1		ug/L		94	64 - 139
1,1,1,2-Tetrachloroethane	50.0	52.9		ug/L		106	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/L		95	70 - 131
Tetrachloroethene	50.0	56.4		ug/L		113	65 - 130
Toluene	50.0	49.4		ug/L		99	70 - 130
trans-1,2-Dichloroethene	50.0	50.1		ug/L		100	70 - 130
trans-1,3-Dichloropropene	50.0	48.3		ug/L		97	63 - 130
1,2,3-Trichlorobenzene	50.0	64.6		ug/L		129	60 - 138
1,2,4-Trichlorobenzene	50.0	63.7		ug/L		127	60 - 140
1,1,1-Trichloroethane	50.0	44.1		ug/L		88	68 - 130
1,1,2-Trichloroethane	50.0	49.5		ug/L		99	70 - 130
Trichloroethene	50.0	53.4		ug/L		107	70 - 130
Trichlorofluoromethane	50.0	44.6		ug/L		89	65 - 138
1,2,3-Trichloropropane	50.0	45.7		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	50.0	46.5		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	50.0	46.7		ug/L		93	69 - 130
Vinyl acetate	100	125		ug/L		125	26 - 160
Vinyl chloride	50.0	41.6		ug/L		83	59 - 136
Xylenes, Total	100	95.5		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*81*		*72 - 119*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*104*		*64 - 132*

Lab Sample ID: MB 400-541023/5
Matrix: Water
Analysis Batch: 541023

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		25	2.6	ug/L			07/27/21 09:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*72 - 119*		*07/27/21 09:35*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*07/27/21 09:35*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/27/21 09:35*	*1*

Lab Sample ID: LCS 400-541023/1002
Matrix: Water
Analysis Batch: 541023

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	200	195		ug/L		98	61 - 145

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

Lab Sample ID: LCS 400-541023/1002
Matrix: Water
Analysis Batch: 541023

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*93*		*72 - 119*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*94*		*64 - 132*

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

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
Benzenethiol	ND		10	1.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
Benzoic acid	ND		30	7.3	ug/L		07/23/21 09:14	07/26/21 20:12	1
Benzyl alcohol	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		07/23/21 09:14	07/26/21 20:12	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		07/23/21 09:14	07/26/21 20:12	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		07/23/21 09:14	07/26/21 20:12	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Chloroaniline	ND		10	3.4	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Chloronaphthalene	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Chlorophenol	ND		10	2.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Dibenzofuran	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Diethyl phthalate	ND		10	0.24	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
Dimethyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		07/23/21 09:14	07/26/21 20:12	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
1,4-Dioxane	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Hexachlorobenzene	ND		10	0.17	ug/L		07/23/21 09:14	07/26/21 20:12	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
Hexachloroethane	ND		10	4.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
Indene	ND		10	1.0	ug/L		07/23/21 09:14	07/26/21 20:12	1
Isophorone	ND		10	0.14	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Methylphenol	ND		10	1.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		07/23/21 09:14	07/26/21 20:12	1

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

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
3-Nitroaniline	ND		10	1.8	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Nitroaniline	ND		10	1.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
Nitrobenzene	ND		10	0.13	ug/L		07/23/21 09:14	07/26/21 20:12	1
2-Nitrophenol	ND		10	5.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
4-Nitrophenol	ND		10	2.1	ug/L		07/23/21 09:14	07/26/21 20:12	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		07/23/21 09:14	07/26/21 20:12	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		07/23/21 09:14	07/26/21 20:12	1
Pentachlorophenol	ND		20	1.4	ug/L		07/23/21 09:14	07/26/21 20:12	1
Phenol	ND		10	2.6	ug/L		07/23/21 09:14	07/26/21 20:12	1
Pyridine	ND		10	3.2	ug/L		07/23/21 09:14	07/26/21 20:12	1
Quinoline	ND		10	4.5	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		07/23/21 09:14	07/26/21 20:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/23/21 09:14	07/26/21 20:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*46 - 124*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
2-Fluorophenol	*5*	*S1-*	*13 - 113*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
Nitrobenzene-d5	*93*		*36 - 126*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
Phenol-d5	*49*		*17 - 127*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
Terphenyl-d14	*106*		*44 - 149*	*07/23/21 09:14*	*07/26/21 20:12*	*1*
2,4,6-Tribromophenol	*94*		*26 - 150*	*07/23/21 09:14*	*07/26/21 20:12*	*1*

Lab Sample ID: LCS 400-540615/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	99.5		ug/L		83	21 - 120
Benzoic acid	502	551		ug/L		110	10 - 144
Benzyl alcohol	120	120		ug/L		100	28 - 120
Bis(2-chloroethoxy)methane	120	118		ug/L		98	47 - 120
Bis(2-chloroethyl)ether	120	148	*+	ug/L		123	44 - 120
bis (2-chloroisopropyl) ether	120	115		ug/L		96	33 - 121
Bis(2-ethylhexyl) phthalate	120	129		ug/L		108	52 - 147
4-Bromophenyl phenyl ether	120	121		ug/L		101	54 - 122
Butyl benzyl phthalate	120	118		ug/L		99	54 - 133
4-Chloroaniline	120	100		ug/L		84	26 - 120
4-Chloro-3-methylphenol	120	121		ug/L		101	48 - 131
2-Chloronaphthalene	120	120		ug/L		100	52 - 121
2-Chlorophenol	120	88.0		ug/L		73	40 - 120
4-Chlorophenyl phenyl ether	120	127		ug/L		106	56 - 125
Dibenz[a,h]acridine	120	134		ug/L		112	31 - 150
Dibenzofuran	120	125		ug/L		104	56 - 122
3,3'-Dichlorobenzidine	160	186		ug/L		116	36 - 132
2,4-Dichlorophenol	120	110		ug/L		92	49 - 120
Diethyl phthalate	120	128		ug/L		107	50 - 137

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

Lab Sample ID: LCS 400-540615/2-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	120	125		ug/L		104	48 - 120
Dimethyl phthalate	120	126		ug/L		105	57 - 124
Di-n-butyl phthalate	120	134		ug/L		112	58 - 126
4,6-Dinitro-ortho-cresol	240	236		ug/L		98	23 - 148
2,4-Dinitrophenol	240	283		ug/L		118	10 - 150
2,4-Dinitrotoluene	120	128		ug/L		107	54 - 142
2,6-Dinitrotoluene	120	129		ug/L		108	55 - 130
Di-n-octyl phthalate	120	139		ug/L		116	57 - 138
1,4-Dioxane	120	81.6		ug/L		68	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	121		ug/L		101	45 - 124
Hexachlorobenzene	120	122		ug/L		101	52 - 129
Hexachlorocyclopentadiene	120	110		ug/L		91	10 - 134
Hexachloroethane	120	106		ug/L		89	20 - 120
Indene	120	122		ug/L		102	49 - 120
Isophorone	120	119		ug/L		99	48 - 120
2-Methylphenol	120	117		ug/L		98	46 - 124
3 & 4 Methylphenol	120	117		ug/L		98	45 - 120
2-Nitroaniline	120	127		ug/L		106	51 - 145
3-Nitroaniline	120	111		ug/L		93	37 - 127
4-Nitroaniline	120	126		ug/L		105	36 - 137
Nitrobenzene	120	112		ug/L		93	45 - 120
2-Nitrophenol	120	115		ug/L		95	40 - 124
4-Nitrophenol	240	237		ug/L		99	23 - 146
N-Nitrosodimethylamine	120	111		ug/L		92	29 - 137
N-Nitrosodi-n-propylamine	120	127		ug/L		106	45 - 120
N-Nitrosodiphenylamine	119	121		ug/L		102	54 - 120
Pentachlorophenol	240	255		ug/L		106	31 - 130
Phenol	120	101		ug/L		84	11 - 120
Pyridine	240	193		ug/L		80	16 - 120
Quinoline	120	137		ug/L		115	49 - 130
2,4,5-Trichlorophenol	120	117		ug/L		98	51 - 136
2,4,6-Trichlorophenol	120	115		ug/L		96	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*104*		*46 - 124*
2-Fluorophenol	*50*		*13 - 113*
Nitrobenzene-d5	*101*		*36 - 126*
Phenol-d5	*85*		*17 - 127*
Terphenyl-d14	*86*		*44 - 149*
2,4,6-Tribromophenol	*107*		*26 - 150*

Lab Sample ID: LCS 400-540615/4-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	8.78	J *-	ug/L		7	10 - 120

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

Lab Sample ID: LCS 400-540615/4-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*46 - 124*
2-Fluorophenol	*16*		*13 - 113*
Nitrobenzene-d5	*86*		*36 - 126*
Phenol-d5	*57*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*
2,4,6-Tribromophenol	*89*		*26 - 150*

Lab Sample ID: LCSD 400-540615/3-A
Matrix: Water
Analysis Batch: 541114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	128		ug/L		107	21 - 120	25	30
Benzoic acid	502	404	*1	ug/L		81	10 - 144	31	30
Benzyl alcohol	120	116		ug/L		96	28 - 120	4	30
Bis(2-chloroethoxy)methane	120	115		ug/L		96	47 - 120	2	30
Bis(2-chloroethyl)ether	120	119		ug/L		99	44 - 120	21	30
bis (2-chloroisopropyl) ether	120	110		ug/L		92	33 - 121	5	30
Bis(2-ethylhexyl) phthalate	120	140		ug/L		117	52 - 147	8	30
4-Bromophenyl phenyl ether	120	122		ug/L		102	54 - 122	1	30
Butyl benzyl phthalate	120	125		ug/L		104	54 - 133	5	30
4-Chloroaniline	120	107		ug/L		89	26 - 120	7	30
4-Chloro-3-methylphenol	120	117		ug/L		98	48 - 131	4	30
2-Chloronaphthalene	120	120		ug/L		100	52 - 121	1	30
2-Chlorophenol	120	75.8		ug/L		63	40 - 120	15	30
4-Chlorophenyl phenyl ether	120	127		ug/L		106	56 - 125	0	30
Dibenz[a,h]acridine	120	150		ug/L		125	31 - 150	11	30
Dibenzofuran	120	124		ug/L		103	56 - 122	1	30
3,3'-Dichlorobenzidine	160	182		ug/L		114	36 - 132	2	30
2,4-Dichlorophenol	120	101		ug/L		84	49 - 120	9	30
Diethyl phthalate	120	128		ug/L		106	50 - 137	0	30
2,4-Dimethylphenol	120	119		ug/L		100	48 - 120	4	30
Dimethyl phthalate	120	127		ug/L		106	57 - 124	1	30
Di-n-butyl phthalate	120	135		ug/L		112	58 - 126	0	30
4,6-Dinitro-ortho-cresol	240	222		ug/L		92	23 - 148	6	30
2,4-Dinitrophenol	240	255		ug/L		106	10 - 150	11	30
2,4-Dinitrotoluene	120	128		ug/L		106	54 - 142	0	30
2,6-Dinitrotoluene	120	129		ug/L		107	55 - 130	1	30
Di-n-octyl phthalate	120	139		ug/L		116	57 - 138	0	30
1,4-Dioxane	120	86.6		ug/L		72	31 - 120	6	30
1,2-Diphenylhydrazine (as Azobenzene)	120	121		ug/L		101	45 - 124	1	30
Hexachlorobenzene	120	124		ug/L		103	52 - 129	2	30
Hexachlorocyclopentadiene	120	102		ug/L		85	10 - 134	7	30
Hexachloroethane	120	103		ug/L		86	20 - 120	3	30
Indene	120	121		ug/L		101	49 - 120	1	30
Isophorone	120	118		ug/L		98	48 - 120	1	30
2-Methylphenol	120	108		ug/L		90	46 - 124	9	30
3 & 4 Methylphenol	120	108		ug/L		90	45 - 120	8	30

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

Lab Sample ID: LCSD 400-540615/3-A
Matrix: Water
Analysis Batch: 541114

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitroaniline	120	125		ug/L		104	51 - 145	2	30
3-Nitroaniline	120	111		ug/L		92	37 - 127	1	30
4-Nitroaniline	120	119		ug/L		99	36 - 137	6	30
Nitrobenzene	120	110		ug/L		92	45 - 120	2	30
2-Nitrophenol	120	107		ug/L		89	40 - 124	7	30
4-Nitrophenol	240	222		ug/L		92	23 - 146	7	30
N-Nitrosodimethylamine	120	99.9		ug/L		83	29 - 137	10	30
N-Nitrosodi-n-propylamine	120	125		ug/L		104	45 - 120	2	30
N-Nitrosodiphenylamine	119	122		ug/L		103	54 - 120	1	30
Pentachlorophenol	240	244		ug/L		102	31 - 130	4	30
Phenol	120	88.0		ug/L		73	11 - 120	14	30
Pyridine	240	182		ug/L		76	16 - 120	5	30
Quinoline	120	137		ug/L		114	49 - 130	0	30
2,4,5-Trichlorophenol	120	113		ug/L		94	51 - 136	4	30
2,4,6-Trichlorophenol	120	112		ug/L		93	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*104*		*46 - 124*
2-Fluorophenol	*38*		*13 - 113*
Nitrobenzene-d5	*98*		*36 - 126*
Phenol-d5	*75*		*17 - 127*
Terphenyl-d14	*92*		*44 - 149*
2,4,6-Tribromophenol	*105*		*26 - 150*

Lab Sample ID: LCSD 400-540615/5-A
Matrix: Water
Analysis Batch: 540930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	18.8	*1	ug/L		16	10 - 120	73	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*103*		*46 - 124*
2-Fluorophenol	*54*		*13 - 113*
Nitrobenzene-d5	*88*		*36 - 126*
Phenol-d5	*89*		*17 - 127*
Terphenyl-d14	*93*		*44 - 149*
2,4,6-Tribromophenol	*99*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 15:56	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/23/21 09:14	07/26/21 15:56	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-540615/1-A
Matrix: Water
Analysis Batch: 540955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.032	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		07/23/21 09:14	07/26/21 15:56	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		07/23/21 09:14	07/26/21 15:56	1
Chrysene	ND		0.20	0.074	ug/L		07/23/21 09:14	07/26/21 15:56	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		07/23/21 09:14	07/26/21 15:56	1
Fluoranthene	ND		0.20	0.068	ug/L		07/23/21 09:14	07/26/21 15:56	1
Fluorene	ND		0.20	0.11	ug/L		07/23/21 09:14	07/26/21 15:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		07/23/21 09:14	07/26/21 15:56	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		07/23/21 09:14	07/26/21 15:56	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		07/23/21 09:14	07/26/21 15:56	1
Phenanthrene	ND		0.20	0.036	ug/L		07/23/21 09:14	07/26/21 15:56	1
Pyrene	ND		0.20	0.040	ug/L		07/23/21 09:14	07/26/21 15:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*15 - 122*	*07/23/21 09:14*	*07/26/21 15:56*	*1*
Nitrobenzene-d5	*92*		*19 - 130*	*07/23/21 09:14*	*07/26/21 15:56*	*1*
Terphenyl-d14	*99*		*33 - 138*	*07/23/21 09:14*	*07/26/21 15:56*	*1*

Lab Sample ID: LCS 400-540615/2-A
Matrix: Water
Analysis Batch: 540955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	102		ug/L		85	41 - 120
Acenaphthylene	120	107		ug/L		89	44 - 120
Anthracene	120	111		ug/L		92	49 - 120
Benzo[a]anthracene	120	109		ug/L		91	61 - 135
Benzo[a]pyrene	120	116		ug/L		96	52 - 120
Benzo[b]fluoranthene	120	129		ug/L		107	53 - 134
Benzo[g,h,i]perylene	120	89.6		ug/L		75	47 - 133
Benzo[k]fluoranthene	120	115		ug/L		96	57 - 134
Chrysene	120	96.1		ug/L		80	55 - 122
Dibenz(a,h)anthracene	120	99.0		ug/L		83	48 - 146
Fluoranthene	120	104		ug/L		87	54 - 128
Fluorene	120	113		ug/L		94	45 - 125
Indeno[1,2,3-cd]pyrene	120	91.8		ug/L		77	43 - 142
1-Methylnaphthalene	120	95.8		ug/L		80	41 - 120
2-Methylnaphthalene	120	103		ug/L		86	32 - 124
Phenanthrene	120	113		ug/L		95	48 - 120
Pyrene	120	102		ug/L		85	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*15 - 122*
Nitrobenzene-d5	*107*		*19 - 130*
Terphenyl-d14	*93*		*33 - 138*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: LCSD 400-540615/3-A
Matrix: Water
Analysis Batch: 541165

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 540615

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	111		ug/L		93	41 - 120	9	56
Acenaphthylene	120	114		ug/L		95	44 - 120	6	56
Anthracene	120	114		ug/L		95	49 - 120	3	51
Benzo[a]anthracene	120	114		ug/L		95	61 - 135	5	49
Benzo[a]pyrene	120	119		ug/L		99	52 - 120	3	50
Benzo[b]fluoranthene	120	133		ug/L		111	53 - 134	3	54
Benzo[g,h,i]perylene	120	91.3		ug/L		76	47 - 133	2	50
Benzo[k]fluoranthene	120	135		ug/L		113	57 - 134	16	52
Chrysene	120	101		ug/L		84	55 - 122	5	50
Dibenz(a,h)anthracene	120	102		ug/L		85	48 - 146	3	50
Fluoranthene	120	116		ug/L		96	54 - 128	11	52
Fluorene	120	123		ug/L		102	45 - 125	9	56
Indeno[1,2,3-cd]pyrene	120	88.3		ug/L		74	43 - 142	4	51
1-Methylnaphthalene	120	88.1		ug/L		73	41 - 120	8	55
2-Methylnaphthalene	120	93.0		ug/L		77	32 - 124	10	57
Phenanthrene	120	104		ug/L		87	48 - 120	9	56
Pyrene	120	106		ug/L		89	48 - 132	4	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*15 - 122*
Nitrobenzene-d5	*89*		*19 - 130*
Terphenyl-d14	*94*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-541608/1-A
Matrix: Water
Analysis Batch: 541653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/21 13:25	07/30/21 18:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/21 13:25	07/30/21 18:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*	*p*	*51 - 149*	*07/30/21 13:25*	*07/30/21 18:02*	*1*

Lab Sample ID: LCS 400-541608/2-A
Matrix: Water
Analysis Batch: 541653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.109	p	ug/L		108	60 - 140
1,2-Dibromoethane	0.101	0.102	p	ug/L		101	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*	*p*	*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-541608/3-A
Matrix: Water
Analysis Batch: 541653

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541608

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.107	p	ug/L		106	60 - 140	2	30
1,2-Dibromoethane			0.101	0.106	p	ug/L		105	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*	*p*	*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Wendy Pennington	25278	DATE: 7/19/21
PO #	GSAP Project ID	PAGE: 1 of 1
60648474 – 3.2.3F	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington
PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122
E-MAIL: elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; bob.billman@aecom.com; wendy.pennington@aecom.com
AECOM Other ID:
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com
SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
* Please include "J" values on Reports
* Please provide sample receipt upon login

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60648474 – 3.2.3F

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-071921-8011	7/19/2021	0000	Water	2					2		X		
	TB-ROX-071921-8260	7/19/2021	0000	Water	2					2	X			
	MW4-ROX-071921-EB	7/19/2021	0825	Water	6			2		8	X	X	X	X
	MW4-ROX-071921	7/19/2021	0935	Water	6			2		8	X	X	X	X
	MW25-ROX-071921	7/19/2021	1100	Water	6			2		8	X	X	X	X
	MW8-ROX-071921	7/19/2021	1200	Water	6			2		8	X	X	X	X
	MW8-ROX-071921-DUP	7/19/2021	1200	Water	6			2		8	X	X	X	X
	MW7-ROX-071921	7/19/2021	1330	Water	6			2		8	X	X	X	X

400-206123 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

		Date	Time
Relinquished by: (Signature)	Received by: (Signature)		
	FEDEX: 9495 6601 2853	7/19/21	1500
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-20-21	Time: 9:28

CUSTODY SEALS: 1013813, 1013812

Version: 2Apr21

3.5 < IR8

Page 60 of 62

8/4/2021 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-206123-1

Login Number: 206123
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.5°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206123-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

Roxana Groundwater Quarterly – 3rd Quarter 2021 Data Review

Laboratory SDG: 400-206993-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 8/24/2021

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-080921-8011	TB-ROX-080921-8260
P66-ROX-080921-EB	P66-ROX-080921

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated 2-butanone (methyl ethyl ketone) was detected in the equipment blank. The VOC LCS recovery for 1-chlorohexane, and the SVOC LCS/LCSD RPD for benzenethiol, were outside evaluation criteria. Several surrogates were outside criteria in several quality control samples. Sample P66-ROX-080921 was diluted to bring VOCs into calibration range of the instrument. The continuing calibration verifications for vinyl chloride and 4-nitroaniline were outside acceptance criteria, biased low; the continuing calibration verification for benzoic acid was outside acceptance criteria, biased high. These issues are addressed further in the appropriate sections of this data review.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
P66-ROX-080921-EB	VOCs	2-Butanone (MEK)	3.7 µg/L

Analytical data that were reported non-detect or at concentrations greater than ten times

(10X) the associated blank concentration for common laboratory contaminants did not require qualification. The compound 2-butanone is a common laboratory contaminant and was not detected in the associated sample. No qualification of data was required.

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/ RPD Criteria
LCS 400-543483/1002	VOCs	1-Chlorohexane	**135**	NA	69-130
LCS/LCSD 400-543486/6-A/7-A	SVOCs	Benzenethiol	60/39	**43**	10-120/30

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Analytical data associated with RPD alone outside evaluation criteria did not require qualification. No qualification of data was required.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
TB-ROX-080921-8260	VOCs	4-Bromofluorobenzene	**125**	72-119
P66-ROX-080921-EB	SVOCs	2-Fluorophenol	**2**	13-113
MB 400-543486/1-A	SVOCs	2-Fluorophenol	**4**	13-113

Trip blanks, equipment blanks, and method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verifications for vinyl chloride and 4-nitroaniline were outside acceptance criteria, biased low; the continuing calibration verification for benzoic acid was outside acceptance criteria, biased high. Results are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P66-ROX-080921	VOCs	Vinyl chloride	**UJ**
P66-ROX-080921	SVOCs	4-Nitroaniline	**UJ**
P66-ROX-080921	SVOCs	Benzoic acid	**J**

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-206993-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
8/18/2021 8:06:54 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Reviewed 8/24/202
LR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Sample Summary 5
Detection Summary 6
Client Sample Results 7
Definitions 18
Surrogate Summary 19
Method Summary 21
Chronicle 22
QC Association 26
QC Sample Results 28
Chain of Custody 43
Receipt Checklists 44
Certification Summary 45

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Job ID: 400-206993-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-206993-1

Comments
No additional comments.

Receipt
The samples were received on 8/10/2021 9:42 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.8° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-543106 recovered outside acceptance criteria, low biased, for Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8260B: Surrogate recovery for the following sample was outside the upper control limit: TB-ROX-080921-8260 (400-206993-2). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: P66-ROX-080921 (400-206993-4). Elevated reporting limits (RLs) are provided.

Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-080921-8260 (400-206993-2), P66-ROX-080921-EB (400-206993-3), P66-ROX-080921 (400-206993-4). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-542128 was outside method criteria for the following analyte(s): Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-543483 recovered outside control limits for the following analyte: 1-Chlorohexane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-543483 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-543483 recovered above the upper control limit for 1,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: Detection of 2-butanone above MDL in sample P66-ROX-080921-EB (400-206993-3) confirmed by re-analysis.

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 400-543824 recovered above the upper control limit for Benzoic acid. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-543486 and analytical batch 400-543824 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-543824 recovered outside acceptance criteria, low biased, for 4-Nitroaniline. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated

Job ID: 400-206993-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

samples were non-detect for this analyte, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: P66-ROX-080921-EB (400-206993-3), (LCS 400-543486/2-A) and (MB 400-543486/1-A). These results have been reported and qualified.

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

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

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

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

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-206993-1	TB-ROX-080921-8011	Water	08/09/21 00:00	08/10/21 09:42
400-206993-2	TB-ROX-080921-8260	Water	08/09/21 00:00	08/10/21 09:42
400-206993-3	P66-ROX-080921-EB	Water	08/09/21 08:20	08/10/21 09:42
400-206993-4	P66-ROX-080921	Water	08/09/21 10:00	08/10/21 09:42

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Client Sample ID: TB-ROX-080921-8011

Lab Sample ID: 400-206993-1

No Detections.

Client Sample ID: TB-ROX-080921-8260

Lab Sample ID: 400-206993-2

No Detections.

Client Sample ID: P66-ROX-080921-EB

Lab Sample ID: 400-206993-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.7	J	25	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: P66-ROX-080921

Lab Sample ID: 400-206993-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	820		5.0	1.9	ug/L	5		8260B	Total/NA
Ethylbenzene	110		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	39		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	410		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	16		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	69		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	200		25	3.0	ug/L	5		8260B	Total/NA
sec-Butylbenzene	4.7	J	5.0	3.5	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	24		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	7.6		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	610		50	8.0	ug/L	5		8260B	Total/NA
Toluene - DL	2300		20	8.2	ug/L	20		8260B	Total/NA
1-Methylnaphthalene	40		0.20	0.076	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	14		0.20	0.061	ug/L	1		8270D LL	Total/NA
Pyrene	0.20		0.20	0.041	ug/L	1		8270D LL	Total/NA
Benzoic acid	61	J	31	7.5	ug/L	1		8270D	Total/NA
2-Methylphenol	11		10	1.8	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	22		20	0.40	ug/L	1		8270D	Total/NA
Phenol	15		10	2.7	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Client Sample ID: TB-ROX-080921-8011
Date Collected: 08/09/21 00:00
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.018	ug/L		08/12/21 15:47	08/14/21 12:42	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		08/12/21 15:47	08/14/21 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*08/12/21 15:47*	*08/14/21 12:42*	*1*

Client Sample ID: TB-ROX-080921-8260
Date Collected: 08/09/21 00:00
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			08/11/21 16:41	1
Acrolein	ND		20	10	ug/L			08/11/21 16:41	1
Acrylonitrile	ND		10	2.8	ug/L			08/11/21 16:41	1
Benzene	ND		1.0	0.38	ug/L			08/11/21 16:41	1
Bromobenzene	ND		1.0	0.54	ug/L			08/11/21 16:41	1
Bromochloromethane	ND		1.0	0.52	ug/L			08/11/21 16:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Bromoform	ND		5.0	0.71	ug/L			08/11/21 16:41	1
Bromomethane	ND		1.0	0.98	ug/L			08/11/21 16:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			08/11/21 16:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Dibromochloromethane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Chloroethane	ND		1.0	0.76	ug/L			08/11/21 16:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			08/11/21 16:41	1
Chloroform	ND		1.0	0.60	ug/L			08/11/21 16:41	1
1-Chlorohexane	ND		1.0	0.70	ug/L			08/11/21 16:41	1
Chloromethane	ND		1.0	0.83	ug/L			08/11/21 16:41	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/11/21 16:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			08/11/21 16:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			08/11/21 16:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			08/11/21 16:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			08/11/21 16:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			08/11/21 16:41	1
2-Hexanone	ND		25	3.1	ug/L			08/11/21 16:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			08/11/21 16:41	1
Methylene bromide	ND		5.0	0.59	ug/L			08/11/21 16:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			08/11/21 16:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			08/11/21 16:41	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			08/11/21 16:41	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			08/11/21 16:41	1
Naphthalene	ND		1.0	1.0	ug/L			08/11/21 16:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			08/11/21 16:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/11/21 16:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			08/11/21 16:41	1
o-Xylene	ND		5.0	0.60	ug/L			08/11/21 16:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			08/11/21 16:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			08/11/21 16:41	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Client Sample ID: TB-ROX-080921-8260
Date Collected: 08/09/21 00:00
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			08/11/21 16:41	1
Styrene	ND		1.0	1.0	ug/L			08/11/21 16:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			08/11/21 16:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			08/11/21 16:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Tetrachloroethene	ND		1.0	0.58	ug/L			08/11/21 16:41	1
Toluene	ND		1.0	0.41	ug/L			08/11/21 16:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/11/21 16:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			08/11/21 16:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			08/11/21 16:41	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			08/11/21 16:41	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			08/11/21 16:41	1
Trichloroethene	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			08/11/21 16:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			08/11/21 16:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			08/11/21 16:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			08/11/21 16:41	1
Vinyl acetate	ND		25	2.0	ug/L			08/11/21 16:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			08/11/21 16:41	1
Xylenes, Total	ND		10	1.6	ug/L			08/11/21 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*	*S1+*	*72 - 119*		*08/11/21 16:41*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*08/11/21 16:41*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*08/11/21 16:41*	*1*

Client Sample ID: P66-ROX-080921-EB
Date Collected: 08/09/21 08:20
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			08/13/21 21:04	1
Acrolein	ND		20	10	ug/L			08/13/21 21:04	1
Acrylonitrile	ND		10	2.8	ug/L			08/13/21 21:04	1
Benzene	ND		1.0	0.38	ug/L			08/13/21 21:04	1
Bromobenzene	ND		1.0	0.54	ug/L			08/13/21 21:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			08/13/21 21:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Bromoform	ND		5.0	0.71	ug/L			08/13/21 21:04	1
Bromomethane	ND		1.0	0.98	ug/L			08/13/21 21:04	1
2-Butanone (MEK)	3.7	J	25	2.6	ug/L			08/13/21 21:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Chloroethane	ND		1.0	0.76	ug/L			08/13/21 21:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			08/13/21 21:04	1
Chloroform	ND		1.0	0.60	ug/L			08/13/21 21:04	1
1-Chlorohexane	ND	*+	1.0	0.70	ug/L			08/13/21 21:04	1
Chloromethane	ND		1.0	0.83	ug/L			08/13/21 21:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/13/21 21:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			08/13/21 21:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			08/13/21 21:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			08/13/21 21:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			08/13/21 21:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			08/13/21 21:04	1
2-Hexanone	ND		25	3.1	ug/L			08/13/21 21:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			08/13/21 21:04	1
Methylene bromide	ND		5.0	0.59	ug/L			08/13/21 21:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			08/13/21 21:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			08/13/21 21:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			08/13/21 21:04	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			08/13/21 21:04	1
Naphthalene	ND		1.0	1.0	ug/L			08/13/21 21:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			08/13/21 21:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/13/21 21:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			08/13/21 21:04	1
o-Xylene	ND		5.0	0.60	ug/L			08/13/21 21:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			08/13/21 21:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			08/13/21 21:04	1

Client Sample ID: P66-ROX-080921-EB
Date Collected: 08/09/21 08:20
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			08/13/21 21:04	1
Styrene	ND		1.0	1.0	ug/L			08/13/21 21:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			08/13/21 21:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			08/13/21 21:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			08/13/21 21:04	1
Toluene	ND		1.0	0.41	ug/L			08/13/21 21:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/13/21 21:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			08/13/21 21:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			08/13/21 21:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			08/13/21 21:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			08/13/21 21:04	1
Trichloroethene	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			08/13/21 21:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			08/13/21 21:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			08/13/21 21:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			08/13/21 21:04	1
Vinyl acetate	ND		25	2.0	ug/L			08/13/21 21:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			08/13/21 21:04	1
Xylenes, Total	ND		10	1.6	ug/L			08/13/21 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*08/13/21 21:04*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*08/13/21 21:04*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*08/13/21 21:04*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		08/13/21 09:48	08/16/21 16:20	1
Acenaphthylene	ND		0.19	0.044	ug/L		08/13/21 09:48	08/16/21 16:20	1
Anthracene	ND		0.19	0.031	ug/L		08/13/21 09:48	08/16/21 16:20	1
Benzo[a]anthracene	ND		0.19	0.045	ug/L		08/13/21 09:48	08/16/21 16:20	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		08/13/21 09:48	08/16/21 16:20	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		08/13/21 09:48	08/16/21 16:20	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		08/13/21 09:48	08/16/21 16:20	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		08/13/21 09:48	08/16/21 16:20	1
Chrysene	ND		0.19	0.072	ug/L		08/13/21 09:48	08/16/21 16:20	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		08/13/21 09:48	08/16/21 16:20	1
Fluoranthene	ND		0.19	0.066	ug/L		08/13/21 09:48	08/16/21 16:20	1
Fluorene	ND		0.19	0.11	ug/L		08/13/21 09:48	08/16/21 16:20	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		08/13/21 09:48	08/16/21 16:20	1
1-Methylnaphthalene	ND		0.19	0.072	ug/L		08/13/21 09:48	08/16/21 16:20	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		08/13/21 09:48	08/16/21 16:20	1
Phenanthrene	ND		0.19	0.035	ug/L		08/13/21 09:48	08/16/21 16:20	1
Pyrene	ND		0.19	0.039	ug/L		08/13/21 09:48	08/16/21 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*15 - 122*	*08/13/21 09:48*	*08/16/21 16:20*	*1*
Nitrobenzene-d5	*100*		*19 - 130*	*08/13/21 09:48*	*08/16/21 16:20*	*1*

Client Sample ID: P66-ROX-080921-EB
Date Collected: 08/09/21 08:20
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	96		33 - 138	08/13/21 09:48	08/16/21 16:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		08/13/21 09:48	08/16/21 18:07	1
Benzenethiol	ND		9.7	1.6	ug/L		08/13/21 09:48	08/16/21 18:07	1
Benzoic acid	ND		29	7.1	ug/L		08/13/21 09:48	08/16/21 18:07	1
Benzyl alcohol	ND		9.7	1.9	ug/L		08/13/21 09:48	08/16/21 18:07	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		08/13/21 09:48	08/16/21 18:07	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		08/13/21 09:48	08/16/21 18:07	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		08/13/21 09:48	08/16/21 18:07	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		08/13/21 09:48	08/16/21 18:07	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		08/13/21 09:48	08/16/21 18:07	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		08/13/21 09:48	08/16/21 18:07	1
4-Chloroaniline	ND		9.7	3.3	ug/L		08/13/21 09:48	08/16/21 18:07	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		08/13/21 09:48	08/16/21 18:07	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		08/13/21 09:48	08/16/21 18:07	1
2-Chlorophenol	ND		9.7	2.1	ug/L		08/13/21 09:48	08/16/21 18:07	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		08/13/21 09:48	08/16/21 18:07	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		08/13/21 09:48	08/16/21 18:07	1
Dibenzofuran	ND		9.7	0.16	ug/L		08/13/21 09:48	08/16/21 18:07	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		08/13/21 09:48	08/16/21 18:07	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		08/13/21 09:48	08/16/21 18:07	1
Diethyl phthalate	ND		9.7	0.23	ug/L		08/13/21 09:48	08/16/21 18:07	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		08/13/21 09:48	08/16/21 18:07	1
Dimethyl phthalate	ND		9.7	0.16	ug/L		08/13/21 09:48	08/16/21 18:07	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		08/13/21 09:48	08/16/21 18:07	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		08/13/21 09:48	08/16/21 18:07	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		08/13/21 09:48	08/16/21 18:07	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		08/13/21 09:48	08/16/21 18:07	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		08/13/21 09:48	08/16/21 18:07	1
Di-n-octyl phthalate	ND		9.7	0.16	ug/L		08/13/21 09:48	08/16/21 18:07	1
1,4-Dioxane	ND		9.7	0.97	ug/L		08/13/21 09:48	08/16/21 18:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		08/13/21 09:48	08/16/21 18:07	1
Hexachlorobenzene	ND		9.7	0.16	ug/L		08/13/21 09:48	08/16/21 18:07	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		08/13/21 09:48	08/16/21 18:07	1
Hexachloroethane	ND		9.7	4.1	ug/L		08/13/21 09:48	08/16/21 18:07	1
Indene	ND		9.7	0.97	ug/L		08/13/21 09:48	08/16/21 18:07	1
Isophorone	ND		9.7	0.14	ug/L		08/13/21 09:48	08/16/21 18:07	1
2-Methylphenol	ND		9.7	1.7	ug/L		08/13/21 09:48	08/16/21 18:07	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		08/13/21 09:48	08/16/21 18:07	1
2-Nitroaniline	ND		9.7	2.1	ug/L		08/13/21 09:48	08/16/21 18:07	1
3-Nitroaniline	ND		9.7	1.7	ug/L		08/13/21 09:48	08/16/21 18:07	1
4-Nitroaniline	ND		9.7	1.5	ug/L		08/13/21 09:48	08/16/21 18:07	1
Nitrobenzene	ND		9.7	0.13	ug/L		08/13/21 09:48	08/16/21 18:07	1
2-Nitrophenol	ND		9.7	5.0	ug/L		08/13/21 09:48	08/16/21 18:07	1
4-Nitrophenol	ND		9.7	2.0	ug/L		08/13/21 09:48	08/16/21 18:07	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		08/13/21 09:48	08/16/21 18:07	1

Client Sample ID: P66-ROX-080921-EB
Date Collected: 08/09/21 08:20
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		08/13/21 09:48	08/16/21 18:07	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		08/13/21 09:48	08/16/21 18:07	1
Pentachlorophenol	ND		19	1.4	ug/L		08/13/21 09:48	08/16/21 18:07	1
Phenol	ND		9.7	2.5	ug/L		08/13/21 09:48	08/16/21 18:07	1
Pyridine	ND		9.7	3.1	ug/L		08/13/21 09:48	08/16/21 18:07	1
Quinoline	ND		9.7	4.4	ug/L		08/13/21 09:48	08/16/21 18:07	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		08/13/21 09:48	08/16/21 18:07	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		08/13/21 09:48	08/16/21 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*08/13/21 09:48*	*08/16/21 18:07*	*1*
2-Fluorophenol	*2*	*S1-*	*13 - 113*	*08/13/21 09:48*	*08/16/21 18:07*	*1*
Nitrobenzene-d5	*76*		*36 - 126*	*08/13/21 09:48*	*08/16/21 18:07*	*1*
Phenol-d5	*23*		*17 - 127*	*08/13/21 09:48*	*08/16/21 18:07*	*1*
Terphenyl-d14	*90*		*44 - 149*	*08/13/21 09:48*	*08/16/21 18:07*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*08/13/21 09:48*	*08/16/21 18:07*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		08/12/21 15:47	08/14/21 13:02	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		08/12/21 15:47	08/14/21 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*08/12/21 15:47*	*08/14/21 13:02*	*1*

Client Sample ID: P66-ROX-080921
Date Collected: 08/09/21 10:00
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			08/11/21 17:34	5
Acrolein	ND		100	50	ug/L			08/11/21 17:34	5
Acrylonitrile	ND		50	14	ug/L			08/11/21 17:34	5
Benzene	**820**		5.0	1.9	ug/L			08/11/21 17:34	5
Bromobenzene	ND		5.0	2.7	ug/L			08/11/21 17:34	5
Bromochloromethane	ND		5.0	2.6	ug/L			08/11/21 17:34	5
Bromodichloromethane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Bromoform	ND		25	3.6	ug/L			08/11/21 17:34	5
Bromomethane	ND		5.0	4.9	ug/L			08/11/21 17:34	5
2-Butanone (MEK)	ND		130	13	ug/L			08/11/21 17:34	5
Carbon disulfide	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Chlorobenzene	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Dibromochloromethane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Chloroethane	ND		5.0	3.8	ug/L			08/11/21 17:34	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			08/11/21 17:34	5
Chloroform	ND		5.0	3.0	ug/L			08/11/21 17:34	5
1-Chlorohexane	ND		5.0	3.5	ug/L			08/11/21 17:34	5
Chloromethane	ND		5.0	4.2	ug/L			08/11/21 17:34	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			08/11/21 17:34	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			08/11/21 17:34	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			08/11/21 17:34	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			08/11/21 17:34	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			08/11/21 17:34	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			08/11/21 17:34	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			08/11/21 17:34	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Ethylbenzene	**110**		5.0	2.5	ug/L			08/11/21 17:34	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			08/11/21 17:34	5
Hexachlorobutadiene	ND		25	4.5	ug/L			08/11/21 17:34	5
2-Hexanone	ND		130	16	ug/L			08/11/21 17:34	5
Isopropylbenzene	**39**		5.0	2.7	ug/L			08/11/21 17:34	5
Methylene bromide	ND		25	3.0	ug/L			08/11/21 17:34	5
Methylene Chloride	ND		25	15	ug/L			08/11/21 17:34	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			08/11/21 17:34	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			08/11/21 17:34	5
m-Xylene & p-Xylene	**410**		25	8.0	ug/L			08/11/21 17:34	5
Naphthalene	**16**		5.0	5.0	ug/L			08/11/21 17:34	5
n-Butylbenzene	ND		5.0	3.8	ug/L			08/11/21 17:34	5
N-Propylbenzene	**69**		5.0	3.5	ug/L			08/11/21 17:34	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			08/11/21 17:34	5
o-Xylene	**200**		25	3.0	ug/L			08/11/21 17:34	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			08/11/21 17:34	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			08/11/21 17:34	5

Client Sample ID: P66-ROX-080921
Date Collected: 08/09/21 10:00
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	4.7	J	5.0	3.5	ug/L			08/11/21 17:34	5
Styrene	ND		5.0	5.0	ug/L			08/11/21 17:34	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			08/11/21 17:34	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			08/11/21 17:34	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Tetrachloroethene	ND		5.0	2.9	ug/L			08/11/21 17:34	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			08/11/21 17:34	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			08/11/21 17:34	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			08/11/21 17:34	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			08/11/21 17:34	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			08/11/21 17:34	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			08/11/21 17:34	5
Trichloroethene	ND		5.0	2.5	ug/L			08/11/21 17:34	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			08/11/21 17:34	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			08/11/21 17:34	5
1,2,4-Trimethylbenzene	24		5.0	4.1	ug/L			08/11/21 17:34	5
1,3,5-Trimethylbenzene	7.6		5.0	2.8	ug/L			08/11/21 17:34	5
Vinyl acetate	ND		130	10	ug/L			08/11/21 17:34	5
Vinyl chloride	ND	UJ	5.0	2.5	ug/L			08/11/21 17:34	5
Xylenes, Total	610		50	8.0	ug/L			08/11/21 17:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*72 - 119*		*08/11/21 17:34*	*5*
Dibromofluoromethane	*100*		*75 - 126*		*08/11/21 17:34*	*5*
Toluene-d8 (Surr)	*107*		*64 - 132*		*08/11/21 17:34*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	2300		20	8.2	ug/L			08/14/21 11:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*08/14/21 11:00*	*20*
Dibromofluoromethane	*104*		*75 - 126*		*08/14/21 11:00*	*20*
Toluene-d8 (Surr)	*97*		*64 - 132*		*08/14/21 11:00*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.033	ug/L		08/13/21 09:48	08/16/21 16:37	1
Acenaphthylene	ND		0.20	0.046	ug/L		08/13/21 09:48	08/16/21 16:37	1
Anthracene	ND		0.20	0.033	ug/L		08/13/21 09:48	08/16/21 16:37	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		08/13/21 09:48	08/16/21 16:37	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		08/13/21 09:48	08/16/21 16:37	1
Benzo[b]fluoranthene	ND		0.20	0.035	ug/L		08/13/21 09:48	08/16/21 16:37	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		08/13/21 09:48	08/16/21 16:37	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		08/13/21 09:48	08/16/21 16:37	1
Chrysene	ND		0.20	0.076	ug/L		08/13/21 09:48	08/16/21 16:37	1
Dibenz(a,h)anthracene	ND		0.20	0.051	ug/L		08/13/21 09:48	08/16/21 16:37	1
Fluoranthene	ND		0.20	0.070	ug/L		08/13/21 09:48	08/16/21 16:37	1
Fluorene	ND		0.20	0.11	ug/L		08/13/21 09:48	08/16/21 16:37	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.044	ug/L		08/13/21 09:48	08/16/21 16:37	1

Client Sample ID: P66-ROX-080921
Date Collected: 08/09/21 10:00
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	40		0.20	0.076	ug/L		08/13/21 09:48	08/16/21 16:37	1
2-Methylnaphthalene	14		0.20	0.061	ug/L		08/13/21 09:48	08/16/21 16:37	1
Phenanthrene	ND		0.20	0.037	ug/L		08/13/21 09:48	08/16/21 16:37	1
Pyrene	0.20		0.20	0.041	ug/L		08/13/21 09:48	08/16/21 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*15 - 122*	*08/13/21 09:48*	*08/16/21 16:37*	*1*
Nitrobenzene-d5	*87*		*19 - 130*	*08/13/21 09:48*	*08/16/21 16:37*	*1*
Terphenyl-d14	*58*		*33 - 138*	*08/13/21 09:48*	*08/16/21 16:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		08/13/21 09:48	08/16/21 18:28	1
Benzenethiol	ND		10	1.7	ug/L		08/13/21 09:48	08/16/21 18:28	1
Benzoic acid	61	J	31	7.5	ug/L		08/13/21 09:48	08/16/21 18:28	1
Benzyl alcohol	ND		10	2.0	ug/L		08/13/21 09:48	08/16/21 18:28	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		08/13/21 09:48	08/16/21 18:28	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		08/13/21 09:48	08/16/21 18:28	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		08/13/21 09:48	08/16/21 18:28	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		08/13/21 09:48	08/16/21 18:28	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		08/13/21 09:48	08/16/21 18:28	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		08/13/21 09:48	08/16/21 18:28	1
4-Chloroaniline	ND		10	3.5	ug/L		08/13/21 09:48	08/16/21 18:28	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		08/13/21 09:48	08/16/21 18:28	1
2-Chloronaphthalene	ND		10	0.14	ug/L		08/13/21 09:48	08/16/21 18:28	1
2-Chlorophenol	ND		10	2.2	ug/L		08/13/21 09:48	08/16/21 18:28	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		08/13/21 09:48	08/16/21 18:28	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 18:28	1
Dibenzofuran	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 18:28	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		08/13/21 09:48	08/16/21 18:28	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		08/13/21 09:48	08/16/21 18:28	1
Diethyl phthalate	ND		10	0.25	ug/L		08/13/21 09:48	08/16/21 18:28	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		08/13/21 09:48	08/16/21 18:28	1
Dimethyl phthalate	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 18:28	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		08/13/21 09:48	08/16/21 18:28	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		08/13/21 09:48	08/16/21 18:28	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		08/13/21 09:48	08/16/21 18:28	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		08/13/21 09:48	08/16/21 18:28	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		08/13/21 09:48	08/16/21 18:28	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 18:28	1
1,4-Dioxane	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 18:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 18:28	1
Hexachlorobenzene	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 18:28	1
Hexachlorocyclopentadiene	ND		20	2.7	ug/L		08/13/21 09:48	08/16/21 18:28	1
Hexachloroethane	ND		10	4.3	ug/L		08/13/21 09:48	08/16/21 18:28	1
Indene	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 18:28	1
Isophorone	ND		10	0.14	ug/L		08/13/21 09:48	08/16/21 18:28	1
2-Methylphenol	11		10	1.8	ug/L		08/13/21 09:48	08/16/21 18:28	1
3 & 4 Methylphenol	22		20	0.40	ug/L		08/13/21 09:48	08/16/21 18:28	1

Client Sample ID: P66-ROX-080921
Date Collected: 08/09/21 10:00
Date Received: 08/10/21 09:42

Lab Sample ID: 400-206993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		08/13/21 09:48	08/16/21 18:28	1
3-Nitroaniline	ND		10	1.8	ug/L		08/13/21 09:48	08/16/21 18:28	1
4-Nitroaniline	ND	UJ	10	1.5	ug/L		08/13/21 09:48	08/16/21 18:28	1
Nitrobenzene	ND		10	0.13	ug/L		08/13/21 09:48	08/16/21 18:28	1
2-Nitrophenol	ND		10	5.3	ug/L		08/13/21 09:48	08/16/21 18:28	1
4-Nitrophenol	ND		10	2.1	ug/L		08/13/21 09:48	08/16/21 18:28	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		08/13/21 09:48	08/16/21 18:28	1
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		08/13/21 09:48	08/16/21 18:28	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		08/13/21 09:48	08/16/21 18:28	1
Pentachlorophenol	ND		20	1.4	ug/L		08/13/21 09:48	08/16/21 18:28	1
Phenol	15		10	2.7	ug/L		08/13/21 09:48	08/16/21 18:28	1
Pyridine	ND		10	3.3	ug/L		08/13/21 09:48	08/16/21 18:28	1
Quinoline	ND		10	4.6	ug/L		08/13/21 09:48	08/16/21 18:28	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		08/13/21 09:48	08/16/21 18:28	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		08/13/21 09:48	08/16/21 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*46 - 124*	*08/13/21 09:48*	*08/16/21 18:28*	*1*
2-Fluorophenol	*18*		*13 - 113*	*08/13/21 09:48*	*08/16/21 18:28*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*08/13/21 09:48*	*08/16/21 18:28*	*1*
Phenol-d5	*50*		*17 - 127*	*08/13/21 09:48*	*08/16/21 18:28*	*1*
Terphenyl-d14	*66*		*44 - 149*	*08/13/21 09:48*	*08/16/21 18:28*	*1*
2,4,6-Tribromophenol	*120*		*26 - 150*	*08/13/21 09:48*	*08/16/21 18:28*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.034	0.019	ug/L		08/12/21 15:47	08/14/21 13:22	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		08/12/21 15:47	08/14/21 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*	*p*	*51 - 149*	*08/12/21 15:47*	*08/14/21 13:22*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-206993-2	TB-ROX-080921-8260	125 S1+	99	103
400-206993-3	P66-ROX-080921-EB	96	101	98
400-206993-4	P66-ROX-080921	119	100	107
400-206993-4 - DL	P66-ROX-080921	94	104	97
LCS 400-543106/1002	Lab Control Sample	95	100	104
LCS 400-543483/1002	Lab Control Sample	100	101	95
LCS 400-543635/1002	Lab Control Sample	97	104	94
MB 400-543106/5	Method Blank	112	98	105
MB 400-543483/5	Method Blank	95	98	98
MB 400-543635/4	Method Blank	94	101	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-206993-3	P66-ROX-080921-EB	82	2 S1-	76	23	90	74
400-206993-4	P66-ROX-080921	82	18	67	50	66	120
LCS 400-543486/2-A	Lab Control Sample	93	20	94	51	108	92
LCS 400-543486/6-A	Lab Control Sample	77	44	65	65	77	78
LCSD 400-543486/3-A	Lab Control Sample Dup	90	26	85	60	107	92
LCSD 400-543486/7-A	Lab Control Sample Dup	86	33	72	61	93	88
MB 400-543486/1-A	Method Blank	95	4 S1-	72	42	103	72

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-206993-3	P66-ROX-080921-EB	85	100	96
400-206993-4	P66-ROX-080921	72	87	58
LCS 400-543486/2-A	Lab Control Sample	83	108	83
LCSD 400-543486/3-A	Lab Control Sample Dup	70	103	79
MB 400-543486/1-A	Method Blank	96	118	106

Surrogate Legend

FBP = 2-Fluorobiphenyl

Surrogate Summary

Client: AECOM Technical Services Inc.
Job ID: 400-206993-1
Project/Site: ROXANA QUARTERLY GW

NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-206993-1	TB-ROX-080921-8011	99
400-206993-3	P66-ROX-080921-EB	95
400-206993-4	P66-ROX-080921	102 p
LCS 400-543406/2-A	Lab Control Sample	123
LCSD 400-543406/3-A	Lab Control Sample Dup	129
MB 400-543406/1-A	Method Blank	107

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Client Sample ID: TB-ROX-080921-8011

Lab Sample ID: 400-206993-1

Date Collected: 08/09/21 00:00
Matrix: Water
Date Received: 08/10/21 09:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.3 mL	35 mL	543406	08/12/21 15:47	TAJ	TAL PEN
Total/NA	Analysis	8011		1			543710	08/14/21 12:42	DS	TAL PEN

Client Sample ID: TB-ROX-080921-8260

Lab Sample ID: 400-206993-2

Date Collected: 08/09/21 00:00
Matrix: Water
Date Received: 08/10/21 09:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543106	08/11/21 16:41	EEH	TAL PEN

Client Sample ID: P66-ROX-080921-EB

Lab Sample ID: 400-206993-3

Date Collected: 08/09/21 08:20
Matrix: Water
Date Received: 08/10/21 09:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543483	08/13/21 21:04	WPD	TAL PEN
Total/NA	Prep	3520C			257.8 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D		1			543824	08/16/21 18:07	S1B	TAL PEN
Total/NA	Prep	3520C			257.8 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			543832	08/16/21 16:20	PP1	TAL PEN
Total/NA	Prep	8011			32.6 mL	35 mL	543406	08/12/21 15:47	TAJ	TAL PEN
Total/NA	Analysis	8011		1			543710	08/14/21 13:02	DS	TAL PEN

Client Sample ID: P66-ROX-080921

Lab Sample ID: 400-206993-4

Date Collected: 08/09/21 10:00
Matrix: Water
Date Received: 08/10/21 09:42

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	20	5 mL	5 mL	543635	08/14/21 11:00	WPD	TAL PEN
Total/NA	Analysis	8260B		5	5 mL	5 mL	543106	08/11/21 17:34	EEH	TAL PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D		1			543824	08/16/21 18:28	S1B	TAL PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			543832	08/16/21 16:37	PP1	TAL PEN
Total/NA	Prep	8011			30.8 mL	35 mL	543406	08/12/21 15:47	TAJ	TAL PEN
Total/NA	Analysis	8011		1			543710	08/14/21 13:22	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-543106/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543106	08/11/21 12:41	EEH	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Client Sample ID: Method Blank

Lab Sample ID: MB 400-543406/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	543406	08/12/21 15:47	TAJ	TAL PEN
Total/NA	Analysis	8011		1			543440	08/13/21 01:57	TAJ	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-543483/5

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543483	08/13/21 11:53	WPD	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-543486/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D		1			543824	08/16/21 16:21	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			543832	08/16/21 15:29	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-543635/4

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543635	08/14/21 08:07	WPD	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-543106/1002

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543106	08/11/21 11:41	EEH	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-543406/2-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	543406	08/12/21 15:47	TAJ	TAL PEN
Total/NA	Analysis	8011		1			543440	08/13/21 02:18	TAJ	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-543483/1002**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543483	08/13/21 10:09	WPD	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-543486/2-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D		1			543991	08/17/21 16:14	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			543832	08/16/21 15:46	PP1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-543486/6-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D		1			543824	08/16/21 17:25	S1B	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-543635/1002**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543635	08/14/21 07:08	WPD	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-543406/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	543406	08/12/21 15:47	TAJ	TAL PEN
Total/NA	Analysis	8011		1			543440	08/13/21 02:38	TAJ	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-543486/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D		1			543991	08/17/21 16:39	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			543832	08/16/21 16:03	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-543486/7-A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	543486	08/13/21 09:48	KWS	TAL PEN
Total/NA	Analysis	8270D		1			543824	08/16/21 17:46	S1B	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

GC/MS VOA

Analysis Batch: 543106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-2	TB-ROX-080921-8260	Total/NA	Water	8260B	
400-206993-4	P66-ROX-080921	Total/NA	Water	8260B	
MB 400-543106/5	Method Blank	Total/NA	Water	8260B	
LCS 400-543106/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 543483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-3	P66-ROX-080921-EB	Total/NA	Water	8260B	
MB 400-543483/5	Method Blank	Total/NA	Water	8260B	
LCS 400-543483/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 543635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-4 - DL	P66-ROX-080921	Total/NA	Water	8260B	
MB 400-543635/4	Method Blank	Total/NA	Water	8260B	
LCS 400-543635/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 543486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-3	P66-ROX-080921-EB	Total/NA	Water	3520C	
400-206993-4	P66-ROX-080921	Total/NA	Water	3520C	
MB 400-543486/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-543486/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-543486/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-543486/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-543486/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 543824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-3	P66-ROX-080921-EB	Total/NA	Water	8270D	543486
400-206993-4	P66-ROX-080921	Total/NA	Water	8270D	543486
MB 400-543486/1-A	Method Blank	Total/NA	Water	8270D	543486
LCS 400-543486/6-A	Lab Control Sample	Total/NA	Water	8270D	543486
LCSD 400-543486/7-A	Lab Control Sample Dup	Total/NA	Water	8270D	543486

Analysis Batch: 543832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-3	P66-ROX-080921-EB	Total/NA	Water	8270D LL	543486
400-206993-4	P66-ROX-080921	Total/NA	Water	8270D LL	543486
MB 400-543486/1-A	Method Blank	Total/NA	Water	8270D LL	543486
LCS 400-543486/2-A	Lab Control Sample	Total/NA	Water	8270D LL	543486
LCSD 400-543486/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	543486

Analysis Batch: 543991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-543486/2-A	Lab Control Sample	Total/NA	Water	8270D	543486
LCSD 400-543486/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	543486

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

GC Semi VOA

Prep Batch: 543406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-1	TB-ROX-080921-8011	Total/NA	Water	8011	
400-206993-3	P66-ROX-080921-EB	Total/NA	Water	8011	
400-206993-4	P66-ROX-080921	Total/NA	Water	8011	
MB 400-543406/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-543406/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-543406/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 543440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-543406/1-A	Method Blank	Total/NA	Water	8011	543406
LCS 400-543406/2-A	Lab Control Sample	Total/NA	Water	8011	543406
LCSD 400-543406/3-A	Lab Control Sample Dup	Total/NA	Water	8011	543406

Analysis Batch: 543710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-206993-1	TB-ROX-080921-8011	Total/NA	Water	8011	543406
400-206993-3	P66-ROX-080921-EB	Total/NA	Water	8011	543406
400-206993-4	P66-ROX-080921	Total/NA	Water	8011	543406

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

Lab Sample ID: MB 400-543106/5
Matrix: Water
Analysis Batch: 543106

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			08/11/21 12:41	1
Acrolein	ND		20	10	ug/L			08/11/21 12:41	1
Acrylonitrile	ND		10	2.8	ug/L			08/11/21 12:41	1
Benzene	ND		1.0	0.38	ug/L			08/11/21 12:41	1
Bromobenzene	ND		1.0	0.54	ug/L			08/11/21 12:41	1
Bromochloromethane	ND		1.0	0.52	ug/L			08/11/21 12:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Bromoform	ND		5.0	0.71	ug/L			08/11/21 12:41	1
Bromomethane	ND		1.0	0.98	ug/L			08/11/21 12:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			08/11/21 12:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Dibromochloromethane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Chloroethane	ND		1.0	0.76	ug/L			08/11/21 12:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			08/11/21 12:41	1
Chloroform	ND		1.0	0.60	ug/L			08/11/21 12:41	1
1-Chlorohexane	ND		1.0	0.70	ug/L			08/11/21 12:41	1
Chloromethane	ND		1.0	0.83	ug/L			08/11/21 12:41	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/11/21 12:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			08/11/21 12:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			08/11/21 12:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			08/11/21 12:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			08/11/21 12:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			08/11/21 12:41	1
2-Hexanone	ND		25	3.1	ug/L			08/11/21 12:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			08/11/21 12:41	1
Methylene bromide	ND		5.0	0.59	ug/L			08/11/21 12:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			08/11/21 12:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			08/11/21 12:41	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			08/11/21 12:41	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			08/11/21 12:41	1
Naphthalene	ND		1.0	1.0	ug/L			08/11/21 12:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			08/11/21 12:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/11/21 12:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			08/11/21 12:41	1
o-Xylene	ND		5.0	0.60	ug/L			08/11/21 12:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			08/11/21 12:41	1

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

Lab Sample ID: MB 400-543106/5
Matrix: Water
Analysis Batch: 543106

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			08/11/21 12:41	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			08/11/21 12:41	1
Styrene	ND		1.0	1.0	ug/L			08/11/21 12:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			08/11/21 12:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			08/11/21 12:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Tetrachloroethene	ND		1.0	0.58	ug/L			08/11/21 12:41	1
Toluene	ND		1.0	0.41	ug/L			08/11/21 12:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/11/21 12:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			08/11/21 12:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			08/11/21 12:41	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			08/11/21 12:41	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			08/11/21 12:41	1
Trichloroethene	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			08/11/21 12:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			08/11/21 12:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			08/11/21 12:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			08/11/21 12:41	1
Vinyl acetate	ND		25	2.0	ug/L			08/11/21 12:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			08/11/21 12:41	1
Xylenes, Total	ND		10	1.6	ug/L			08/11/21 12:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*72 - 119*		*08/11/21 12:41*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*08/11/21 12:41*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*08/11/21 12:41*	*1*

Lab Sample ID: LCS 400-543106/1002
Matrix: Water
Analysis Batch: 543106

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	285		ug/L		143	43 - 160
Acrolein	500	439		ug/L		88	38 - 160
Acrylonitrile	500	511		ug/L		102	64 - 142
Benzene	50.0	47.7		ug/L		95	70 - 130
Bromobenzene	50.0	46.3		ug/L		93	70 - 132
Bromochloromethane	50.0	47.5		ug/L		95	70 - 130
Bromodichloromethane	50.0	48.0		ug/L		96	67 - 133
Bromoform	50.0	47.7		ug/L		95	57 - 140
Bromomethane	50.0	35.2		ug/L		70	10 - 160
2-Butanone (MEK)	200	239		ug/L		119	61 - 145
Carbon disulfide	50.0	48.7		ug/L		97	61 - 137
Carbon tetrachloride	50.0	46.8		ug/L		94	61 - 137
Chlorobenzene	50.0	50.2		ug/L		100	70 - 130
Dibromochloromethane	50.0	48.5		ug/L		97	67 - 135
Chloroethane	50.0	40.0		ug/L		80	55 - 141

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

Lab Sample ID: LCS 400-543106/1002
Matrix: Water
Analysis Batch: 543106

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	50.0	27.3		ug/L		55	10 - 160
Chloroform	50.0	47.6		ug/L		95	69 - 130
1-Chlorohexane	50.0	51.5		ug/L		103	69 - 130
Chloromethane	50.0	32.2		ug/L		64	58 - 137
cis-1,2-Dichloroethene	50.0	48.6		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	46.9		ug/L		94	69 - 132
1,2-Dichlorobenzene	50.0	49.8		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	47.8		ug/L		96	70 - 130
Dichlorodifluoromethane	50.0	37.6		ug/L		75	41 - 146
1,1-Dichloroethane	50.0	47.7		ug/L		95	70 - 130
1,2-Dichloroethane	50.0	47.9		ug/L		96	69 - 130
1,1-Dichloroethene	50.0	45.8		ug/L		92	63 - 134
1,2-Dichloropropane	50.0	46.1		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	49.3		ug/L		99	70 - 130
2,2-Dichloropropane	50.0	48.7		ug/L		97	52 - 135
1,1-Dichloropropene	50.0	48.3		ug/L		97	70 - 130
Ethylbenzene	50.0	50.8		ug/L		102	70 - 130
Ethyl methacrylate	50.0	49.7		ug/L		99	68 - 130
Hexachlorobutadiene	50.0	51.8		ug/L		104	53 - 140
2-Hexanone	200	259		ug/L		129	65 - 137
Isopropylbenzene	50.0	50.1		ug/L		100	70 - 130
Methylene bromide	50.0	48.2		ug/L		96	70 - 130
Methylene Chloride	50.0	45.1		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	208		ug/L		104	69 - 138
Methyl tert-butyl ether	50.0	47.1		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	50.4		ug/L		101	70 - 130
Naphthalene	50.0	49.1		ug/L		98	47 - 149
n-Butylbenzene	50.0	55.9		ug/L		112	67 - 130
N-Propylbenzene	50.0	51.8		ug/L		104	70 - 130
o-Chlorotoluene	50.0	49.5		ug/L		99	70 - 130
o-Xylene	50.0	51.0		ug/L		102	70 - 130
p-Chlorotoluene	50.0	51.4		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	50.6		ug/L		101	65 - 130
sec-Butylbenzene	50.0	51.4		ug/L		103	66 - 130
Styrene	50.0	50.4		ug/L		101	70 - 130
tert-Butylbenzene	50.0	51.4		ug/L		103	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.2		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	53.5		ug/L		107	70 - 131
Tetrachloroethene	50.0	47.3		ug/L		95	65 - 130
Toluene	50.0	47.9		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	47.9		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	50.6		ug/L		101	63 - 130
1,2,3-Trichlorobenzene	50.0	49.3		ug/L		99	60 - 138
1,2,4-Trichlorobenzene	50.0	48.3		ug/L		97	60 - 140
1,1,1-Trichloroethane	50.0	47.4		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	49.0		ug/L		98	70 - 130
Trichloroethene	50.0	45.4		ug/L		91	70 - 130
Trichlorofluoromethane	50.0	38.4		ug/L		77	65 - 138

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

Lab Sample ID: LCS 400-543106/1002
Matrix: Water
Analysis Batch: 543106

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	52.6		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	51.4		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	52.4		ug/L		105	69 - 130
Vinyl acetate	100	85.9		ug/L		86	26 - 160
Vinyl chloride	50.0	38.6		ug/L		77	59 - 136
Xylenes, Total	100	101		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 119*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*104*		*64 - 132*

Lab Sample ID: MB 400-543483/5
Matrix: Water
Analysis Batch: 543483

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			08/13/21 11:53	1
Acrolein	ND		20	10	ug/L			08/13/21 11:53	1
Acrylonitrile	ND		10	2.8	ug/L			08/13/21 11:53	1
Benzene	ND		1.0	0.38	ug/L			08/13/21 11:53	1
Bromobenzene	ND		1.0	0.54	ug/L			08/13/21 11:53	1
Bromochloromethane	ND		1.0	0.52	ug/L			08/13/21 11:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Bromoform	ND		5.0	0.71	ug/L			08/13/21 11:53	1
Bromomethane	ND		1.0	0.98	ug/L			08/13/21 11:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			08/13/21 11:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Chlorobenzene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Dibromochloromethane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Chloroethane	ND		1.0	0.76	ug/L			08/13/21 11:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			08/13/21 11:53	1
Chloroform	ND		1.0	0.60	ug/L			08/13/21 11:53	1
1-Chlorohexane	ND		1.0	0.70	ug/L			08/13/21 11:53	1
Chloromethane	ND		1.0	0.83	ug/L			08/13/21 11:53	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/13/21 11:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			08/13/21 11:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			08/13/21 11:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			08/13/21 11:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			08/13/21 11:53	1

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

Lab Sample ID: MB 400-543483/5
Matrix: Water
Analysis Batch: 543483

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			08/13/21 11:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			08/13/21 11:53	1
2-Hexanone	ND		25	3.1	ug/L			08/13/21 11:53	1
Isopropylbenzene	ND		1.0	0.53	ug/L			08/13/21 11:53	1
Methylene bromide	ND		5.0	0.59	ug/L			08/13/21 11:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			08/13/21 11:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			08/13/21 11:53	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			08/13/21 11:53	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			08/13/21 11:53	1
Naphthalene	ND		1.0	1.0	ug/L			08/13/21 11:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			08/13/21 11:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/13/21 11:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			08/13/21 11:53	1
o-Xylene	ND		5.0	0.60	ug/L			08/13/21 11:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			08/13/21 11:53	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			08/13/21 11:53	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			08/13/21 11:53	1
Styrene	ND		1.0	1.0	ug/L			08/13/21 11:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			08/13/21 11:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			08/13/21 11:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Tetrachloroethene	ND		1.0	0.58	ug/L			08/13/21 11:53	1
Toluene	ND		1.0	0.41	ug/L			08/13/21 11:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			08/13/21 11:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			08/13/21 11:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			08/13/21 11:53	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			08/13/21 11:53	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			08/13/21 11:53	1
Trichloroethene	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			08/13/21 11:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			08/13/21 11:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			08/13/21 11:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			08/13/21 11:53	1
Vinyl acetate	ND		25	2.0	ug/L			08/13/21 11:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			08/13/21 11:53	1
Xylenes, Total	ND		10	1.6	ug/L			08/13/21 11:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*08/13/21 11:53*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*08/13/21 11:53*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*08/13/21 11:53*	*1*

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

Lab Sample ID: LCS 400-543483/1002
Matrix: Water
Analysis Batch: 543483

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	168		ug/L		84	43 - 160
Acrolein	500	326		ug/L		65	38 - 160
Acrylonitrile	500	696		ug/L		139	64 - 142
Benzene	50.0	51.4		ug/L		103	70 - 130
Bromobenzene	50.0	58.1		ug/L		116	70 - 132
Bromochloromethane	50.0	54.3		ug/L		109	70 - 130
Bromodichloromethane	50.0	51.4		ug/L		103	67 - 133
Bromoform	50.0	55.2		ug/L		110	57 - 140
Bromomethane	50.0	41.5		ug/L		83	10 - 160
2-Butanone (MEK)	200	208		ug/L		104	61 - 145
Carbon disulfide	50.0	44.3		ug/L		89	61 - 137
Carbon tetrachloride	50.0	48.3		ug/L		97	61 - 137
Chlorobenzene	50.0	55.1		ug/L		110	70 - 130
Dibromochloromethane	50.0	53.0		ug/L		106	67 - 135
Chloroethane	50.0	33.5		ug/L		67	55 - 141
2-Chloroethyl vinyl ether	50.0	46.8		ug/L		94	10 - 160
Chloroform	50.0	47.7		ug/L		95	69 - 130
1-Chlorohexane	50.0	67.5	*+	ug/L		135	69 - 130
Chloromethane	50.0	65.0		ug/L		130	58 - 137
cis-1,2-Dichloroethene	50.0	59.0		ug/L		118	68 - 130
cis-1,3-Dichloropropene	50.0	56.4		ug/L		113	69 - 132
1,2-Dichlorobenzene	50.0	54.3		ug/L		109	67 - 130
1,3-Dichlorobenzene	50.0	58.9		ug/L		118	70 - 130
1,4-Dichlorobenzene	50.0	56.9		ug/L		114	70 - 130
Dichlorodifluoromethane	50.0	31.3		ug/L		63	41 - 146
1,1-Dichloroethane	50.0	56.6		ug/L		113	70 - 130
1,2-Dichloroethane	50.0	50.0		ug/L		100	69 - 130
1,1-Dichloroethene	50.0	31.7		ug/L		63	63 - 134
1,2-Dichloropropane	50.0	60.7		ug/L		121	70 - 130
1,3-Dichloropropane	50.0	52.7		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	52.4		ug/L		105	52 - 135
1,1-Dichloropropene	50.0	50.0		ug/L		100	70 - 130
Ethylbenzene	50.0	54.7		ug/L		109	70 - 130
Ethyl methacrylate	50.0	52.7		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	67.6		ug/L		135	53 - 140
2-Hexanone	200	240		ug/L		120	65 - 137
Isopropylbenzene	50.0	56.2		ug/L		112	70 - 130
Methylene bromide	50.0	51.4		ug/L		103	70 - 130
Methylene Chloride	50.0	51.1		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	272		ug/L		136	69 - 138
Methyl tert-butyl ether	50.0	53.1		ug/L		106	66 - 130
m-Xylene & p-Xylene	50.0	52.1		ug/L		104	70 - 130
Naphthalene	50.0	53.8		ug/L		108	47 - 149
n-Butylbenzene	50.0	60.5		ug/L		121	67 - 130
N-Propylbenzene	50.0	61.0		ug/L		122	70 - 130
o-Chlorotoluene	50.0	59.2		ug/L		118	70 - 130
o-Xylene	50.0	52.5		ug/L		105	70 - 130
p-Chlorotoluene	50.0	56.5		ug/L		113	70 - 130

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

Lab Sample ID: LCS 400-543483/1002
Matrix: Water
Analysis Batch: 543483

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	63.3		ug/L		127	65 - 130
sec-Butylbenzene	50.0	61.4		ug/L		123	66 - 130
Styrene	50.0	55.8		ug/L		112	70 - 130
tert-Butylbenzene	50.0	56.7		ug/L		113	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.3		ug/L		113	67 - 131
1,1,2,2-Tetrachloroethane	50.0	55.3		ug/L		111	70 - 131
Tetrachloroethene	50.0	52.5		ug/L		105	65 - 130
Toluene	50.0	48.4		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	51.1		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	53.6		ug/L		107	63 - 130
1,2,3-Trichlorobenzene	50.0	56.4		ug/L		113	60 - 138
1,2,4-Trichlorobenzene	50.0	58.6		ug/L		117	60 - 140
1,1,1-Trichloroethane	50.0	48.5		ug/L		97	68 - 130
1,1,2-Trichloroethane	50.0	51.9		ug/L		104	70 - 130
Trichloroethene	50.0	55.1		ug/L		110	70 - 130
Trichlorofluoromethane	50.0	36.3		ug/L		73	65 - 138
1,2,3-Trichloropropane	50.0	53.4		ug/L		107	70 - 130
1,2,4-Trimethylbenzene	50.0	60.1		ug/L		120	70 - 130
1,3,5-Trimethylbenzene	50.0	59.2		ug/L		118	69 - 130
Vinyl acetate	100	117		ug/L		117	26 - 160
Vinyl chloride	50.0	43.5		ug/L		87	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 119*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Lab Sample ID: MB 400-543635/4
Matrix: Water
Analysis Batch: 543635

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.41	ug/L			08/14/21 08:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*08/14/21 08:07*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*08/14/21 08:07*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*08/14/21 08:07*	*1*

Lab Sample ID: LCS 400-543635/1002
Matrix: Water
Analysis Batch: 543635

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	50.0	42.4		ug/L		85	70 - 130

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

Lab Sample ID: LCS 400-543635/1002
Matrix: Water
Analysis Batch: 543635

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		72 - 119
Dibromofluoromethane	104		75 - 126
Toluene-d8 (Surr)	94		64 - 132

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

Lab Sample ID: MB 400-543486/1-A
Matrix: Water
Analysis Batch: 543824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		08/13/21 09:48	08/16/21 16:21	1
Benzenethiol	ND		10	1.7	ug/L		08/13/21 09:48	08/16/21 16:21	1
Benzoic acid	ND		30	7.3	ug/L		08/13/21 09:48	08/16/21 16:21	1
Benzyl alcohol	ND		10	2.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		08/13/21 09:48	08/16/21 16:21	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		08/13/21 09:48	08/16/21 16:21	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		08/13/21 09:48	08/16/21 16:21	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		08/13/21 09:48	08/16/21 16:21	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		08/13/21 09:48	08/16/21 16:21	1
4-Chloroaniline	ND		10	3.4	ug/L		08/13/21 09:48	08/16/21 16:21	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		08/13/21 09:48	08/16/21 16:21	1
2-Chloronaphthalene	ND		10	0.14	ug/L		08/13/21 09:48	08/16/21 16:21	1
2-Chlorophenol	ND		10	2.2	ug/L		08/13/21 09:48	08/16/21 16:21	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
Dibenzofuran	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 16:21	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		08/13/21 09:48	08/16/21 16:21	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
Diethyl phthalate	ND		10	0.24	ug/L		08/13/21 09:48	08/16/21 16:21	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		08/13/21 09:48	08/16/21 16:21	1
Dimethyl phthalate	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 16:21	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		08/13/21 09:48	08/16/21 16:21	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		08/13/21 09:48	08/16/21 16:21	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		08/13/21 09:48	08/16/21 16:21	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		08/13/21 09:48	08/16/21 16:21	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		08/13/21 09:48	08/16/21 16:21	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 16:21	1
1,4-Dioxane	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
Hexachlorobenzene	ND		10	0.17	ug/L		08/13/21 09:48	08/16/21 16:21	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		08/13/21 09:48	08/16/21 16:21	1
Hexachloroethane	ND		10	4.2	ug/L		08/13/21 09:48	08/16/21 16:21	1
Indene	ND		10	1.0	ug/L		08/13/21 09:48	08/16/21 16:21	1
Isophorone	ND		10	0.14	ug/L		08/13/21 09:48	08/16/21 16:21	1
2-Methylphenol	ND		10	1.8	ug/L		08/13/21 09:48	08/16/21 16:21	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		08/13/21 09:48	08/16/21 16:21	1

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

Lab Sample ID: MB 400-543486/1-A
Matrix: Water
Analysis Batch: 543824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		08/13/21 09:48	08/16/21 16:21	1
3-Nitroaniline	ND		10	1.8	ug/L		08/13/21 09:48	08/16/21 16:21	1
4-Nitroaniline	ND		10	1.5	ug/L		08/13/21 09:48	08/16/21 16:21	1
Nitrobenzene	ND		10	0.13	ug/L		08/13/21 09:48	08/16/21 16:21	1
2-Nitrophenol	ND		10	5.2	ug/L		08/13/21 09:48	08/16/21 16:21	1
4-Nitrophenol	ND		10	2.1	ug/L		08/13/21 09:48	08/16/21 16:21	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		08/13/21 09:48	08/16/21 16:21	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		08/13/21 09:48	08/16/21 16:21	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		08/13/21 09:48	08/16/21 16:21	1
Pentachlorophenol	ND		20	1.4	ug/L		08/13/21 09:48	08/16/21 16:21	1
Phenol	ND		10	2.6	ug/L		08/13/21 09:48	08/16/21 16:21	1
Pyridine	ND		10	3.2	ug/L		08/13/21 09:48	08/16/21 16:21	1
Quinoline	ND		10	4.5	ug/L		08/13/21 09:48	08/16/21 16:21	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		08/13/21 09:48	08/16/21 16:21	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		08/13/21 09:48	08/16/21 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*46 - 124*	*08/13/21 09:48*	*08/16/21 16:21*	*1*
2-Fluorophenol	*4*	*S1-*	*13 - 113*	*08/13/21 09:48*	*08/16/21 16:21*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*08/13/21 09:48*	*08/16/21 16:21*	*1*
Phenol-d5	*42*		*17 - 127*	*08/13/21 09:48*	*08/16/21 16:21*	*1*
Terphenyl-d14	*103*		*44 - 149*	*08/13/21 09:48*	*08/16/21 16:21*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*08/13/21 09:48*	*08/16/21 16:21*	*1*

Lab Sample ID: LCS 400-543486/2-A
Matrix: Water
Analysis Batch: 543991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	126		ug/L		105	21 - 120
Benzoic acid	502	331		ug/L		66	10 - 144
Benzyl alcohol	120	52.2		ug/L		43	28 - 120
Bis(2-chloroethoxy)methane	120	116		ug/L		97	47 - 120
Bis(2-chloroethyl)ether	120	98.2		ug/L		82	44 - 120
bis (2-chloroisopropyl) ether	120	104		ug/L		87	33 - 121
Bis(2-ethylhexyl) phthalate	120	113		ug/L		94	52 - 147
4-Bromophenyl phenyl ether	120	120		ug/L		100	54 - 122
Butyl benzyl phthalate	120	125		ug/L		105	54 - 133
4-Chloroaniline	120	88.4		ug/L		74	26 - 120
4-Chloro-3-methylphenol	120	112		ug/L		93	48 - 131
2-Chloronaphthalene	120	111		ug/L		93	52 - 121
2-Chlorophenol	120	48.0		ug/L		40	40 - 120
4-Chlorophenyl phenyl ether	120	120		ug/L		100	56 - 125
Dibenz[a,h]acridine	120	114		ug/L		95	31 - 150
Dibenzofuran	120	121		ug/L		100	56 - 122
3,3'-Dichlorobenzidine	160	190		ug/L		119	36 - 132
2,4-Dichlorophenol	120	68.0		ug/L		57	49 - 120
Diethyl phthalate	120	128		ug/L		106	50 - 137

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

Lab Sample ID: LCS 400-543486/2-A
Matrix: Water
Analysis Batch: 543991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	120	110		ug/L		91	48 - 120
Dimethyl phthalate	120	115		ug/L		96	57 - 124
Di-n-butyl phthalate	120	132		ug/L		110	58 - 126
4,6-Dinitro-ortho-cresol	240	206		ug/L		86	23 - 148
2,4-Dinitrophenol	240	204		ug/L		85	10 - 150
2,4-Dinitrotoluene	120	143		ug/L		119	54 - 142
2,6-Dinitrotoluene	120	126		ug/L		105	55 - 130
Di-n-octyl phthalate	120	108		ug/L		90	57 - 138
1,4-Dioxane	120	63.7		ug/L		53	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	127		ug/L		106	45 - 124
Hexachlorobenzene	120	122		ug/L		101	52 - 129
Hexachlorocyclopentadiene	120	64.1		ug/L		53	10 - 134
Hexachloroethane	120	95.5		ug/L		80	20 - 120
Indene	120	102		ug/L		85	49 - 120
Isophorone	120	110		ug/L		92	48 - 120
2-Methylphenol	120	119		ug/L		99	46 - 124
3 & 4 Methylphenol	120	99.2		ug/L		83	45 - 120
2-Nitroaniline	120	136		ug/L		114	51 - 145
3-Nitroaniline	120	130		ug/L		109	37 - 127
4-Nitroaniline	120	136		ug/L		113	36 - 137
Nitrobenzene	120	106		ug/L		89	45 - 120
2-Nitrophenol	120	65.5		ug/L		55	40 - 124
4-Nitrophenol	240	188		ug/L		78	23 - 146
N-Nitrosodimethylamine	120	80.3		ug/L		67	29 - 137
N-Nitrosodi-n-propylamine	120	118		ug/L		99	45 - 120
N-Nitrosodiphenylamine	119	117		ug/L		99	54 - 120
Pentachlorophenol	240	177		ug/L		74	31 - 130
Phenol	120	76.8		ug/L		64	11 - 120
Pyridine	240	156		ug/L		65	16 - 120
Quinoline	120	125		ug/L		104	49 - 130
2,4,5-Trichlorophenol	120	101		ug/L		84	51 - 136
2,4,6-Trichlorophenol	120	86.7		ug/L		72	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*94*		*36 - 126*
Phenol-d5	*51*		*17 - 127*
Terphenyl-d14	*108*		*44 - 149*
2,4,6-Tribromophenol	*92*		*26 - 150*

Lab Sample ID: LCS 400-543486/6-A
Matrix: Water
Analysis Batch: 543824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	71.5		ug/L		60	10 - 120

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

Lab Sample ID: LCS 400-543486/6-A
Matrix: Water
Analysis Batch: 543824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543486

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	77		46 - 124
2-Fluorophenol	44		13 - 113
Nitrobenzene-d5	65		36 - 126
Phenol-d5	65		17 - 127
Terphenyl-d14	77		44 - 149
2,4,6-Tribromophenol	78		26 - 150

Lab Sample ID: LCSD 400-543486/3-A
Matrix: Water
Analysis Batch: 543991

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	126		ug/L		105	21 - 120	0	30
Benzoic acid	502	336		ug/L		67	10 - 144	1	30
Benzyl alcohol	120	55.3		ug/L		46	28 - 120	6	30
Bis(2-chloroethoxy)methane	120	101		ug/L		84	47 - 120	14	30
Bis(2-chloroethyl)ether	120	91.9		ug/L		77	44 - 120	7	30
bis (2-chloroisopropyl) ether	120	99.2		ug/L		83	33 - 121	5	30
Bis(2-ethylhexyl) phthalate	120	115		ug/L		96	52 - 147	2	30
4-Bromophenyl phenyl ether	120	113		ug/L		95	54 - 122	6	30
Butyl benzyl phthalate	120	126		ug/L		105	54 - 133	0	30
4-Chloroaniline	120	85.0		ug/L		71	26 - 120	4	30
4-Chloro-3-methylphenol	120	109		ug/L		91	48 - 131	2	30
2-Chloronaphthalene	120	106		ug/L		88	52 - 121	5	30
2-Chlorophenol	120	60.0		ug/L		50	40 - 120	22	30
4-Chlorophenyl phenyl ether	120	112		ug/L		94	56 - 125	7	30
Dibenz[a,h]acridine	120	110		ug/L		92	31 - 150	3	30
Dibenzofuran	120	108		ug/L		90	56 - 122	11	30
3,3'-Dichlorobenzidine	160	189		ug/L		118	36 - 132	1	30
2,4-Dichlorophenol	120	76.1		ug/L		63	49 - 120	11	30
Diethyl phthalate	120	123		ug/L		102	50 - 137	4	30
2,4-Dimethylphenol	120	103		ug/L		86	48 - 120	6	30
Dimethyl phthalate	120	111		ug/L		93	57 - 124	3	30
Di-n-butyl phthalate	120	128		ug/L		107	58 - 126	3	30
4,6-Dinitro-ortho-cresol	240	211		ug/L		88	23 - 148	2	30
2,4-Dinitrophenol	240	198		ug/L		82	10 - 150	3	30
2,4-Dinitrotoluene	120	130		ug/L		109	54 - 142	9	30
2,6-Dinitrotoluene	120	116		ug/L		97	55 - 130	8	30
Di-n-octyl phthalate	120	110		ug/L		92	57 - 138	2	30
1,4-Dioxane	120	66.0		ug/L		55	31 - 120	4	30
1,2-Diphenylhydrazine (as Azobenzene)	120	121		ug/L		101	45 - 124	5	30
Hexachlorobenzene	120	119		ug/L		99	52 - 129	2	30
Hexachlorocyclopentadiene	120	57.5		ug/L		48	10 - 134	11	30
Hexachloroethane	120	91.6		ug/L		76	20 - 120	4	30
Indene	120	104		ug/L		87	49 - 120	2	30
Isophorone	120	102		ug/L		85	48 - 120	8	30
2-Methylphenol	120	124		ug/L		103	46 - 124	4	30
3 & 4 Methylphenol	120	100		ug/L		84	45 - 120	1	30

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

Lab Sample ID: LCSD 400-543486/3-A
Matrix: Water
Analysis Batch: 543991

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitroaniline	120	131		ug/L		109	51 - 145	4	30
3-Nitroaniline	120	119		ug/L		99	37 - 127	9	30
4-Nitroaniline	120	127		ug/L		106	36 - 137	6	30
Nitrobenzene	120	97.2		ug/L		81	45 - 120	9	30
2-Nitrophenol	120	79.8		ug/L		66	40 - 124	20	30
4-Nitrophenol	240	186		ug/L		77	23 - 146	1	30
N-Nitrosodimethylamine	120	83.3		ug/L		69	29 - 137	4	30
N-Nitrosodi-n-propylamine	120	115		ug/L		96	45 - 120	3	30
N-Nitrosodiphenylamine	119	111		ug/L		94	54 - 120	5	30
Pentachlorophenol	240	186		ug/L		77	31 - 130	5	30
Phenol	120	85.2		ug/L		71	11 - 120	10	30
Pyridine	240	156		ug/L		65	16 - 120	0	30
Quinoline	120	114		ug/L		95	49 - 130	9	30
2,4,5-Trichlorophenol	120	107		ug/L		89	51 - 136	6	30
2,4,6-Trichlorophenol	120	93.8		ug/L		78	50 - 127	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*26*		*13 - 113*
Nitrobenzene-d5	*85*		*36 - 126*
Phenol-d5	*60*		*17 - 127*
Terphenyl-d14	*107*		*44 - 149*
2,4,6-Tribromophenol	*92*		*26 - 150*

Lab Sample ID: LCSD 400-543486/7-A
Matrix: Water
Analysis Batch: 543824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	46.4	*1	ug/L		39	10 - 120	43	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*46 - 124*
2-Fluorophenol	*33*		*13 - 113*
Nitrobenzene-d5	*72*		*36 - 126*
Phenol-d5	*61*		*17 - 127*
Terphenyl-d14	*93*		*44 - 149*
2,4,6-Tribromophenol	*86*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-543486/1-A
Matrix: Water
Analysis Batch: 543832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		08/13/21 09:48	08/16/21 15:29	1
Acenaphthylene	ND		0.20	0.045	ug/L		08/13/21 09:48	08/16/21 15:29	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-543486/1-A
Matrix: Water
Analysis Batch: 543832

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.032	ug/L		08/13/21 09:48	08/16/21 15:29	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		08/13/21 09:48	08/16/21 15:29	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		08/13/21 09:48	08/16/21 15:29	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		08/13/21 09:48	08/16/21 15:29	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		08/13/21 09:48	08/16/21 15:29	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		08/13/21 09:48	08/16/21 15:29	1
Chrysene	ND		0.20	0.074	ug/L		08/13/21 09:48	08/16/21 15:29	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		08/13/21 09:48	08/16/21 15:29	1
Fluoranthene	ND		0.20	0.068	ug/L		08/13/21 09:48	08/16/21 15:29	1
Fluorene	ND		0.20	0.11	ug/L		08/13/21 09:48	08/16/21 15:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		08/13/21 09:48	08/16/21 15:29	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		08/13/21 09:48	08/16/21 15:29	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		08/13/21 09:48	08/16/21 15:29	1
Phenanthrene	ND		0.20	0.036	ug/L		08/13/21 09:48	08/16/21 15:29	1
Pyrene	ND		0.20	0.040	ug/L		08/13/21 09:48	08/16/21 15:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*15 - 122*	*08/13/21 09:48*	*08/16/21 15:29*	*1*
Nitrobenzene-d5	*118*		*19 - 130*	*08/13/21 09:48*	*08/16/21 15:29*	*1*
Terphenyl-d14	*106*		*33 - 138*	*08/13/21 09:48*	*08/16/21 15:29*	*1*

Lab Sample ID: LCS 400-543486/2-A
Matrix: Water
Analysis Batch: 543832

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	99.2		ug/L		83	41 - 120
Acenaphthylene	120	96.0		ug/L		80	44 - 120
Anthracene	120	102		ug/L		85	49 - 120
Benzo[a]anthracene	120	102		ug/L		85	61 - 135
Benzo[a]pyrene	120	110		ug/L		92	52 - 120
Benzo[b]fluoranthene	120	106		ug/L		88	53 - 134
Benzo[g,h,i]perylene	120	105		ug/L		87	47 - 133
Benzo[k]fluoranthene	120	114		ug/L		95	57 - 134
Chrysene	120	94.0		ug/L		78	55 - 122
Dibenz(a,h)anthracene	120	116		ug/L		97	48 - 146
Fluoranthene	120	108		ug/L		90	54 - 128
Fluorene	120	110		ug/L		92	45 - 125
Indeno[1,2,3-cd]pyrene	120	108		ug/L		90	43 - 142
1-Methylnaphthalene	120	88.0		ug/L		73	41 - 120
2-Methylnaphthalene	120	88.2		ug/L		74	32 - 124
Phenanthrene	120	95.2		ug/L		79	48 - 120
Pyrene	120	95.5		ug/L		80	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*15 - 122*
Nitrobenzene-d5	*108*		*19 - 130*
Terphenyl-d14	*83*		*33 - 138*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: LCSD 400-543486/3-A
Matrix: Water
Analysis Batch: 543832

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543486

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	87.8		ug/L		73	41 - 120	12	56
Acenaphthylene	120	87.4		ug/L		73	44 - 120	9	56
Anthracene	120	88.6		ug/L		74	49 - 120	14	51
Benzo[a]anthracene	120	94.1		ug/L		78	61 - 135	8	49
Benzo[a]pyrene	120	105		ug/L		87	52 - 120	5	50
Benzo[b]fluoranthene	120	99.8		ug/L		83	53 - 134	6	54
Benzo[g,h,i]perylene	120	88.0		ug/L		73	47 - 133	18	50
Benzo[k]fluoranthene	120	92.9		ug/L		77	57 - 134	20	52
Chrysene	120	96.0		ug/L		80	55 - 122	2	50
Dibenz(a,h)anthracene	120	89.6		ug/L		75	48 - 146	26	50
Fluoranthene	120	101		ug/L		84	54 - 128	6	52
Fluorene	120	98.1		ug/L		82	45 - 125	12	56
Indeno[1,2,3-cd]pyrene	120	89.3		ug/L		74	43 - 142	19	51
1-Methylnaphthalene	120	73.4		ug/L		61	41 - 120	18	55
2-Methylnaphthalene	120	77.6		ug/L		65	32 - 124	13	57
Phenanthrene	120	91.6		ug/L		76	48 - 120	4	56
Pyrene	120	87.7		ug/L		73	48 - 132	9	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*15 - 122*
Nitrobenzene-d5	*103*		*19 - 130*
Terphenyl-d14	*79*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-543406/1-A
Matrix: Water
Analysis Batch: 543440

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 543406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		08/12/21 15:47	08/13/21 01:57	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		08/12/21 15:47	08/13/21 01:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*08/12/21 15:47*	*08/13/21 01:57*	*1*

Lab Sample ID: LCS 400-543406/2-A
Matrix: Water
Analysis Batch: 543440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 543406

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.116		ug/L		115	60 - 140
1,2-Dibromoethane	0.101	0.109		ug/L		109	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*123*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-543406/3-A
Matrix: Water
Analysis Batch: 543440

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 543406

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.113		ug/L		112	60 - 140	3	30
1,2-Dibromoethane			0.101	0.111		ug/L		110	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*129*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

- ☐ SGW FDG
- ☐ PIPELINE
- ☐ RETAIL
- ☐ CHEMICALS
- ☐ CONSULTANT
- ☐ LUBES
- ☐ TRANSPORTATION
- ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	Wendy Pennington
PO #	60648474 – 3.2.3F
PlaNet Site or Project ID	25278
GSAP Project ID	USPC/00114/R/02
☐ CHECK IF NO INCIDENT # APPLIES	
DATE:	8/9/21
PAGE:	1 of 1

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60648474 – 3.2.3F

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman, Wendy Pennington

PHONE NO.: 314-802-1171; 314-449-2913; 314-802-1122

E-MAIL: elizabeth.kunkel@aecom.com, melissa.remiger@aecom.com, bob.billman@aecom.com, wendy.pennington@aecom.com

AECOM Server ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger, Wendy Pennington

SAMPLER NAME(S) (Print): Mary D'Angelo, Joe Mayer

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-3462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com; wendy.pennington@aecom.com

TURNAROUND TIME (CALENDAR DAYS):

☐ STANDARD (14 DAY) ☑ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☑ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:

* Please include "J" values on Reports
* Please provide sample receipt upon login

5 day turnaround

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60648474 – 3.2.3F

400-206993 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-080921-8011	8/9/2021	0000	Water	2					2		X		
	TB-ROX-080921-8260	8/9/2021	0000	Water	2					2	X			
	P66-ROX-080921-EB	8/9/2021	0820	Water	6			2		8	X	X	X	X
	P66-ROX-080921	8/9/2021	1000	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 0.8°C IR-8

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature) FEDEX: 9495 6601 2875	Date: 8/9/21	Time: 1600
Relinquished by: (Signature)	Received by: (Signature) ETA PGW	Date: 8/10/21	Time: 942
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS: 1011655, 1011654

Version: 2Apr21

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-206993-1

Login Number: 206993
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-206993-1

Laboratory: Eurofins TestAmerica, Pensacola

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

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-12-22
Arkansas DEQ	State	88-0689	09-02-21
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-21
Iowa	State	367	08-01-22
Kansas	NELAP	E-10253	10-31-21
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-21
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-21
Maryland	State	233	09-30-21
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
New Jersey	NELAP	FL006	06-30-22
North Carolina (WW/SW)	State	314	12-31-21
Oklahoma	State	9810	08-31-21
Pennsylvania	NELAP	68-00467	01-31-22
Rhode Island	State	LAO00307	12-30-21
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-21
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
Washington	State	C915	05-15-22
West Virginia DEP	State	136	09-30-21

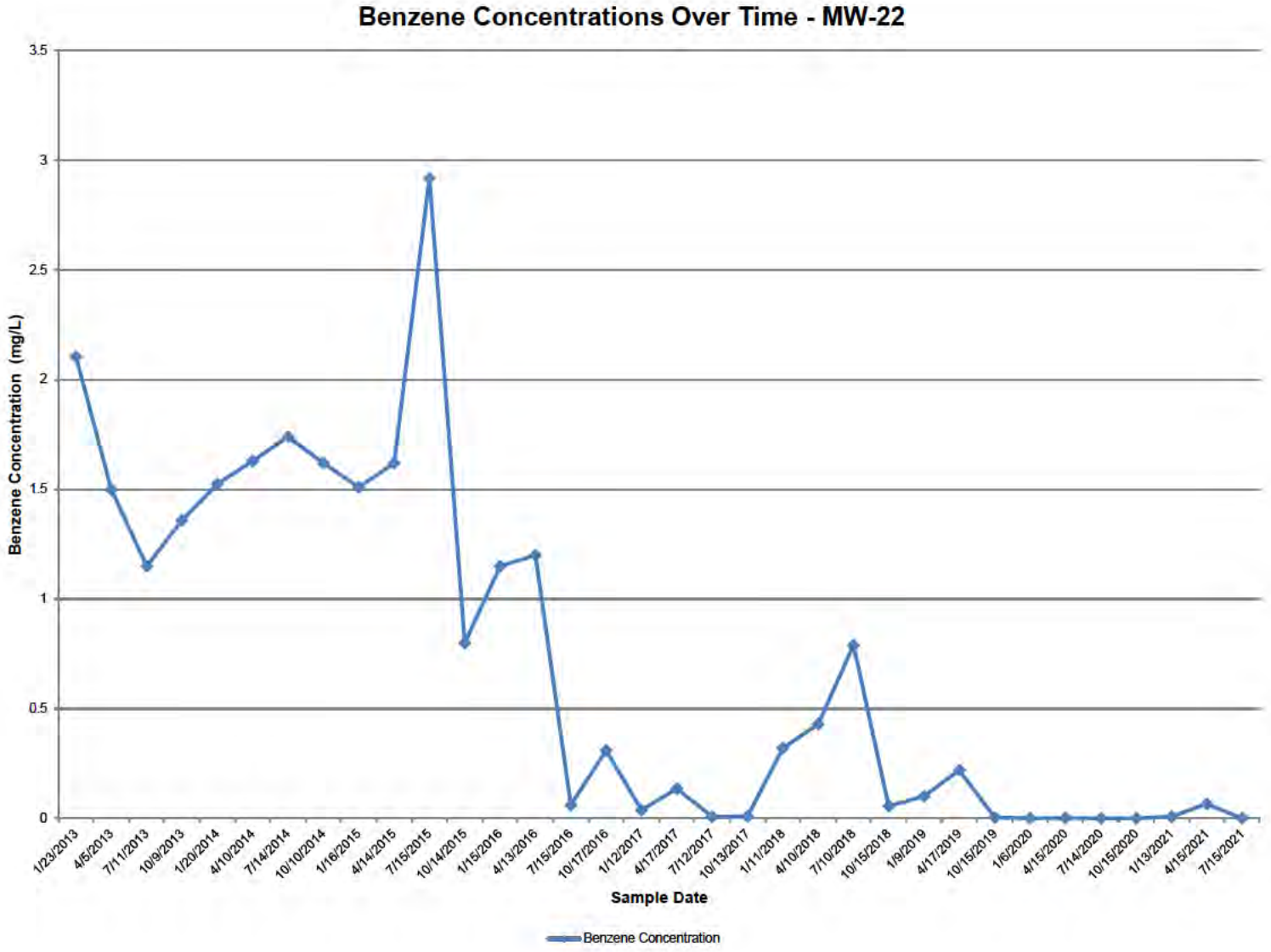
Appendix D

Appendix D – 1 Charts – Benzene Concentrations Over Time

Appendix D – 2 GWSDAT Charts

- 4th Street area – MW-22, ROST-4 PZ(C), P-59, and T-12
- Public Works Yard area – MW-7, MW-8, MW-25, and P-57

4th Street Area



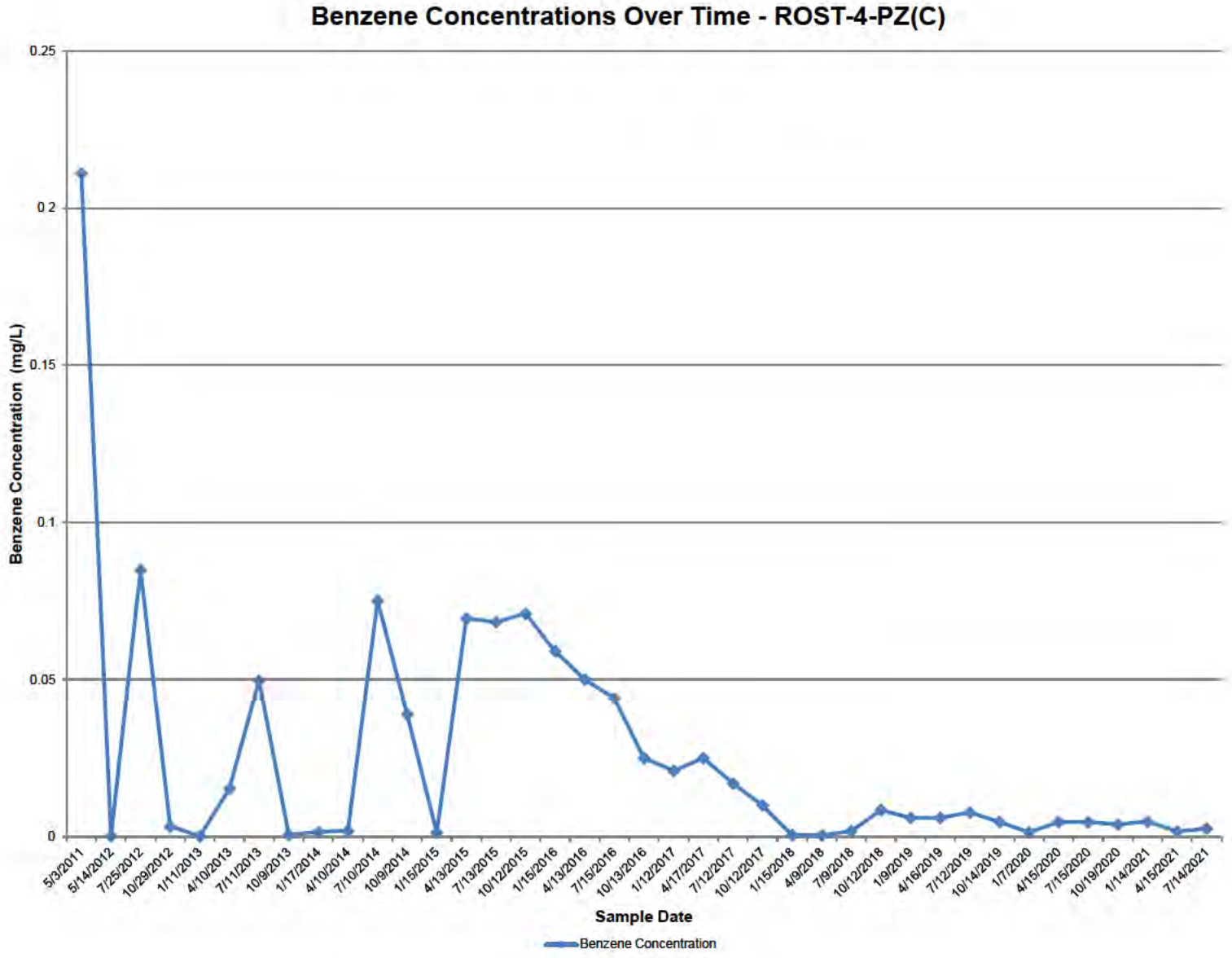
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.



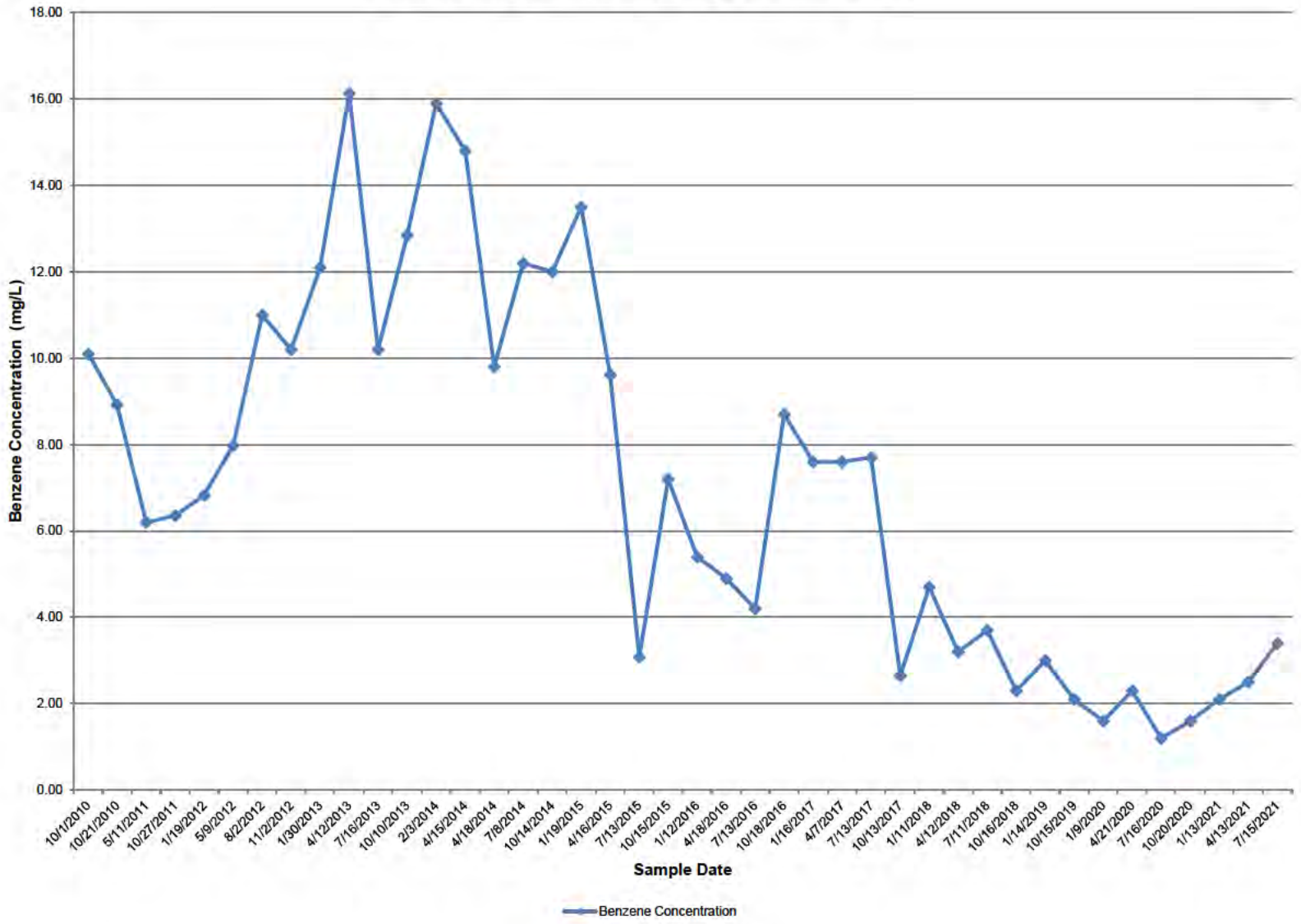
Notes:

mg/L = milligrams per liter

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.

Benzene Concentrations Over Time - P-59

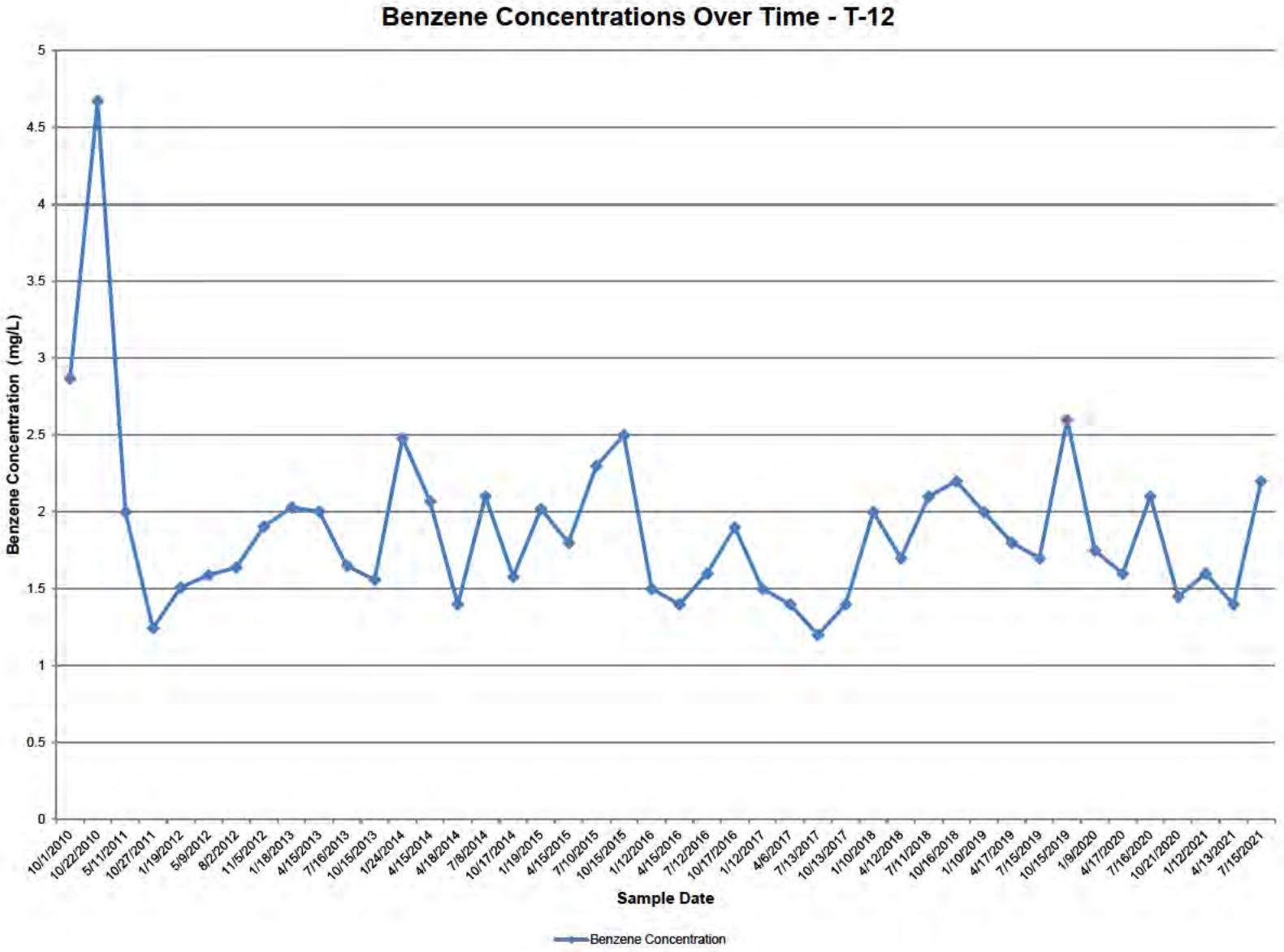


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



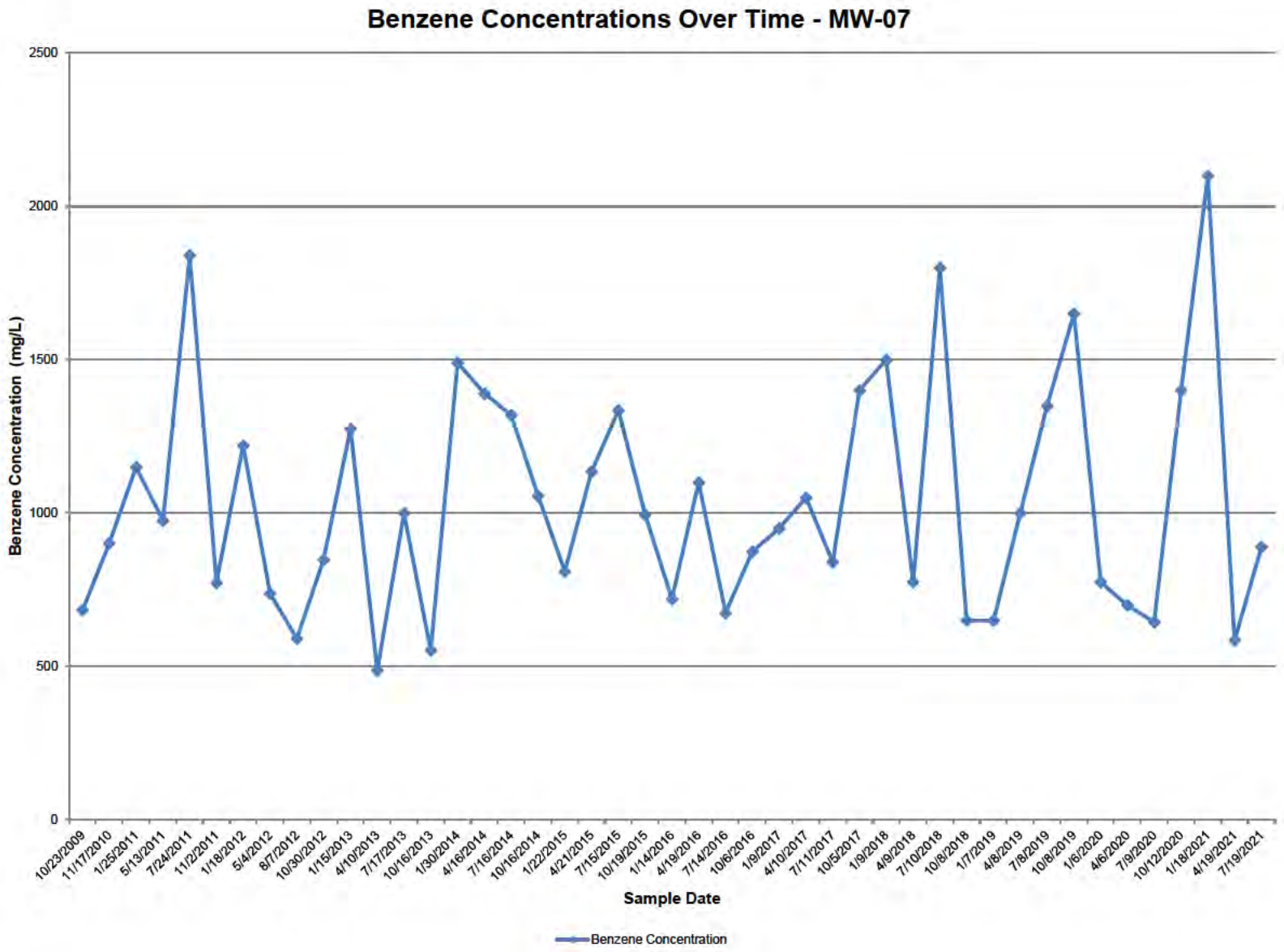
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Public Works Yard Area

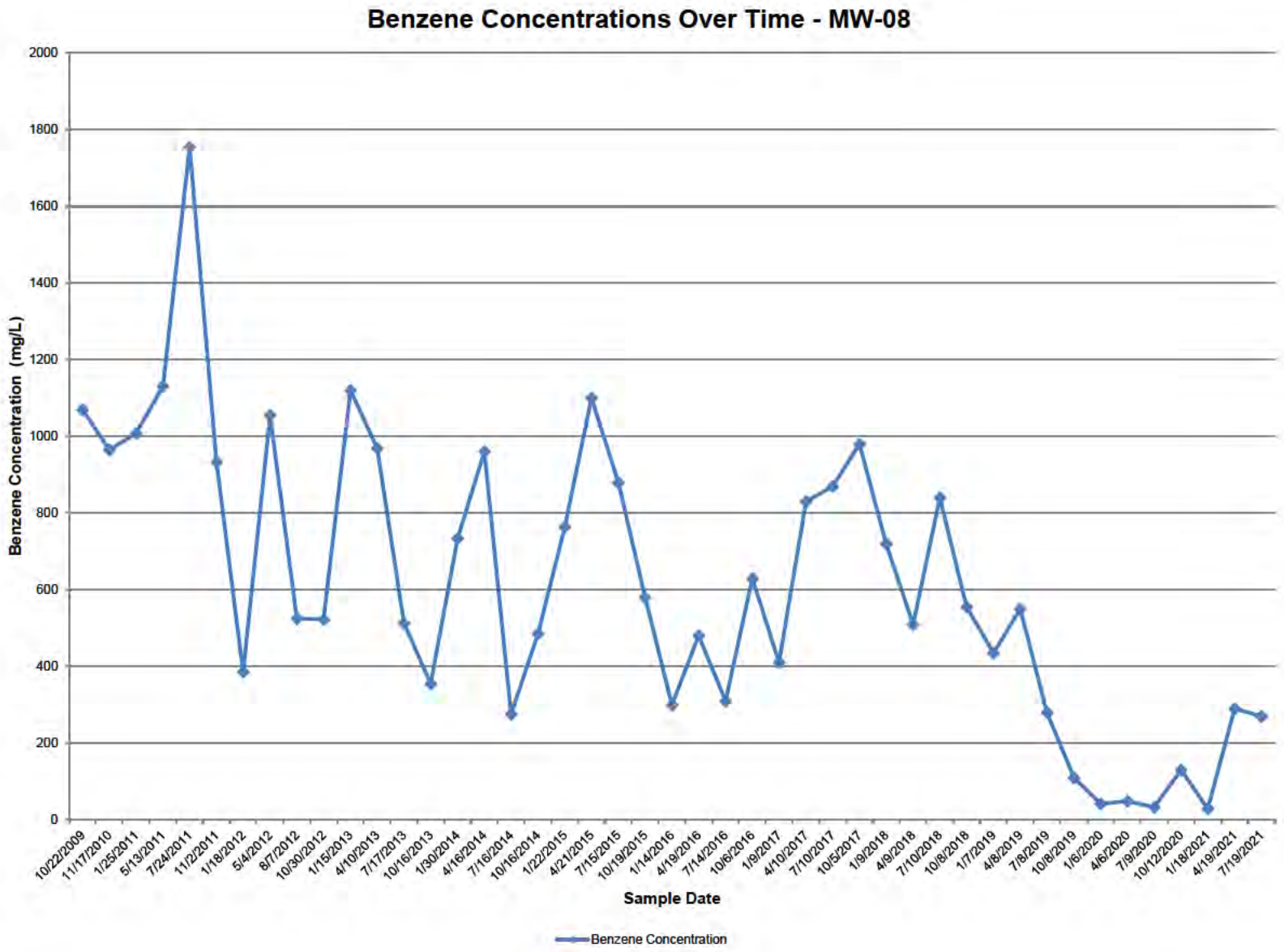


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

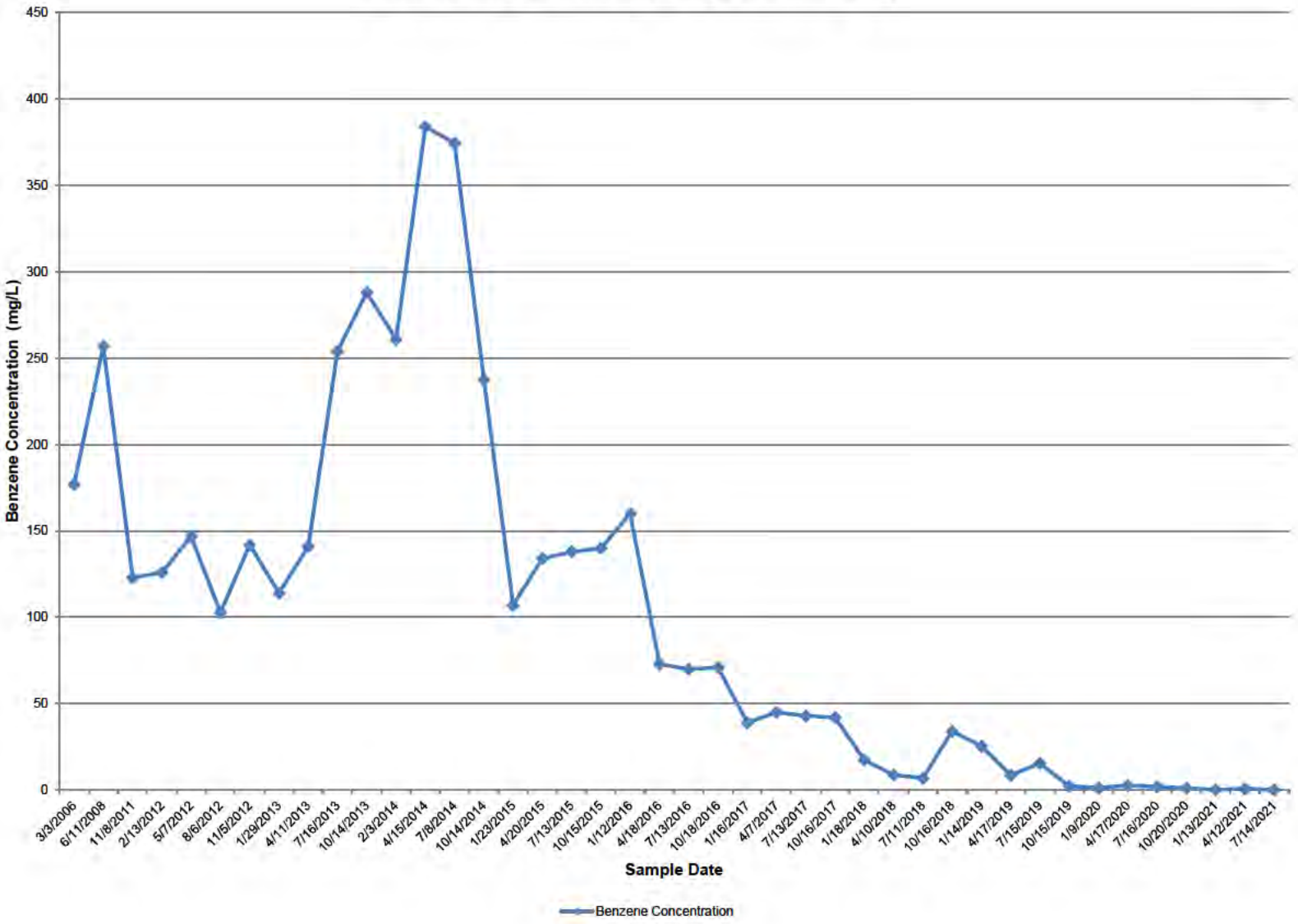
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - P-57



Notes:

mg/L = milligrams per liter

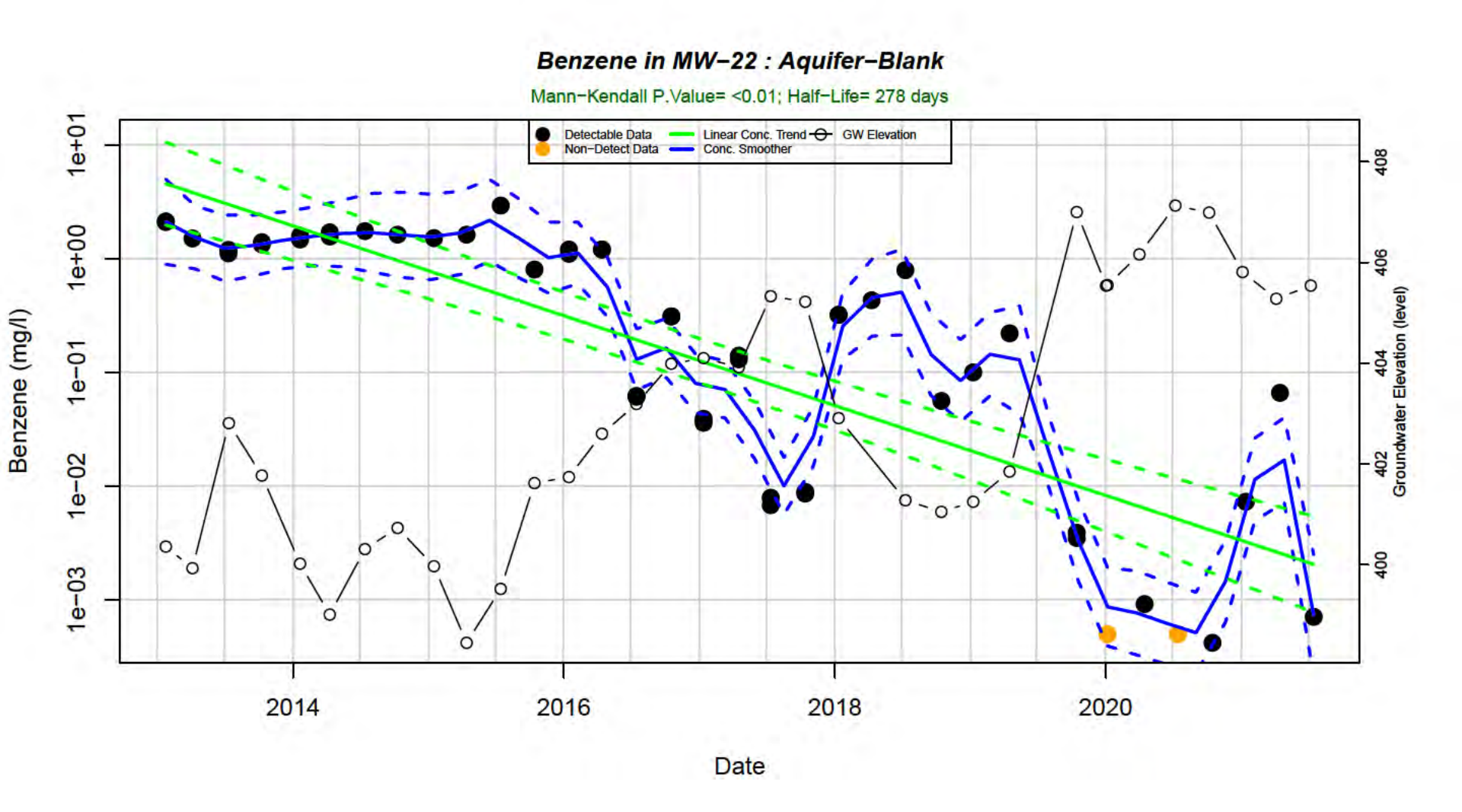
Duplicate values were averaged.

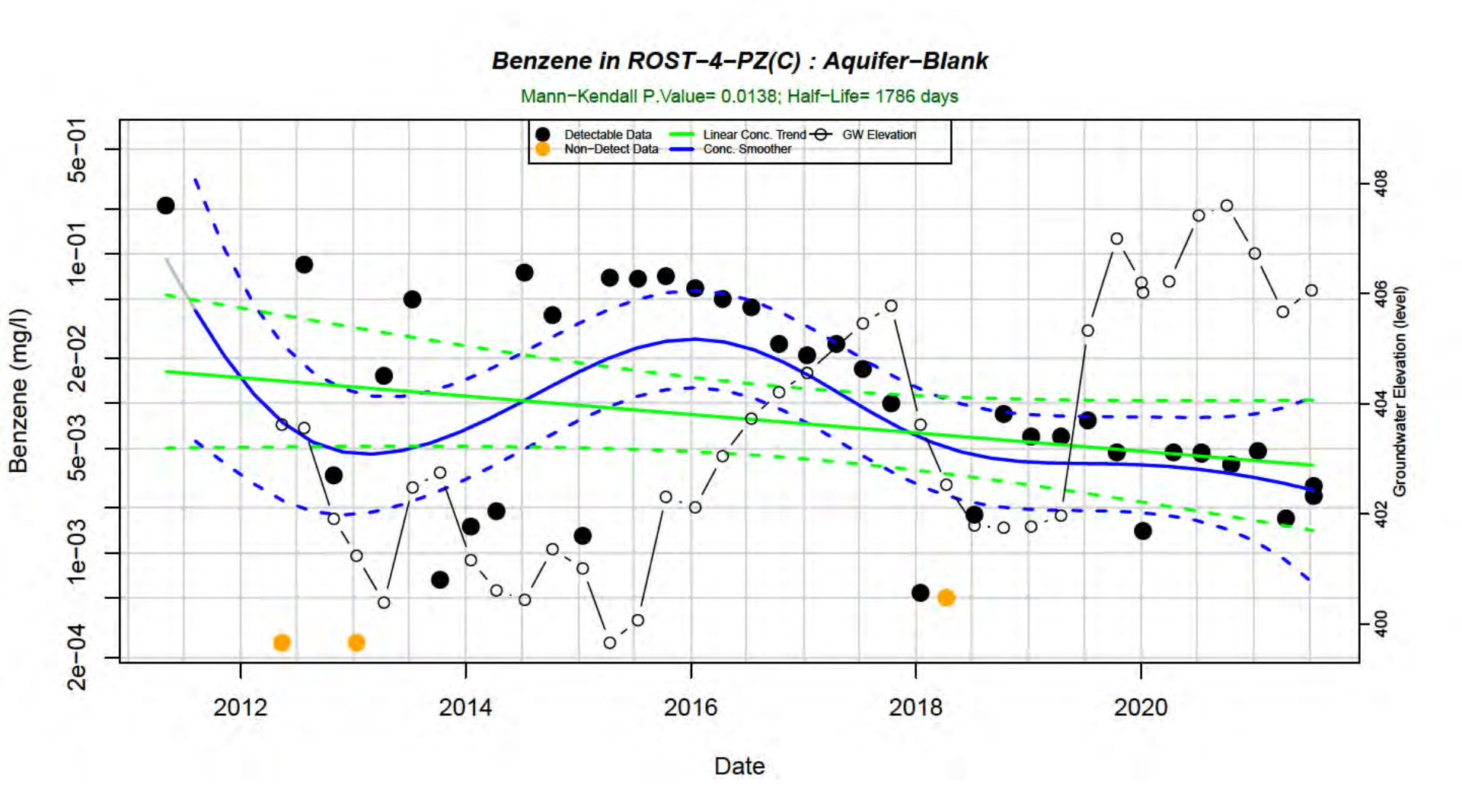
Timeframe specific to available data.

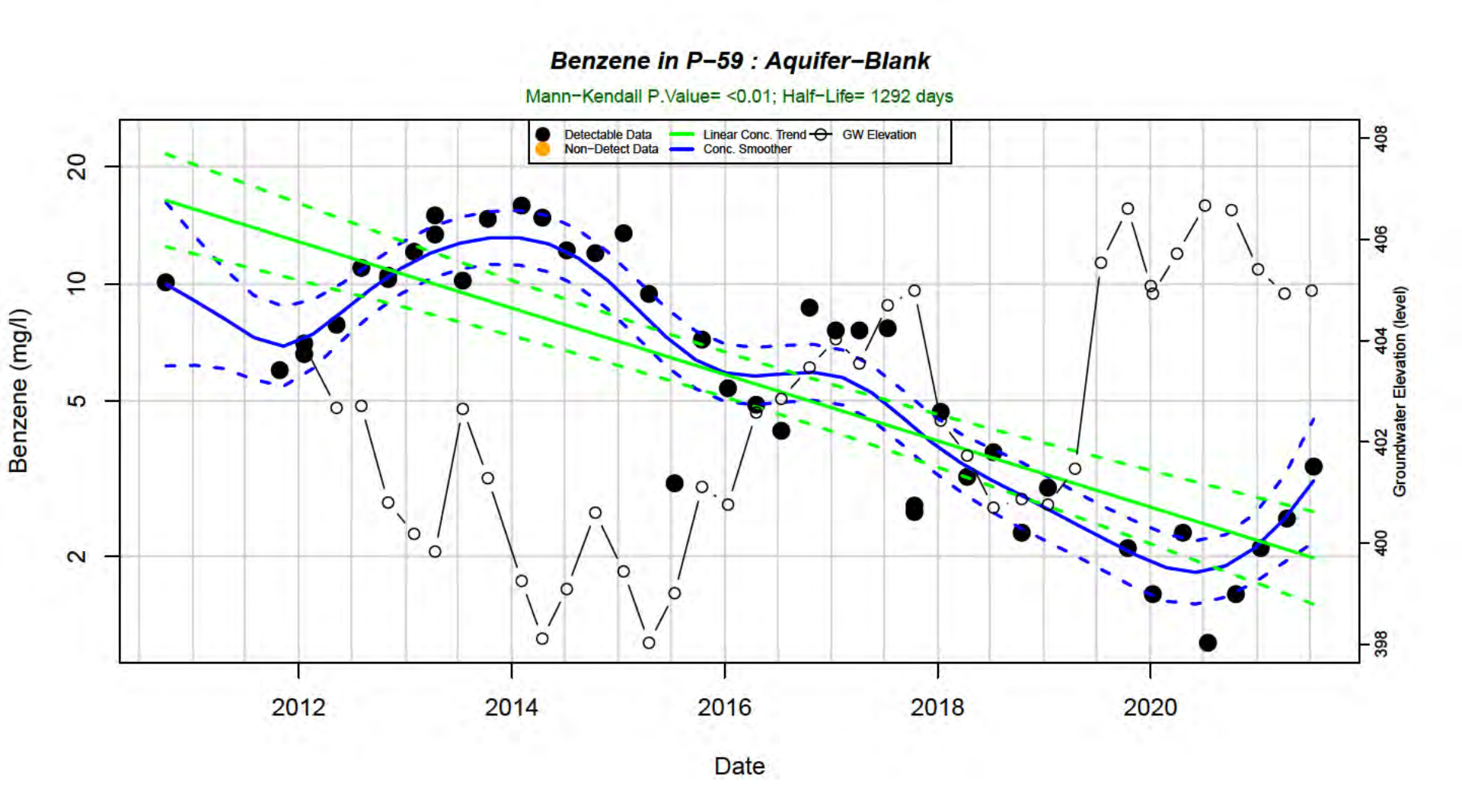
GWSDAT Summary/Legend

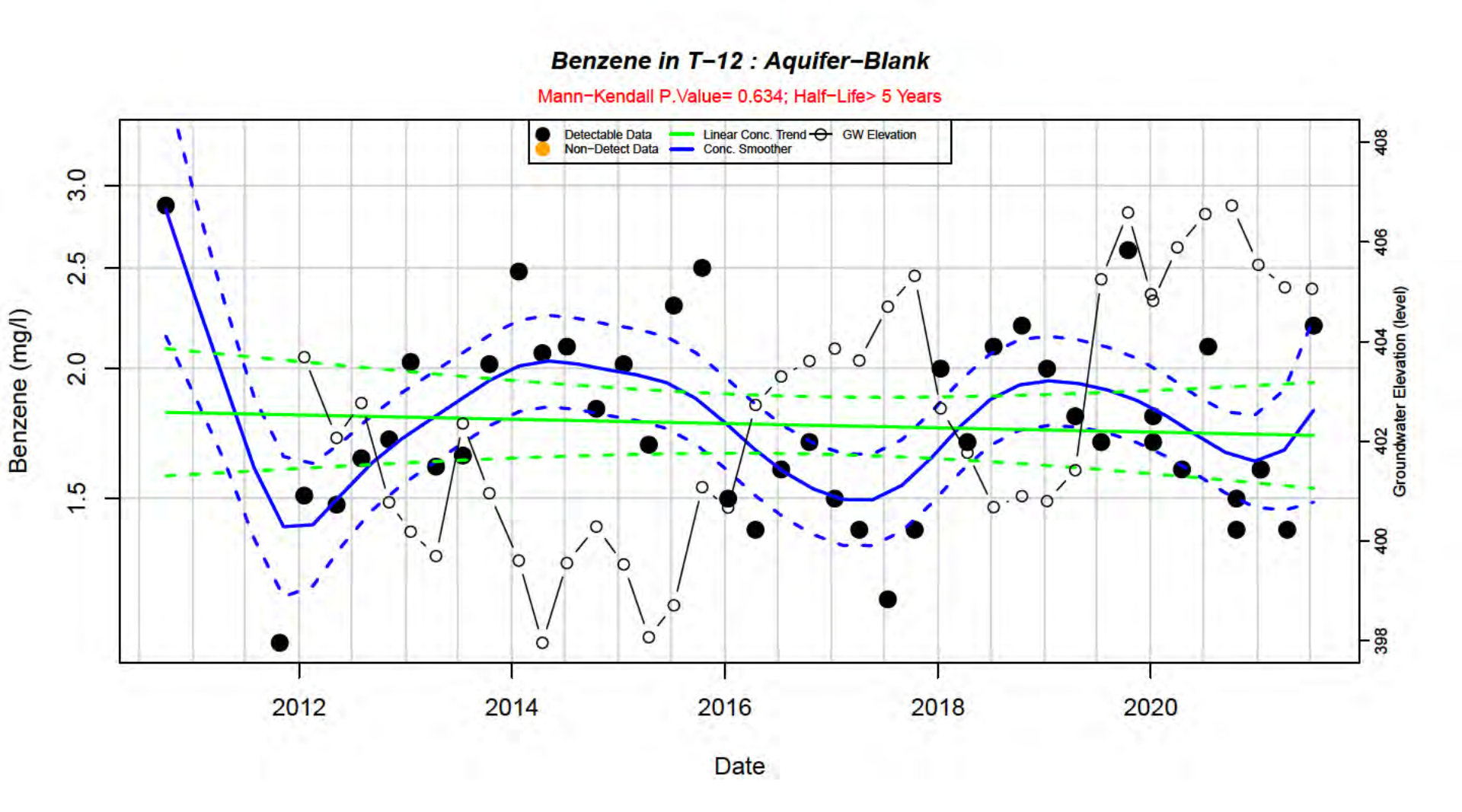
Black Solid Data Points	=	Detections
Orange Solid Data Points	=	Non-Detects
Black-Hollow Data Points	=	Groundwater Elevation
Solid Blue Line	=	Smoothed estimate of the mean trend
Dashed Blue Line	=	95% confidence interval around the estimated mean trend
Solid Green Line	=	Linear trend estimate (Mann-Kendall Analysis)
Dashed Green Line	=	95% confidence interval around linear trend estimate

4th Street Area

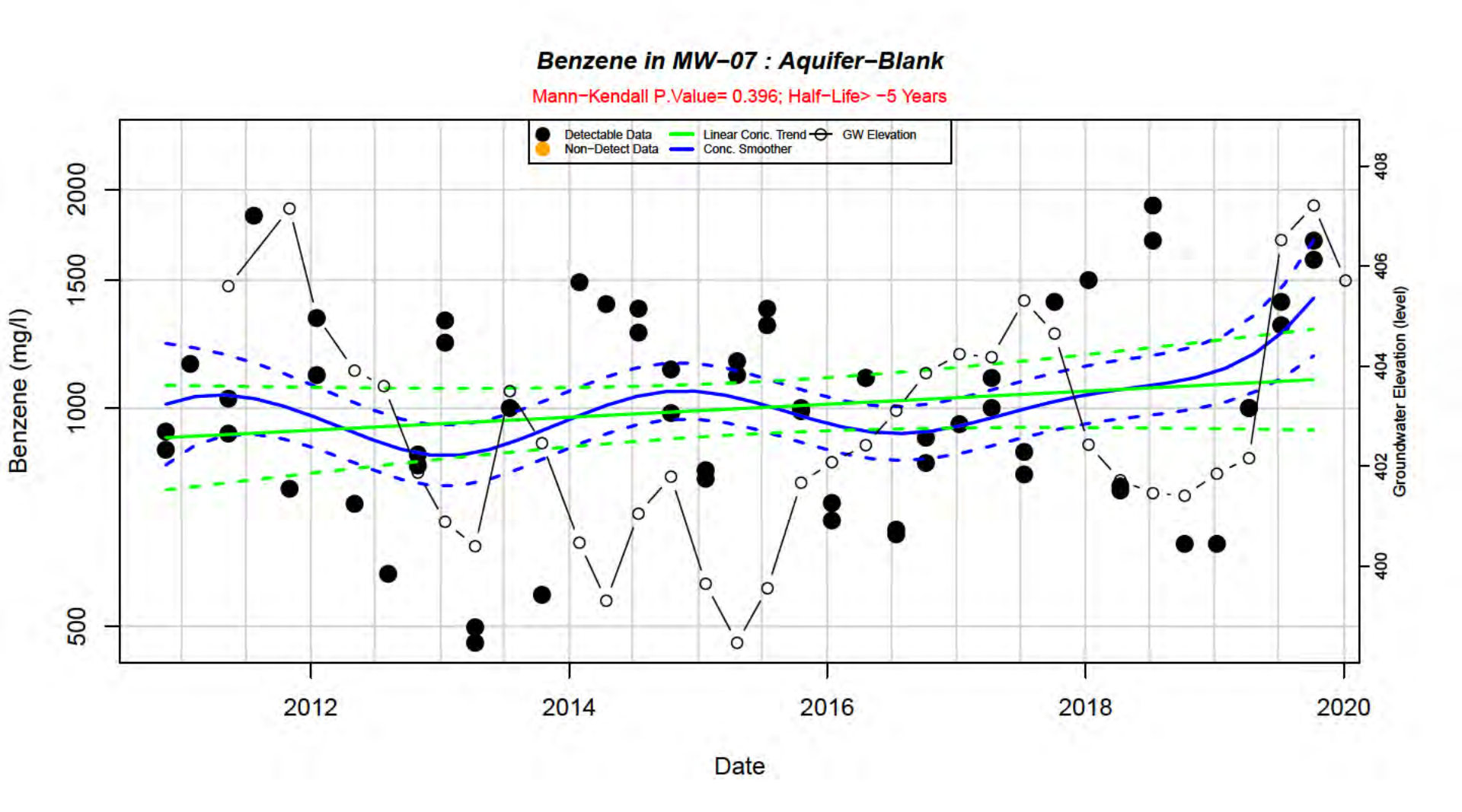

Benzene in MW−22 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 278 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1e−03
1e−02
1e−01
1e+00
1e+01
Groundwater Elevation (level)
400
402
404
406
408
2014
2016
2018
2020
Date

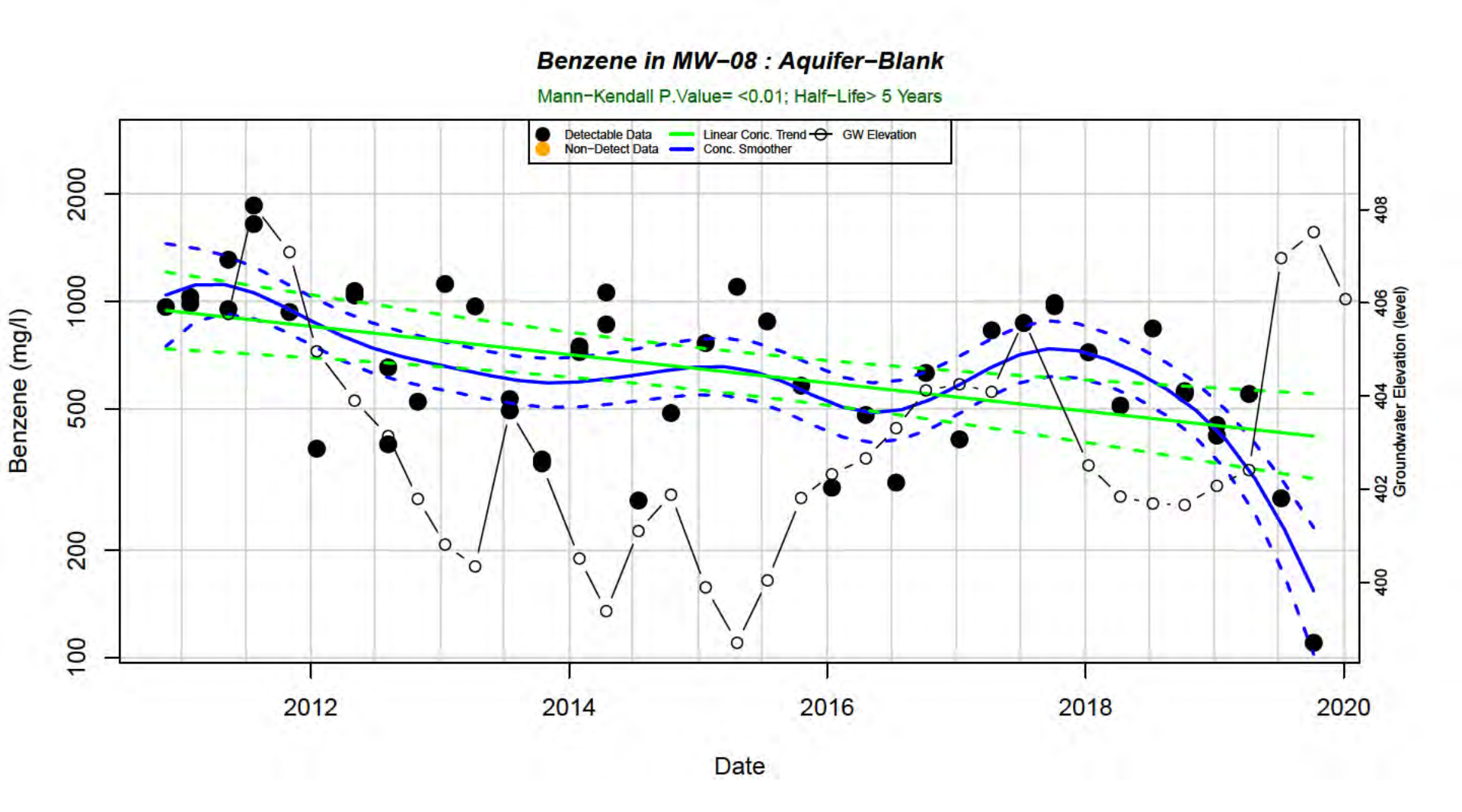

Benzene in ROST−4−PZ(C) : Aquifer−Blank
Mann−Kendall P.Value= 0.0138; Half−Life= 1786 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
5e−01
1e−01
2e−02
5e−03
1e−03
2e−04
Groundwater Elevation (level)
408
406
404
402
400
2012
2014
2016
2018
2020
Date

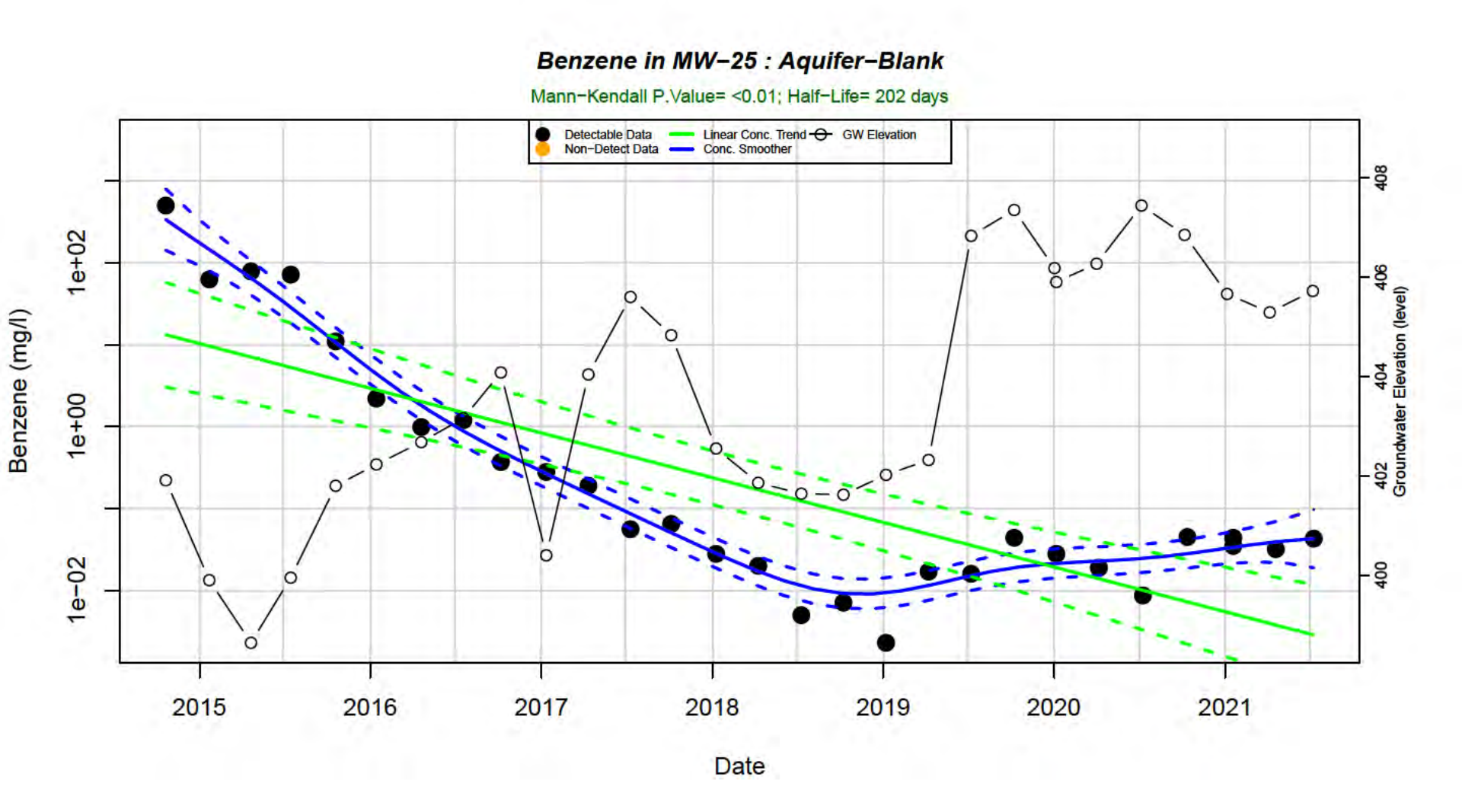

Benzene in P−59 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 1292 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
Groundwater Elevation (level)
Date
2012
2014
2016
2018
2020
2
5
10
20
398
400
402
404
406
408

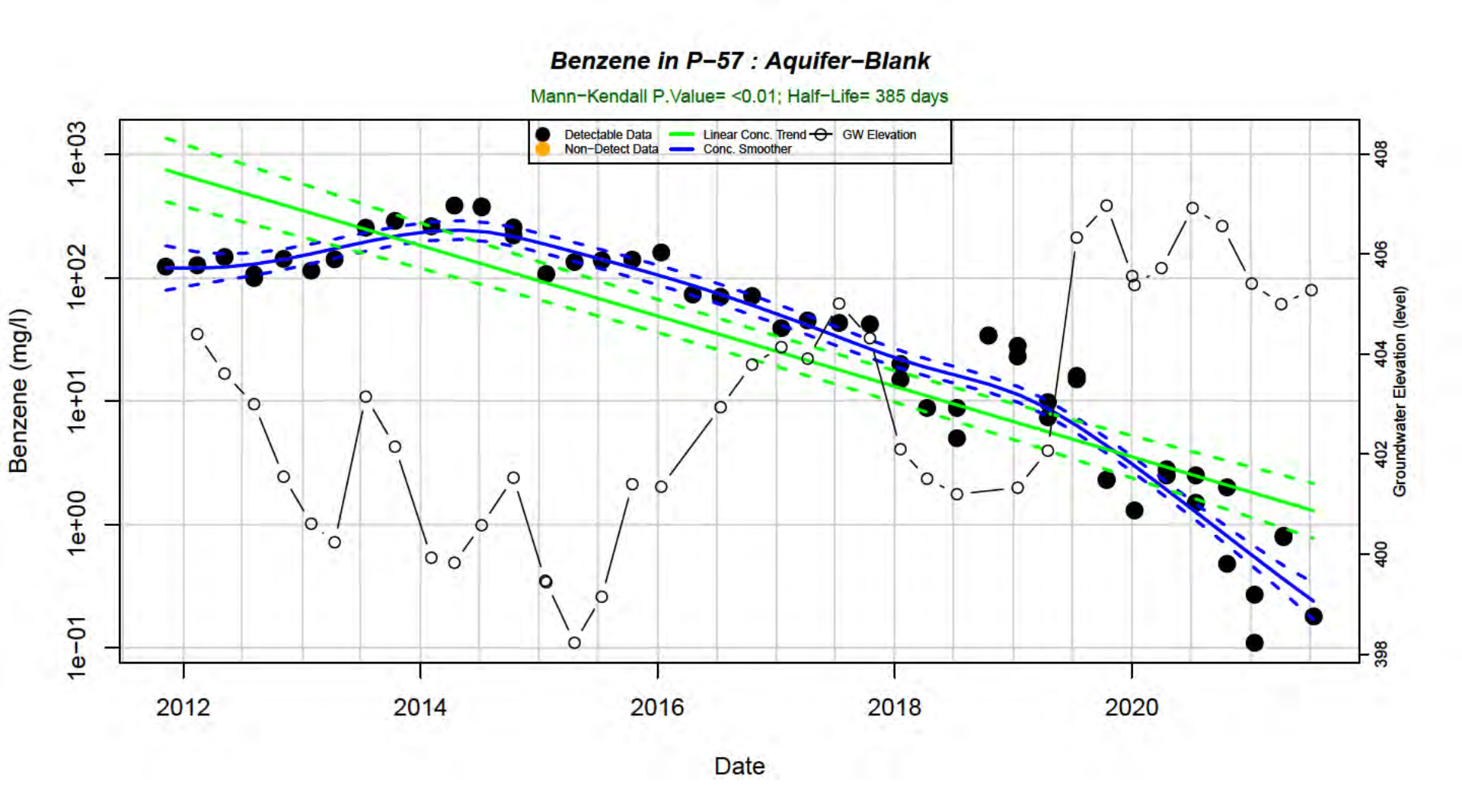

Benzene in T−12 : Aquifer−Blank
Mann−Kendall P.Value= 0.634; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1.5
2.0
2.5
3.0
Groundwater Elevation (level)
398
400
402
404
406
408
2012
2014
2016
2018
2020
Date

Public Works Yard Area


Benzene in MW−07 : Aquifer−Blank
Mann−Kendall P.Value= 0.396; Half−Life> −5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
500
1000
1500
2000
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
Date


Benzene in MW−08 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
100
200
500
1000
2000
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
Date


Benzene in MW−25 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 202 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1e−02
1e+00
1e+02
Groundwater Elevation (level)
400
402
404
406
408
2015
2016
2017
2018
2019
2020
2021
Date


Benzene in P−57 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 385 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1e−01
1e+00
1e+01
1e+02
1e+03
Groundwater Elevation (level)
398
400
402
404
406
408
2012
2014
2016
2018
2020
Date

Melissa Remiger
Environmental Scientist
M: 314/449-2913
E: melissa.remiger@aecom.com

AECOM
100 N. Broadway, 20th Floor
St. Louis, MO 63102
aecom.com